

Development of an effective phytosanitary report certification system for South African compliance with the European market

Ву

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DECLARATION

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DEDICATION

This thesis is dedicated to my husband Morne Bezuidenhout and my children: Zander, Isane and Juandre for their enormous love, commitment and support during my studies. Without you, this would not have been possible.



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LIST OF ACRONYMS

ANC African National Congress

APIS Agricultural Product Inspection Services
CFSP Common Foreign and Security Policy

DOA Department of Agriculture

ECSC European Coal and Steel Community

EEC European Economic Community

EU European Union

FAO Food and Agriculture Organisation

FTA Free trade agreement

GATT General Agreement on Tariffs and Trade

GDP Gross domestic product

IMF International Monetary Fund

IPPC International Plant Protection Convention

JSE Johannesburg Stock Exchange

NPPPIS National Plant and Plant Product Inspection

Services

NPPO National Plant Protection Organisation

NTBs non-tariff barriers

OECD Organisation for Economic Co-operation and

Development

PCE Phytosanitary Capacity Evaluation

PPECB Perishable Product Export Control Board

PRA Pest Risk Analysis

SACU South African Customs Union

SADC South African Development Community

SAFEX South African Futures Exchange SOP Standard Operation Procedures

SPS Sanitary and Phytosanitary

TDCA Trade, Development and Co-operation Agreement



UNCTAD United Nations Conference on Trade and

Development

WTO World Trade Organisation

WTO SPS Agreement World Trade Organisation's Agreement on the

Application of Sanitary and Phytosanitary Measures



CHAPTER ONE

INTRODUCTION

1.1 OBJECTIVE

The objective of this study is to develop an effective phytosanitary report certification system for South African compliance with the European market.

1.2 SPECIFIC AIMS

- 1. To identify phytosanitary constraints faced by the South African Export Regulatory System.
- 2. To evaluate the phytosanitary certification system currently used by the National Plant Protection Organisation (NPPO) of South Africa with regard to exports of agricultural produce to the European market.
- 3. To develop a certification guide to equip the NPPO of South Africa with the necessary technical assistance to ensure compliance with the European Union's phytosanitary regulations.

1.3 RELEVANCE STATEMENT

The South African economy, including agriculture, is increasingly integrated in world markets (Jooste and Spies, 2006). Three major political and economic developments of the 1990s contributed to this process. The most important was the lifting of economic sanctions against South Africa following the accession in 1994 of a democratic government. The next radical change was the repeal of the Marketing Act of 1937, which led to establishment of a much freer economic and entrepreneurial environment with major reduction in government interventions in domestic production, marketing and trade. The opening of the agricultural sector placed South Africa among the world's leading exporters of agro-food products



such as wine, fresh fruit and sugar (OEDC, 2006). The beginning of the current decade witnessed particularly strong agricultural growth. The Department of Agriculture (2007a) pointed out that primary commercial agriculture contributes about 2,3% to South Africa's gross domestic product (GDP) in 2006, but accounts for 10% to total reported formal employment. Europe is by far the largest Agricultural trade balance importer, absorbing almost one-half of the country's agricultural exports.

As a result of agreements negotiated at the World Trade Organisation (WTO), traditional trade protection measures such as tariffs and quotas are falling away (WTO, 1995). But to some extent they are being replaced by domestic technical regulations that permit countries to bar products from entering their markets if the products do not meet certain standards. To become and remain competitive, producers and suppliers must meet the Sanitary and Phytosanitary (SPS) requirements set by importers' governments in importing countries. Some SPS measures are very simple and specific, but others are combined in extremely complex systems like the requirements (set out in hundreds of pages of legislation and guidance documents) governing the import of plants and plant products for entry in to the European Union (EU). At the same time, SPS policies will likely become more complex and enforcement more stringent as trade becomes more liberalized (Henson, Loader, Swinbank, Bredhal and Lux, 2000).

The expansion of world trade has placed a huge responsibility on the NPPO of South Africa to facilitate safe agricultural trade with its international trading partners. Lack of knowledge and the inability to meet international market requirements are, however, the most fundamental impediments to accessing foreign markets. The accuracy of the phytosanitary certificate it issues is of paramount importance for international trade. If credibility is lost, this can result in stricter and lengthier inspection procedures in importing countries and eventually loss of markets. This has immediate and potentially serious repercussions for all stakeholders and severely affects industries that depend wholly on specific



markets. It is for these reasons that countries must strengthen their export certification services.

The NPPO of South Africa do experience capacity constraints in its phytosanitary export regulatory system mostly due to the recent restructuring of the National Department of Agriculture (DOA 2007a) and the lack of standards and standard operational procedures which greatly impact on its ability to implement its obligations under the World Trade Organisation's (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (WTO SPS) and the International Plant Protection Convention (IPPC). As no phytosanitary capacity evaluation for South Africa has been done to date, it is crucial to evaluate their export certification system to identify the major challenges experienced by the NPPO officials in phytosanitary certification to the European markets, because of its immense importance in the international trade arena.

1.4 OUTLINE OF THE DISSERTATION

This dissertation is divided into six chapters. Following the introduction in Chapter one, Chapter two are dedicated to the South African economy and agricultural sector, which are discussed in some detail. This includes globalisation and international trade issues. The European Union as an important export market for South Africa is also discussed in this Chapter, which includes an overview of the European market's legislative requirements. At the end of the second Chapter, the South African Phytosanitary export regulatory system is summarized.

The third Chapter is dedicated to the identification of the phytosanitary constraints faced by the South African export regulatory system. The key resources relating to capacity have been analyzed with the aim of highlighting the weaknesses. Based on the author's background experience, certain interpretations and analysis could be made. Further information was obtained



from the current PCE (Phytosanitary capacity evaluation) studies conducted by the Department of Agriculture for South Africa. The thematic areas studied also form the control points and compliance criteria for the Food and Agricultural Organisation (FAO) tool kit (the PCE) that measures a country's capacity to comply with Sanitary and Phytosanitary (SPS) measures.

The evaluation of the phytosanitary certification system currently used by the National Plant Protection Organisation (NPPO) of South Africa with regards to exports to the European market is considered in Chapter four. This Chapter is based on a data gathering task which included questionnaires, telephonic interviews and personal and email communications with various stakeholders.

Chapter five is dedicated to the development of a phytosanitary report certification system for South African compliance with the European market. In the final Chapter (Chapter six) the results of Chapter three and Chapter four are discussed. The major weaknesses of the phytosanitary certification system are presented and recommendations made to improve the perceived problems. Ideas for future work as well as a brief summary of what has been achieved concluded this dissertation.

1.5 LITERATURE CITED

Department of Agriculture (2007a) *Annual Report 2006/2007*. Pretoria: Government Printer.

Henson, S.J., Loader, R., Swinbank, A., Bredhal, M. & Lux, N. (2000) *The impact of sanitary and phytosanitary measures on developing countries*. Centre for Food Economics Research, University of Reading, Reading, UK.



Jooste, A. & Spies, D. (2006) A South African Export opportunity scan for value-added agricultural products. Directorate: International Trade, Department of Agriculture.

OECD (2006) *Agricultural Policy Reform in South Africa*. Organisation for Economic Co-operation and Development, Paris.

WTO (1995) Trading into the future. World Trade Organisation, France.



CHAPTER 2

LITERATURE REVIEW

2.1 SOUTH AFRICAN ECONOMY AND THE AGRICULTURAL SECTOR

2.1.1 Brief overview of the South African economy

South Africa is one of the largest countries on the African continent, which includes a population of 46,9 million and a surface area of 1,22 million square kilometres. With a per capita gross domestic product (GDP) of US\$ 3530, South Africa is also the largest African economy. This is more than 4 times the African average (OECD, 2006).

The CIA (2007) pointed out that South Africa is middle –income, emerging market with an abundant supply of natural recourses. Growth has been robust since 2004, as South Africa has reaped the benefits of macroeconomic stability and a global commodities boom. It is further stressed by Burger (2007) that the economy of South Africa is now stronger than any time in the past 20 years. It expanded by about 5% in 2005, and continued growth at about 5% a year over the period. Even though the recent performance of the South African economy has generally been positive, investment and output growth are still below the levels necessary to reduce unemployment and to achieve a more equitable income distribution (OECD, 2006). The CIA (2007) stated that unemployment remains high and outdated infrastructure has constrained economic growth and that daunting economic problems remained from the apartheid era.

The crucial preconditions for agricultural and rural development in South Africa are macroeconomic stability and economic growth above the current rate. According to the Organisation for Economic Co-operation and Development (2006), higher economic growth, in a country like South Africa, is inconceivable without easing profound humanitarian problems. These problems are largely



occurring in the rural areas, and agricultural development has a vital role to play in its resolution. This circular dependence between agriculture and economic growth on the one hand and human development on the other ultimately represents the most difficult challenges for South African policy makers.

2.1.2 Agriculture as a key sector of the South African economy

The South African agricultural sector, unlike in other African countries, is not dominated by subsistence farming. South Africa has a dual agricultural economy, comprising a well-developed commercial sector and a predominantly subsistence-oriented sector in the rural areas (Burger, 2007).

Covering 1,2 million square kilometres of land, South Africa is one-eighth the size of the United States of America and has seven climatic regions, from Mediterranean to subtropical to semi-dessert (CIA, 2007). The country can be subdivided into a number of farming regions according to climate, natural vegetation, types of soil and the type of farming practiced (Burger, 2007). Due to the countries varied climate, many different crops are grown.

This biodiversity, together with a coastline 3000 kilometres long and served by seven commercial ports, favours the cultivation of a highly diverse range of marine and agricultural products, from deciduous, citrus and subtropical fruit to grain, wool, cut flowers, livestock and game About 12% of South Africa's surface area can be used for crop production. High potential arable land comprises only 22% of total arable land. Some 1,3 million hectares (ha) are under irrigation. The most important factor limiting agricultural production is the availability of water. Rainfall is distributed unevenly across the country. Almost 50% of South Africa's water is used for agricultural purposes (Burger, 2007).

Today, South Africa is not only self-sufficient in virtually all major agricultural products, but in a normal year is also a net food exporter. However, with very low



average rainfall and high variability within and between seasons, agriculture is vulnerable to the effects of drought. Owing to its geographical location, some parts of South Africa are prone to drought. When there is a major drought, there is strong downward pressure on GDP. In good years however, the contribution of agriculture can be vital to lifting the economy of the Southern African region (Burger, 2007).

According to the Department of Agriculture (2007b), the value of commercial agricultural production in South Africa was R 96 billion in 2007, while its contribution to the gross domestic product (GDP) was approximately R 49 billion. The primary agricultural sector has grown by an average of approximately 11, 8% per annum since 1970, while the total economic growth was 14, and 9% per annum over the same period, resulting in a decline in the agricultural share of the GDP from 7,1% in 1970 to 2, and 3% in 2006. The Department of Agriculture (2007a) pointed out that primary commercial agriculture contributes about 2,3% to South Africa's gross domestic product (GDP) in 2006, but accounts for 10% to total reported formal employment.

Despite its relatively small share of the total GDP, primary agriculture is an important sector in the South African economy, especially in the rural areas, and a major earner of foreign exchange. Agricultures prominent indirect role in the economy is a function of backward and forward linkages to other sectors. About 70% of agricultural output is used as intermediate products in the sector. Agriculture is therefore a crucial sector and an important engine of growth for the rest of the economy (Department of Agriculture 2007b).

2.1.3 Agricultural policy reforms: deregulation and market freedom

South Africa has undergone immense economic, social and political changes since the beginning of the democratization process in 1994. The overall results of the reforms to date have been positive, with a stronger and stable macro



economy, better integration into the global trading system, and some progress in redressing past injustices. Since the end of apartheid in 1994, South African agriculture has evolved from a highly regulated and protected industry to one free from all constraints, unsubsidized by government and capable of competing with the best in the world (Viljoen, 2005).

The South African economy, including agriculture, is increasing integrated in world markets (Jooste and Spies, 2006). According to the policy brief of the OEDC (2006), three major political and economic developments of the 1900's contributed to this process

The most important one was the lifting of economic sanctions against South Africa following the accession in 1994 of a democratic government. In 1948, the National Party won the national elections and immediately started implementing a stricter race-based policy named apartheid. This effectively divided the economy into a privileged white one, and an impoverished black one. The policy was widely critised and lead to crippling sanctions being placed against the country in the 1980's. The legacy of apartheid will have a major impact on the economy for generations to come (CIA, 2007). South Africa held its first multiracial election in 1994, leaving the newly elected African National Congress (ANC) government with the daunting task of trying to restore order to an economy harmed by sanctions, while also integrating the previously disadvantaged segment of the population into it. The democratic elections and the lifting of international economic sanctions against South Africa opened the way for broad liberalizing reforms (OECD, 2006).

The next radical change was the repeal of the Marketing Act of 1937, which led to the establishment of a much freer economic and entrepreneurial environment with major reduction in government interventions in domestic production, marketing and trade (Sandrey and Vink, 2006). South Africa's agricultural marketing has undergone transformation since 1994 with the introduction of the



Marketing of Agricultural Products Act, 1996 (Act 47 of 1996). This Act has changed agricultural marketing policy and practice dramatically to ensure that it occurs in a free environment. The deregulation process was aimed at ensuring that farmers and agribusinesses position themselves as players in the globally competitive environment. The deregulation process entailed closing agricultural marketing boards, phasing out import and export-control measures, eliminating subsidies, and introducing tariffs to protect the domestic agricultural industry value chains against unfair international competition. While a fairly radical process to some old-style producers in South Africa, deregulation has ensured a leaner and stronger agricultural industry, with farmers and agribusinesses able to position themselves as players in a global competitive environment. Phasing out controls and closing marketing boards led to a short-term shortage of essential services formerly provided by the boards and cooperatives, such as storage, grading, deliveries, value adding, information dissemination and research. As a result specialized marketing support institutions, such as the South African Futures Exchange (SAFEX) and the Agricultural Futures Market of the Johannesburg Stock Exchange (JSE), were established to provide much needed price management mechanisms (Sandrey and Vink, 2006; Viljoen, 2005 and OECD, 2006).

According to Barry (2006) the deregulation process was driven by anti competition philosophies and concern about effective use of power in the single channel marketing system. The "big bang" approach to deregulation resulted in many essential industry services being lost, particularly access to relevant and accurate information. Because of deregulation, a period of major change to industry organisations occurred in the mid to late 1990's. New South African industry organisations were created, or organisations went through major reformation processes.

The opening of the agricultural sector placed South Africa among the world's leading exporters of agro-food products such as wine, fresh fruit and sugar. The



main development in trade policies were the replacement of direct control over imports by tariffs, which were set below the rates bound in the WTO, and the elimination of state controls over exports. The average import tariff level was lowered by one—third between 1994 and 1999. South Africa has established a number of preferential trade arrangements with countries inside and outside the South African Development Community (SADC) region. The new trade arrangements improved access to foreign markets for farmers, but also introduced greater exposure to external competition.

Wide ranging reforms liberalizing domestic and foreign trade and lowering support to agriculture were implemented in the 1990s. The commercial agricultural sector adapted well to the policy reforms and liberalisation efforts (OECD, 2006).

The ability of the commercial sector to respond to increased market opportunities will ultimately determine any gains from global trade liberalisation. Farming policies need to be conducive to quality and productivity improvements for this sector to further improve its international competitiveness and exploit its export potential.

2.1.4 Globalisation and international trade

Sheram and Soubbotina (2000) define "Globalisation" as the growing interdependence of countries resulting from the increasing integration of trade, finance, people, and ideas in one global marketplace. International trade and cross-border investment flows are the main elements of this integration.

Globalisation started after World War II but has accelerated considerably since the mid-1980s, driven by two main factors. One involves technological advances. The other factor has to do with the increasing liberalisation of trade and capital markets: more and more governments are refusing to protect their economies



from foreign competition or influence through import tariffs and no tariff barriers such as import quotas, export restraints, and legal prohibitions (Collier, Greenaway & Gunning,1997). A number of international institutions established in the wake of World War II- including the World Bank, International Monetary Fund (IMF), and General Agreement on Tariffs and Trade (GATT), succeeded in 1995 by the World Trade Organisation (WTO)- have played an important role in promoting free trade in place of protectionism.

As the World Trade Organisation passes the 50th anniversary of the rules-based trading system that began with the GATT after World War II, it is clear that globalisation and the liberalisation of trade have become permanent fixtures in international trade policy formulation. Of all globally traded commodities, agriculture is most subject to rigged rules and double standards. In the early 1990s there was some optimism that agricultural trade would become fairer: for the first time agriculture was included in the Uruguay Round of the Global Agreement on Trade and Tariffs (GATT). Through GATT it was hoped that the disarray that characterized global trade in agriculture would be reformed to make way for a "fair and market oriented agricultural trading system...through substantial and progressive reductions in agricultural support and protection" (Mather, 2002).

For every country in the world, the import and export of agricultural products is essential to the health of the economy as well as the population (FAO, 2001). For countries that are actively engaged in globalisation, the benefits come with new risks and challenges. For participating countries the main benefits of unrestricted foreign trade stem from the increased access of their producers to larger, international markets. Domestic producers produce more efficiently due to their international specialization and the pressure that comes from foreign competition, and consumers enjoy a wider variety of domestic and imported goods at lower prices (Sheram and Soubbotina, 2000). Mather (2002) stated that for developing country producers the hope was for greater access to northern



hemisphere markets and higher and more stable world commodity prices. The impact of the Uruguay Round has been extremely disappointing. While developing countries have liberalized their agricultural markets and support systems to farmers, often as part of a structural adjustment programme, the subsidies and supports to farmers in the USA and the European Union have in fact increased since the late 1980s. Country subsidies in 2000 of the Organisation for Economic Co-operation and Development were so high that it exceeded the value of world trade in agricultural products. The impact of these subsidies on prices has been enormous for international competition and on developing country producers. It is important to note that subsidies have not only increased, they have also changed their character and their focus. In other words, in the decade of the 1990s the nature of the rigged rules and double standards has changed in significant ways. Prior to the Uruguay Round subsidies in the European Union were often indirect or in the form of market prices supports. Since then the subsidies have become direct to support measures for limiting production and improving the environment. Despite changes in the focus of the subsidies their impact on world trade remains the same.

Tariff protection has also changed since the early 1990s. Non-tariff barriers and quotas have given way to quantitative tariffs, which increase the costs of imports (Mather, 2002). Governments of developing countries often argue that recently established industries require temporary protection until they become more competitive and less vulnerable to foreign competition. Sheram and Soubbotina (2000) argue further that governments often prohibit or reduce selected imports by introducing quotas, or make imports more expensive and less competitive by imposing tariffs. Such protectionist policies can be economically dangerous because they allow domestic producers to continue producing less efficiently and eventually lead to economic stagnation. Wherever possible, increasing the economic efficiency and international competitiveness of key industries should be considered as an alternative to protectionist policies.



Import tariffs are widely used as a market access barrier in order to restrict imports of citrus fruits and citrus juices and protect national production (FAO, 2004). Hagedoorn (2002) indicated that as a result of the Marrakech Agreement on agriculture in 1994, there has been a process of reduction of tariffs on imported fruits and fruit juices. Some countries have reached trade agreements with other countries or groups of countries in order to benefit from preferential treatment through the reduction of the level of tariffs or even the allowance of duty-free entry. According to The United Nations Conference on Trade and Development (UNCTAD, 2006), these trade agreements expand market opportunities.

Liberalisation of agricultural markets has been on the agenda of policy makers and international organisations since the beginning of the 1980's. Gradually, policies in the industrialized world became increasingly oriented towards less government interference, and were characterized by a simultaneous shift from national to supranational regulations. In much of the developing world, policy reforms under structural adjustment programs led to a redefinition of the government in relation to agricultural markets. As a result of these national and international developments, agricultural markets world-wide entered a long-term process of liberalisation (Collier *et al*, 1997).

There continue to be important limitations to the free global movement of fruit, despite the opportunities resulting from globalisation, and many countries have experienced difficulty adjusting to a new trade environment characterized by reduced tariff barriers. However, the emphasis placed on non-tariff barriers has increased both due to the global proliferation of non-tariff or technical measures and because of wider recognition of the impact non-tariff barriers can have on trade. There is now concern that such technical measures can act, either explicitly or implicitly, as a barrier to trade in a similar manner to tariffs and quantitative restrictions (FAO, 2001; 2004). Countries may thus turn to other measures (such as SPS) in order to protect domestic markets, secure market



share or gain other unfair trading advantages, particularly in those instances in which existing tariff barriers may have been removed. Sanitary and phytosanitary (SPS) measures are technical regulations designed to prevent a potentially adverse impact of international trade on human, animal or plant life or health. The purpose is to protect consumer and national heath and safety. The Agreement on the Application of Sanitary and Phytosanitary Measures (the "SPS Agreement") entered into force with the establishment of the World Trade Organisation on 1 January 1995 (WTO, 1995).

2.1.5 South Africa as a player in international markets

Trade is a significant component of South Africa's agricultural economy and is essential to South Africa's prosperity. In the last decade (1993-2003) agricultural exports have grown strongly in importance and now represent 40% of the total value of production. Imports have also grown sharply since the mid nineties and now compare to 20% of the value of production. South Africa is on balance an agricultural exporting country (Department of Agriculture, 2007a). While the dramatic growth in trade partially reflects the decline in the Rand over recent years it is also a response to an economic policy environment that has moved rapidly from protectionist statutory intervention and support of agriculture prior to the mid nineties to deregulation and global competitiveness in the current economy.

According to the Department of Agriculture (2001), the political changes in South Africa and the policy changes in agriculture, since 1994, have contribute to a dramatic increase in the role of trade in the agricultural economy. Consumer preferences, food safety considerations, social and technical conditions and intellectual property rights have taken on a new importance in the light of globalisation.



South Africa is a signatory to the World Trade Organisation (WTO) and is an active participant in the standard setting body that is vital to its global market share, the International Plant Protection Convention (IPPC).

On the African continent, South Africa is considered as a lead country and plays a major role in agricultural development and trade issues. During 2006/2007, the department of agriculture continued participating actively in initiatives aimed at integrating the South African Development Community (SADC) region, to improve the regional economy through increased market access and economic activities for our agricultural products (Department of Agriculture, 2007a).

Despite some challenges facing the region, according to Director General of Agriculture, the SADC Trade Protocol which makes provision for South African products to be traded freely within the region, is on track for implementation in 2008 (Department of Agriculture, 2007a).

South Africa's objective with agricultural negotiations, as part of the Doha Development Agenda, is to achieve a substantial reduction in domestic support and the elimination of export subsidies, mainly from developed countries. Other objectives are to achieve a substantial improvement of market access for South African agricultural exports and to ensure that South Africa's commitments, in terms of domestic support, fully covers the development needs of the country. The WTO's Doha Development Round negotiations were suspended during July 2006. The core negotiating issues revolved around agriculture and the inability or unwillingness of key member to redress highly distorted trade measures that frustrate the development ambitions of developing countries. Since then, much work has been done, individually and in collaboration with our alliances partners in the WTO, to facilitate a resumption of negotiations. Negotiations were formally resumed in Geneva in early February 2007 (WTO, 2007).



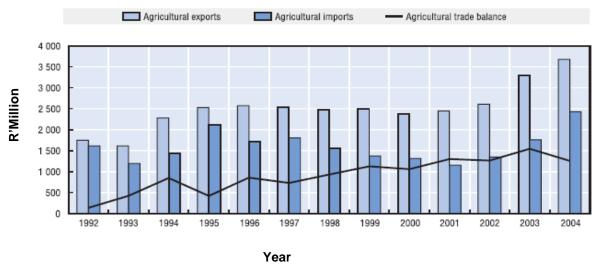
South Africa has also established a number of preferential trade agreements with countries inside and outside the SADC region. Trade agreements improve access to foreign markets for farmers, but also exposed them more too external competition. South Agriculture maintains bilateral trade agreements with countries in Africa, and is involved in negotiations as part of South African Customs Union (SACU) with the USA, South America Common Market (MERCOSUR), and the European Free Trade Area. South Africa is also involved in the WTO negotiations individual and as a member of the G29 of the Cairns Group and the Africa Group. South Africa is also developing trade relations with other countries. This includes the implementation of the agricultural aspects of the SACU Agreement that came into effect in July 2004; the SADC Protocol on Trade; and the South Africa-EU trade, Development and Co-operation Agreement (TDCA). The South African —EU TDCA was implemented on 1 January 2000.

The South African economy, including agriculture, is increasingly integrated in world markets with about one-third of agricultural production exported. The opening up of the agricultural sector placed South Africa among the world's leading exporters of such agro-food products as wine, fresh fruit and sugar. (OECD, 2006 and Sandrey and Vink, 2006).

The beginning of the current decade witnessed particularly strong agricultural export growth (Fig 1). South African agricultural export revenues reached almost 9% of the total value of national exports (OECD, 2006).



Fig 1 South African Agricultural exports and imports in 1992 – 2004 USD Million



Source: OECD, 2006

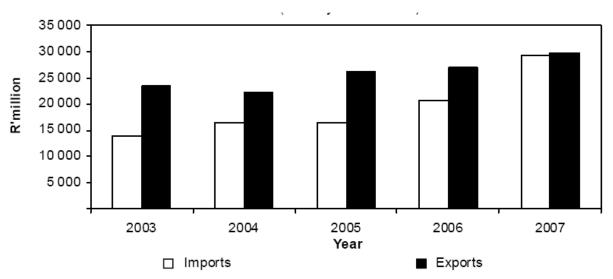
Deciduous fruit is grown mainly in the Western Cape and in the Langkloof Valley in the Eastern Cape. This industry's export earnings represent 16% of the country's total earning from agricultural exports for 2004/05. During 2003, South Africa was the largest exporter in the southern hemisphere of table grapes to Europe (Burger, 2007).

Europe is by far the largest destination, absorbing almost one-half of the countries agricultural exports. The EU remains South Africa's largest single export market for agricultural products although its share of exports has dropped from 61% in 1988 to 38% in 2001 (Department of Agriculture, 2007a). Agricultural imports are also growing, but less rapidly than exports accounting for 5-6% of the total annual imports since 2000 (OECD, 2006).

In figure 2, the estimated value of imports during 2007 come to approximately R 29 155 million compared to R 20 588 million in 2006- an in crease of 41.6%. The estimated value of exports show an increase of 13,7% from R 26 978 in 2006 to about R 29 729 in 2007 (Department of Agriculture, 2007b).



Fig 2: Imports and exports of agricultural products 2003-2007 (January to December)



Source: Department of Agriculture, 2007b

According to the 2007 values, citrus, wine, sugar, grapes, apples, pears and quinces were the most important export products. During 2007, the United Kingdom (UK), Netherlands, USA, Mozambique and Germany were the 5 largest export destinations for agricultural products (Department of Agriculture, 2007b).

2.2 EUROPEAN UNION AS AN IMPORTANT EXPORT MARKET FOR SOUTH AFRICA

2.2.1 What is the European Union?

The European Union (EU) is a unique, economic and political partnership between 27 democratic European countries. It is founded upon numerous treaties and has undergone expansions that have taken it from 6 member states to 27. Common institutions has been set up by the EU's member states, to which they delegate some of their sovereignty so that decisions on specific matters of joint interest can be made democratically at European level (Dinan, 2005).



Fontaine (2004) pointed out that the historical roots of the European Union lies in the Second World War. The European Union is the culmination of European integration which started with the European Coal and Steel Community (ECSC). As of 1950, the European Coal and Steel Community begin to unite European countries economically and politically in order to secure lasting peace. The ECSC Treaty was aimed at speeding up the reconstruction of Europe after World War II and at preventing a recurrence of war amongst its signatories.

The six founders were Belgium, France, Germany, Italy, Luxembourg and the Netherlands. In 1957, the Treaty of Rome creates the European Economic Community (EEC), or 'Common Market'. Denmark, Ireland and the United Kingdom join the European Union on 1 January 1973, raising the number of member states to nine. In 1981, Greece becomes the 10th member of the EU and Spain and Portugal follow five years later. In 1987 the Single European Act is signed. This is a treaty which provides the basis for a vast six-year programme aimed at sorting out the problems with the free-flow of trade across EU borders and thus creates the 'Single Market'. There is major political upheaval when, on 9 November 1989, the Berlin Wall is pulled down and the border between East and West Germany is opened for the first time in 28 years, this leads to the reunification of Germany when both East and West Germany are united in October 1990. In December 1992 a single European market was achieved. The Maastricht Treaty of 1992 created the European Union, preparing for the introduction of a single currency and the gradual development of a Common Foreign and Security Policy (CFSP) (Fontaine, 2004 and Dinan, 2005).

Barnard (2007) pointed out that in 1993 the Single Market were completed with the 'four freedoms' of: movement of goods, services, people and money. In 1995 the EU gains three more new members, Austria, Finland and Sweden (Fontaine, 2004 and Dinan, 2005). On 1 May 1999 the single currency (Euro) came into being. The EU provides a unique institutional framework for forging unity and cooperation amongst the nations of Europe. With the accession of new 10



members on 1 May 2004 the number of EU Member States has increased from 10 to 25. The new 10 members are Hungary, The Czech Republic, Estonia, Latvia, Lithuania, Poland, Slovenia, Slovakia, Malta, and Cyprus (Dinan, 2005). According to the Europa web portal, the fifth enlargement completed with the accession of Romania and Bulgaria on 1 January 2007.

2.2.2 The geography of the European Union

The EU primarily occupies a large portion of Western and Central Europe, covering 4,422,773 square kilometres. It extend northeast to Finland, northwest to Ireland, southeast to Cyprus and southwest to Iberia, it represents the seventh largest territory in the world by area (CIA, 2007).

The union's geography is composed of its 27 member states (Appendix A). Although most of the EU is on the European continent, the EU is not coterminous with Europe: significant parts of the continent (e.g. Switzerland, Norway, and European Russia) are outside of the EU. The member states of the EU have land borders with 21 other nations. Several overseas territories and dependencies of various member states are also formally part of the EU (e.g. the Azores, Madeira, French Guiana, Martinique, Guadeloupe or the Canary Islands) while in other cases territories associated with member states are not part of the EU (e.g. Greenland, the Faroe Islands, most territories associated to the United Kingdom, Aruba, the Netherlands Antilles or New Caledonia) (Dinan, 2004, 2005 and Hartley, 2004).

2.2.3 Brief overview of the economy

CIA (2007) indicates that the economy of the EU combines the economies of the 27 member states and is generating an estimated nominal GDP of US\$ 17, 6 trillion in 2008. It accounts for about 31% of the world's total economic output. Fifteen member states adopted a single currency, the Euro, managed by the



European Central Bank. The EU economy consists off a single market and is represented as a unified entity in the WTO. The agricultural sector is supported by subsidies from the EU in the form of the Common Agricultural policy (CAP). It guarantees a minimum price for farmers in the EU. This is criticized as a form of protectionism, inhibiting trade, and damaging developing countries (Graumans, 1997).

2.2.4 Institutional structure of the European Union

There are currently 5 institutions of the EU which govern the Union. They are outlined in the treaties of the European Union in the following order:

- the European Parliament (representing the people of Europe);
- the Council of the European Union (representing national governments);
- the European Commission (representing the common EU interest).
- The Court of Justice of the European Communities
- European Court of Auditors

The **European Parliament** shares the legislative and budgetary authority of the Union with the Council. It does however have powers over the Commission which the Council does not. The **Council of the European Union** is a body holding legislative and executive powers and is thus the main decision making body of the Union. The **European Commission** is the executive arm of the Union. It is designed to be independent of national interest. The body is responsible for drafting all law of the EU and has monopoly over legislative initiative within the European Community pillar. It also deals with the day-to-day running of the Union and has a duty to uphold the law and treaties. The **Court of Justice** of the European Communities is the highest court of the Union on matters of Union law and is composed of 27 judges *(one per member state). Its role is to ensure that the Union law is allied in the same e way across all states and to settle legal disputes between institutions or states. It has become a



powerful institution as Union law overrides national law. European **Court of Auditors** has no judicial powers like the Court of Justice. Instead, it ensures that taxpayer's funds from the budget of the EU have been correctly spent (Fontaine, 2004).

Most EU institutions were created with the establishment of the European Coal and Steal Community in the 1950's. Much change since then has been in the context the shifting of the power balance away from the Council towards the Parliament. The EU's system of governance is largely unique. The institutions are not concentrated in a single capital city; they are instead based across 3 cities, Brussels, Luxembourg and Strasbourg. The current arrangement was agreed in 1992 and attached to the Treaty of Amsterdam. The treaty states that the Commission and Council would be based in Brussels, the Courts in Luxembourg and the Parliament is Strasbourg. However some departments of the Commission and meetings of the Council take place in Luxembourg while the Parliament has its committees and some sessions in Brussels and its secretariat in Luxembourg (Hartley, 2004 and Dinan, 2005).

According to Steiner, Woods and Twigg–Flesner (2006) the law of the European Union is the unique legal system which operates alongside the laws of the member states of the EU. EU law has direct effect within the legal system of its member's states, and overrides national law in many areas, especially in terms of economic and social policy. The EU is not a federal government, nor is it an intergovernmental organisation. EU law has what is known as a 3 pillar structures. The first, oldest and most important "pillar" deals with law concerning economic and social rights and how European institutions are set up. This is found in the treaty of the European Communities, signed in Rome in 1957 and subsequently amended by other Treaties concluded between the member states. The second and third pillar was established under the Treaty of the European Union, signed in Maastricht in 1992. The second pillar concerns the EU Common Foreign and Security Policy. The third pillar concerns Police and Judicial Co-



operation in Criminal Matters. Technically speaking "EC law" denotes anything to do with the first pillar and "EU law" denotes the law regarding all three pillars.

There are a number of types of legislation which can be passed. The strongest is a regulation, an act or law which is directly applicable in its entity. Then there are directives which bind members to certain goals which they must achieve. They do this through their own laws and hence have room to manoeuvre in deciding upon them. A decision is an instrument which is focused at a particular person/group and is directly applicable. Institutions may also issue recommendations and opinions which are merely non-binding declarations (Craig and de Burca, 2007).

2.2.5 South African agricultural trade relations with the European Union

Graumans (1997) stressed that since the first democratic elections South Africa has been involved in redefining its relations in the international arena. The isolation of apartheid South Africa left the democratic government with empty hands regarding international agreements, both in trade and cooperation spheres. The negotiations with the EU are one of the exercises the new government and its transforming departments saw themselves faced with. The EU is an important trade partner and has strong ties with South Africa's neighbours in the SADC region.

According to the Department of Agriculture (2007a), Europe remains South Africa's largest trading region and source of investment. In 2005, Europe accounted for 38,9% (R 116, 94 billion) of South Africa's total exports, and 40,3% (R140, 448 billion) of its total imports. During the same year, the EU accounted for the bulk of this trade, with exports to the EU reaching R 106,465 billion in 2005 (up from R93,426 billion in 20040, and imports reaching R128,360 billion in 2005 (up from R121,064 in 2002). Since 2001, South Africa's imports from Germany have been South Africa's largest source of imports. In 2005, South



Africa's imports from Germany totalled R49, 197 billion. The United Kingdom remains South Africa's largest export destination in Europe with exports amounting to R32, 377 billion in 2005. Trade relations with Europe, particular with the European Union, are pivotal to South Africa's economic development. The Trade, Development and Co-operation Agreement (TDCA) with the EU form a substantial element of South Africa's reconstruction and development (Burger, 2007).

The TDCA, which came under provisional implementation on 1 January 2000 and fully into force on 1 May 2004, provides for the establishment of a free trade agreement (FTA) between South Africa and the EU. The TDCA commits South Africa to grant duty-free access to 86% of the EU's imports over a period of 12 years, while the EU will liberalize 95% of South Africa's imports over a 10 year period (Assarson, 2005). This agreement is expected to contribute towards the restructuring of the South African economy and its long-term economic growth.

According to the Department of Agriculture (2006a), the TDCA review clauses provide for the two parties to assess whether they would like to improve the TDCA in areas in which they already have commitments, and whether to extend it to areas that the TDCA covers partially or not at all. South Africa seeks to use the TDCA review processes to correct the anomalies in South Africa's and the SADC's trade policy towards the EU, and to ensure that the ongoing economic partnership agreement between the SADC and the EU are aligned with a revised TDCA. South Africa also negotiated that the EU's Generalized System of Preference (GSP) be transposed to the TDCA, because products with GSP-status enjoy preference over those under the TDCA.

In August 2005, SACU concluded an FTA with European Free Trade Areas states (EFRA), including Liechtenstein Switzerland, Norway and Iceland. The SACU's offer to the EFTA was the same as that of the EU in terms of the South African EU TDCA on both agriculture and industrial products with some marginal



adjustments (taking into account BLNS countries' sensitivities). EFTA has provided limited access to basic agricultural products (Department of Agriculture, 2006a).

2.2.6 The legislative requirements of the EU

The body of EU legislation that implements the provisions of the SPS Agreements constitutes a complex and overlapping series of Regulations and Directives that have been introduced over the period since the establishment of the EU. The European Commission embodies and upholds the general interest of the Union and is the driving force in the Union's institutional system. Its four main roles are to propose legislation to Parliament and the Council, to administer and implement Community policies, to enforce Community law (jointly with the Court of Justice) and to negotiate international agreements, mainly those related to trade and cooperation (Fontaine, 2004).

According to the official website of Europe, The Directorate-General for Health and Consumer Protection is a Directorate-General of the European Commission. The Health and Consumer Protection DG is responsible for the implementation of EU laws on the safety of food and other products, on consumer's rights and on the protection of people's health. The Directorate-General for Health and Consumer Protection is organised into six directorates:

Directorate A: General Affairs

Directorate B: Social Affairs

Directorate C: Public Health and Risk Assessment

Directorate D: Animal Health and Welfare

Directorate E: Safety of the Food Chain

Directorate F: Food and Veterinary Office



The EU's plant Health legislation is covered by Directorate E- Food Safety: plant Health, animal health and welfare, international questions: E1 – Plant health of the Health and Consumer Protection Directorate-General. The main objective of the EU plant health legislation is to protect the safety of food derived from plants and to secure the health and quality status of crops in all member states. It also regulates the trade of plants and plant products within the EU as well as imports from the rest of the world in accordance with international plant health standards and obligations. It implements preventative measures to guard against the introduction and spread of organisms harmful to plants or plant products within the EU. It also ensures quality conditions for the sale of seeds and propagation material within the EU. EU legislation also covers the intellectual property rights granted to plant varieties, as well as the conservation and use of genetic resources.

The importation of agricultural products into the EU are governed by Council Directive 2000/29/EC of 8 May 2000 on protective measures against the introduction into the Community of organisms harmful to plants or plant product and against their spread within the Community. This Directive concerns protective measures against the introduction into the Member States from other Member States or third countries of organisms which are harmful to plants or plant products.

This Directive replaces and consolidates Directive 77/93/EEC of 21 December 1976 and subsequent amendments. It is based on the principles accepted internationally in the International Plant Protection Convention (IPPC) of the Food and Agriculture Organisation (FAO) and the WTO SPS (sanitary and phytosanitary measures) agreement.

In 2004 a consolidated text of the Council Directive was produced by the CONSLEG system of the Office for Official Publications of the European Communities (CONSLEG: 2000L0029 — 01/05/2004). This document is meant



purely as a documentation tool and the institutions do not assume any liability for its contents.

2.3 SOUTH AFRICAN PHYTOSANITARY EXPORT REGULATORY SYSTEM

2.3.1 Importance of the SPS mechanisms in international trade

2.3.1.1 What are Sanitary and Phytosanitary Measures?

According to the SPS Agreement (WTO, 1994), sanitary and phytosanitary measures are mandatory technical requirements adopted by nations to protect the health and lives of humans, animals, and plants from risks associated with disease, pests, and contamination of foodstuffs, and to prevent damage caused by the establishment or spread of pests. The application of sanitary and phytosanitary measures to facilitate international trade, is regulated by the WTO Agreement on the Application of Sanitary and Phytosanitary Measures. Sanitary measures relate to human or animal health, whereas phytosanitary measures relate to plant health. SPS measures may take many forms, including laws, decrees, regulations, requirements and procedures, and they may involve the application of specific standards

The SPS Agreement was negotiated during the Uruguay Round to address the concern that gains made during the round in negotiating freer trade in agricultural commodities could be eroded if countries substituted arbitrary or unjustified technical barriers to keep out imports (WTO, 1995). The agreement confirms that WTO members have the right to apply SPS measures to protect human, animal, or plant life or health. But such measures can be applied only to the extent necessary and must be based on sound scientific principles and (unless provisional) must not be maintained without sufficient scientific evidence. Furthermore, measures must not arbitrarily or unjustifiably discriminate among members. The agreement states further that all measures that conform to



international standards, guidelines, or recommendations, as promulgated by the relevant international standard-setting bodies (Codex Alimentarius Commission, International Office of Epizooties and International Plant Protection Convention), are consistent with the relevant provisions of the agreement. But if a member's measure results in a level of protection higher than would be achieved by a relevant international norm, or if no such norm exists, the measure must be based on a risk assessment appropriate to the circumstances, reflect a consistent approach to risk management, and be the least trade-restrictive means of achieving the importing member's level of protection. The requirements of the Agreement are generally seen as high and even developed countries face a substantial task when they have to provide a risk assessment robust enough to be judged in conformity with the Agreement's provisions.

Agricultural producers and exporters and regulatory authorities share responsibility for ensuring conformity with SPS requirements. Businesses are typically responsible for ensuring that requirements are met, and governments monitor compliance, applying restrictions where necessary. For agricultural products in international trade, the relevant authorities of an exporting country might have to provide official certification that the requirements of an importing country have been met. These activities require suitable legal frameworks and enforcement mechanisms, and technical support in the form of surveillance and monitoring systems, testing laboratories, official inspection services, pest and disease databases, and so forth.

As the expansion of world trade has created more integrated agricultural and food markets an agreement on international measures for ensuring the quality and safety of traded agricultural products are therefore essential. SPS measures are meant to ensure safety, and domestic regulatory structures governing the application and regulation of such measures are necessary to ensure that only safe agricultural products and foodstuffs are distributed to the general population (WTO, 1995).



2.3.1.2 How do Sanitary and Phytosanitary Measures affect trade and development?

Food and agricultural standards are emerging as a particularly important aspect of the institutional framework of global markets in an era market by the twin forces of globalisation and agro-industrialisation. The role of standards, as well as how they are set and implemented, is shifting as the global agric-food system adapts to these forces. Specifically, the market context is changing due to the shift from homogeneous markets to differentiated markets, a reorientation from national markets to global markets, moving from spot markets toward vertical coordination and integration, and the restructuring of economies and policies from planned to market driven (World Bank, 2001).

Jaffee (1993) indicated that the fastest growing global agricultural markets for developing countries are for fruits and vegetables, livestock products and other high-value commodities. For these high-value products, regulations and standards related to safety and quality play a large role in determining trade opportunities. The WTO agreements to discipline agricultural food safety and quality regulatory decisions are primarily sovereign prerogatives. These WTO disciplines call broadly for countries to achieve legitimate regulatory goals in the least trade-distorting manner. Effectiveness of these disciplines is an important aspect of a rules-based agricultural trade system.

Sanitary and phytosanitary measures, trade and development are increasingly interconnected (World Bank, 2001). Developing countries are huge exporters of agricultural and food products, taking advantage of their abundant low- cost labour and arable land. Recent liberalisation of global trade including reduction in agricultural tariffs and elimination of quotas has expanded export opportunities for many of these countries. But their inability to conform to SPS measures required by trading partners has hampered their ability to take advantage of



these opportunities. At the same time, SPS policies will likely become more complex and enforcement more stringent as trade becomes more liberalised (Henson, Loader, Swinbank, Bredhal and Lux, 2000).

Several studies have provided evidence that technical regulations constitute a considerable obstacle to the growth of agricultural food and produce exports of developing countries, including those in Africa (Townsend, 1999; Jabati, 2003; Zarrilli, 2002; Henson *et al.*, 2000; Jha, 2002). Agricultural exports from South Africa, and indeed other African countries, also face these heavy non-tariff restrictions (including technical trade barriers, sanitary and phytosanitary standards, safeguards and anti-dumping instruments), which constrain the developing countries capacity to exploit trade opportunities. Among all the non-tariff barriers (NTBs), sanitary and phytosanitary (SPS) standards and technical regulations are perhaps the biggest constraint impacting on agricultural exports. African countries continue to see SPS measures as a protection device preventing the export of their agricultural products.

2.3.2 SPS Regulations and enforcement in South Africa.

2.3.2.1 Meeting SPS requirements in the global market place

The South African economy, including agriculture, is increasingly integrated in world markets. According to the OECD's review on the agricultural policy reform in South Africa (2006), three major political and economic developments of the 1990s contributed to this process. The most important was the lifting of economic sanctions against South Africa following the accession in 1994 of a democratic government. The next radical change was the repeal of the Marketing Act of 1937, (Vink and Kirsten, 2000) which led to establishment of a much freer economic and entrepreneurial environment with major reduction in government interventions in domestic production, marketing and trade. The opening of the agricultural sector placed South Africa among the world's leading exporters of



agro-food products such as wine, fresh fruit and sugar. The beginning of the current decade witnessed particularly strong agricultural growth. South Africa's agricultural export revenues reached almost 9% of the total value of national export. Europe is by far the largest Agricultural trade balance importer, absorbing almost one-half of the country's agricultural exports (Department of Agriculture, 2006b).

As a result of agreements negotiated at the World Trade Organisation (WTO), traditional trade protection measures such as tariffs and quotas are falling away. But to some extent they are being replaced by domestic technical regulations that permit countries to bar products from entering their markets if the products do not meet certain standards. To become and remain competitive, producers and suppliers must meet the Sanitary and Phytosanitary (SPS) requirements set by importers' governments in importing countries. Some SPS measures are very simple and specific, but others are combined in extremely complex systems like the requirements (set out in hundreds of pages of legislation and guidance documents) governing the import of plants and plant products for entry in to the European Union (EU). At the same time, SPS policies will likely become more complex and enforcement more stringent as trade becomes more liberalised (Jaffee, 2005).

The expansion of world trade has placed a huge responsibility on the National Plant Protection Organisation of South Africa (NPPO) to facilitate safe agricultural trade with its international trading partners. Lack of knowledge and the inability to meet international market requirements are, however, the most fundamental impediments to accessing foreign markets. The accuracy of the phytosanitary certificate it issues is of paramount importance for international trade. If credibility is lost, this can result in stricter and lengthier inspection procedures in importing countries and eventually loss of markets. This has immediate and potentially serious repercussions for all stakeholders and severely



affects industries that depend wholly on specific markets. It is for these reasons that countries must strengthen their export certification services.

2.3.2.2 South Africa's Phytosanitary Export Regulatory System

Department of Agriculture

South Africa is a signatory member of the WTO and the IPPC. Within South Africa, the overall administration on matters related to the SPS Agreement comes under the mandate of the Department of Agriculture (DOA). The DOA plays a key role in the development of South African agriculture and the profitability and international competitiveness of the sector. The strategic role of the Department of Agriculture is to facilitate the transformation objectives for agricultural development, food security and growth of the sector and the sustainable use of natural resources. To achieve this, the department provides support for the growth and transformation of the agricultural sector, poverty eradication and rural development, and for establishing farmer support programmes. These include access to technology, markets, finance, information and training. The department also seeks to mitigate risks by formulating strategies for disaster management, quality assurance, food safety, and plant and animal health. The activities of the Department of Agriculture are organised into 5 programmes.

The programme: Biosecurity and Disaster Management's main objective is to reduce the incidence of animal and plant diseases and ensure compliance with international and national agricultural risk and disaster management measures through development, implementation and monitoring of policies that ensure proper maintenance of and improvement in management systems for animal and plant disease control. The Biosecurity and Disaster Management branch comprises of two Chief Directorates: Plant Health and Inspection Services (PHIS) and Food, Animal Health and Disaster Management.



Plant Health and Inspection Services

This Chief Directorate is responsible for regulations governing the import and export of plants, plant products and other regulated articles. It focuses on policies and systems to control plant diseases and on making sure that illegal agricultural products do not enter and leave South Africa. It also ensures that plant products are of good quality. Directorate Plant Health and Directorate Agricultural Product Inspection Services (APIS), which constitutes the NPPO of South Africa (Appendix B), is mandated with the responsibility of managing the SPS requirements, including the implementation of the International Standards for Phytosanitary Measures (ISPM's) establishes under the IPPC.

Directorate Plant Health

The purpose of Directorate Plant Health is to reduce plant risk associated with plants, plant products and regulated articles. Within the thrust of the departmental agricultural strategy, the directorate administers the Agricultural Pests Act, 1983 (Act No. 36 of 1983) in accordance with the principles of the World Trade Organisation (WTO) Agreement on the application of sanitary and phytosanitary measures, well as the international standards of the International Plant Protection Convention (IPPC) and other recognised bodies.

The key objectives of the directorate are to develop national policy, measures and standards regarding the reduction and management of risks relating to quarantine and other regulated pests associated with plants, plant products and other regulated articles. Plant Health staff is responsible for pest risk assessments (PRA), which evaluate pest risks associated with plant commodities entering or leaving South Africa. Pest Risk Assessments are conducted on imported commodities and in support of South African export commodities. A plant PRA identifies pests that may be introduced with a particular commodity, and estimates the likelihood that the pests will be introduced and the



consequences of their introduction. This is in compliance with international principles and standards to support a globally competitive agricultural sector, sustainable development and national food security. Furthermore, the directorate renders plant quarantine and plant diagnostic services and analytical laboratory services for agricultural products. The directorate is the contact point for the National Plant Protection Organisation of South Africa.

Directorate Agricultural Product Inspection Services

Directorate Agricultural Product Inspection Services ensures that imported and exported goods are safe. Within the thrust of the departmental agricultural strategy, the directorate administers and is involved with the principles of the WTO, agreement on the application of sanitary and phytosanitary measures, the agreement on the application of technical barriers to trade (TBT) and the convention on biodiversity, as well as the standards of the International Plant Protection Convention (IPPC), Codex Alimentarius, the International Union for the Protection of New Varieties (UPOV), the International Seed Testing Association (ISTA), and other recognised bodies.

The main objective of the directorate is the rendering of inspection and audit services at official ports of entry/exit, national plant and plant product inspection and audit services and national inspection services on plant and propagating material.

2.4 CONCLUSION

The opening of the agricultural sector placed South Africa among the world's leading exporters of agro-food products such as wine, fresh fruit and sugar (OEDC, 2006). Europe is by far the largest Agricultural trade balance importer, absorbing almost one-half of the country's agricultural exports. In order to become and remain competitive, producers and suppliers must meet the Sanitary and Phytosanitary (SPS) requirements set by importers' governments in



importing countries. Some SPS measures are very simple and specific, but others are combined in extremely complex systems. Sanitary and phytosanitary policies will likely become more complex and enforcement more stringent as trade becomes more liberalized (Henson, Loader, Swinbank, Bredhal and Lux, 2000). The expansion of world trade has placed a huge responsibility on the National Plant Protection Organisation (NPPO) of South Africa to facilitate safe agricultural trade with its international trading partners. If credibility is lost, this can result in stricter and lengthier inspection procedures in importing countries and eventually loss of markets.

2.4 LITERATURE CITED

Assarson, J. (2005) The impacts of the European Union – South African Free Trade Agreement. Department of Economics, Uppsala University

Barnard, C. (2007) *The substantive Law of the EU: The four freedoms*, 2nd ed., Oxford, New York: Oxford University Press.

Barry, P. (2006) South African Citrus Industry, Study Tour Report: Findings and Observations. Government of South Australia, Primary Industry and Resources SA.

Burger, D. (2007) South African Yearbook 2006/2007. Government Communication and Information System.

CIA (2007) The 2007 World Fact Book. Central Intelligence Agency. Directorate of Intelligence, USA.

Collier, P., Greenaway, D. & Gunning, J. W. (1997) Evaluating Trade Liberalisation: A Methodological Framework. In *Regional Integration and Trade*



Liberalisation in Sub-Saharan Africa (Oyejide, A., Elbadawi, I. & Collier, P. Eds). St. Martin's Press Inc., New York.

Craig, P. & de Burca, G. (2007) EU Law, Text and Materials, 4th ed., Oxford, New York: Oxford University Press.

Department of Agriculture (2001) Strategic plan for South African Agriculture. Pretoria: Government Printer.

Department of Agriculture (2006a) Update on trade negotiations. Directorate: International Trade, Pretoria.

Department of Agriculture (2006b) *Annual Report 2005/2006*. Pretoria: Government Printer.

Department of Agriculture (2007a) *Annual Report 2006/2007*. Pretoria: Government Printer.

Department of Agriculture (2007b) Economic review of the South African Agriculture. Directorate Agricultural Statistics, Pretoria

Dinan, D. (2004) Europe recast; A history of European Union. Lynne Rienner Publishers, USA.

Dinan, D. (2005) Ever closer union: An introduction to European Integration, 3rd edition, Lynne Rienner Publishers, USA

EUROPA web portal. Official website of European Commission. http://ec.europa.eu



FAO (2001) *Trade Policy Developments for Tropical Fruits*. Paper presented by IPPC Secretariat at the Intergovernmental Group on Bananas and Tropical Fruits, San Jose, Costa Rica, December 2001.

FAO (2004) The State of Agricultural Commodity Markets. FAO, Rome.

Fontaine, P. (2004) Europe in 12 lessons. European Commission, Directorate-General for Press and Communication, Belgium.

Graumans, A. (1997) Redefining relations between South Africa and the European Union. An analysis of the South Africa- European Union Trade and Cooperation Negotiations: 1994-1997. FGD Occasional Paper, The Foundation for Global Dialogue, South Africa.

Hagedoorn, L. F. (2002) Support of the Netherlands to Capacity Building in Developing Countries. *Paper presented at the FAO/WHO Global Forum of Food Safety Regulators Marrakech, Morocco, January 2002.*

Hartley, T. (2004) European Union in a global context. United Kingdom: Cambridge University Press.

Henson, S.J., Loader, R., Swinbank, A., Bredhal, M. & Lux, N. (2000). *The impact of sanitary and phytosanitary measures on developing countries*. Centre for Food Economics Research, University of Reading, Reading, UK.

International Plant Protection Convention Secretariat. (2004). International Phytosanitary Portal (IPP). http://www.ippc.int

Jabati, M.C. (2003) *Market Access for Developing Countries of Africa: The Reality*. AGSF Occasional Paper No. 1. United Nations Food and Agriculture Organisation, Rome.



Jaffee, S.M. (1993) Exporting High-Value Food Commodity: Success Stories From Developing Countries. Discussion Paper 198. World Bank, Washington, D.C.

Jaffee, S.M. (2005) Food Safety and Agricultural Health Standards and Developing Country Exports: Rethinking the Impacts and the Policy Agenda. Trade Note 25. International Trade Department, World Bank, Washington, D.C.

Jha, V. (2002) Strengthening developing countries capacities to respond to health, sanitary and environmental requirements – a scooping paper for selected developing countries. Paper No. 1. The United Nations Conference on Trade and Development, FAO, Rome.

Jooste, A. & Spies, D. (2006) A South African Export opportunity scan for value-added agricultural products. Directorate: International Trade, Department of Agriculture.

Mather, C. (2002) Rigged rules and double standards in global agricultural trade. Presented at Oxfam International's Campaign "Rigged Rules and Double Standards: trade, globalisation and the fight against poverty", University of the Witwatersrand, South Africa, April 2002.

Nations online project. Map of European Countries http://www.lmagenationsonline.org

OECD (2006) *Agricultural Policy Reform in South Africa*. Organisation for Economic Co-operation and Development, Paris.

Sandrey, R. & Vink, N. (2006) How can South Africa exploit new opportunities in agricultural export markets? Lessons from the New Zealand experience. Tralac Working Paper, No 19. Stellenbosch: US Printers.



Sheram, K. & Soubbotina, T. P. (2000) Global and International Trade. In *Beyond Economic Growth: Meeting the Challenges of Global Development*. The International Bank for Reconstruction and Development, Washington, D.C.

Steiner, J., Woods, L. & Twigg-Flesner (2006) *EU Law*, 9th ed., Oxford, New York: Oxford University Press.

Townsend, R.F. (1999) Agricultural incentives in sub Saharan Africa: Policy challenges. Technical paper No. 444. World Bank, Washington D.C.

UNCTAD (2006) *Market information in the commodities area: Information on citrus fruit.* The United Nations Conference on Trade and Development FAO, Rome (http://www.unctad.org/infocomm/anglais/oranges/sitemap.htm).

Viljoen, M.F. (2005) South African Agricultural Policy 1994 to 2004: Some reflections. Agrekon 44(1):1-16.

Vink, N & Kirsten, J. (2000) Deregulation of Agricultural Marketing in South Africa: Lessons Learned. Free Market Foundation, Sandton.

World Bank (2001) Standards, Developing Countries, and the Global Trade System. In *Global Economic Prospects 2002: Making Trade Work for the World's Poor*. World Bank, Washington, D.C.

WTO (1994) Agreement on the Application of Sanitary and Phytosanitary Measures. World Trade Organisation, Geneva.

WTO (1995) *Trading into the future*. World Trade Organisation, France.

WTO (2007). World Trade Organisation. http://www.wto.org



Zarrilli, S. (2002) *The SPS Agreement and the Developing Countries*. Prepared by the Trade Negotiations and Commercial Diplomacy Branch, Division on International Trade and Commodities, The United Nations Conference on Trade and Development, FAO, Rome.



CHAPTER 3

IDENTIFYING PHYTOSANITARY CONSTRAINTS FACED BY THE SOUTH AFRICAN EXPORT REGULATORY SYSTEM

3.1 INTRODUCTION

As a department with linkages across the agricultural sector and the broader economy, the Department of Agriculture (DOA) both influences and is influenced by developments within the external environment in which we operate. While some external changes can be anticipated and accommodated, at least to a certain extent, it is not possible to plan for every contingency, particularly when changes arise in the international arena, where the department and the South African government have limited influence. As is many developing countries, South Africa has certain capacity constraints that complicate its ability to comply with its international obligations according to the provisions of the World Trade Organisation (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and its relevant standard-setting bodies. A need therefore exists to evaluate the existing capacity and identify areas for capacity building to ensure improvement in the design and use of the phytosanitary export system.

3.2 METHODOLOGY

The key resources relating to capacity in South Africa have been analyzed with the aim of highlighting the weaknesses. Most of these areas also form part of the control points and compliance criteria for the Food and Agricultural Organisation's tool kit (the Phytosanitary Capacity Evaluation) that measures a country's capacity to comply with SPS measures. The tool is available on CD-ROM and on the International Phytosanitary portal of the International Plant Protection Organisation (https://www.ippc.int/IPP/En/default.jsp).



As no phytosanitary capacity evaluation for South Africa has been done to date (April 2008), the FAO tools were use as a guideline and data were collected from previous chapter and based on personal experience as an inspector for 10 years the information was interpreted in terms of its compliance ability to the provisions of the World Trade Organisation (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and its relevant standard-setting bodies. The outcome of this analysis was approved by Directorate Plant Health and presented at the International Congress of Entomology, Durban, South Africa in July 2008 (Bezuidenhout, 2008).

The evaluation study focused on the phytosanitary institution in South Africa responsible for the phytosanitary export regulatory system of plants, plant products and other regulated articles. The thematic areas studied were:

- Regulatory Framework
- Institutions and coordinating mechanisms
- Human Resource
- Physical infrastructure
- Pest and disease diagnostic capabilities
- Pest Risk Analysis
- Surveillance and exotic pest/disease response
- Inspection systems
- Export Certification Systems
- Documentation
- Notification and inquiry point
- Financial resources



3.3 RESULTS

3.3.1 Regulatory framework

At the international level, major changes have taken place in international standards for plant health set by the WTO's sister organisation, the IPPC. The previous institutional structure charged with responsibility for SPS did not adequately address the new functional demands of the international standard setting institution. In order to align the departmental organisational structure with the strategic objectives, strategies and programmes, the structure was reviewed at the end of 2005. The review resulted in the restructuring of the macroorganisational structure, in order to enhance organisational performance. Subsequently, a new improved structure was implemented on 1 April 2006. The main objectives of the restructuring process were to accelerate and improve service delivery and to increase flexibility to adapt to changing environmental influences.

The establishment of the Agricultural Product Inspection Service and Plant Health as two separate directorates under the Chief Directorate Plant Health and Inspection Services, which constitute the National Plant Protection Organisation (NPPO) of South Africa, is an effort to remove the previously overlapping responsibilities of policy and standard setting and operational activities under the old SPS regime. Despite the current trend for adopting structures compatible with functional demands of international standards setting agencies, the restructuring process and its related activities, placed a heavy strain on the daily business of the institutions charged with responsibility for phytosanitary exports of agricultural products. Directorate Plant Health experienced great change in management, and some functions and key officials were relocated to other line function positions, and others had to join new divisions within Plant Health. Agricultural Product inspection Services were burdened with the expansion of their operational activities into plant health, animal health and food safety and quality



assurance. This readjustment period slowed down implementation and also negatively impacted on the planning activities of the NPPO of South Africa.

3.3.2 Institutions and coordinating mechanisms

Very poor coordination exists between the two entities involve in phytosanitary export related issues. This stems from the process of evolution where the mandate of these two directorates was overlapping under one directorate and pre-dated the establishment of Standards Organisations. The export regulatory system of South Africa have neither a mechanism for ensuring coordination between the two directorates involved in phytosanitary certification nor a common method for sharing information among themselves or with the public.

The lack of coordination among these national authorities can be cited as an obstacle to South Africa's compliance with phytosanitary measures for export of agricultural products. The accuracy of the phytosanitary certificate it issues is of paramount importance for international trade. If credibility is lost, this can result in stricter and lengthier inspection procedures in importing countries and eventually loss of markets. In most instances, lack of coordination may be the result of insufficient or absent standards and standard operational procedures (SOP) which greatly impact on its ability to implement its obligations under the WTO Agreement on the Application of SPS Measures and the IPPC. Standard operational procedures could review such overlaps and harmonise functions accordingly to minimise duplication of efforts.

Communication between the NPPO and the private sector is also deficient and in many circumstances also nonexistent. Such communication directly affects exporter's ability to meet phytosanitary requirements and also have a great impact on South Africa's ability to expand its export markets, as government SPS institutions are frequently expected to play an intermediary or complementary role in international trade.



3.3.3 Human resources

The restructuring process of the DOA, the high vacancy rate and severe skills development backlog in the agricultural sector has contributed to the ongoing shortage of sufficient human resources for developing and implementing phytosanitary measures. The overall shortage of manpower has affected geographic distribution and effectiveness of field operations at national levels and has a negative impact on the operation of the entire export regulatory system. One constraint that continues to hamper service delivery is the ongoing shortage of skilled personnel, particularly at management level and in specialised fields. These shortages not only detract from the department's ability to deliver services to the agricultural sector but also affect South Africa's export performance. These factors affect the capacity of institutions to implement phytosanitary export regulations. The ongoing shortage of high-level skills within the NPPO of South Africa is a cause of major concern. Current staffing levels are insufficient to render the required core services, especially considering the expansion of the department's activities domestically, regionally and internationally.

The levels of expertise, knowledge and experience of the staff directly involved in the operation of the phytosanitary export system influence the development and implementation of policies, laws, regulations and review and decision making procedures. With this low skill and knowledge levels, the lack of familiarity and understanding undermines confidence, and leads to highly protective, poorly defined inconsistent, comparatively rigid and /or narrow interpretation/ judgments of the scientific requirements/ demands of such a system. Without knowledgeable experts to operate the export regulatory system, the NPPO are experiencing difficulty in assessing other countries' scientific justifications for phytosanitary requirements, understanding how a new standard might affect their export prospects, or responding to formal notifications of proposed phytosanitary measures in export markets within the time allowed for comment. It is harder still for South Africa to challenge phytosanitary measures or import restrictions in



export markets bilaterally or through WTO dispute settlement procedures. Moreover, the NPPO have limited expertise to participate in international bodies that promulgate SPS standards, guidelines, and recommendations.

3.3.4 Physical infrastructure

The NPPO lack technical resources to equip and operate an export regulatory system. Adequate laboratory equipment and materials necessary for export examination and certification are of the utmost importance to assess whether agricultural products produced in South Africa meet foreign phytosanitary requirements. Required resources include laboratories and related consumables, disease and taxonomic reference collections, monitoring equipment, inspection posts, port facilities, computer systems, and much more. The following are notable for improvement:

- Inadequate inspection equipment at exit points, particularly airport cargo sections.
- Inadequate communications between exit points and head offices to enable laboratory test results to be quickly communicated to exporters.

3.3.5 Pest and disease diagnostic capabilities

The NPPO has some capacity to undertake pest and disease diagnosis in most disciplines. The technical staffs employed by the NPPO are largely holders of basic degrees. Further advanced training is required for staff in most disciplines, especially in the use of modem rapid diagnostic methods. This is particularly true when inspecting high-risk plant material exported for propagation under very stringent phytosanitary requirements. Most of the high level of skill in the technical disciplines exists outside of the NPPO in the Agricultural Research Council (ARC), universities and the private industry, but there seems to be little coordination between the various institutions. South Africa also experiences a



lack of experienced taxonomists, which are a key element of the export regulatory system. Documented systems need to be developed, as well as a computerised management information system that would better enable technical personnel to coordinate laboratory activities.

Plant health safeguarding systems and market access initiatives are dependent on a high-quality arthropod collection and disease herbarium to serve as a reference source when identifying organisms and validating the pest status of a country. Currently, the collections are maintained by Biosystematics division of the ARC. Again the lack of coordination and inadequate communication between the NPPO and ARC impact negatively on the success of phytosanitary certification and South Africa's entrances of new export markets.

3.3.6 Pest Risk Analysis

The NPPO have some personnel that are trained in pest risk analysis (PRA) through the Tuskegee/USDA-APHIS ATRIP program (DOA, 2007a). However, since their training, the NPPO lost some of these officials. Technical support provided to the phytosanitary export regulatory system is contained within the Division Pest Risk Analysis (PRA), Directorate Plant Health. The establishment and maintenance of export markets and special export work programmes is vital to ensure that South Africa maintains and expands its global market share. Market access issues therefore remain a high priority of the NPPO. Supporting all exports, implementation of procedures continued to ensure that South Africa is able to comply with the IPPC's international standard for phytosanitary measures in international trade.

In order to facilitate South Africa's request for market access, technical and scientific information regarding pests on specific agricultural commodities (pest information packages) are provided for bilateral engagements with various countries. Pest information packages are completed in liaison with scientists of research institutes and the respective industries. Before any pest list is officially



provided to the national plant protection authority of potential importing countries, the list is evaluated by the designated "export desk" of the pest risk analysis division to ensure correctness. Capacity of skilled professionals as well as exchange of information necessary to these stakeholders in order to achieve a common understanding of the risks, and to develop credible management options, credible regulations and policies to deal with the risks is inadequate. Apart from delays, the infrastructure for dissemination of information is weak.

3.3.7 Surveillance and exotic pest/disease response

Surveillance systems in Plant Health are much weaker than those of Animal Health. Data on plant pests and diseases are not properly collated. The NPPO does not maintain any efficient database of regulated pests or specified commodity pest lists. Pest-free areas identified and maintained are few in occurrence and are mostly focused on the citrus industry. Places of production, sites of production and areas of low pest prevalence which can enhance export opportunities for South Africa, have not been identified or declared.

3.3.8 Inspection systems

Airports, seaports and land borders are experiencing a lack of adequate coverage and representation of skilled and experienced staff involve in phytosanitary certification. Land borders are porous and require greater attention to control pests and diseases. Bulky consignments are recorded, but smaller products are smuggled across without phytosanitary inspections. To minimise this practice would require public education and measures by governments to shorten the time taken for inspections at border crossings. Communication facilities and transport are a problem and result in delays in sending samples for laboratory analysis.



Inspectors are lacking the basic knowledge of adequate inspection procedures and identification of pests, do not follow correct sampling procedures and are not equipped with the necessary inspection tools. These factors have an impact on the accuracy of the phytosanitary certificate issued, which is of paramount importance for international trade. If credibility is lost, this can result in stricter and lengthier inspection procedures in importing countries and eventually loss of markets. This has immediate and potentially serious repercussions for all stakeholders and severely affects industries that depend wholly on specific markets.

3.3.9 Export certification systems

Phytosanitary certificates for exports and phytosanitary certificates for re-export follow formats and standards of the IPPC, as stipulated in ISPM 12 (International Standard for Phytosanitary Measures: *Guidelines for Phytosanitary Certificates*). Areas that need greater attention are measures to improve pre-export inspection and certification monitoring to control fraudulence in certification and to ensure that seals to containers are not tampered with or agricultural goods interfered with. Another area of great concern is the lack of technical communication and co-ordination between plant health inspectors and Plant Health's Pest Risk Analysis "export desk" in the verification and technical justification of phytosanitary measures. This may be the rationale behind the recent increased interceptions of South Africa's agricultural products in the European Union.

3.3.10 Documentation

The principle of transparency requires that contracting parties should publish and disseminate phytosanitary prohibitions, restrictions and requirements and, on request, make available the rationale for such measures (ISPM 1). As a prerequisite, the technical justification for non-compliance to foreign import requirements and pest information packages with include the official pest lists for



initiation of market access, should be sufficiently documented. Documentation and record keeping is insufficient and sometimes lacking. Cross cutting issues amongst the different division in Plant Health are the major caused of scattered official documentation among officials which lead to an inadequate record keeping system.

3.3.11 Notification and inquiry point

The directorate Plant Health is the contact point for the National Plant Protection Organisation of South Africa. The NPP (National Plant Protection) Contact Point is administered by the division International Standards. This division is seriously under staffed and it impact negatively on the successful operation of the notification and enquiry point. The need for collaboration between all SPS institutions for collation of responses to enquiries is paramount. Furthermore, there is need for collation of data on rejections of exported products and its analysis to serve as a feedback for better control of phytosanitary certification.

3.3.12 Financial resources

All SPS institutions have budgetary inadequacies. Although institutions generate revenue from phytosanitary certificates, import permits and other services, the treasury system does not allow any of these institutions to directly use these funds. The capacity for emergency response to pest and disease situations, which may have a great impact on phytosanitary certification and new export markets, depends on the availability of easily accessible funds.

3.4 DISCUSSION

The NPPO are experience capacity constraints in its phytosanitary export regulatory system mostly due to the recent restructuring of the National Department of Agriculture and the lack of standards and standard operational



procedures which greatly impact on its ability to implement its obligations under the World Trade Organisation's (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (WTO SPS) and the International Plant Protection Convention (IPPC). In order to meet the challenges associated with the increasing volumes of agricultural products being traded internationally, extending capacity is crucial.

Inadequate legislation, absence or inadequate information on pests, insufficient human resources, inadequate pest surveillance, inspection and certification, disease free and areas and areas of low pest prevalence not yet identified and inadequate information sharing on pests, were identified as some of the links weakening the phytosanitary export regulatory system in South Africa. There is a greater need now to co-ordinate operational planning in directorates because directorates are tasked with deliverables beyond their capacity. The limited availability of qualified professionals in specific fields, characterised by a scarcity of skilled professionals, such as pathologists, entomologists and virologists, places a constraint on the NPPO's capacity to render quality regulatory supervision.

3.5 LITERATURE CITED

Bezuidenhout, I. (2008) *Phytosanitary constraints: South Africa's export regulatory system.* Paper presented at the International Congress of Entomology, International Conference Centre, Durban, South Africa, July 2008.

Department of Agriculture (2007a) *Annual Report 2006/2007*. Pretoria: Government Printer.

International Plant Protection Convention Secretariat. (2004). *International Phytosanitary Portal (IPP)*. http://www.ippc.int



CHAPTER 4

EVALUATION OF THE PHYTOSANITARY CERTIFICATION SYSTEM CURRENTLY USED BY THE NATIONAL PLANT PROTECTION ORGANISATION OF SOUTH AFRICA WITH REGARD TO EXPORTS TO THE EURPEAN MARKETS

4.1 INTRODUCTION

The major challenge for South Africa relates to capacity inadequacies. There is an acute need for appropriate policy to deal with capacity constraints. The focus of this chapter will be on the phytosanitary certification system currently used by the National Plant Protection Organisation (NPPO) of South Africa with regards to the certification for the European Union (EU). The aim is to identify the major weaknesses in the system in order to examining projects and programs seeking to strengthen certification capacities which are specifically required for competitive export-oriented food and agricultural activities. The accuracy of the phytosanitary certificate it issues is of paramount importance for international trade. If credibility is lost, this can result in stricter and lengthier inspection procedures in importing countries and eventually loss of markets. This has immediate and potentially serious repercussions for all stakeholders and severely affects industries that depend wholly on specific markets.

4.2 METHODOLOGY

Research efforts were focused on analyzing the export certification system and evaluated the certification procedures against the World Trade Organisation's (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (WTO-SPS) compliances and identifying weaknesses within it and developing



recommendations for future Research and Development Programmes. This study took placed between January and August 2008.

This study consists of primary and secondary research efforts. Two sets of questionnaires were constructed: one evaluating the export certification system used at the ports of exit, the second in order to identify the major challenges experienced by the NPPO officials in phytosanitary certification to the European markets. The purpose behind using the export certification system questionnaire (Appendix C) was to provide an understanding of the sector. The questionnaire was forwarded by electronic mail to the four Assistant Directors of the Sub Directorate National Plant and Plant Product Inspection of the Directorate Agricultural Product Inspection Services.

An effort was made to incorporate into the second questionnaire questions pertaining to key issues identified during the preliminary interviews; visits to certification offices at OR Tambo International Airport, Stellenbosch Quarantine Station, Cape Town International Airport and Pretoria; EU interception records and the authors practical experience with regard to the interpretation of the European import requirements contained in the EU Directive. Research was undertaken by a combination of face to face and telephone surveys between March and May 2008, following the questions listed in Appendix D. This was necessary to elicit views on where technical assistance relating to EU certification may be most needed.

Interviews were carried out with certification officers from Directorate APIS covering various aspects of EU certification with a view of establishing the problem/opportunity areas, how and why they exist and some ideas on how they might be overcome and/or exploited. Secondary data fill in the gaps, as far as possible, on issues not covered by the questionnaire and interviews.



In total, 30 experts were interviewed. Research findings were then analyzed and interpreted and the findings are documented in this chapter

4.3 RESULTS AND DISCUSSIONS

This section of the report details the findings of the primary research undertaken with the NPPO of South Africa. This included the analysis of the phytosanitary export regulatory system of South Africa and the interviews conducted with the phytosanitary certification officials. The research findings follow the format of the questionnaire (Appendix D) developed and approved for the study.

The International Plant Protection Convention, Article V requires its contracting parties to make arrangements to issue phytosanitary certificates certifying compliance with the phytosanitary regulations of other contracting parties (FAO, 1999). Directorate Plant Health and Directorate Agricultural Product Inspection Services (APIS), which constitutes the NPPO of South Africa, is mandated with the responsibility of managing the phytosanitary requirements, including the implementation of the International Standards for Phytosanitary Measures (ISPM's) establishes under the IPPC.

The main objective of the Agricultural Product inspection Services (APIS) is the rendering of inspection and audit services at official ports of entry/exit, national plant and plant product inspection and audit services and national inspection services on plant and propagating material. Technical support provided to the Phytosanitary Export Regulatory System is contained within the Division Pest Risk Analysis (PRA), Directorate Plant Health of the Department of Agriculture forming part of the NPPO of South Africa. The pest risk analysis (PRA) division is responsible to serve as the point of contact and technical liaison regarding export certification assistance. Technical support provided to a Phytosanitary Export Regulatory System produce valid and credible phytosanitary compliance with the phytosanitary import regulations of other contracting parties. This not alone



facilitate trade and create new market opportunities, but also enables the NPPO of South Africa to identify, notify and provide technical assistance to non-compliance which will result in the reduction or elimination of the use of unjustifiable phytosanitary measures as barriers to trade.

Within the phytosanitary export regulatory system, the Sub Directorate: National Plant and Plant Product Inspection Services (NPPIS) of Directorate: APIS are responsible for phytosanitary certification. NPPIS are divided into 4 inspection divisions, representing the following regions: Gauteng, Eastern Cape, Western Cape and Kwazulu Natal. Each region is governed by an Assistant Director. Certification officials are placed at different stations in each region. Exported consignments certified under this system should meet the current phytosanitary requirements of the importing country. Table 1 summarize the structure of this certification unit.

Currently (May 2008), 44 APIS officials are responsible for the issuing of phytosanitary certificates certifying compliance with the phytosanitary regulations of other contracting parties. Of the 44 inspectors, 30 were interviewed during 2008. This represented 68% of the NPPO officials responsible for phytosanitary certification.



Table 1: South African phytosanitary export regulatory system responsible for certification

1. GAUTENG INSPECTION SERVICES			
Office	Inspectors accredited for phytosanitary certification		
Johannesburg	5		
Pretoria	4		
2. EASTERN CAPE INSPECTION SERVICES			
Office	Inspectors accredited for phytosanitary certification		
Port Elizabeth	4		
Bloemfontein	3		
East London	2		
Upington	1		
3. WESTERN CAPE INSPECTION SERVICES			
Office	Inspectors accredited for phytosanitary certification		
Cape Town	4		
Stellenbosch	11		
Oudtshoorn	1		
4. KWAZULU NATAL INSPECTION SERVICES			
Office	Inspectors accredited for phytosanitary certification		
Durban	7		
Nelspruit	2		



Q1 What are your academic qualification?

The minimum academic requirement for employment is an appropriate three year National diploma or BSc degree in Agriculture. Of the 30 inspectors interviewed, almost 90% were in possession of a National diploma in agriculture. Senior officials with a service record of 10 years mostly indicated a BSc degree.

Q2 Are you accredited to issue phytosanitary certificates?

Directorate APIS provides for appropriate export related training of all appointed inspectors. This training is contained in an export module which is presented during a one week course. Examination are required and only a mark of 75% and higher will lead to accreditation. A database on accredited certification officials are maintained by the Directorates' information officer. In cases of non compliances of phytosanitary certification, the responsible certification official will be suspended from issuing phytosanitary certificates and will only be reinstated once the course has been repeated and the minimum requirements satisfied. Only accredited inspectors are involved in phytosanitary certification.

Q3 At which office are you stationed?

Officials responsible for phytosanitary certification were identified by the respective managers of each region. Of the 44 experts, 30 were interviewed which represented 68% of the NPPO officials responsible for phytosanitary certification. Table 2 provides a breakdown of the respective experts interviewed in each region.



Table 2: Overview of respective experts interviewed

OFFICE	INSPECTORS ACCREDITED FOR PHYTOSANITARY CERTIFICATION	INSPECTORS INTERVIEWED ON EUROPEN CERTIFICATION	
Gauteng Inspection Services:			
Johannesburg	5	3	
Pretoria	4	3	
OFFICE	INSPECTORS ACCREDITED FOR PHYTOSANITARY CERTIFICATION	INSPECTORS INTERVIEWED ON EUROPEN CERTIFICATION	
Eastern Cape Inspection Services:			
Port Elizabeth	4	3	
Bloemfontein	3	3	
East London	2	1	
Upington	1	1	
OFFICE	INSPECTORS ACCREDITED FOR PHYTOSANITARY CERTIFICATION	NSPECTORS INTERVIEWED ON EUROPEN CERTIFICATION	
Western Cape Inspection Services:			
Cape Town	4	2	
Stellenbosch	11	8	
Oudtshoorn	1	1	
OFFICE	INSPECTORS ACCREDITED FOR PHYTOSANITARY CERTIFICATION	INSPECTORS INTERVIEWED ON EUROPEN CERTIFICATION	
Kwazulu Natal Inspection Services:			
Durban	7	4	
Nelspruit	2	1	



Q4 How well do you think you understand the concept of phytosanitary certification?

According to the International Standard for Phytosanitary Measures (ISPM 5, 2002), *Glossary of Phytosanitary Terms*, phytosanitary certification it the use of phytosanitary procedures leading to the issue of a Phytosanitary Certificate. Phytosanitary procedure are define as any officially prescribed method for implementing phytosanitary regulations including the performance of inspections, tests, surveillance or treatments in connection with regulated pests.

Most of the inspectors claimed to have a reasonable understanding on phytosanitary certification. Further analysis indicated that several inspectors believe that issuing a phytosanitary certificate is the only element of the phytosanitary certification process.

Q5 What is the Council Directive 2000/29/EC of 8 May 2000 and for what is it used?

The response to this question can be summarized in short as the import conditions of the "EU", but with no or minimum knowledge of what the abbreviation portrays.

Q6 Explain procedures to follow when client intent to export to Europe?

Table 3 indicates the basic phytosanitary structure of the South African phytosanitary export system involve in certification to the European markets. The East London office is the only office claiming to have a database on specific additional declarations use in issuing phytosanitary certificates. The legislation on the import requirements of the EU is evenly distributed between the offices and certification officials, except for the Upington office were no copy of the EU Directive is indicated. The Bloemfontein office is the only office that indicated that they are unsure of the version of the EU Directive in there office. The most upsetting issue is that certification officials are issuing phytosanitary certificates



without stating the compliance to the import conditions of the importing country on the certificate in the space provide for additional declarations (open phytosanitary certificate). Officials in Upington are issuing phytosanitary certificates even without a copy of the EU's import requirements.

Phytosanitary certificates for fresh produce are mostly issued based on the Perishable Product Export Control Board's (PPECB) quality inspection form and exporter are provided with an "open" phytosanitary certificate. Citrus fruit are exported with an additional declaration on the phytosanitary certificate. This practice started after fruit were intercepted in Europe mainly because of Citrus black spot. Exports for propagation material are done based on visual inspections and "open" phytosanitary certificates.



Table 3: Phytosanitary structure for European certification

OFFICE	INSPECTORS ACCREDITED FOR PHYTOSANITARY CERTIFICATION	DO YOU HAVE A DATABASE WITH SPECIFIC AD'S FOR EU CERTIFICATION	HOW MANY COPIES OF EU DIRECTIVES AT EACH OFFICE	DO YOU ISSUE "OPEN" PHYTOSANITARY CERTIFICATE FOR THE EU OR DO YOU PROVIDE AD'S ON THE CERTIFICATES
	(Gauteng Inspection Se	rvices:	
Johannesburg	5	No	7	Both
Pretoria	4	No	3	Both
Eastern Cape Inspection Services:				
Port Elizabeth	4	No	4	Both
Bloemfontein	3	No	3, but unsure of version	Both
East London	2	Yes	1	Both
Upington	1	No	0	Open
Western Cape Inspection Services:				
Cape Town	4	No	4	Both
Stellenbosch	11	No	9	Both
Oudtshoorn	1	No	1	Both
Kwazulu Natal Inspection Services:				
Durban	7	No	7	Both
Nelspruit	2	No	2	Both



Inspectors claimed that EU Directive is complicated and time consuming. Some offices are in constant communication with Directorate Plant Health regarding technical support with EU certification.

Q7 How many member states are part of the European Union?

The only correct response to this question came from 2 certification officials at the Stellenbosch office. Some officers indicated that they have a list of the member states but indicate that they don't know when it was last amended.

Q8 Name one regulated article that are prohibited to be exported to the European Union from South Africa?

The response to this question was very alarming. Soil was indicated as being prohibited, but it could not be indicated under which circumstances soil is allowed to be exported from South Africa.

Q9 What are the major constraints faced in European phytosanitary certification?

European phytosanitary legislation was described as drawn out and confusing. Most officials indicated that they don't even know were to start the certification process.

Q10 Do you have any comments you would like to make in relation to phytosanitary certification to the European Union?

Almost 100% of all inspectors interviewed indicated that they would appreciate a central database to ensure standardized phytosanitary certification to the European Union.



The constraints faced by the inspectors in the certification to the European markets formed the focus of this qualitative research. These issues, identified and confirmed via consultation during this study, are not uncommon in other sectors of the phytosanitary export regulatory system, especially those with similar structural character.

This study has quite clearly demonstrated that a lack of fundamental scientific knowledge and the inability to interpret the phytosanitary import requirements of the European market are the elementary barriers to phytosanitary compliance. This place a constraint on the NPPO's capacity to render quality regulatory supervision. Another area of great concern is the lack of technical communication and co-ordination between plant health inspectors and Plant Health's Pest Risk Analysis "export desk" in the verification and technical justification of phytosanitary measures. This may be the rationale behind the recent increased interceptions of South Africa's agricultural products in the European Union.

There is a greater need now to co-ordinate operational planning in directorates because directorates are tasked with deliverables beyond their capacity.

4.4 LITERATURE CITED

ISPM No 5. 2002. *Glossary for Phytosanitary Terms*. International Standards for Phytosanitary Measures, Publication No. 5. Secretariat of the International Plant Protection, Food and Agriculture Organisation of the United Nations.

Food and Agriculture Organisation. 1999. New revised text of the International Plant Protection Convention, 1997. Food and Agriculture Organisation of the United Nations, Rome.



CHAPTER 5

DEVELOPING A PHYTOSANITARY REPORT CERTIFICATION SYSTEM FOR SOUTH AFRICAN COMPLIANCE WITH THE EUROPEAN MARKET

5.1 INTRODUCTION

The accuracy of phytosanitary certification is of paramount importance for international trade. If credibility is lost, this can result in stricter and lengthier inspection procedures in importing countries and eventually loss of markets. This study resulted in the development of a phytosanitary report certification system to provide phytosanitary certification and technical assistance regarding export applications for South African Agricultural produce to the European Union (EU).

5.2 METHODOLOGY

The results generated from the research finding contained in Chapter three and four from were analysis and the capacity constraints faced by the South African National Plant Protection Organisation (NPPO) officials were identified and prioritized. These constraints were then use as the criteria in order to develop a standard operating procedure (SOP) that are able to assist the NPPO officials in the export certification process for the European market.

The phytosanitary report certification system was tested between 18-19 July 2008 during an intensive workshop with various certification experts of the Directorate APIS, including officials from Auditing services. The assessment results were integrated into the SOP. This standard operating procedure (SOP) is currently in used by the training division of the Directorate APIS of the Department of Agriculture for further in depth analysis.



5.3 RESULTS AND DISCUSSION

The following were identified as the foremost constraints weakening the phytosanitary export certification system in South Africa:

- inability to interpret the phytosanitary import requirements of the European market
- inadequate scientific knowledge
- insufficient technical communication and co-ordination between NPPO Directorates
- absence or inadequate verification and technical justification of phytosanitary measures

These capacity constraints place a major constraint on the NPPO's capacity to render quality regulatory services and are the elementary barrier to phytosanitary compliance. Based on the outcome of this analysis, a 'certification guideline' to equip the officials with the necessary technical assistance to ensure compliance with the European Union's phytosanitary regulations was developed (Appendix E). This is necessary in order to provide technical support to the phytosanitary certification process and to enable the National Plant Protection Organisation (NPPO) of South Africa to certify compliance with the phytosanitary import regulations of the European Union in terms of Article V of the International Plant Protection Convention (IPPC) (FAO, 1999). The NPPO have the authority to prevent the export of consignments which do not meet an importing country's requirements.

Council Directive 2000/29/EC of 8 May 2000 lays down measures designed to protect plants and plant products against harmful organisms by preventing the spread of these organisms in the European Union (EU). It thus prohibits the presence of identified harmful organisms on plants or plant products and, in order to stop them spreading, it provides for plant-health checks and certificates for



plants and plant products circulating between EU Member States and entering from other countries. The Directive covers living plants and living parts of plants, including, in particular, fruit and vegetables that have not been deep-frozen, tubers, cut flowers, trees and branches with foliage, leaves, live pollen and seeds for planting.

The foundation of this certification guideline is a consolidated version of Council Directive 2000/29/EC of 8 May 2000 with all subsequent amendments. The last amendment incorporated was Commission Directive 2007/41/EC of 28 June 2007. This certification system will be maintained and amended as necessary by the PRA 'export desk' of the Directorate Plant Health of the Department of Agriculture of South Africa.

The phytosanitary report certification system starts with a list of all member States of the EU to date with the relevant country codes for each. All relevant phytosanitary terms and definition are included in order to clarify import requirements. The layout of the directive is explained in detail and a step by step instruction guide take inspectors through the entire certification process.

Annexes I and II index the harmful organisms banned in the EU, either altogether or when they are on certain plants or plant products. Organisms listed occurring in South Africa and which will need certification is highlighted in dark blue. Also incorporated into this guide and attached to Annex I is the host range of identified organisms which is necessary in order to determine pathway to establish entry from South Africa to the EU.

Annex III lists plants and plant products that must not be imported from certain countries. All product prohibited to be exported from SA has been identified and highlighted in blue for easy reference and certification. Annex IV contains the special requirements for regulated product to gain access to EU market. Highlighted in blue are the regulations applicable to South African certification. Annex IV, Part A Section II is not applicable to South Africa.



This Directive subjects certain plants and plant products from third countries (Annex V, part B), which includes South Africa to a phytosanitary inspection and certification. Regulated articles indexed in this annex will require a phytosanitary certificate with or without special requirements contained in Annex IV.

Also established in the certification system are protected zones to guard against certain harmful organisms. The reason for this protection is the absence of specified harmful organisms in this zone despite conditions favourable to their development. The additional protection provided in the protected zones includes:

- an additional list of harmful organisms the introduction and spread of which in the protected zones is prohibited;
- an additional list of plants and plant products the introduction of which into the protected zones is prohibited;
- an additional list of specific requirements to be met by certain crops and crop products when they are introduced into or moved within the EU.

5.4 LITERATURE CITED

Food and Agriculture Organisation. 1999. New revised text of the International Plant Protection Convention, 1997. Food and Agriculture Organisation of the United Nations, Rome.



CHAPTER 6

CONCLUSION

6.1 INTRODUCTION

This section of the report contains the interpretation of the research findings in summary form and provides recommendations for improvements in phytosanitary certification system of South Africa. The objectives of the study were to:

- to identify phytosanitary constraints faced by the South African Export Regulatory System.
- to evaluate the phytosanitary certification system currently used by the National Plant Protection Organisation (NPPO) of South Africa with regard to exports of agricultural produce to the European Union (EU).
- to develop a certification guide to equip the NPPO of South Africa with the necessary technical assistance to ensure compliance with the EU's phytosanitary regulations.

6.2 SUMMARY OF CONSULTATION AND RESEARCH FINDINGS

This section of the report provides a summary of the findings of the research undertaken on the Phytosanitary export regulatory system of South Africa. Inadequate legislation, absence or inadequate information on pests, insufficient human resources, inadequate pest surveillance, inspection and certification, disease free and areas and areas of low pest prevalence not yet identified and inadequate information sharing on pests, were identified as some of the links weakening the phytosanitary export regulatory system in South Africa. The limited availability of qualified professionals in specific fields, characterised by a scarcity of skilled professionals, such as pathologists, entomologists and



virologists, places a constraint on the NPPO's capacity to render quality regulatory supervision.

The constraints faced by the inspectors in the certification to the European markets formed the focus of this qualitative research. This study has quite clearly demonstrated that a lack of fundamental scientific knowledge and the inability to interpret the phytosanitary import requirements of the European market are the elementary barriers to phytosanitary compliance. Another area of great concern is the lack of technical communication and co-ordination between plant health inspectors and Plant Health's Pest Risk Analysis "export desk" in the verification and technical justification of phytosanitary measures.

6.3 RECOMMENDATIONS FOR IMPROVEMENTS

This study has quite clearly demonstrated that these capacity constraints place a major restriction on the NPPO's capacity to render quality regulatory services and are the elementary barrier to phytosanitary compliance. Unless corrective action is taken, non-compliance to the EU market will continue and, in the face of increasing global competition, South Africa will suffer declining market access.

In order to provide technical support to the phytosanitary certification process and to enable the (NPPO) of South Africa to certify compliance with the phytosanitary import regulations of the European Union in terms of Article V of the International Plant Protection Convention (IPPC), a 'certification guideline' to equip the officials with the necessary technical assistance to ensure compliance with the EU's phytosanitary regulations was developed.

The way forward is now to provide the Directorate responsible for export certification with the necessary training with regard to the phytosanitary report certification system for EU compliance and official distribution thereof to all certification offices for the implementation face.



Development of an effective phytosanitary report certification system for South African compliance with the European markets

By

Isabella Bezuidenhout

Promoter: Prof. Lise Korsten

Department: Microbiology and Plant Pathology **Faculty:** Natural and Agricultural Sciences

Degree: Minst Agrar (Plant Quarantine)

ABSTRACT

As a result of agreements negotiated at the World Trade Organisation (WTO), traditional trade protection measures such as tariffs and quotas are falling away. But to some extent they are being replaced by domestic technical regulations that permit countries to bar products from entering their markets if the products do not meet certain standards. To become and remain competitive, producers and suppliers must meet the Sanitary and Phytosanitary (SPS) requirements set by importers' governments in importing countries. Some SPS measures are very simple and specific, but others are combined in extremely complex systems like the requirements governing the import of plants and plant products for entry in to the European Union (EU).

The aim of this study was to evaluate the phytosanitary certification system currently used by the National Plant Protection Organisation (NPPO) of South Africa with regard to exports of agricultural produce to the European market and to develop an effective and efficient strategy to ensure compliance with the European Union's phytosanitary regulations.



The expansion of world trade has placed a huge responsibility on the National Plant Protection Organisation (NPPO) of South Africa to facilitate safe agricultural trade with its international trading partners.

After putting the phytosanitary constraints/ weaknesses faced by the South African Export Regulatory System into perspective, numerous aspects of the export process were considered in this study. The NPPO of South Africa does experience capacity constraints in its phytosanitary export regulatory system mostly due to the recent restructuring of the Department of Agriculture (DOA). This information, combined with background information obtained from the personal experience of the author as a plant health officer for the past ten years at the Department of Agriculture and the analysis of questionnaires indicated that the current phytosanitary certification system are the most fundamental impediment to accessing foreign markets.

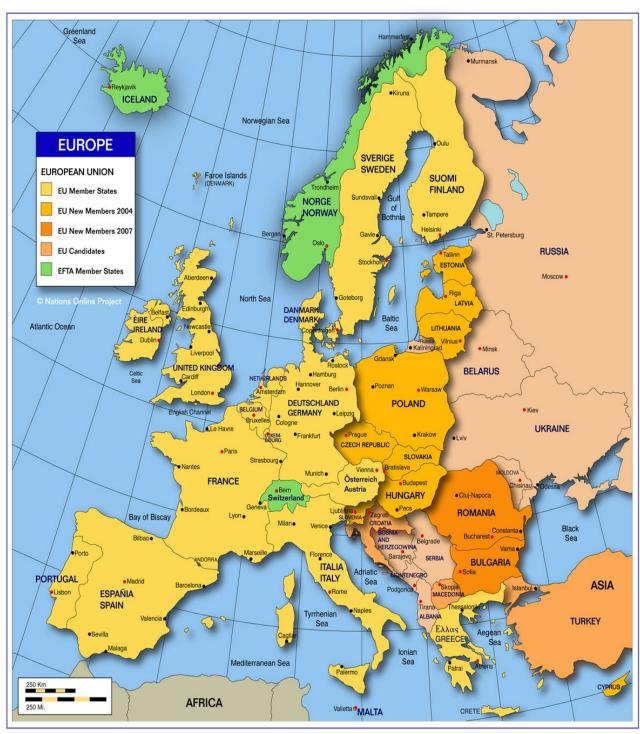
This is followed by an evaluation of the export certification system to identify the major challenges experienced by the NPPO officials in phytosanitary certification to the European markets. Lack of fundamental scientific knowledge and the inability to interpret the phytosanitary import requirements of the European market were identified as the elementary barriers to phytosanitary compliance

Finally, the accuracy of phytosanitary certification is of paramount importance for international trade. If credibility is lost, this can result in stricter and lengthier inspection procedures in importing countries and eventually loss of markets. This study resulted in the development of a certification guide to equip the NPPO of South Africa with the necessary technical assistance to ensure compliance with the European Union's phytosanitary regulations. This standard operating procedure (SOP) is currently in used by the certification officials of the DOA.



Appendix A

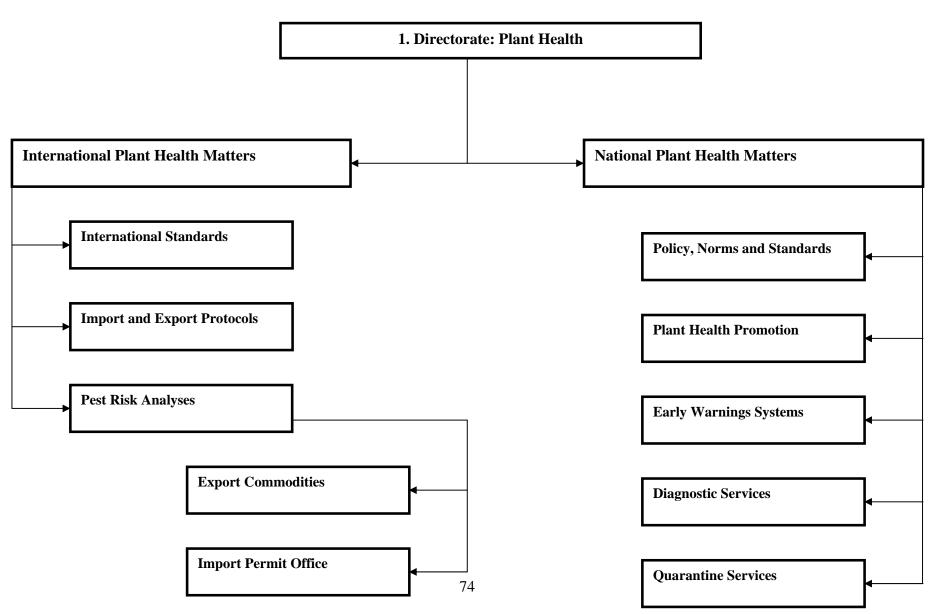
Map of Europe showing the European countries



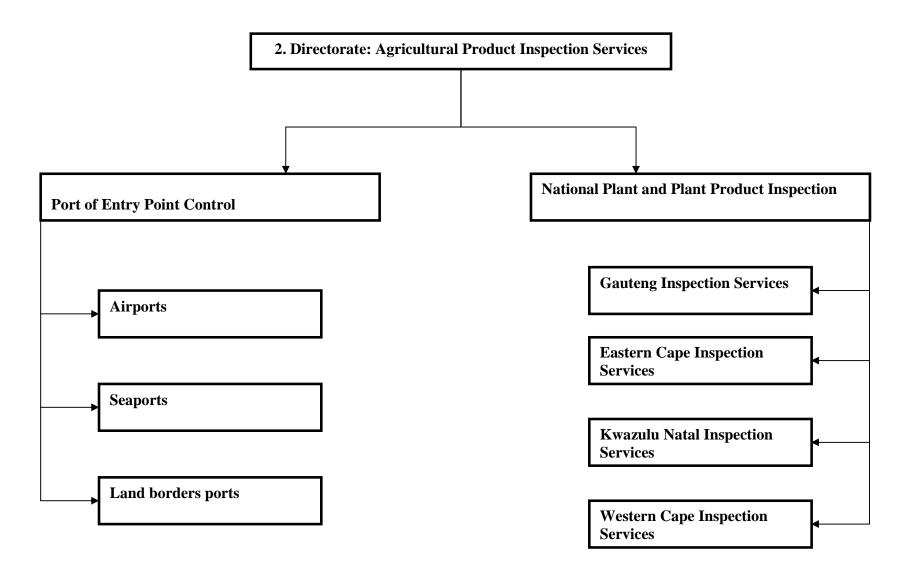
Source: Image © nationsonline.org



Appendix B
Organisational structure of the National Plant Protection Organisation of South Africa









Appendix C

South African export regulatory system survey

In order for the Directorate: Plant Health to improve their technical assistance to APIS inspectors for phytosanitary certification to the European Union (EU), the PRA division is in need of the following information.

OFFICE	INSPECTORS	DO YOU HAVE A	HOW MANY	DO YOU ISSUE "OPEN"
	ACCREDITED FOR	DATABASE WITH	COPIES OF EU	PHYTOSANITARY
	PHYTOSANITARY	SPECIFIC AD'S	DIRECTIVES AT	CERTIFICATE FOR THE
	CERTIFICATION	FOR EU	EACH OFFICE	EU OR DO YOU
		CERTIFICATION		PROVIDE AD'S ON THE
	(Number)		(Number)	
		(Yes/No)		CERTIFICATES
				(Yes/No)
		Sauteng Inspection Ser	rvices:	
	Eas	stern Cape Inspection	Services:	
	Wes	stern Cape Inspection	Services:	-
		oupo mopocación		



OFFICE	INSPECTORS ACCREDITED FOR PHYTOSANITARY CERTIFICATION (Number)	DO YOU HAVE A DATABASE WITH SPECIFIC AD'S FOR EU CERTIFICATION (Yes/No)	HOW MANY COPIES OF EU DIRECTIVES AT EACH OFFICE (Number)	DO YOU ISSUE "OPEN" PHYTOSANITARY CERTIFICATE FOR THE EU OR DO YOU PROVIDE AD'S ON THE CERTIFICATES (Yes/No)
Kwazulu Natal Inspection Services:				

Thank you for taking the time to participate in this survey. Please forward your completed questionnaire to Isabel Bezuidenhout by no later than 25 April 2008. If you have any questions please call Isabel on (012) 319 6112.



Appendix D

Inspectors' questionnaire

I would now like to ask you some questions about the phytosanitary certification process that you are involved in.

Q1 What are your academic qualification?

Q2 Are you accredited to issue phytosanitary certificates?

Q3 At which office are you stationed?

Q4 How well do you think you understand the concept of phytosanitary certification?

Q5 What is the Council Directive 2000/29/EC of 8 May 2000 and for what is it used?

Q6 Explain procedures to follow when client intent to export to Europe?

Q7 How many member states are part of the European Union?

Q8 Name one regulated article that are prohibited to be exported to the European Union from South Africa?

Q9 What are the major constraints faced in European phytosanitary certification?

Q10 Do you have any comments you would like to make in relation to phytosanitary certification to the European Union?

Thank you for taking the time to participate in this interview.



Appendix E

Phytosanitary report certification system for South African compliance with the European market

European Export Certification guidelines



MEMBER STATES OF THE EUROPEAN UNION

MEMBER STATE	COUNTRY CODE
Austria	AT
Belgium	BE
Bulgaria	BG
Cyprus	CY
Czech Republic	CZ
Denmark	DK
Estonia	EE
Finland	FI
France	FR
Germany	DE
Greece	EL HU
Hungary Ireland	IE
Italy	IT
Latvia	LV
Lithuania	LT
Luxembourg	LU
Malta	MT
Netherlands	NL
Poland	PL
Portugal	PT
Romania	RO
Slovakia	SK
Slovenia	SI
Spain	ES
Sweden	SE
United Kingdom	UK

- The abbreviations used are the ISO codes, except for Greece and the United Kingdom, for which EL and UK are recommended (instead of GR and GB).
- Do not use 'Republic of Ireland' nor 'Irish Republic'
- Use 'the Netherlands' not Holland, which is only part of the Netherlands (the provinces of North and South Holland); a capital T is not necessary on 'the'.
- Use 'United Kingdom' for the Member State, not 'Great Britain', which comprises England, Scotland and Wales; these three together with Northern Ireland Are the constituent parts of the United Kingdom. The purely geographical term 'British Isles' includes Ireland and the Crown Dependencies (the Isle of Man and the Channel Islands which are not part of the United Kingdom).



PHYTOSANITARY TERMS AND DEFINITIONS

Continental Europe: The continent of Europe, excluding the United

Kingdom, Isle of Man, Ireland and Iceland.

European Economic Area (EEA): European Union countries and three of the four

European Free Trade Association (EFTA) states; Norway, Iceland and Liechtenstein.

Switzerland is not part of the EEA.

European Free Trade Association

(EFTA):

Iceland, Liechtenstein, Norway and Switzerland

Harmful organisms: Any species, strain or biotype of plant, animal or

pathogenic agent injurious to plants or plant

products

Mediterranean Countries: The region surrounding the Mediterranean Sea.



Non-European countries:	All countries not belonging to continental Europe .	
Plants:	Living plants and living parts thereof, including seeds.	
	Living parts of plants shall be considered to include:	
	 fruit in the botanical sense other than that preserved by deep freezing, Vegetables other than those preserved by deep freezing, tubers, corms, bulbs, rhizomes, cut flowers, branches with foliage, cut trees retaining foliage, Leaves and foliage, plant tissue cultures, Live pollen, Bud wood, cuttings, scions, Any other parts of plants, which may be specified in accordance with the procedures referred to in Article 18(2) 	
	Seeds shall be considered to mean:	
	Seed in the botanical sense, other than those not intended for planting	
Plant products:	products of plant origin, unprocessed or having undergone simple preparation, in so far as these are not plants	
Protected zones:	a zone in the community:	
	 in which one or more harmful organisms referred to in this Directive, which are established in one or more parts of the 	

Community, are not endemic or established despite favourable conditions for them to

in which there is a danger that certain harmful organisms will establish, given propitious

establish themselves there,



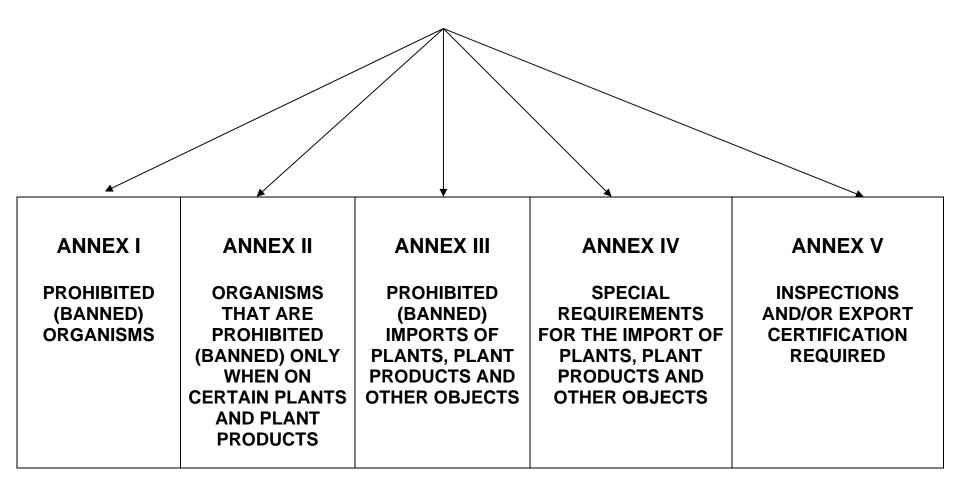
ecological conditions, for particular crops, despite the fact that these organisms are not endemic or established in the Community.

Third Countries:

All countries except countries belonging to the European Union (EU) and the European Economic Area (EEA).



LAYOUT OF THE EU DIRECTIVE





ANNEX I

PART A

Harmful organisms of which the introduction into, and spread within, all member states shall be banned

PART B

Harmful organisms of which the introduction and spread are prohibited (banned) in certain protected zones (E.g. When *Globodera pallida* does not occur in a zone it is regulated under Part B but when *Globodera pallida* does occur in a zone it is regulated under Part A Section II)

SECTION I

Harmful organisms not known to occur in any part of the Community and relevant for the entire Community (E.g. Quarantine pests not present in the entire Community)

SECTION II

Harmful organisms known to occur in the Community and relevant for the entire Community (E.g. Regulated non-quarantine pests, Quarantine pests not widely distributed and being officially controlled)



ANNEX II

PART A

Harmful organisms whose introduction into, and spread within, all member states shall be prohibited (banned) if they are present on certain plants or plant products within the whole community on certain plants and plant products

PART B

Harmful organisms whose introduction into, and spread within, certain protected zones shall be prohibited (banned) if they are present on certain plants or plant products (E.g. When harmful organism does not occur in a zone it is regulated under Part B but when the same harmful organism does occur in a zone it is regulated under Part A Section II)

SECTION I

Harmful organisms not known occur in any part of the Community and relevant for the entire Community (E.g. Quarantine pests not present in the entire Community)

SECTION II

Harmful organisms known to occur in the Community and relevant for the entire Community (E.g. regulated non-quarantine pests, Quarantine pests not widely distributed and being officially controlled)



ANNEX III

PART A

Plants, plant products and other objects of which the introduction shall be prohibited (banned) within all member states (Potential exporters need to apply for market access to EU via NPP Contact Point of SA)

PART B

Plants, plant products and other objects of which the introduction shall be prohibited (banned) in certain protected zones (Potential exporters need to apply for market access to EU via NPP Contact Point of SA)



ANNEX IV

PART A

Special requirements which must be laid down by all member states for the introduction and movement of plants, plant products and other objects into and within all member states

PART B

Special requirements which shall be laid down by all member states for the introduction and movement of plants, plant products and other objects into and within certain protected zones

SECTION I

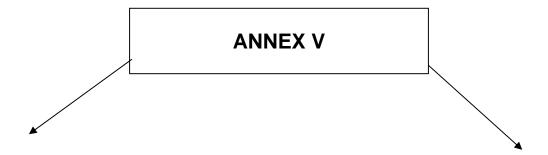
Plants, plant products and other goods originating outside the community

SECTION II

Plants, plant products and other goods originating from inside the community

(Not applicable South Africa)





PART A

Plants, plant products and other objects originating in the Community

(Not applicable to South Africa)

PART B

Plants, plant products and other objects originating in territories, other than those territories referred to in part A that requires a phytosanitary inspection and certification



Step by step instruction guideline for European certification

- 1. Determine whether or not the regulated article is prohibited for export to the EU according to the prescriptions in Annex III.
- 1.1. If the regulated article is prohibited according to the prescriptions of Annex III Part A the phytosanitary certification process ends. However, an official market access request may be submitted for evaluation by the EU via the SA NPP Contact Point.
- 1.2. If the regulated article is not prohibited according to the prescriptions of Annex III Part A, the prescriptions in Annex I, II, IV and V will be applicable.
- 1.3. If the regulated article is prohibited from export from SA to protected zones specified in Annex III Part B the phytosanitary certification process ends for the protected zone, but regulated article may be exported to other member states.
- 1.4. If the regulated article is not prohibited based on the prescriptions of Annex III Part B, (i.e. not destined for a protected zone) the prescriptions in Annex I, II, IV and V will be applicable.
- 2. Annex V Part A is not applicable to SA.
- 2.1. Determine whether or not the regulated article should be subjected to an inspection based on the prescriptions in Annex V Part B.
- 2.2. If the regulated article is not listed in Annex V Part B the prescriptions of Annexes I and II will be applicable.
- 2.3. If the regulated article is listed in Annex V Part B the prescriptions of Annex VI for inspection procedures will be applicable as well as the further prescriptions of Annexes I and II.
- 3. Determine whether the regulated article is destined for a protected zone as specified in Annex IV Part B.
- 3.1. If the regulated article is destined for a protective zone as specified in Annex IV Part B, the import requirements as prescribed in Annex IV Part B "Special requirements" shall be applicable for phytosanitary certification. Annex I and II will also be applicable.
- 3.2. If the regulated article is not destined for a protected zone (as specified in Annex IV Part B) then the import requirements in Annex IV Part A Section I will be applicable for phytosanitary certification. Annex I and II will also be applicable
- 3.3 Note that Annex IV, part A, section II, is not applicable to South Africa



- 4. Annex II: Organisms that are prohibited (ban) only when on certain plants and plant products
- 4.1 Look at part A section 1 Harmful organisms not known to occur in any part of the community and relevant for the entire community. Look for plants that are going to be exported in the subject of contamination column. Look at the organism in the species column associated with plants being exported
- 4.2 If the organism in the species column are not present in SA no inspection and or testing is necessary for that plant
- 4.3 If the organism in the species column is present in SA inspection and or testing is necessary for that plant to declare freedom of. It is important that we contact the PRA division (Isabel Bezuidenhout (012) 319-6112 for phytosanitary options
- 4.4 Look at annex II part A section II: 1 Harmful organism known to occur in the community and relevant for the entire community. Look for plants that are going to be exported in the subject of contamination column. Look at the organism in the species column associated with plants being exported
- 4.5 If the organism in the species column are not present in SA no inspection and or testing is necessary for that plant
- 4.6 If the organism in the species column is present in SA inspection and or testing is necessary for that plant to declare freedom of. It is important that we contact the PRA division (Isabel Bezuidenhout (012) 319-6112 for phytosanitary options
- 4.7 Look at Annex II Part B: Harmful organisms whose introduction into and spread within certain protected zones shall be prohibited (banned) if they are present on certain plants or plant products.
- 4.8 If the plant for export are going to a protected zone as specified in the protected zone column then the additional organisms in the species column is applicable for that plant to that zone. Remember that Annex II part A is also applicable
- 4.9 If the plants for export is no specified in annex II then annex II is not applicable to that export
- 5. Annex I: Harmful organisms of which the introduction into, and spread within, all member states shall be banned
- 5.1 Look at part A section I: Harmful organisms not known to occur in any part of the community and relevant for the entire community
- 5.2 Identify the list of organisms that occur in SA and that are associated with the host plants that are going to be exported (Information will be provided by PRA).



- 5.3 Look at part A section II: Harmful organisms known to occur in the community and relevant for the entire community
- 5.4 Identify the list of organisms that occur in SA and that are associated with the host plants that are going to be exported (Information will be provided by PRA).
- 5.5 Look at Annex I Part B: Harmful organisms of which the introduction and spread are prohibited (banned) in certain protected zones
- 5.6 Identify the list of organisms that occur in SA and that are associated with the host plants that are going to be exported to that protected zone as mentioned in the protected zone column. (Information will be provided by PRA).

ALL ORGANISMS PRINTED IN BLUE OCCUR IN SOUTH AFRICA AND NEEDS TO BE CERTIFIED ON THE PHYTOSANITARY CERTIFICATES



ANNEX I

PART A

HARMFUL ORGANISMS WHOSE INTRODUCTION INTO, AND SPREAD WITHIN, ALL MEMBER STATES SHALL BE BANNED

Sect ion I

HARMFUL ORGANISMS NOT KNOWN TO OCCUR IN ANY PART OF THE COMMUNITY AND RELEVANT FOR THE ENTIRE COMMUNITY

(a) Insects, mites and nematodes, at all stages of their development

1. Acleris spp. (non-European)

Acleris gloverana ^{1,8} Acleris variana ^{1,8}

- 2. Amauromyza maculosa (Malloch)¹
- 3. Anomala orientalis Waterhouse¹
- 4. Anoplophora chinensis (Thomson) ¹
- 4.1. Anoplophora glabripennis (Motschulsky) 1,8
- 5. Anoplophora malasiaca (Forster)¹
- 6. Arrhenodes minutus Drury 8
- 7. **Bemisia tabaci** ¹ (Biotype B) Genn. (non-European populations) vector of viruses such as:
 - (a) Bean golden mosaic virus^{1,4,8}
 - (b) Cowpea mild mottle virus^{1,4}
 - (c) Lettuce infectious yellows virus^{1,4,8}
 - (d) Pepper mild tigré virus⁴
 - (e) Squash leaf curl virus¹
 - (f) Euphorbia mosaic virus 4
 - (g) Florida tomato virus¹
- 8. Cicadellidae (non-European) known to be vector of Pierce's disease (caused by *Xylella fastidiosa*), such as:
 - (a) Carneocephala fulgida Nottingham^{1,8}
 - (b) Draeculacephala minerva Ball^{1,8}
 - (c) Graphocephala atropunctata (Signoret) 1,8
- 9. *Choristoneura* spp. (non-European)

Choristoneura conflictana 1,8

Choristoneura fumiferana 1,8

Choristoneura occidentalis 1,8

Choristoneura rosaceana 1,8

- 10. Conotrachelus nenuphar (Herbst) 1,8
- 10.1. Diabrotica barberi Smith and Lawrence^{1,8}
- 10.2. Diabrotica undecimpunctata howardi Barber¹
- 10.3. Diabrotica undecimpunctata undecimpunctata Mannerheim^{1,8}



- 10.4. Diabrotica virgifera Le Conte¹
- 11. Heliothis (Helicoverpa) zea (Boddie) 1,8
- 11.1. *Hirschmanniella* spp., other than *Hirschmanniella gracilis* ^{1,6,7} (de Man) Luc and Goodey
- 12. Liriomyza sativae Blanchard¹
- 13. Longidorus diadecturus Eveleigh and Allen^{6,7}
- 14. *Monochamus* spp. (non-European)

Monochamus alternatus 1,8

Monochamus carolinensis^{1,8}

Monochamus leuconotus¹

Monochamus marmorator 1,8

Monochamus mutator 1,8

Monochamus nitens ^{1,8}

Monochamus notatus 1,8

Monochamus obtusus^{1,8}

Monochamus saltuarius^{1,8}

Monochamus scutellatus 1,8

Monochamus titillator^{1,8}

- 15. *Myndus crudus* Van Duzee ^{1,8}
- 16. Nacobbus aberrans (Thorne) Thorne and Allen^{1,6,7,8}
- 16.1. Naupactus leucoloma Boheman^{1,8}
- 17. *Premnotrypes* spp. (non-European)

Premnotrypes latithorax^{1,8}

Premnotrypes suturicallus^{1,8}

Premnotrypes vorax^{1,8}

- 18. Pseudopityophthorus minutissimus (Zimmermann) ^{1,8}
- 19. Pseudopityophthorus pruinosus (Eichhoff) 1,8
- 20. Scaphoideus luteolus (Van Duzee) 1,8
- 21. Spodoptera eridania (Cramer) 1,8
- 22. Spodoptera frugiperda (Smith) 1,8
- 23. Spodoptera litura (Fabricus) 1,8
- 24. Thrips palmi Karny¹
- 25. Tephritidae (non-European) such as:
 - (a) Anastrepha fraterculus (Wiedemann)^{1,5,8}
 - (b) Anastrepha ludens (Loew) 1,5,8
 - (c) Anastrepha obliqua Macquart 1,5,8
 - (d) Anastrepha suspensa (Loew) 1,5,8
 - (e) Dacus ciliatus Loew^{1,5}
 - (f) Dacus (Bactrocera) curcurbitae Coquillet 1,5,8
 - (g) Dacus (Bactrocera) dorsalis Hendel^{1,5,8}
 - (h) Dacus (Bactrocera) tryoni (Froggatt) 1,5,8
 - (i) Dacus (Bactrocera) tsuneonis Miyake^{1,5,8}
 - (j) Dacus (Bactrocera) zona Saund 1,5,8
 - (k) Epochra canadensis (Loew) 1,5
 - (I) Pardalaspis (Neoceratitis) cyanescens Bezzi¹
 - (m) Pardalaspis (Ceratitis) quinaria Bezzi^{1,5}
 - (n) Pterandrus (Ceratitis) rosa (Karsch) 1,5



- (o) Rhacochlaena (Euphranta) japonica Ito⁸
- (p) Rhagoletis cingulata (Loew) 1,5
- (q) Rhagoletis completa Cresson^{1,5}
- (r) Rhagoletis fausta (Osten-Sacken) 1,5,8
- (s) Rhagoletis indifferens Curran^{1,5,8}
- (t) Rhagoletis mendax Curran^{1,5,8}
- (u) Rhagoletis pomonella Walsh^{1,5,8}
- (v) Rhagoletis ribicola Doane^{1,5}
- (w) Rhagoletis suavis (Loew) 1,5
- 26. *Xiphinema americanum* Cobb *sensu lato* (non-European populations) *Xiphinema americanum sensu lato* consists of the following species:
 - X. americanum^{6,7,8}
 - X. rivesi
 - X. californicum
 - X. brevicolle
- 27. Xiphinema californicum Lamberti and Bleve-Zacheo 1,6,7,8

(b) Bacteria

1. Xylella fastidiosa (Well and Raju)^{1,4,8}

(c) Fungi

- 1. Ceratocystis fagacearum (Bretz) Hunt^{1,2,8}
- 2. Chrysomyxa arctostaphyli Dietel^{1,2,8}
- 3. *Cronartium* spp. (non-European)

Cronartium coleosporiodes 1,2,8

Cronartium comandrae^{1,2,8}

Cronartium comptoniae^{1,2,8}

Cronartium fusiforme^{1,2,8}

Cronartium himalayense^{1,2,8}

Cronartium quercuum^{1,2,8}

- 4. Endocronartium spp. (non-European)
 - Endocronartium harknessii^{1,2,8}
- 5. Guignardia laricina (Saw.) Yamamoto and Ito^{1,2}
- 6. *Gymnosporangium* spp. (non-European)

Gymnosporangium clavipes^{1,2,8}

Gymnosporangium globosum^{1,2,8}

Gymnosporangium juniperi-virginianae^{1,2,8}

Gymnosporangium yamadae^{1,2,8}

- 7. Inonotus weirii (Murril) Kotlaba and Pouzar^{1,2}
- 8. *Melampsora farlowii* (Arthur) Davis^{1,2,8}
- 9. *Monilinia fructicola* (Winter) Honey^{1,2}
- 10. Mycosphaerella larici-leptolepis Ito et al. ^{2,8}
- 11. *Mycosphaerella populorum* G. E. Thompson^{1,2,8}
- 12. Phoma andina Turkensteen^{1,2,8}
- 13. Phyllosticta solitaria Ellis & Everh. 1,2,8



- Septoria lycopersici Speg. var. malagutii Ciccarone and Boerema^{1,2,8} 14.
- Thecaphora solani Barrus^{1,2,8} 15.
- Tilletia indica Mitra^{1,2,8} 15.1.
- Trechispora brinkmannii (Bresad.) Rogers² 16.

(d) Viruses and virus-like organisms

- 1. Elm phlöem necrosis mycoplasm 4
- Potato viruses and virus-like organisms such as: 2.
 - (a) Andean potato latent virus 1,4,8
 - (b) Andean potato mottle virus 1,4,8
 - (c) Arracacha virus B, oca strain^{1,4}
 - (d) Potato black ringspot virus 1,4,8
 - (e) Potato spindle tuber viroid^{1,4,8}
 - (f) Potato virus T^{1,4,8}
 - (g) non-European isolates of potato viruses A, M, S, V, X and Y (including Yo, YN and YC) and Potato leafroll virus 1,4 Tobacco ringspot virus 1,4,8
- 3.
- Tomato ringspot virus^{1,4,8} 4.
- 5. Viruses and virus-like organisms of Cydonia Mill., Fragaria L., Malus Mill., Prunus L., Pyrus L., Ribes L., Rubus L. and Vitis L., such as:
 - (a) Blueberry leaf mottle virus 1,4,8
 - (b) Cherry rasp leaf virus (American) 1,4,8
 - (c) Peach mosaic virus (American) 1,4,8
 - (d) Peach phony rickettsia 4
 - (e) Peach rosette mosaic virus 1,4,8
 - (f) Peach rosette mycoplasm^{1,4}
 - (g) Peach X-disease mycoplasm^{1,4}
 - (h) Peach yellows mycoplasm^{1,4}
 - (i) Plum line pattern virus (American) 1,4
 - (j) Raspberry leaf curl virus (American) 1,4,8
 - (k) Strawberry latent 'C' virus^{1,4,8}
 - (I) Strawberry vein banding virus⁴
 - (m) Strawberry witches' broom mycoplasm^{1,4}
 - (n) Non-European viruses and virus-like organisms of Cydonia Mill., Fragaria L., Malus Mill., Prunus L., Pyrus L., Ribes L., Rubus L. and Vitis L.
- 6. Viruses transmitted by Bemisia tabaci Genn., such as:
 - (a) Bean golden mosaic virus 1,4,8
 - (b) Cowpea mild mottle virus^{1,4}
 - (c) Lettuce infectious yellows virus 1,4,8
 - (d) Pepper mild tigré virus⁴
 - (e) Squash leaf curl virus 1,4,8
 - (f) Euphorbia mosaic virus 4
 - (g) Florida tomato virus¹



(e) Parasitic plants

1. Arceuthobium spp. (non-European)
Arceuthobium abietinum ^{1,8}
Arceuthobium americanum ^{1,8}
Arceuthobium campylopodum ^{1,8}
Arceuthobium divaricum ¹
Arceuthobium douglasii ^{1,8}
Arceuthobium laricis ^{1,8}
Arceuthobium minutissimum ^{1,8}
Arceuthobium occidentale ^{1,8}
Arceuthobium pusillum ^{1,8}
Arceuthobium tsugense ^{1,8}
Arceuthobium vaginatum ^{1,8}



Section II

HARMFUL ORGANISMS KNOWN TO OCCUR IN THE COMMUNITY AND RELEVANT FOR THE ENTIRE COMMUNITY

(a) Insects, mites and nematodes, at all stages of their development

- 1. Globodera pallida (Stone) Behrens^{1,6,7,8}
- 2. Globodera rostochiensis (Wollenweber) Behrens^{1,6,7,8}
- 3. Heliothis (Helicoverpa) armigera (Hübner) 1,8
- 6.1. Meloidogyne chitwoodi Golden et al. (all populations) 1,6,7,8
- 6.2. *Meloidogyne fallax* Karssen ^{1,6,7,8}
- 7. Opogona sacchari (Bojer) 1,8
- 8. Popilia japonica Newman 1,8
- 8.1. Rhizoecus hibisci Kawai and Takagi¹
- 9. Spodoptera littoralis (Boisduval) 1,8

(b) Bacteria

- 1. Clavibacter michiganensis (Smith) Davis et al. ssp. sepedonicus (Spieckermann and Kotthoff) Davis et al.^{1,4,8}
- 2. Pseudomonas (Ralstonia) solanacearum (Smith) Smith Pseudomonas (Ralstonia) solanacearum race 1 1,4,8
 Pseudomonas (Ralstonia) solanacearum race 2 1,4,8
 Pseudomonas (Ralstonia) solanacearum race 3 1,4,8

(c) Fungi

- 1. Melampsora medusae Thümen^{1,2,8}
- 2. Synchytrium endobioticum (Schilbersky) Percival^{1,2,8}

(d) Viruses and virus-like organisms

- 1. Apple proliferation mycoplasm ^{1,4}
- 2. Apricot chlorotic leafroll mycoplasm^{1,4}
- 3. Pear decline mycoplasm^{1,4}



PART B

HARMFUL ORGANISMS WHOSE INTRODUCTION INTO, AND WHOSE SPREAD WITHIN, CERTAIN PROTECTED ZONES SHALL BE BANNED

(a) Insects, mites and nematodes, at all stages of their development

	Species	Protected zone(s)
1.	Bemisia tabaci Genn. (European populations) ¹	IRL, P (Azores, Beira Interior, Beira Litoral, Entre Douro e Minho, Madeira, Ribatejo e Oeste (communes of Alcobaça, Alenquer, Bombarral, Cadaval, Caldas da Rainha, Lourinhã, Nazaré, Obidos, Peniche and Torres Vedras) and Trásos-Montes), UK, S, FI
1.1.	Daktulosphaira vitifoliae (Fitch) ¹	CY
2.	Globodera pallida (Stone) Behrens ^{1,6,7,8}	FI, LV, SI, SK
3.	Leptinotarsa decemlineata Say ¹	E (Ibiza and Menorca), IRL, CY, M, P (Azores and Madeira), UK, S (Malmöhus, Kristianstads, Blekinge, Kalmar, Gotlands Län, Halland), FI (the districts of Åland, Turku, Uusimaa, Kymi, Häme, Pirkanmaa, Satakunta)
4.	Liriomyza bryoniae (Kaltenbach) ¹	IRL and UK (Northern Ireland)

(b) Viruses and virus-like organisms

	Species	Protected zone(s)
1.	Beet necrotic yellow vein virus ^{1,4,8}	F (Britanny), FI, IRL, P (Azores), UK (Northern Ireland)
2.	Tomato spotted wilt virus ^{1,4,8}	S, FI



Annex 1 A: Host range of organisms that occur in South Africa

Table 1: Host range of insects occurring in South Africa

INSECTS	HOST RANGE
Bemisia tabaci 1	Abelmoschus esculentus ¹ (okra),
Bernisia tabaci	Arachis hypogaea ¹ (groundnut),
[tobacco whitefly; silver leaf whitefly]	Brassica oleracea var. botrytis ¹ (cauliflower),
[tobacco winterly, onver lear winterly]	Brassica oleracea var. gemmifera ¹ (Brussels
	sprouts),
	Brassica oleracea var. italica ¹ (broccoli),
	Cajanus cajan ¹ (pigeon pea),
	Capsicum annuum¹ (bell pepper),
	Carica papaya ¹ (papaw),
	Cucumis sativus¹ (cucumber),
	Euphorbia pulcherrima ¹ (poinsettia),
	Gerbera jamesonii ¹ (African daisy),
	Glycine max ¹ (soybean),
	Gossypium hirsutum ¹ (Bourbon cotton),
	Ipomoea batatas¹ (sweet potato),
	Lactuca sativa¹ (lettuce),
	Lycopersicon esculentum ¹ (tomato),
	Manihot esculenta ¹ (cassava),
	Nicotiana tabacum¹ (tobacco),
	Phaseolus vulgaris¹ (common bean),
	Piper nigrum 1 (black pepper),
	Sinningia speciosa¹ (gloxinia),
	Solanum melongena ¹ (aubergine),
2 11	Solanum tuberosum ¹ (potato)
Ceratitis quinaria 1,5	Citrus, 1,5
	Prunus americana 1,5 (apricot),
[Rhodesian fruit fly]	Prunus persica ^{1,5} (peach),
	Prunus persica ^{1,5} (peach), Psidium guajava ^{1,5} (guava) Annona reticulata ^{1,5} (bullock's heart),
Ceratitis rosa ^{1,5}	Annona reticulata ^{1,5} (bullock's heart),
	Averrhoa carambola ^{1,5} (carambola),
[Natal fruitfly]	Capsicum frutescens 1,5 (chilli),
	Carica papaya ^{1,5} (papaw),
	Carissa macrocarpa ^{1,5} (natal plum),
	Citrus, ¹
	Citrus aurantium ^{1,5} (sour orange),
	Citrus reticulata ^{1,5} (mandarin),
	Citrus sinensis ^{1,5} (navel orange),
	Coffea ¹ (coffee),
	Coffea arabica ^{1,5} (arabica coffee),
	Cydonia oblonga ^{1,5} (quince), Eriobotrya japonica ¹ (loquat),
	Eriobotrya japonica ¹ (loquat),

INSECTS	HOST RANGE
INSECTS	Eugenia uniflora ^{1,5} (surinam cherry),
	Ficus carica ^{1,5} (fig),
	Garcinia mangostana ^{1,5} (mangosteen),
	Litchi chinensis ^{1,5} (litchi),
	Lycopersicon esculentum ^{1,5} (tomato),
	Malus domestica ^{1,5} (apple),
	Mangifera indica ^{1,5} (mango),
	Manillara zanata ¹ (mango),
	Manilkara zapota¹ (sapodilla),
	Persea americana ^{1,5} (avocado),
	Prunus armeniaca ^{1,5} (apricot),
	Prunus domestica ^{1,5} (plum),
	Prunus persica ^{1,5} (peach),
	Prunus salicina ¹ (Japanese plum),
	Psidium guajava ^{1,5} (guava),
	Psidium longipes 1,5 (strawberry guava), Pyrus communis 1,5 (European pear),
	Pyrus communis (European pear),
	Syzygium aqueum ^{1,5} (watery rose-apple),
	Syzygium cumini ^{1,5} (black plum),
	Syzygium jambos ¹ (rose apple),
	Syzygium malaccense ^{1,5} (malay-apple),
	Terminalia catappa ^{1,5} (Singapore almond),
	Theobroma cacao ^{1,5} (cocoa),
	Vitis vinifera ^{1,5} (grapevine), Ziziphus jujuba ^{1,5} (common jujube)
15	Ziziphus jujuba ^{1,3} (common jujube)
Dacus ciliatus 1,5	Citrullus colocynthis (colocynth)
	Citrullus lanatus 1,5 (watermelon),
[lesser pumpkin fly]	Cucumis melo ^{1,5} (melon), Cucumis sativus ^{1,5} (cucumber),
	Cucumis sativus', (cucumber),
	Cucumis metuliferus ⁵ (African horned
	cucumber)
	Cucurbita maxima 1,5 (giant pumpkin),
	Cucurbita pepo ^{1,5} (ornamental gourd),
	Lagenaria siceraria 5 (white-flowered gourd)
	Luffa acutangula ^{1,5} (angled luffa),
	Luffa aegyptiaca 1,5 (luffa),
	Lycopersicon esculentum ^{1,5} (tomato)
	Momordica balsamina ⁵ (balsam apple)
	Momordica charantia ^{1,5} (bitter gourd),
	Sechium edule ⁵ (chayote)
	Trichosanthes cucumerina var. anguinea ^{1,5}
4	(snakegourd)
Daktulosphaira vitifoliae ¹	Vitis ¹ (grape),
	Vitis aestivalis (Summer grape),
[grapevine phylloxera]	Vitis labrusça¹ (fox grape),
	Vitis riparia ¹ (riverbank grape (USA)),

INSECTS	HOST RANGE
	Vitis vinifera ¹ (grapevine)
Heliothis armigera 1,8	Abelmoschus esculentus ^{1,8} (okra),
_	Albizia procera ^{1,8} (white siris),
[African cotton bollworm]	Allium ¹ (onions, garlic, leek, etc.),
	Arachis hypogaea ^{1,8} (groundnut),
	Avena sativa 1,8 (oats),
	Brassica oleracea var. gemmifera 1,8 (Brussels
	sprouts),
	Brassica oleracea var. italica ^{1,8} (broccoli),
	Broussonetia papyrifera ^{1,8} (paper mulberry),
	Cajanus cajan ^{1,8} (pigeon pea),
	Capsicum annuum 1,8 (bell pepper),
	Cicer arietinum 1,8 (chickpea),
	Citrus, 1
	Glycine max ^{1,8} (soybean)
	Glycine max ^{1,8} (soybean), Gossypium ^{1,8} (cotton),
	Helianthus annuus ^{1,8} (sunflower)
	Hordeum vulgare ^{1,8} (barley)
	Lablah purpureus ^{1,8} (hyacinth bean)
	Hordeum vulgare ^{1,8} (barley), Lablab purpureus ^{1,8} (hyacinth bean), Linum usitatissimum ^{1,8} (flax),
	Lycopersicon esculentum ^{1,8} (tomato),
	Manaifora indica ^{1,8} (manaa)
	Nicotiana tahacum ^{1,8} (tohacco)
	Nicotiana tabacum ^{1,8} (tobacco), Pennisetum glaucum ^{1,8} (pearl millet),
	Phaseolus vulgaris ^{1,8} (common bean),
	Pinus 1 (pines),
	Pisum sativum ^{1,8} (pea),
	Solonum molongono 1,8 (aubergine)
	Solanum melongena ^{1,8} (aubergine), Solanum tuberosum ^{1,8} (potato),
	Sorahum bioolor ^{1,8} (corahum)
	Sorghum bicolor ^{1,8} (sorghum), Triticum aestivum ^{1,8} (wheat),
	Vigna unguiculata ^{1,8} (cowpea),
	Zea mays ^{1,8} (maize)
Monochamus leuconotus ¹	Coffea ¹ (coffee)
Monochamus leuconotus	Conea (conee)
[white coffee stem borer]	
19	10
Naupactus leucoloma 1,8	Allium cepa ^{1,8} (onion),
	Arachis hypogaea ^{1,8} (groundnut),
[whitefringed weevil]	<i>Ipomoea batatas</i> ^{1,8} (sweet potato),
	Medicago sativa ^{1,8} (lucerne),
	Solanum tuberosum ^{1,8} (potato),
	Trifolium repens ^{1,8} (white clover)
Opogona sacchari ^{1,8}	Alpinia, ¹
	Ananas comosus ^{1,8} (pineapple),
[banana moth]	

INSECTS	HOST RANGE
1102010	Begonia, 1
	Bougainvillea spectabilis ^{1,8} (Bougainvilla),
	Capsicum ¹ (peppers).
	Capsicum ¹ (peppers), Cordyline, ¹
	Dieffenbachia ^{1,8} (dumbcanes),
	Dioscorea ¹ (yam),
	Euphorbia pulcherrima ^{1,8} (poinsettia),
	Ficus, ¹
	Heliconia, ¹
	Hippeastrum, ¹
	Maranta 1 (arrowroot),
	Musa ¹ (banana),
	Philodendron, ¹
	Saccharum officinarum ^{1,8} (sugarcane).
	Saintpaulia ¹ (african violet).
	Saintpaulia ¹ (african violet), Sansevieria ¹ (snake plant),
	Sinningia speciosa ^{1,8} (gloxinia),
	Solanum melongena ^{1,8} (aubergine)
	Strelitzia, 1
	Yucca, 1
	Zea mays ^{1,8} (maize)
Spodoptera littoralis 1,8	Abelmoschus esculentus ^{1,8} (okra),
	Acacia nilotica ^{1,8} (gum arabic tree), Actinidia arguta ^{1,8} (tara vine),
[cotton leafworm]	Actinidia arguta ^{1,8} (tara vine),
	Alcea rosea ^{1,8} (Hollyhock),
	Allium cepa ^{1,8} (onion),
	Allium fistulosum ^{1,8} (Welsh onion),
	Amaranthus 1,8 (grain amaranth),
	Anemone 1 (windflower),
	Apium graveolens ^{1,8} (celery),
	Arachis hypogaea ^{1,8} (groundnut), Asparagus officinalis ^{1,8} (asparagus),
	Asparagus officinalis" (asparagus),
	Beta vulgaris ^{1,8} (beetroot),
	Beta vulgaris var. saccharifera ^{1,8} (sugarbeet),
	Brassica oleracea 1,8 (cabbages, cauliflowers),
	Brassica oleracea var. capitata ^{1,8} (cabbage), Brassica rapa subsp. chinensis ^{1,8} (Chinese
	cabbage),
	Caladium, ¹
	Callistephus chinensis ^{1,8} (China aster), Camellia sinensis ^{1,8} (tea),
	Camellia sinensis (tea),
	Capsicum ¹ (peppers), Capsicum annuum ^{1,8} (bell pepper),
	Chloric govern ^{1,8} (rhodes grees)
	Chloris gayana ^{1,8} (rhodes grass),

INSECTS	HOST RANGE
	Chrysanthemum indicum ^{1,8} (chrysanthemum),
	Citrullus lanatus ^{1,8} (watermelon),
	Citrus, ¹
	Citrus aurantium ^{1,8} (sour orange),
	Coffea arabica ^{1,8} (arabica coffee),
	Convolvulus ^{1,8} (morning glory),
	Corchorus capsularis ^{1,8} (white jute),
	Corchorus olitorius ^{1,8} (jute),
	Cryptomeria, ¹
	Cucurbita ¹ (pumpkin),
	Cucurbita pepo ^{1,8} (ornamental gourd),
	Cynara cardunculus L. var. scolymus ^{1,8} (globe
	artichoke),
	Daucus carota ^{1,8} (carrot),
	Dalbergia sissoo, ^{1,8}
	Datura ¹ (thorn-apple).
	Dianthus barbatus ^{1,8} (sweet williams),
	Dianthus caryophyllus ^{1,8} (carnation),
	Ficus carica 1,8 (fig),
	Gerbera ^{1,8} (Barbeton daisy),
	Glycine max 1,8 (soybean),
	Gossypium ¹ (cotton),
	Gossypium barbadense ^{1,8} (Gallini cotton)
	Helianthus annuus ^{1,8} (sunflower), Helianthus tuberosus ^{1,8} (Jerusalem artichoke),
	Helianthus tuberosus ^{1,8} (Jerusalem artichoke).
	Hibiscus cannabinus ^{1,8} (kenaf),
	Hibiscus mutabilis ^{1,8} (cottonrose),
	Indigofera tinctoria ^{1,8} (Indigo)
	Ipomoea batatas ^{1,8} (sweet potato),
	Lactuca sativa 1,8 (lettuce),
	Lantana, ¹
	Luffa aegyptiaca ^{1,8} (loofah),
	Lycopersicon, ¹
	Lycopersicon esculentum ^{1,8} (tomato),
	Medicago sativa ^{1,8} (lucerne),
	Melilotus spp., ¹
	Mentha spicata ^{1,8} (Spear mint),
	Morus ¹ (mulberrytree),
	Musa x paradisiaca ^{1,8} (plantain),
	Musa ¹ (banana),
	Nicotiana tabacum ^{1,8} (tobacco),
	Opuntia ¹ (Pricklypear),
	Oryza sativa ^{1,8} (rice),
	Persea americana ^{1,8} (avocado),
	Phaseolus ¹ (beans)
	Phaseolus vulgaris ^{1,8} (common bean),
	rnaseolus vulgaris (common bean),

INSECTS	HOST RANGE
	Phoenix dactylifera ^{1,8} (date-palm),
	Piper ¹ (pepper)
	Pistia stratiotes ^{1,8} (water lettuce).
	Pistia stratiotes ^{1,8} (water lettuce), Pisum sativum ^{1,8} (pea),
	Poaceae ¹ (grasses),
	Populus alba ^{1,8} (silver-leaf poplar),
	Portulaca oleracea ^{1,8} (purslane),
	Portulaca oleracea ^{1,8} (purslane), Prunus domestica ^{1,8} (plum),
	Prunus salicina ^{1,8} (Japanese plum), Psidium guajava ^{1,8} (guava),
	Psidium guajava ^{1,8} (guava),
	Punica granatum ^{1,8} (pomegranate),
	Punica granatum ^{1,8} (pomegranate), Salvia officinalis ^{1,8} (common sage),
	Sesamum indicum ^{1,8} (sesame)
	Sesbania sesban ^{1,8} (sesban),
	Sesbania sesban ^{1,8} (sesban), Raphanus sativus ^{1,8} (radish), Ricinus communis ^{1,8} (castor bean),
	Ricinus communis ^{1,8} (castor bean),
	Rosa' (roses),
	Saccharum officinarum ^{1,8} (sugarcane),
	Solanum melongena 1,8 (aubergine),
	Solanum tuberosum ^{1,8} (potato),
	Sorghum bicolor ^{1,8} (sorghum), Spinacia oleracea ^{1,8} (spinach),
	Spinacia oleracea ^{1,0} (spinach),
	Theobroma cacao ^{1,8} (cocoa),
	Trifolium ¹ (clovers),
	Trifolium alexandrinum ^{1,8} (Berseem clover),
	<i>Trifolium repens</i> ^{1,8} (white clover),
	Trigonella foenum-graecum ^{1,8} (fenugreek),
	Triticum aestivum ^{1,8} (wheat),
	Verbena ¹ (vervain),
	Vicia faba ^{1,8} (broad bean),
	Vigna angularis ^{1,8} (adzuki bean),
	Vigna mungo ^{1,8} (black gram), Vigna radiata ^{1,8} (mung bean),
	Vigna radiata (mung bean),
	Vigna unguiculata ^{1,8} (cowpea),
	Viola odorata ^{1,8} (English violet), Vitis vinifera ^{1,8} (grapevine),
	vius viriliera (grapevine),
	Zea mays ^{1,8} (maize)
	Zinnia elegans ^{1,8} (zinnia)



Table 2: Host range of nematodes occurring in South Africa

NEMATODES	HOST RANGE
Globodera rostochiensis 1,6,7,8	Antirrhinum majus ³ (common snapdragon),
	Avena sativa ³ (oats),
[yellow potato cyst nematode]	Beta vulgaris ³ (beet),
	Brassica oleracea ³ (cabbage),
	Datura stramonium 1,3,8 (jimsonweed),
	Lycopersicon esculentum ^{1,3,8} (tomato),
	Lycopersicon pimpinellifolium ^{1,3,8} (currant
	tomato),
	Pisum sativum ³ (peas),
	Solanum aviculare ^{1,3,8} (kangaroo apple),
	Solanum cladassi, ³
	Solanum gilo ^{1,8} (gilo),
	Solanum indicum, 1,8
	Solanum marginatum ^{1,8} (white-edged
	nightshade),
	Solanum mauritianum ^{1,8} (tree tobacco),
	Solanum melongena ^{1,3,8} (aubergine),
	Solanum nigrum 1,3,8 (black nightshade),
	Solanum quitoense ^{1,8} (Nagrangillo),
	Solanum sarrachoides ^{1,3,8} (green nightshad)
4670	Solanum tuberosum ^{1,3,8} (potato)
Meloidogyne chitwoodi 1,6,7,8	Allium cepa ³ (onion),
	Arachis hypogaea 3 (peanut),
[columbia root-knot nematode]	Avena sativa 3 (oats),
	Beta vulgaris ³ (beet),
	Brassica campestris 3 (cole),
	Brassica napus ³ (rape),
	Brassica rapa ³ (turnip),
	Capsicum annuum ³ (pepper),
	Chenopodium quinoa 1,8 (quinoa),
	Citrullus lanatus ³ (watermelon), Daucus carota ^{1,3,8} (carrot),
	Fragaria chiloensis ³ (strawberry),
	Fragaria cniloensis (strawberry),
	Gossypium hirsutum ³ (cotton),
	Helianthus annuus ³ (sunflower)
	Hordeum vulgare ³ (barley), Lycopersicon esculentum ^{1,3,8} (tomato),
	Modicago sativa ^{1,3,8} (hearns)
	Medicago sativa ^{1,3,8} (lucerne), Phaseolus vulgaris ^{1,3,8} (common bean),
	Pisum sativum ^{1,3,8} (pea),
	Raphanus sativus ³ (raddish),
	Scorzonera hispanica ^{1,8} (oyster plant),
	Solanum melongena ³ (eggnlant)
	Solanum melongena ³ (eggplant),

NEMATODES	HOST RANGE
	Solanum tuberosum ^{1,3,8} (potato)
	Sorghum bicolor ³ (sorghum),
	Triticum aestivum ³(wheat),
	Zea mays ^{1,3,8} (maize)
Xiphinema americanum ^{6,7,8}	Acer platanoides 1 (Norway maple),
•	Agropyron cristatum¹ (crested wheatgrass),
[American dagger nematode]	Agropyron desertorum ¹ (crested wheatgrass),
	Anethum graveolens ¹ (dill),
	Allium cepa 3 (onion),
	Allium sativum ³ (garlic).
	Avena sativa ^{1,3} (oats),
	Bambusa tuldoides ¹ (punting-pole bamboo),
	Beta vulgaris ³ (garden beet),
	Brassica oleracea ³ (broccoli),
	Callicarpa americana (American beautyberry),
	Capsicum frutescens ³ (pepper)
	Carissa grandiflora ³ (natal plum),
	Carya illinoinensis 3 (pecan),
	Chrysanthemum maximum (max daisy),
	Cichorium intybus ¹ (chicory),
	Citrus, ¹
	Citrus aurantium ³ (Seville orange)
	Citrus limon ³ (lemon)
	Citrus sinensis ^{1,3} (navel orange), Citrus reticulata ³ (mandarin orange),
	Citrus reticulata ³ (mandarin orange),
	Citrus X paradise ³ (grapefruit),
	Cocos nucifera ¹ (coconut),
	Codiaeum variegatum ¹ (croton),
	Coffea canephora ¹ (robusta coffee),
	Cucumis melo ³ (cantaloupe),
	Cucurbita pepo ¹ (ornamental gourd),
	Cydonia oblonga ¹ (quince),
	Cydonia dactylon ³ (Bermuda grass), Cynara scolymus ³ (artichoke),
	Cynara scolymus ³ (artichoke),
	Daucus carota 3 (carrot),
	Ficus carica ^{1,3} (fig),
	Fragaria chiloensis ³ (strawberry), Fragaria ananassa ^{1,3} (strawberry),
	Fragaria ananassa ^{1,3} (strawberry),
	Fragaria vesca ³ (strawberry),
	Glycine max 1 (soyabean),
	Gossypium hirsutum ^{1,3} (Bourbon cotton),
	Juglans regia ¹ (walnut),
	Juniperus monosperma,3 (cherrystone Juniper)
	Helianthus annuus ³ (sunflower)
	Hordeum vulgare ³ (barley),

NEMATODES	HOST RANGE
	Lactica sativa ³ (lettuce)
	Linum usitatissimum¹ (flax),
	Litchi chinensis ¹ (lichi),
	Lycopersicon esculentum ^{1,3} (tomato),
	Manilkara zapota 1 (sapodilla),
	Malus domestica ¹ (apple).
	Malus sylvestris ^{1,3} (crab-apple tree), Mangifera indic ^{1,3} (mango), Medicago sativa ^{1,3} (lucerne),
	Mangifera indic ^{1,3} (mango),
	Medicago sativa ^{1,3} (lucerne),
	Mentha piperita¹ (Peppermint),
	Mentha spicata ¹ (Spear mint),
	Nerium oleander ¹ (oleander),
	Nicotiana tabacum¹ (tobacco),
	Onobrychis viciifolia ¹ (sainfoin),
	Oryza sativa ^{1,3} (rice),
	Persea Americana ³ (avocado), Phaseolus limensis ³ (lima bean),
	Phaseolus limensis 3 (lima bean),
	Phaseolus vulgaris 3 (bean),
	Picea glauca ¹ (white spruce),
	Picea pungens ¹ (blue spruce),
	Pinus echinata ¹ (shortleaf pine),
	Pinus edulis 3 (nut-pine),
	Pinus elliottii ¹ (slash pine),
	Pinus resinosa ¹ (red pine),
	Pinus sylvestris ¹ (Scots pine),
	Pinus taeda¹ (loblolly pine),
	Pistacia vera ^{1,3} (pistachio),
	Poncirus trifoliata ¹ (Trifoliate orange),
	Prunus armeniaca ^{1,3} (apricot),
	Prunus avium ^{1,3} (sweet cherry),
	Prunus cerasus ³ (sour cherry),
	Prunus domestica ^{1,3} (plum),
	Prunus dulcis ^{1,3} (almond), Prunus persica ^{1,3} (peach),
	Prunus persica ^{1,3} (peach),
	Prunus salicina¹ (Japanese plum),
	Psidium guajava ^{1,3} (guava),
	Punica granatum ³ (pomegranate), Pyrus communis ³ (pear),
	Pyrus communis (pear),
	Rubus idaeus ^{1,3} (garden raspberry),
	Rubus longanobaccus ³ (raspberry),
	Saccharum officinarum ^{1,3} (sugarcane),
	Shorea robusta ¹ (sal),
	Solanum tuberosum ^{1,3} (potato),
	Sorghum bicolor 1,3 (sorghum),
	Sorghum halepense ³ (Johnson grass),
	Tectona grandis ¹ (teak),

NEMATODES	HOST RANGE
	Trifolium pratense ¹ (purple clover),
	Trifolium repens ^{1,3} (white clover),
	Triticum aestivum ³ (wheat),
	Vaccinium angustifolium ¹ (Lowbush blueberry),
	Vaccinium corymbosum ^{1,3} (blueberry),
	Vaccinium myrtillus ¹ (blueberry),
	Vitis labrusca ¹ (fox grape),
	Vitis rupestris 1 (sand-grape),
	Vitis vinifera ^{1,3} (grapevine),
	Zea mays ^{1,3} (maize)

Table 3: Host range of fungi occurring in South Africa

FUNGI	HOST RANGE
Melampsora medusae 1,2,8	Larix (larches), 1
	Pinus (pines), 1
[poplar leaf rust]	Populus balsamifera 1,8 (balm of Gilead),
	Populus balsamifera subsp. trichocarpa ^{1,8}
	(black cottonwood), <i>Populus deltoides</i> ^{1,2,8} (poplar)
	Populus deltoides ^{1,2,8} (poplar)
	Pseudotsuga menziesii 1,8 (Douglas-fir)
Synchytrium endobioticum 1,2,8	Solanum tuberosum ^{1,2,8} (potato)
[potato wart disease]	
4.2.0	4
Tilletia indica 1,2,8	Triticale, 1
	Triticum (wheat), 1,8
[Karnal bunt of wheat]	Triticum aestivum (wheat) 1,8

Table 4: Host range of bacteria occurring in South Africa

BACTERIA	HOST RANGE
Pseudomonas solanacearum	Annona cherimola ^{1,8} (cherimoya),
1,4,8	Anthurium, ¹
	Amaranthus spp. 4
[bacterial wilt of potato]	Arachis hypogaea 1,4,8 (groundnut),
	Bidens spp. 4,
	Capsicum annuum 1,4,8 (bell pepper),
	Casuarina cunninghamiana ^{1,8} (Australian
	beefwood),
	Casuarina equisetifolia 1,8 (casuarina),
	Casuarina glauca ^{1,8} (scaly oak (Australia)),

BACTERIA	HOST RANGE
	Colocasia esculenta ^{1,8} (taro), Curcuma longa ^{1,8} (turmeric), Datura spp. ⁴ , Gossypium ^{1,8} (cotton), Helianthus spp. ⁴ Heliconia ¹ , Hevea brasiliensis ^{1,8} (rubber), Ipomoea batatas ^{1,8} (sweet potato), Lycopersicon esculentum ^{1,4,8} (tomato), Manihot esculenta ^{1,8} (cassava), Musa ¹ (banana), Musa x paradisiaca ^{1,8} (plantain), Nicandra spp. ⁴ , Nicotiana tabacum ^{1,4,8} (tobacco), Pelargonium (pelargoniums), Physalis spp. ⁴ Ricinus communis ^{1,4,8} (castor bean), Solanum melongena ^{14,,8} (aubergine), Solanum nigrum ⁴ , Solanum tuberosum ^{1,4,8} (potato), Tectona grandis ^{1,8} (teak), Zingiber officinale ^{1,8} (ginger)
Pseudomonas solanacearum race 1 ^{1,4,8} [bacterial wilt of solanaceous crops]	Arachis hypogaea ^{1,8} (groundnut), Capsicum annuum ^{1,8} (bell pepper), Lycopersicon esculentum (tomato), Musa ¹ (banana), Nicotiana tabacum ^{1,8} (tobacco), Solanum melongena ^{1,8} (aubergine), Solanum tuberosum ^{1,8} (potato)
Pseudomonas solanacearum race 3 ^{1,4,8} [brown rot of potato]	Lycopersicon esculentum ^{1,8} (tomato), Solanum tuberosum ^{1,8} (potato)



Table 5: Host range of viruses occurring in South Africa

VIRUS	HOST RANGE
Cherry rasp leaf virus 1,4,8	Malus, 4
	Malus domestica 1,8 (apple),
	Plantago, 4
	Prunus, ⁴
	Prunus avium ^{1,8} (sweet cherry), Prunus cerasus ^{1,8} (sour cherry),
	Prunus cerasus ^{1,8} (sour cherry),
	Prunus mahaleb ^{1,8} (mahaleb cherry).
	Prunus persica ^{1,8} (peach)
	Prunus persica ^{1,8} (peach) Rubus idaeus ^{1,8} (raspberry)
	Taraxacum. *
Pepper mild tigré virus 4	Capsicum ^{1,4} (peppers),
	Capsicum annuum¹ (bell pepper),
	Capsicum frutescens ¹ (chilli),
	Lycopersicon esculentum ¹ (tomato),
	Physalis angulata 1 (cutleaf groundcherry)
Strawberry vein banding	Fragaria ¹ (strawberry),
virus ⁴	Fragaria ananassa ¹ (strawberry),
	Fragaria vesca ¹ (wild strawberry)
Tomato spotted wilt virus 1,4,8	Ageratum conyzoides 1,4,8 (billy goat weed),
	Alstroemeria ^{1,4} (Inca lily),
	Ananas comosus 1,4,8 (pineapple),
	Anemone 1,4 (windflower),
	Anemone coronaria ^{1,4,8} (Poppy anemone),
	Apium graveolens ^{1,4,8} (celery), Arachis hypogaea ^{1,4,8} (groundnut),
	Arachis hypogaea 1,4,8 (groundnut),
	Aster, 1,4
	Begonia, 1,4
	Benincasa hispida ^{1,4,8} (wax gourd),
	Bidens pilosa ^{1,4,8} (blackjack),
	Calceolaria ^{1,4} (pouch flower),
	Calendula officinalis 1,4,8 (Pot marigold),
	Callistephus ^{1,4} ,
	Callistephus chinensis ^{1,4,8} (China aster),
	Canavalia gladiata 1,4,8 (horse bean),
	Canna indica ^{1,4,8} (Queensland arrowroot),
	Capsicum ^{1,4} (peppers),
	Capsicum annuum ^{1,4,8} (bell pepper),
	Carica papaya 1,4,8 (papaw),
	Catharanthus roseus 1,4,8 (Pink periwinkle),
	Chrysanthemum morifolium ^{1,4,8}
	(chrysanthemum (florists')), Cicer arietinum ^{1,4,8} (chickpea),
	Cicer arietinum (cnickpea), Cichorium (cnickpea),
	Cicnorium '' (cnicory),

VIRUS	HOST RANGE
	Cichorium endivia ^{1,4,8} (endives),
	Citrullus lanatus 1,4,8 (watermelon),
	Coleus, 1,4
	Columnea, 1,4
	Columnea hirta ^{1,4}
	Crotalaria juncea ^{1,4,8} (sunn hemp), Cucumis sativus ^{1,4,8} (cucumber),
	Cucumis sativus 1,4,8 (cucumber),
	Cucurbita pepo 1,4,8 (ornamental gourd),
	Cyclamen, 1,4
	Cynara cardunculus L. var. scolymus ^{1,4} (globe
	artichoke),
	Cyphomandra betacea ^{1,4,8} (tree tomato),
	Dahlia, 1,4
	Dieffenbachia 1,4 (dumbcanes),
	Eustoma grandiflorum, 1,4,8
	Ficus elastica ^{1,4,8} (rubber plant),
	Ficus pumila ^{1,4,8} (creeping fig),
	Galinsoga parviflora ^{1,4,8} (gallant soldier),
	Gerbera ^{1,4} (Barbeton daisy),
	Gerbera jamesonii 1,4,8 (African daisy),
	Glycine max ^{1,4,8} (soyabean),
	Gossypium 1,4 (cotton),
	Helianthus annuus ^{1,4,8} (sunflower),
	Impatiens ^{1,4} (balsam),
	Impatiens walleriana ^{1,4,8} (Busy-lizzy),
	Jacquemontia tamnifolia ^{1,4,8} (Smallflower
	morningglory),
	Kalanchoe, 1,4 8
	Lactuca sativa ^{1,4,8} (lettuce), Lathyrus sativus ^{1,4,8} (grasspea), Lens culinaris ssp ^{1,4,8} , culinaris (lentil),
	Lathyrus sativus (grasspea),
	Lens culinaris ssp ^{1,1,5} . culinaris (lentil),
	Lupinus (lupins),
	Lycopersicon esculentum ^{1,4,8} (tomato),
	Mentha piperita ^{1,4,8} (Peppermint), Mirabilis jalapa ^{1,4,8} (marvel of Peru),
	Winabilis jalapa (marvei of Peru),
	Nicandra physalodes ^{1,4,8} (apple of Peru),
	Nicotiana rustica ^{1,4,8} (wild tobacco), Nicotiana tabacum ^{1,4,8} (tobacco),
	Ocimum, 1,4
	Ocimum, Ocimum basilicum ^{1,4,8} (basil),
	Ocinium basilicum (basil), Oncidium ^{1,4} (dancing-lady orchid),
	Pelargonium ^{1,4} (pelargoniums),
	Pericallis cruenta ^{1,4,8} (common cineraria),
	Petunia, 1,4
	Peturia, 1 Phalaenopsis, 1,4
	Phaseolu ^{1,4} (beans),
	rnaseolu (Deans),

VIRUS	HOST RANGE
	Phaseolus vulgaris ^{1,4,8} (common bean), Physalis peruviana ^{1,4,8} (pea), Saintpaulia ionantha ^{1,4,8} (African violet), Salvia officinalis ^{1,4,8} (common sage), Sechium edule ^{1,4,8} (chayote), Sinningia, ^{1,4} Sinningia speciosa ^{1,4,8} (gloxinia), Solanum melongena ^{14,8} (aubergine), Solanum tuberosum ^{1,4,8} (potato), Stephanotis floribunda ^{1,4,8} (madagascar stephanotis), Tagetes ^{1,4} (marigold), Tephrosia purpurea ^{1,4,8} (purple tephrosia), Valeriana officinalis ^{1,4,8} (common valerian), Valerianella locusta ^{1,4,8} (common cornsalad), Vicia faba ^{1,4,8} (broad bean), Vigna mungo ^{1,4,8} (black gram), Vigna radiata ^{1,4,8} (mung bean), Vigna unguiculata ^{14,8} (grapevine), Zantedeschia aethiopica ^{1,4,8} (calla lily), Zinnia, ^{1,4} Zinnia elegans ^{1,4,8} (zinnia)
non-European isolates of potato viruses A, M, S, V, X and Y	Solanum tuberosum ¹(potato),
(including Yo, YN and YC) and Potato leafroll virus ^{1,4}	



ANNEX II

PART A

HARMFUL ORGANISMS WHOSE INTRODUCTION INTO, AND SPREAD WITHIN, ALL MEMBER STATES SHALL BE BANNED IF THEY ARE PRESENT ON CERTAIN PLANTS OR PLANT PRODUCTS

Sect ion I

HARMFUL ORGANISMS NOT KNOWN TO OCCUR IN THE COMMUNITY AND RELEVANT FOR THE ENTIRE COMMUNITY

(a) Insects, mites and nematodes, at all stages of their development

Species	Subject of contamination
1. Aculops fuchsiae Keifer 1;8	Plants of Fuchsia L., intended for planting, other than seeds
2. Aleurocantus spp. 1;8	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
	than fruit and seeds
Aleurocantus spiniferus 1;8	
(orange spiny whitefly)	
- Atauma and a management 1:8	
Aleurocantus woglumi 1;8	
(citrus black fly)	Directs of Francial Links and discontinuous throughout the control of
3. Anthonomus bisignifer	Plants of <i>Fragaria</i> L., intended for planting, other than seeds
(Schenkling) 1,8	
4. Anthonomus signatus (Say) 1;8	Plants of <i>Fragaria</i> L., intended for planting, other than seeds
5. Aonidiella citrina Coquillet 1;9;13	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
	than fruit and seeds
6. Aphelenchoïdes besseyi	Seeds of Oryza spp.
Christie (*) ^{1;7;8}	
(rice leaf nematode)	
7. Aschistonyx eppoi Inouye 10	Plants of <i>Juniperus</i> L., other than fruit and seeds, originating in non-European
, s	countries



Species	Subject of contamination
8. Bursaphelenchus xylophilus (Steiner	Plants of Abies Mill., Cedrus Trew, Larix Mill., Picea A. Dietr., Pinus L.,
and Buhere) Nickle et al. 6;7;8	Pseudotsuga Carr. and Tsuga Carr., other than fruit and seeds, and wood of
	conifers (Coniferales), originating in non-European countries
9. Carposina niponensis (sasakii)	Plants of Cydonia Mill., Malus Mill., Prunus L. and Pyrus L., other than seeds,
Walsingham 1;8'	originating in non-European countries
10. <i>Diaphorina citri</i> Kuway ^{1;8}	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, and
	Murraya König, other than fruit and seeds
11. Enarmonia (Grapholita) packardi	Plants of Cydonia Mill., Malus Mill., Prunus L. and Pyrus L., other than seeds,
(Zeller) 1;8	originating in non-European countries
12. Enarmonia (Grapholita) prunivora	Plants of Crataegus L., Malus Mill., Photinia Ldl., Prunus L. and Rosa L.,
Walsh ¹	intended for planting, other than seeds, and fruit of <i>Malus</i> Mill. and <i>Prunus</i> L.,
	originating in non-European countries
13. Eotetranychus lewisi	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
McGregor ^{13,14}	than fruit and seeds
15. Grapholita inopinata Heinrich 1	Plants of Cydonia Mill., Malus Mill., Prunus L. and Pyrus L., other than seeds,
4.44	originating in non-European countries
16. Hishomonus phycitis ^{1;11}	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
	than fruit and seeds
17. Leucaspis (Lopholeucaspis)	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
japonica Ckll. 1;8	than fruit and seeds
18. Listronotus bonariensis	Seeds of Cruciferae, Gramineae and Trifolium spp., originating in Argentina,
(Kuschel) 1;8	Australia, Bolivia, Chile, New Zealand and Uruguay
19. Margarodes, non-European	Plants of <i>Vitis</i> L., other than fruit and seeds
species, such as:	
1:8	
(a) Margarodes vitis (Phillipi) 1;8	
(b) Margarodes vredendalensis de	
Klerk 1;8	
(ground pearls)	
(c) <i>Margarodes prieskaensis</i> Jakubski ^{1;8}	
(ground pearls)	



Species	Subject of contamination
20. <i>Numonia</i> (<i>Acrobasis</i>) <i>pyrivorella</i> (Matsumura) ^{1,8}	Plants of <i>Pyrus</i> L., other than seeds, originating in non-European countries
21. <i>Oligonychus perditus</i> Pritchard and Baker ^{1;8}	Plants of <i>Juniperus</i> L., other than fruit and seeds, originating in non-European countries
22. <i>Pissodes</i> spp. (non-European) Pissodes nemorensis ^{1;8} (northern pine weevil) - Pissodes strobe ^{1;8} - Pissodes terminalis ^{1;8}	Plants of conifers (<i>Coniferales</i>), other than fruit and seeds, wood of conifers (<i>Coniferales</i>) with bark, and isolated bark of conifers (<i>Coniferales</i>), originating in non-European countries
23. Radopholus citrophilus Huettel Dickson and Kaplan 8;15 Only R. similis are recognised and not R. citrophilus or the subspecies R. similis similis en R. similis citrophilus. The following studies showed that R. citrophilus is a synonym for R. similis 1998, Valette et al. SEM studies 1999, Elbadri et al. morphological studies 2002 Elbadri et al. molecular studies 2003, Ryss	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other than fruit and seeds, and Plants of Araceae, Marantaceae, Musaceae, Persea spp., Strelitziaceae, rooted or with growing medium attached or associated
24. Saissetia nigra (Nietm.) 1;9;13 (olive scale)	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds
25. <i>Scirtothrips aurantii</i> Faure ^{1;8;1} (South African citrus thrips)	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than seeds
26. Scirtothrips dorsalis Hood 1;12;13	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds
27. Scirtothrips citri (Moultex) 1;8;13	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than seeds



Species	Subject of contamination
28. Scolytidae spp. (non-European)	Plants of conifers (<i>Coniferales</i>), over 3 m in height, other than fruit and seeds, wood of conifers (<i>Coniferales</i>) with bark, and isolated bark of conifers
 None of the species in this insect family listed in the EPPO A1 and A2 lists of pests recommended for regulation as quarantine pests occurs in South Africa 	(Coniferales), originating in non-European countries
29. Tachypterellus (Anthonomus) quadrigibbus Say ^{1;8}	Plants of <i>Cydonia</i> Mill., <i>Malus</i> Mill., <i>Prunus</i> L. and <i>Pyrus</i> L., other than seeds, originating in non-European countries
30. Toxoptera citricida Kirk. 1;8;13	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
(Black citrus aphid)	than fruit and seeds
31. <i>Trioza erytreae</i> Del Guercio ^{1;8;13}	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids and
(African citrus psyllid)	Clausena Burm. f., other than fruit and seeds
32. <i>Unaspis citri</i> Comstock 1;8;13	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
	than fruit and seeds

^(*) Aphelenchoides besseyi Christie is not present on Oryza spp. in the Community

(b) Bacteria

Species	Subject of contamination
1. Citrus greening bacterium	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
(citrus huanglongbing (greening) disease)	than fruit and seeds
Two forms occur: a heat-tolerant (Asian) form and a heat-sensitive (African) form.	
Heat-tolerant form ("Liberobacter asiaticum") 1;4;8;13	
Heat-sensitive form ("Liberobacter africanum") 1;4;8;13	



Species	Subject of contamination
- Pest free areas are regulated by the Agricultural Pest Act 36 of 1983	
2. Citrus variegated chlorosis ^{1;4;8} (Xylella fastidiosa [Wells et al., 1987])	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds
3. Erwinia stewartii (Smith) Dye 1;4;8	Seeds of Zea mays L.
4. Xanthomonas campestris (all strains pathogenic to Citrus) 1;4;8	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than seeds
5. Xanthomonas campestris pv. oryzae (Ishiyama) Dye ^{1;4;8} and Xanthomonas campestris pv. oryzicola (Fang. et al.) Dye ^{1;4;8}	Seeds of <i>Oryza</i> spp.

(c) Fungi

Species	Subject of contamination
1. Alternaria alternata (Fr.)	Plants of Cydonia Mill., Malus Mill. And Pyrus L. intended for planting, other
Keissler 1;2	than seeds, originating in non-European countries
(non- European pathogenic isolates)	
(alternaria leaf spot)	
1.1. Anisogramma anomala (Peck) E.	Plants of Corylus L., intended for planting, other than seeds, originating in
Müller 1;2;8	Canada and the United States of America
2. Apiosporina morbosa (Schwein.) v.	Plants of <i>Prunus</i> L. intended for planting, other than seeds
Arx 1;2;8	
3. Atropellis spp.	Plants of <i>Pinus</i> L., other than fruit and seeds, isolated bark and wood of <i>Pinus</i>
- Atropellis pinicola Zeller & Goodd.	L.
1930 1,2,8	
 Atropellis piniphila (Weir) M.L. Lohman & E.K. Cash 1940 1;2;8 	
Lonman & E.K. Cash 1940	



Species	Subject of contamination
4. Ceratocystis coerulescens (Münch) Bakshi ²	Plants of <i>Acer saccharum</i> Marsh., other than fruit and seeds, originating in the USA and Canada, wood of <i>Acer saccharum</i> Marsh., including wood which has not kept its natural round surface, originating in the USA and Canada North
5. Cercoseptoria pini-densiflorae (Hori and Nambu) Deighton 1;2 [Mycosphaerella gibsonii H.C. Evans 1984] (needle blight of pine)	Plants of <i>Pinus</i> L., other than fruit and seeds, and wood of <i>Pinus</i> L.
6. Cercospora angolensis Carv. and Mendes ^{1,2,8}	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than seeds
7. Ciborinia camelliae Kohn ^{1;2;8}	Plants of <i>Camelia</i> L., intended for planting, other than seeds, originating in non- European countries
8. Diaporthe vaccinii Shaer 1;2;8	Plants of Vaccinium spp., intended for planting, other than seeds
 9. Elsinoë spp. Bitanc. and Jenk. Mendes` - Elsinoë australis Bitanc. & Jenkins^{1,2} 	Plants of Fortunella Swingle, Poncirus Raf., and their hybrids, other than fruit and seeds and plants of Citrus L. and their hybrids, other than seeds and other than fruits, except fruits of Citrus reticulata Blanco and of Citrus sinensis (L.) Osbeck originating in South America
- Elsinoë fawcettii Bitanc. & Jenkins 1;2 (citrus scab)	
10. Fusarium oxysporum f. sp. albedinis (Kilian and Maire) Gordon 1;2;8	Plants of <i>Phoenix</i> spp., other than fruit and seeds
11. Guignardia citricarpa Kiely (all strains pathogenic to Citrus) 1;2;8 (citrus black spot)	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than seeds
 Guignardia citricarpa does occur in certain citrus production areas. Pest free areas are regulated by the Agricultural Pest Act 36 of 1983 	



Species	Subject of contamination
12. Guignardia piricola (Nosa)	Plants of Cydonia Mill., Malus Mill., Prunus L. and Pyrus L., other than seeds,
Yamamoto ^{1;2}	originating in non-European countries
13. <i>Puccinia pittieriana</i> Hennings ^{1;2;8}	Plants of Solanaceae, other than fruit and seeds
14. Scirrhia acicola (Dearn.) Siggers 1;2	Plants of <i>Pinus</i> L., other than fruit and seeds
15. Venturia nashicola Tanaka and	Plants of <i>Pyrus</i> L., intended for planting, other than seeds, originating in non-
Yamamoto ^{1;2}	European countries
[Venturia pyrina Aderhold ("pirina")]	
(black spot of pear)	

(d) Virus and virus-like organisms

Species	Subject of contamination
1. Beet curly top virus (non-European isolates) 1;4	Plants of Beta vulgaris L., intended for planting, other than seeds
2. Black raspberry latent virus 1;4 [Tobacco streak virus]	Plants of Rubus L., intended for planting
3. Blight and blight-like 1;4;16 [Citrus blight disease]	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds
4. Cadang-Cadang viroid ^{1;4;8} [Coconut cadang-cadang viroid]	Plants of <i>Palmae</i> , intended for planting, other than seeds, originating in non- European countries
5. Cherry leafroll virus 1;4 (*)	Plants of Rubus L., intended for planting
6. Citrus mosaic virus ^{1;4;8} [Citrus mosaic badnavirus]	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds
7. Citrus tristeza virus (non- European isolates) 1;4;8 [Citrus tristeza closterovirus]	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds
8. Leprosis ^{1;4;8} [Citrus leprosis rhabdovirus]	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf. and their hybrids, other than fruit and seeds



Species	Subject of contamination
9. Little cherry pathogen (non-	Plants of <i>Prunus cerasus</i> L., <i>Prunus avium</i> L., <i>Prunus incisa</i> Thunb., <i>Prunus</i>
European isolates) 1;17	sargentii Rehd., Prunus serrula Franch., Prunus serrulata Lindl., Prunus
[Little cherry virus]	speciosa (Koidz.) Ingram, Prunus subhirtella Mig., Prunus yedoensis Matsum.,
. , ,	and hybrids and cultivars thereof, intended for planting, other than seeds
A virus-like pathogen thus probably causes	and myshas and salavars anorosi, interface for planting, salish and seeds
little cherry disease.	
10. Naturally spreading psorosis 1;4;18	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
[Citrus ringspot virus]	than fruit and seeds
EU Directive 77/93 lists "naturally spreading	
psorosis" as of quarantine concern for the EU.	
Though no clearly characterized agent has yet	
been identified, it is nevertheless clear that at	
least two virus-like agents are independently involved in causing two distinct diseases which	
have been called psorosis.	
nave been called psorosis.	
The first is psorosis A, true psorosis or	
classical psorosis, identified by leaf flecking	
symptoms when grafted onto suitable citrus	
indicators and by the fact that it is not	
mechanically transmitted (in the majority of	
isolates).	
The second is psorosis B, also called citrus	
ringspot, which is associated with distinctive	
virus particles, and is mechanically transmitted	
and can therefore be identified by its reactions	
on herbaceous indicators.	
The disease which spreads naturally in South	
America is the latter, so this data sheet	
concerns citrus ringspot 'virus' and the quarantine significance of its natural	
transmission under certain circumstances	
11. Palm lethal yellowing	Plants of Palmae, intended for planting, other than seeds, originating in non-
mycoplasm ^{1;4;19}	European countries
[palm lethal yellowing phytoplasma]	Latopour countries



Species	Subject of contamination
12. Prunus necrotic ringspot	Plants of Rubus L., intended for planting
virus ^{1;4} (**)	
[Prunus necrotic ringspot ilarvirus]	
13. Satsuma dwarf virus ^{1;4;8}	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
[Satsuma dwarf nepovirus]	than fruit and seeds
14. Tatter leaf virus 1;4;8	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
[Apple stem grooving virus]	than fruit and seeds
[Citrus tatter leaf capillovirus]	
15. Witches' broom (MLO) 1;20	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
[Candidatus Phytoplasma aurantifolia	than fruit and seeds
Zreik et al 1995]	
(Lime witches' broom phytoplasma)	

^(*) Cherry leaf roll virus is not present in *Rubus* L. in the Community. (**) Prunus necrotic ringspot virus is not present in *Rubus* L. in the Community.



Section II

HARMFUL ORGANISMS KNOWN TO OCCUR IN THE COMMUNITY AND RELEVANT FOR THE ENTIRE COMMUNITY

(a) Insects, mites and nematodes, at all stages of their development

Species	Subject of contamination
1. Aphelenchoides besseyi Christie 1;7;8 (rice leaf nematode)	Plants of <i>Fragaria</i> L., intended for planting, other than seeds
2. Daktulosphaira vitifoliae (Fitch) 1 (grapevine phylloxera)	Plants of Vitis L., other than fruit and seeds
3. Ditylenchus destructor Thorne 1;6;7 (potato tuber nematode)	Flower bulbs and corms of <i>Crocus</i> L., miniature cultivars and their hybrids of the genus <i>Gladiolus</i> Tourn. ex L., such as <i>Gladiolus callianthus</i> Marais, <i>Gladiolus colvillei</i> Sweet, <i>Gladiolus nanus</i> hort., <i>Gladiolus ramosus</i> hort., <i>Gladiolus tubergenii</i> hort., <i>Hyacinthus</i> L., <i>Iris</i> L., <i>Trigridia</i> Juss, <i>Tulipa</i> L., intended for planting, and potato tubers (<i>Solanum tuberosum</i> L.), intended for planting
4. Ditylenchus dipsaci (Kühn) Filipjev ^{1;6;7;8} (stem and bulb nematode)	Seeds and bulbs of <i>Allium ascalonicum</i> L., <i>Allium cepa</i> L. and <i>Allium schoenoprasum</i> L., intended for planting and plants of <i>Allium porrum</i> L., intended for planting, bulbs and corms of <i>Camassia</i> Lindl., <i>Chionodoxa</i> Boiss., <i>Crocus flavus</i> Weston 'Golden Yellow', <i>Galanthus</i> L., <i>Galtonia candicans</i> (Baker) Decne, <i>Hyacinthus</i> L., <i>Ismene</i> Herbert, <i>Muscari</i> Miller, <i>Narcissus</i> L., <i>Ornithogalum</i> L., <i>Puschkinia</i> Adams, <i>Scilla</i> L., <i>Tulipa</i> L., intended for planting, and seeds of <i>Medicago sativa</i> L.
5. Circulifer haematoceps ^{1;26} [Neoaliturus haematoceps (Mulsant & Rey)]	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds
6. Circulifer tenellus ^{1;26} [Neoaliturus tenellus (Baker)] (beet leafhopper)	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds
6.1. Eutetranychus orientalis Klein 1;8;13;14 (Citrus brown mite)	Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf. Raf. and their hybrids, other than fruit and seeds



Species	Subject of contamination
7. Radopholus similis (Cobb) Thorne 1;6;7;8;15	Plants of <i>Araceae</i> , <i>Marantaceae</i> , <i>Musaceae</i> , <i>Persea</i> spp., <i>Strelitziaceae</i> , rooted or with growing medium attached or associated
(burrowing nematode)	Tooled of with growing medium attached of associated
8. Liriomyza huidobrensis (Blanchard) 1 (serpentine leafminer)	Cut flowers, leafy vegetables of <i>Apium graveolens</i> L. and plants of herbaceous species, intended for planting, other than: — bulbs, — corms, — plants of the family Gramineae, — rhizomes, — seeds
9. Liriomyza trifolii (Burgess) ^{1;8} (American serpentine leafminer)	Cut flowers, leafy vegetables of <i>Apium graveolens</i> L. and plants of herbaceous species, intended for planting, other than: — bulbs, — corms, — plants of the family Gramineae, — rhizomes, — seeds

(b) Bacteria

Species	Subject of contamination
1. Clavibacter michiganensis spp.	Seeds of Medicago sativa L.
insidiosus (McCulloch)	
Davis et al. 1;4;8	
(bacterial lucerne wilt)	
2. Clavibacter michiganensis spp.	Plants of Lycopersicon lycopersicum (L.) Karsten ex Farw., intended for
michiganensis (Smith)	planting
Davis <i>et al.</i> 1;4;8	
(bacterial canker of tomato)	
3. Erwinia amylovora (Burr.) Winsl. et	Plants of Amelanchier Med., Chaenomeles Lindl., Cotoneaster Ehrh.,
al. ^{1;4;8}	Crataegus L., Cydonia Mill., Eriobotrya Lindl., Malus Mill., Mespilus L., Photinia
	davidiana (Dcne.) Cardot, Pyracantha Roem., Pyrus L. and Sorbus L., intended
	for planting, other than seeds



Species	Subject of contamination
4. Erwinia chrysanthemi pv. dianthicola (Hellmers) Dickey 1;4;8	Plants of <i>Dianthus</i> L., intended for planting, other than seeds
[Pectobacterium chrysanthemi (Burkholder et al. 1953) Brennor et al. 1973 emend Haub]	
5. Pseudomonas caryophylli (Burkholder) Starr and Burkholder (1;4;8	Plants of <i>Dianthus</i> L., intended for planting, other than seeds
6. Pseudomonas syringae pv. persicae (Prunier et al.) Young et al. ^{1;8}	Plants of <i>Prunus persica</i> (L.) Batsch and <i>Prunus persica</i> var. <i>nectarina</i> (Ait.) Maxim, intended for planting, other than seeds
7. Xanthomonas campestris pv. phaseoli (Smith) Dye 1;4;8 [Xanthomonas axonopodis pv. phaseoli (Smith 1897) Vauterin et al. 1995] (bean blight)	Seeds of <i>Phaseolus</i> L.
8. Xanthomonas campestris pv. pruni (Smith) Dye 1;8 [Xanthomonas arboricola pv. pruni (Smith) Vauterin, Hoste, Kersters & Swings] (bacterial canker of stone fruit)	Plants of <i>Prunus</i> L., intended for planting, other than seeds
9. Xanthomonas campestris pv. vesicatoria (Doidge) Dye 1;4;8 (bacterial spot of tomato and pepper)	Plants of <i>Lycopersicon lycopersicum</i> (L.) Karsten ex Farw. and <i>Capsicum</i> spp., intended for planting
10. Xanthomonas fragariae Kennedy and King ^{1,8}	Plants of <i>Fragaria</i> L., intended for planting, other than seeds
11. Xylophilus ampelinus (Panagopoulos) Willems et al. 1;8 (canker of grapevine)	Plants of Vitis L., other than fruit and seeds



(c) Fungi

Species	Subject of contamination
1. Ceratocystis fimbriata f. sp. platani	Plants of <i>Platanus</i> L., intended for planting, other than seeds, and wood of
Walter ^{1;2;8}	Platanus L., including wood which has not kept its natural round surface
2. Colletotrichum acutatum	Plants of <i>Fragaria</i> L., intended for planting, other than seeds
Simmonds 1;2	
(black spot of strawberry)	
3. <i>Cryphonectria parasitica</i> (Murrill) Barr ^{1;2;8}	Plants of Castanea Mill and Quercus L., intended for planting, other than seeds
4. Didymella ligulicola (Baker,	Plants of <i>Dendranthema</i> (DC.) Des Moul., intended for planting, other than
Dimock and Davis) v. Arx ²	seeds
(ray blight of chrysanthemum)	
5. Phialophora cinerescens	Plants of <i>Dianthus</i> L., intended for planting, other than seeds
(Wollenweber) van Beyma 1;2;8	
6. Phoma tracheiphila (Petri)	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
Kanchaveli and Gikashvili 1;2;8	than seeds
7. Phytophthora fragariae Hickmann	Plants of <i>Fragaria</i> L., intended for planting, other than seeds
var. <i>Fragari</i> ae ^{1;2;8}	
8. Plasmopara halstedii (Farlow)	Seeds of Helianthus annuus L.
Berl. and de Toni 1;21	
(downy mildew of sunflower)	
1.2.8	
9. <i>Puccinia horiana</i> Hennings ^{1;2;8}	Plants of <i>Dendranthema</i> (DC.) Des Moul., intended for planting, other than
(white rust of chrysanthemum)	seeds
10. Scirrhia pini Funk and Parker 1;2	Plants of <i>Pinus</i> L., intended for planting, other than seeds
[Mycosphaerella pini Rostr. 1957]	
(red-band needle blight)	
11. Verticillium albo-atrum Reinke and	Plants of <i>Humulus lupulus</i> L., intended for planting, other than seeds
Berthold ^{1;2;8}	Fiants of Fluridius Tupulus L., Interfued for planting, other than seeds
[Verticillium albo-atrum hop strains Reinke	
& Berthold]	
(verticillium wilt of hop)	
(10.00	



Species	Subject of contamination
12. Verticillium dahliae Klebahn ^{1;2,8} [Verticillium dahliae hop strains Klebahn] (verticillium wilt of hop)	Plants of <i>Humulus lupulus</i> L., intended for planting, other than seeds

(d) Viruses and virus-like organisms

Species	Subject of contamination
1. Arabis mosaic virus 4	Plants of Fragaria L. and Rubus L., intended for planting, other than seeds
2. Beet leaf curl virus 1;4;8	Plants of Beta vulgaris L., intended for planting, other than seeds
3. Chrysanthemum stunt viroid 1;4;8	Plants of <i>Dendranthema</i> (DC.) Des Moul., intended for planting, other than
	seeds
4. Citrus tristeza virus (European	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
isolates) 1;4;8	than fruit and seeds
[Citrus tristeza closterovirus]	
5. Citrus vein enation woody	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
gall ^{1;4;22}	than fruit and seeds
[Citrus vein enation disease]	
(citrus woody gall)	
6. Grapevine flavescence dorée MLO 1;4;23	Plants of <i>Vitis</i> L., other than fruit and seeds
7. Plum pox virus ^{1,4,8}	Plants of <i>Prunus</i> L., intended for planting, other than seeds
8. Potato stolbur mycoplasm ²⁴	Plants of Solanaceae, intended for planting, other than seeds
9. Raspberry ringspot virus 1;4;25	Plants of <i>Fragaria</i> L. and <i>Rubus</i> L., intended for planting, other than seeds
10. Spiroplasma citri Saglio et al. 1;4;26	Plants of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, other
	than fruit and seeds
11. Strawberry crinkle virus 1;4;27	Plants of <i>Fragaria</i> L., intended for planting, other than seeds
[Strawberry crinkle cytorhabdovirus]	
12. Strawberry latent ringspot virus 1,4,28	Plants of <i>Fragaria</i> L. and <i>Rubus</i> L., intended for planting, other than seeds
13. Strawberry mild yellow edge virus 1;4;29	Plants of <i>Fragaria</i> L., intended for planting, other than seeds



Species	Subject of contamination	
14. Tomato black ring virus 1;4;30	Plants of <i>Fragaria</i> L. and <i>Rubus</i> L., intended for planting, other than seeds	
15. Tomato spotted wilt virus 1;4;8	Plants of Apium graveolens L., Capsicum annuum L., Cucumis melo L.,	
	Dendranthema (DC.) Des Moul., all varieties of New Guinea hybrids Impatiens,	
	Lactuca sativa L., Lycopersicon lycopersicum (L.) Karsten ex Farw. Nicotiana	
	tabacum L., of which there shall be evidence that they are intended for sale to	
	professional tobacco production. Solanum melongena L. and Solanum	
	tuberosum L., intended for planting, other than seeds	
16. Tomato yellow leaf curl virus ^{1;4;8}	Plants of Lycopersicon lycopersicum (L.) Karsten ex Farw., intended for	
	planting, other than seeds	



PART B

HARMFUL ORGANISMS WHOSE INTRODUCTION INTO, AND WHOSE SPREAD WITHIN, CERTAIN PROTECTED ZONES SHALL BE BANNED IF THEY ARE PRESENT ON CERTAIN PLANTS OR PLANT PRODUCTS

(a) Insect mites and nematodes, at all stages of their development

Species	Subject of contamination	Protected zone(s)
1. Anthonomus grandis	Seeds and fruits (bolls) of Gossypium spp. and	EL, E (Andalucia, Catalonia,
(Boh.) 1;8	unginned cotton	Extremadura, Murcia, Valencia)
2. Cephalcia lariciphila	Plants of <i>Larix</i> Mill., intended for planting, other	IRL, UK (Northern Ireland, Isle of Man
(Klug) 1;31	than seeds	and Jersey)
3. Dendroctonus micans	Plants of <i>Abies</i> Mill., <i>Larix</i> Mill., <i>Picea</i> A. Dietr.,	EL, IRL, UK (Northern Ireland, Isle of
Kugelan 1;11	Pinus L. and Pseudotsuga Carr., over 3 m in	Man and Jersey)
	height, other than fruit and seeds, wood of conifers	
	(Coniferales)	
	with bark, isolated bark of conifers	
4. Gilphinia hercyniae	Plants of <i>Picea</i> A. Dietr., intended for planting,	EL, IRL, UK (Northern Ireland, Isle of
(Hartig) ^{1;32}	other than seeds	Man and Jersey)
[Gilpinia hercyniae]		
5. Gonipterus	Plants of <i>Eucalyptus</i> l'Herit., other than fruit and	EL, P (Azores)
scutellatus Gyll. 1;33	seeds	
(eucalyptus weevil)	Di a Cata Mail a Cata Di a	EL E (0 :) IDL III(
6. (a) <i>Ips amitinus</i> Eichhof ^{1;34}	Plants of <i>Abies</i> Mill., <i>Larix</i> Mill., <i>Picea</i> A. Dietr. and	EL, F (Corsica), IRL, UK
ElChhoi	Pinus L., over 3 m in	
	height, other than fruit and seeds, wood of conifers	
(b) /pa aamah raa 11aan 1:35	(Coniferales) with bark, isolated bark of conifers	CL IDL LIK (Northorn Indoned Jole of
(b) <i>lps cembrae</i> Heer ^{1;35}	Plants of <i>Abies</i> Mill., <i>Larix</i> Mill., <i>Picea</i> A. Dietr. and	EL, IRL, UK (Northern Ireland, Isle of
	Pinus L. and Pseudotsuga	Man)
	Carr., over 3 m in height, other than fruit and	
	seeds, wood of conifers <i>Coniferales</i>) with bark, isolated bark of conifers	
	isolated park of confliers	



Species	Subject of contamination	Protected zone(s)
(c) <i>Ips duplicatus</i> Sahlberg ^{1;36}	Plants of <i>Abies</i> Mill., <i>Larix</i> Mill., <i>Picea</i> A. Dietr. and <i>Pinus</i> L., over 3 m in height, other than fruit and seeds, wood of conifers (<i>Coniferales</i>) with bark, isolated bark of conifers	EL, IRL, UK
(d) <i>Ips sexdentatus</i> Börner ^{1;37}	Plants of <i>Abies</i> Mill., <i>Larix</i> Mill., <i>Picea</i> A. Dietr., <i>Pinus</i> L. over 3 m in height, other than fruit and seeds, wood of conifers (<i>Coniferales</i>) with bark, isolated bark of conifers	IRL, CY, UK (Northern Ireland, Isle of Man)
(e) <i>lps typographus</i> Heer ^{1;38}	Plants of <i>Abies</i> Mill., <i>Larix</i> Mill., <i>Picea</i> A. Dietr., <i>Pinus</i> L. and <i>Pseudotsuga</i> Carr., over 3 m in height, other than fruit and seeds, wood of conifers (<i>Coniferales</i>) with bark, isolated bark of conifers	IRL, UK
9. Sternochetus mangiferae Fabricius 1;8 (mango seed weevil)	Seeds of <i>Mangifera</i> spp. originating in third countries	E (Granada and Malaga), P (Alentejo, Algarve and Madeira)
10. <i>Thaumetopoea</i> pityocampa (Den. and Schiff.) 1;39	Plants of <i>Pinus</i> L., intended for planting, other than fruit and seeds	E (Ibiza)

(b) Bacteria

Species	Subject of contamination	Protected zone(s)
1. Curtobacterium	Seeds of <i>Phaseolus vulgaris</i> L. and Dolichos Jacq.	EL, E, P
flaccumfaciens pv.		
flaccumfaciens (Hedges)		
Collins and Jones 1,4,8		
2. Erwinia amylovora	Parts of plants, other than fruit, seeds and plants	E, EE, F (Corsica), IRL, I (Abruzzi;
(Burr.) Winsl. et al. 1;4;8	intended for planting, but	Apulia; Basilicata; Calabria;
	including live pollen for pollination of Amelanchier	Campania; Emilia- Romagna:
	Med., Chaenomeles Lindl.,	provinces of Forlí-Cesena (with

Species	Subject of contamination	Protected zone(s)
- Pooloo	Cotoneaster Ehrh., Crataegus L., Cydonia Mill.,	exclusion of the provincial area situated
	Eriobotrya Lindl., Malus Mill., Mespilus L., Photinia	to the North of the State
	davidiana (Dcne.) Cardot, Pyracantha Roem.,	road n. 9 — Via Emilia),
	Pyrus L. and Sorbus L.	Parma, Piacenza and Rimini (with
	1 yrus E. and sorbus E.	exclusion of
		the provincial area situated to the North
		of the State road n. 9 — Via Emilia);
		Friuli-Venezia Giulia; Lazio; Liguria;
		Lombardy; Marche; Molise; Piedmont;
		Sardinia; Sicily; Tuscany;
		Umbria; Valle d'Aosta;
		Veneto: except in the
		province of Rovigo the
		communes Rovigo,
		Polesella, Villamarzana,
		Fratta Polesine, San Bellino, Badia
		Polesine, Trecenta, Ceneselli,
		Pontecchio Polesine, Arquà Polesine,
		Costa di Rovigo, Occhiobello,
		Lendinara, Canda, Ficarolo, Guarda
		Veneta, Frassinelle Polesine,
		Villanova del Ghebbo,
		Fiesso Umbertiano, Castelguglielmo,
		Bagnolo di Po, Giacciano con
		Baruchella, Bosaro, Canaro, Lusia,
		Pincara, Stienta, Gaiba, Salara, and in
		the province
		of Padova the communes
		Castelbaldo, Barbona,
		Piacenza d'Adige,
		Vescovana, S. Urbano,
		Boara Pisani, Masi, and in the province
		of Verona the communes Palù,

Species	Subject of contamination	Protected zone(s)
-		Roverchiara, Legnago,
		Castagnaro, Ronco all'Adige, Villa
		Bartolomea, Oppeano,
		Terrazzo, Isola Rizza,
		Angiari), LV, LT, A
		(Burgenland, Carinthia,
		Lower Austria, Tirol (administrative
		district Lienz), Styria, Vienna), P, SI
		(except the Gorenjska and Maribor
		regions), SK (except the communes of
		Blahová, Horné Mýto and
		Okoč (Dunajská Streda
		County), Hronovce and
		Hronské Kľačany (Levice
		County), Veľké Ripňany
		(Topoľčany County),
		Málinec (Poltár County),
		Hrhov (Rožňava County),
		Kazimír, Luhyňa, Malý
		Horeš, Svätuše and Zatín
		(Trebišov County)), FI,
		UK (Northern Ireland, Isle
		of Man and Channel Islands)



(c) Fungi

Species	Subject of contamination	Protected zone(s)
0.1. Cryphonectria	Wood, excluding wood which is bark-free, and	CZ, EL, (Crete, Lesvos) IRL, S, UK
parasitica (Murrill.) Barr. Mill. 1;2;8	isolated bark of Castanea	(except the Isle of Man)
1. Glomerella gossypii	Seeds and fruits (bolls) of Gossypium spp.	EL
Edgerton 1;2;8		
[Colletotrichum gossypii		
Southw.]		
(anthracnose of cotton)		
2. Gremmeniella abietina	Plants of <i>Abies</i> Mill., <i>Larix</i> Mill., <i>Picea</i> A. Dietr.,	IRL, UK (Northern Ireland)
(Lag.) Morelet 1;2;40	Pinus L. and Pseudotsuga Carr., intended for	
	planting, other than seeds	
3. Hypoxylon mammatum	Plants of <i>Populus</i> L., intended for planting, other	IRL, UK (Northern Ireland)
3. <i>Hypoxylon mammatum</i> (Wahl.) J. Miller ^{1;2;41}	than seeds	· · · · · · · · · · · · · · · · · · ·

(d) Virus and virus-like organisms

Species	Subject of contamination	Protected zone(s)
1. Citrus tristeza virus (European isolates) 1;4;8 [Citrus tristeza closterovirus]	Fruits of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, with leaves and peduncles	EL, F (Corsica), M, P
2. Grapevine flavescence dorée MLO ^{1;4;23}	Plants of <i>Vitis</i> L., other than fruit and seeds.	CZ, FR (Champagne-Ardenne, Lorraine and Alsace), IT (Basilicata)



ANNEX III

PART A

PLANTS, PLANT PRODUCTS AND OTHER OBJECTS THE INTRODUCTION OF WHICH SHALL BE PROHIBITED IN ALL MEMBER STATES

Description	Country of origin	Export Certification guidelines
1. Plants of Abies Mill., Cedrus Trew, Chamaecyparis Spach, Juniperus L., Larix Mill., Picea A. Dietr., Pinus L., Pseudotsuga Carr. and Tsuga Carr., other than fruit and seeds	Non-European countries	Regulated articles are prohibited to be exported from South Africa to all Member States
2. Plants of <i>Castanea</i> Mill., and <i>Quercus</i> L., with leaves, other than fruit and seeds	Non-European countries	 Regulated articles are prohibited to be exported from South Africa to all Member States
3. Plants of <i>Populus</i> L., with leaves, other than fruit and seeds	North American countries	 Regulated articles are allowed to be exported from South Africa to all Member States
5. Isolated bark of Castanea Mill.	Third countries	 Regulated articles are prohibited to be exported from South Africa to all Member States
6. Isolated bark of <i>Quercus</i> L., other than <i>Quercus</i> suber L.	North American countries	Regulated articles are allowed to be exported from South Africa to all Member States
7. Isolated bark of <i>Acer saccharum</i> Marsh.	North American countries	Regulated articles are allowed to be exported from South Africa to all Member States
8. Isolated bark of <i>Populus</i> L.	Countries of the American continent	Regulated articles are allowed to be exported from South Africa to all Member States
9. Plants of <i>Chaenomeles</i> Ldl., <i>Cydonia</i> Mill., <i>Crateagus</i> L., <i>Malus</i>	Non-European countries	Regulated articles are prohibited to be exported from South Africa



Description	Country of origin	Export Certification guidelines
Mill., <i>Prunus</i> L., <i>Pyrus</i> L., and <i>Rosa</i> L., intended for planting, other than dormant plants free from leaves, flowers and fruit		to all Member States
9.1. Plants of <i>Photinia</i> Ldl., intended for planting, other than dormant plants free from leaves, flowers and fruit	USA, China, Japan, the Republic of Korea and Democratic People's Republic of Korea	 Regulated articles are allowed to be exported from South Africa to all Member States
10. Tubers of <i>Solanum tuberosum</i> L. (seed potatoes)	Third countries other than Switzerland	 Without prejudice of a derogation, it is forbidden for phytosanitary reasons to import seed potatoes from all third countries (with include South Africa) except Switzerland.
11. Plants of stolon- or tuber-forming species of <i>Solanum</i> L. or their hybrids, intended for planting, other than those tubers of <i>Solanum tuberosum</i> L. as specified under Annex III A (10)	Third countries	Regulated articles are prohibited to be exported from South Africa to all Member States
12. Tubers of species of Solanum L., and their hybrids, other than those specified in points 10 and 11 (table potatoes)	Without prejudice to the special requirements applicable to the potato tubers listed in Annex IV, Part A Section I, third countries other than Algeria, Egypt, Israel, Libya, Morocco, Syria, Switzerland, Tunisia and Turkey, and other than European third countries which are either recognised as being free from <i>Clavibacter michiganensis</i> ssp. <i>sepedonicus</i> (Spieckermann and Kotthoff) Davis <i>et al.</i> , in accordance with the procedure referred to in Article 18(2), or in which provisions recognised as equivalent to	Without prejudice of a derogation, it is forbidden for phytosanitary reasons to export ware potatoes from South Africa. Trade of ware potatoes is only allowed with the EU's Mediterranean partners (Algeria, Egypt, Israel, Libya, Morocco, Syria, Tunisia and Turkey), Switzerland and other European third countries. These countries trade mainly table potatoes, especially early potatoes, and do not make a difference on the EU markets of



Description	Country of origin	Export Certification guidelines
	the Community provisions on combating <i>Clavibacter michiganensis</i> ssp. <i>sepedonicus</i> (Spieckermann and Kotthoff) Davis <i>et al.</i> in accordance with the procedure referred to in Article 18(2), have been complied with	potatoes for processing.
13. Plants of <i>Solanaceae</i> intended for planting, other than seeds and those items covered by Annex III A (10), (11) or (12)	Third countries, other than European and Mediterranean countries	 Regulated articles are prohibited to be exported from South Africa to all Member States
14. Soil and growing medium as such, which consists in whole or in part of soil or solid organic substances such as parts of plants, humus including peat or bark, other than that composed entirely of peat	Turkey, Belarus, Moldavia, Russia, Ukraine and third countries not belonging to continental Europe, other than the following: Egypt, Israel, Libya, Morocco, Tunisia	Regulated articles are prohibited to be exported from South Africa to all Member States
15. Plants of <i>Vitis</i> L., other than fruits	Third countries other than Switzerland	 Regulated articles are prohibited to be exported from South Africa to all Member States
16. Plants of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds	Third countries	 Regulated articles are prohibited to be exported from South Africa to all Member States
17. Plants of <i>Phoenix</i> spp. other than fruit and seeds	Algeria, Morocco	 Regulated articles are allowed to be exported from South Africa to all Member States
18. Plants of <i>Cydonia</i> Mill., <i>Malus</i> Mill., <i>Prunus</i> L. and <i>Pyrus</i> L. and their hybrids, and <i>Fragaria</i> L., intended for planting, other than seeds	Without prejudice to the prohibitions applicable to the plants listed in Annex III A (9), where appropriate, non-European countries, other than Mediterranean countries, Australia, New Zealand, Canada, the continental states of the USA	Regulated articles are prohibited to be exported from South Africa to all Member States



Description	Country of origin	Export Certification guidelines
19. Plants of the family <i>Graminacae</i> , other than plants of ornamental perennial grasses of the subfamilies	Third countries, other than European and Mediterranean countries	 Regulated articles are prohibited to be exported from South Africa to all Member States
Bambusoideae and Panicoideae and of the genera Buchloe, Bouteloua Lag., Calamagrostis, Cortaderia Stapf., Glyceria R. Br., Hakonechloa Mak. ex		
Honda, <i>Hystrix</i> , <i>Molinia</i> , <i>Phalaris</i> L., <i>Shibataea</i> , <i>Spartina</i> Schreb., <i>Stipa</i> L. and <i>Uniola</i> L., intended for planting, other than seeds		



PART B

PLANTS, PLANT PRODUCTS AND OTHER OBJECTS THE INTRODUCTION OF WHICH SHALL BE PROHIBITED IN CERTAIN PROTECTED ZONES

Description	Protected zone(s)	Export Certification guidelines
1. Without prejudice to the prohibitions applicable to the plants listed in Annex IIIA (9), (9.1), (18), where appropriate, plants and live pollen for pollination of: Amelanchier Med., Chaenomeles Lindl., Crataegus L., Cydonia Mill., Eriobotrya Lindl., Malus Mill., Mespilus L., Pyracantha Roem., Pyrus L. and Sorbus L., other than fruit and seeds, originating in third countries other than Switzerland and other than those recognised as being free from Erwinia amylovora (Burr.) Winsl. et al. in accordance with the procedure laid down in Article 18(2), or in which pest free areas have been established in relation to Erwinia amylovora (Burr.) Winsl. et al. in accordance with the relevant International Standard for Phytosanitary Measures and recognised as such in accordance with the procedure laid down in Article 18(2)	E, EE, F (Corsica), IRL, I (Abruzzi; Apulia; Basilicata; Calabria; Campania; Emilia- Romagna: provinces of Forlí- Cesena (with exclusion of the provincial area situated to the North of the State road n. 9 — Via Emilia), Parma, Piacenza and Rimini (with exclusion of the provincial area situated to the North of the State road n. 9 — Via Emilia); Friuli-Venezia Giulia; Lazio; Liguria; Lombardy; Marche; Molise; Piedmont; Sardinia; Sicily; Tuscany; Umbria; Valle d'Aosta; Veneto: except in the province of Rovigo the communes Rovigo, Polesella, Villamarzana, Fratta Polesine, San Bellino, Badia Polesine, Trecenta, Ceneselli, Pontecchio Polesine, Arquà Polesine, Costa di Rovigo, Occhiobello, Lendinara, Canda, Ficarolo, Guarda Veneta, Frassinelle Polesine, Villanova del Ghebbo, Fiesso Umbertiano, Castelguglielmo, Bagnolo di Po, Giacciano con Baruchella, Bosaro, Canaro, Lusia, Pincara, Stienta, Gaiba,	The following plants are prohibited to be exported from South Africa [Annex IIIA (9), (18)]: Chaenomeles Ldl., Cydonia Mill., Crateagus L., Malus Mill., Pyrus L. The following plants are allowed to be exported from South Africa to the protected zone(s) Amelanchier Med. Eriobotrya Lindl., Mespilus L., Pyracantha Roem., Sorbus L Erwinia amylovora (Burr.) Winsl. et al. 1;4;8 are not known to occur in South Africa.

Description	Protected zone(s)	Export Certification guidelines
	Salara, and in the province of Padova the communes Castelbaldo, Barbona, Piacenza d'Adige, Vescovana, S. Urbano, Boara Pisani, Masi, and in the province of Verona the communes Palù, Roverchiara, Legnago, Castagnaro, Ronco all'Adige, Villa Bartolomea, Oppeano, Terrazzo, Isola Rizza, Angiari), LV, LT, A (Burgenland, Carinthia, Lower Austria, Tirol (administrative district Lienz), Styria, Vienna), P, SI (except the Gorenjska and Maribor regions), SK (except the communes of Blahová, Horné Mýto and Okoč (Dunajská Streda County), Hronovce and Hronské Kľačany (Levice County), Velké Ripnany (Topoľčany County), Málinec (Poltár County), Hrhov (Rožnava County), Kazimír, Luhyna, Malý Horeš, Svätuše and Zatín (Trebišov County)), FI, UK (Northern Ireland, Isle of Man and	
2. Without prejudice to the prohibitions applicable to the plants listed in Annex IIIA (9), (9.1), (18), where appropriate, plants and live pollen for pollination of: <i>Cotoneaster</i> Ehrh. and <i>Photinia davidiana</i> (Dcne.) Cardot, other than fruit and seeds, originating in third countries other than those recognised as being free from <i>Erwinia amylovora</i>	Channel Islands) E, EE, F (Corsica), IRL, I (Abruzzi; Apulia; Basilicata; Calabria; Campania; Emilia- Romagna: provinces of Forlí- Cesena (with exclusion of the provincial area situated to the North of the State road n. 9 — Via Emilia), Parma, Piacenza and Rimini (with exclusion of the provincial area situated to the North of the State road	Regulated articles are allowed to be exported from South Africa the protected zone(s) - Erwinia amylovora (Burr.) Winsl. et al. 1;4;8 are not known to occur in South Africa.

Description	Protected zone(s)	Export Certification guidelines
(Burr.) Winsl. Et al. in accordance with	n. 9 — Via Emilia); Friuli-Venezia	ZAPOTE COTUMORUSTI GATACIMICO
the procedure laid down in Article	Giulia; Lazio; Liguria; Lombardy;	
18(2), or in which pest free areas have	Marche; Molise; Piedmont; Sardinia;	
been established in relation to	Sicily; Tuscany; Umbria; Valle d'Aosta;	
<i>Erwinia amylovora</i> (Burr.) Winsl. et al.	Veneto: except in the province of	
in accordance with the relevant	Rovigo the communes Rovigo,	
International Standard for	Polesella, Villamarzana, Fratta	
Phytosanitary Measures and	Polesine, San Bellino, Badia Polesine,	
recognised as such in accordance with	Trecenta, Ceneselli, Pontecchio	
the procedure laid down in Article 18(2)	Polesine, Arquà Polesine, Costa di	
	Rovigo, Occhiobello, Lendinara,	
	Canda, Ficarolo, Guarda	
	Veneta, Frassinelle Polesine, Villanova	
	del Ghebbo, Fiesso Umbertiano,	
	Castelguglielmo, Bagnolo di Po,	
	Giacciano con Baruchella, Bosaro,	
	Canaro, Lusia, Pincara, Stienta, Gaiba,	
	Salara, and in the province of Padova	
	the communes Castelbaldo, Barbona,	
	Piacenza d'Adige, Vescovana, S.	
	Urbano, Boara Pisani, Masi, and in the	
	province of Verona the communes	
	Palù, Roverchiara, Legnago,	
	Castagnaro, Ronco all'Adige, Villa	
	Bartolomea, Oppeano, Terrazzo, Isola	
	Rizza, Angiari), LV, LT, A (Burgenland,	
	Carinthia, Lower Austria, Tirol	
	(administrative district Lienz), Styria,	
	Vienna), P, SI (except the Gorenjska	
	and Maribor regions), SK (except the	
	communes of Blahová, Horné Mýto	
	and Okoč (Dunajská Streda County),	
	Hronovce and Hronské Kľačany	

Description	Protected zone(s)	Export Certification guidelines
	(Levice County), Velké Ripnany	
	(Topoľčany County), Málinec (Poltár	
	County), Hrhov (Rožnava County),	
	Kazimír, Luhyna, Malý Horeš, Svätuše	
	and Zatín (Trebišov County)), FI, UK	
	(Northern Ireland, Isle of Man and	
	Channel Islands)	



ANNEX IV

PART A

SPECIAL REQUIREMENTS WHICH MUST BE LAID DOWN BY ALL MEMBER STATES FOR THE INTRODUCTION AND MOVEMENT OF PLANTS, PLANT PRODUCTS AND OTHER OBJECTS INTO AND WITHIN ALL MEMBER STATES

Sect ion I

PLANTS, PLANT PRODUCTS AND OTHER OBJECTS ORIGINATING OUTSIDE THE COMMUNITY

Plants, plant products and other objects	Special requirements	Export certification guidelines
1.1. Whether or not listed among the CN codes in Annex V, Part B, wood of	Official statement that the wood has undergone an appropriate:	Not applicable to South Africa Bursaphelenchus xylophilus 6,7,8
conifers (Coniferales), except that of <i>Thuja</i> L., other than in the form of:	(a) heat treatment to achieve a minimum core temperature of 56 °C	(Steiner et Bührer) is not known to occur in South Africa
— chips, particles, sawdust, shavings, wood waste and scrap obtained in whole	for at least 30 minutes. There shall be evidence thereof by a mark 'HT' put	
or part from these conifers, — wood packaging material, in the form of packing cases, boxes, crates, drums	on the wood or on any wrapping in accordance with current usage, and on the certificates referred to in Article	
and similar packings, pallets, box pallets and other load boards, pallet collars,	13.1.(ii), or (b) fumigation to a specification	
actually in use in the transport of objects of all kinds,	approved in accordance with the procedure laid down in Article 18.2.	
— wood used to wedge or support non- wood cargo,— wood of <i>Libocedrus decurrens</i> Torr.	There shall be evidence thereof by indicating on the certificates referred to in Article 13.1.(ii), the active	
where there is evidence that the wood has been processed or manufactured for	ingredient, the minimum wood temperature, the rate (g/m3) and the	



Plants, plant products and other objects	Special requirements	Export certification guidelines
pencils using heat treatment to achieve a minimum temperature of 82 °C for a seven to eight-day period, but including that which has not kept its natural round surface, originating in Canada, China, Japan, the Republic of Korea, Mexico, Taiwan and the USA, where Bursaphelenchus xylophilus (Steiner et Bührer) Nickle et al. is known to occur.	exposure time (h), or (c) chemical pressure impregnation with a product approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof by indicating on the certificates referred to in Article 13.1. (ii), the active ingredient, the pressure (psi or kPa) and the concentration (%).	
 1.2. Whether or not listed among the CN codes in Annex V, Part B, wood of conifers (Coniferales), except that of Thuja L., in the form of: — chips, particles, sawdust, shavings, wood waste and scrap obtained in whole or part from these conifers, originating in Canada, China, Japan, the Republic of Korea, Mexico, Taiwan and the USA, where Bursaphelenchus xylophilus (Steiner et Bührer) Nickle et al. is known to occur. 	Official statement that the wood has undergone an appropriate: (a) heat treatment to achieve a minimum core temperature of 56 °C for at least 30 minutes, the latter to be indicated on the certificates referred to in Article 13.1.(ii), or (b) fumigation to a specification approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof by indicating on the certificates referred to in Article 13.1. (ii), the active ingredient, the minimum wood temperature, the rate (g/m3) and the exposure time (h).	Not applicable to South Africa Bursaphelenchus xylophilus ^{6,7,8} (Steiner et Bührer) is not known to occur in South Africa
1.3 Whether or not listed among the CN codes in Annex V, Part B, wood of	Official statement that the wood: (a) is bark-free, or	Not applicable to South Africa Bursaphelenchus xylophilus ^{6,7,8}
<i>Thuja</i> L., other than in the form of:	(b) has undergone kiln-drying to below	(Steiner et Bührer) is not known



Plants, plant products and other objects	Special requirements	Export certification guidelines
— chips, particles, sawdust, shavings, wood waste and scrap, — wood packaging material, in the form of packing cases, boxes, crates, drums and similar packings, pallets, box pallets and other load boards, pallet collars, actually in use in the transport of objects of all kinds, — wood used to wedge or support non-wood cargo, originating in Canada, China, Japan, the Republic of Korea, Mexico, Taiwan and the USA, where Bursaphelenchus xylophilus (Steiner et Bührer) Nickle et al. is known to occur.	20% moisture content, expressed as a percentage of dry matter, achieved through an appropriate time/ temperature schedule. There shall be evidence thereof by a mark 'kiln dried' or 'K.D.' or another internationally recognised mark, put on the wood or on any wrapping in accordance with current usage, or (c) has undergone an appropriate heat treatment to achieve a minimum core temperature of 56 °C for at least 30 minutes. There shall be evidence thereof by a mark 'HT' put on the wood or on any wrapping in accordance with current usage and on the certificates referred to in Article 13.1.(ii), or (d) has undergone an appropriate fumigation to a specification approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the minimum wood temperature, the rate (g/m3) and the exposure time (h), or (e) has undergone an appropriate chemical pressure impregnation with a product approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof	to occur in South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
	by indicating on the certificates referred to in Article 13.1. (ii), the active ingredient, the pressure (psi or kPa) and the concentration (%).	
 1.4. Whether or not listed among the CN codes in Annex V, Part B, wood of Thuja L., in the form of: — chips, particles, sawdust, shavings, wood waste and scrap, originating in Canada, China, Japan, the Republic of Korea, Mexico, Taiwan and the USA, where Bursaphelenchus xylophilus (Steiner et Bührer) Nickle et al. is known to occur. 	Official statement that the wood: (a) has been produced from debarked round wood, or (b) has undergone kiln-drying to below 20% moisture content, expressed as a percentage of dry matter, achieved through an appropriate time/ temperature schedule, or (c) has undergone an appropriate fumigation to a specification approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the minimum wood temperature, the rate (g/m3) and the exposure time (h), or (d) has undergone an appropriate heat treatment to achieve a minimum core temperature of 56 °C for at least	Not applicable to South Africa Bursaphelenchus xylophilus 6,7,8 (Steiner et Bührer) is not known to occur in South Africa
	30 minutes, the latter to be indicated on the certificates referred to in Article 13.1. (ii).	
1.5. Whether or not listed among the CN odes in Annex V, Part B, wood of conifers (Coniferales), other than in the form of:	Official statement that the wood: (a) originates in areas known to be free from:	Not applicable to South Africa

Plants, plant products and other objects	Special requirements	Export certification guidelines
 chips, particles, sawdust, shavings, wood waste and scrap obtained in whole or part from these conifers, wood packaging material in the form of packing cases, boxes, crates, drums and similar packings, pallets, box pallets and other load boards, pallet collars, actually in use in the transport of objects of all kinds, wood used to wedge or support non-wood cargo, but including that which has not kept its natural round surface, originating in Russia, Kazakhstan and Turkey. 	— Monochamus spp. (non-European) — Pissodes spp. (non-European) — Scolytidae spp. (non-European) The area shall be mentioned on the certificates referred to in Article 13.1.(ii), under the rubric 'place of origin,' or (b) is bark-free and free from grub holes, caused by the genus Monochamus spp. (non-European), defined for this purpose as those which are larger than 3 mm across, or (c) has undergone kiln-drying to below 20% moisture content, expressed as a percentage of dry matter, achieved through an appropriate time/ temperature schedule. There shall be evidence thereof by a mark 'kiln dried' or 'K.D'. or another internationally recognised mark, put on the wood or on any wrapping in accordance with the current usage, or (d) has undergone an appropriate heat treatment to achieve a minimum core temperature of 56 °C for at least 30 minutes. There shall be evidence thereof by a mark 'HT' put on the wood or on any wrapping in accordance with current usage, and on the certificates referred to in Article 13.1.(ii), or (e) has undergone an appropriate	

Plants, plant products and other objects	Special requirements	Export certification guidelines
	fumigation to a specification approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the minimum wood temperature, the rate (g/m3) and the exposure time (h), or (f) has undergone an appropriate chemical pressure impregnation with a product approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof by indicating on the certificates referred to in Article 13.1. (ii), the active ingredient, the pressure (psi or kPa) and the concentration (%).	
 1.6. Whether or not listed among the CN codes in Annex V, Part B, wood of conifers (Coniferales), other than in the form of: — chips, particles, sawdust, shavings, wood waste and scrap obtained in whole or part from these conifers, — wood packaging material, in the form of packing cases, boxes, crates, drums and similar packings, pallets, box pallets and other load boards, pallet collars, actually in use in the transport of objects of all kinds, 	Official statement that the wood: (a) is bark-free and free from grub holes, caused by the genus Monochamus spp. (non-European), defined for this purpose as those which are larger than 3 mm across, or (b) has undergone kiln-drying to below 20% moisture content, expressed as a percentage of dry matter, achieved through an appropriate time/ temperature schedule. There shall be evidence thereof by a mark 'kiln dried' or 'K.D' or another internationally	Of the non-European species regulated, only Monochamus leuconotus ¹ (white coffee stem borer) occurs in South Africa.



Plants, plant products and other objects	Special requirements	Export certification guidelines
	recognised mark, put on the wood or on any wrapping in accordance with current usage, or (c) has undergone an appropriate fumigation to a specification approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the minimum wood temperature, the rate (g/m3) and the exposure time (h), or (d) has undergone an appropriate chemical pressure impregnation with a product approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the pressure (psi or kPa) and the concentration (%), or (e) has undergone an appropriate heat treatment to achieve a minimum core temperature of 56 °C for at least 30 minutes. There shall be evidence thereof by a mark 'HT' put on the wood or on any wrapping in accordance with current usage, and on the certificates referred to in Article	Export certification guidelines
1.7. Whether or not listed among the CN	13.1.(ii). Official statement that the wood:	Of the non-European species
TITE THIS GIVE OF THE HEIGH WITHOUT WITH ON	Smolal diatornomic trial tile wood.	- or the non-European species



Plants, plant products and other objects	Special requirements	Export certification guidelines
codes listed in Annex V, Part B, wood in the form of chips, particles, sawdust, shavings, wood waste and scrap obtained in whole or in part from conifers (Coniferales), originating in — Russia, Kazakhstan and Turkey, — non-European countries other than Canada, China, Japan, the Republic of Korea, Mexico, Taiwan and the USA, where Bursaphelenchus xylophilus (Steiner et Bührer) Nickle et al. is known to occur.	(a) originates in areas known to be free from: — <i>Monochamus</i> spp. (non-European) — <i>Pissodes</i> spp. (non-European) — <i>Scolytidae</i> spp. (non-European) The area shall be mentioned on the certificates referred to in Article 13.1.(ii), under the rubric 'place of origin,' or (b) has been produced from debarked round wood, or (c) has undergone kiln-drying to below 20% moisture content, expressed as a percentage of dry matter, achieved through an appropriate time/ temperature schedule, or (d) has undergone an appropriate fumigation to a specification approved in accordance with the procedure laid down in Article 18.2. There shall be evidence of the fumigation by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the minimum wood temperature, the rate (g/m3) and the exposure time (h), or (e) has undergone an appropriate heat treatment to achieve a minimum core temperature of 56 °C for at least 30 minutes, the latter to be indicated	regulated, only Monochamus leuconotus¹ (white coffee stem borer) occurs in South Africa. Of all the non-European species regulated, Pissodes nemorensis¹;8 (northern pine weevil) occurs in South Africa. None of the non-European species in the Scolytidae family listed in the EPPO A1 and A2 lists of pests recommended for regulation as quarantine pests occurs in South Africa.



Plants, plant products and other objects	Special requirements	Export certification guidelines
	on the certificates referred to in Article 13.1. (ii).	
2. Wood packaging material, in the form of packing cases, boxes, crates, drums and similar packings, pallets, box pallets and other load boards, pallet collars, actually in use in the transport of objects of all kinds, except raw wood of 6 mm thickness or less, and processed wood produced by glue, heat and pressure, or a combination thereof, coming from third countries, except Switzerland.	The wood packaging material shall: — be made from debarked round wood, and — be subject to one of the approved measures as specified in Annex I to FAO International Standard for Phytosanitary Measures No 15 on Guidelines for regulating wood packaging material in international trade, and — display a mark with:	Refer to ISPM 15
	(a) the two-letter ISO country code, a code identifying the producer and the code identifying the approved measure applied to the wood packaging material in the mark as specified in Annex II to FAO International Standard for Phytosanitary Measures No 15 on Guidelines for regulating wood packaging material in international trade. The letters 'DB' shall be added to the abbreviation of the approved measure included in the said mark, and (b) in the case of wood packaging material manufactured, repaired or	

Plants, plant products and other objects	Special requirements	Export certification guidelines
	recycled as of 1 March 2005, also the logo as specified in Annex II to the said FAO Standard. However the requirement is not applicable on a temporary basis until 31 December 2007 in the case of wood packaging material manufactured, repaired or recycled before 28 February 2005. The first indent, requiring wood packaging material to be made from debarked round wood, shall only apply from 1 January 2009. This paragraph shall be reviewed by 1 September 2007.	
 2.1. Wood of Acer saccharum Marsh., including wood which has not kept its natural round surface, other than in the form of: — wood intended for the production of veneer sheets, — chips, particles, sawdust, shavings, wood waste and scrap, originating in the USA and Canada. 	Official statement that: the wood has undergone kiln-drying to below 20% moisture content, expressed as a percentage of dry matter, achieved through an appropriate time/temperature schedule. There shall be evidence thereof by a mark 'Kiln-dried' or 'KD' or another internationally recognised mark, put on the wood or on any wrapping in accordance with current usage.	Not applicable to South Africa
2.2. Wood of Acer saccharum Marsh., intended for the production of veneer sheets, originating in the USA and Canada.	Official statement that: the wood originates in areas known to be free from <i>Ceratocystis virescens</i>	Not applicable to South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
•	(Davidson) Moreau and is intended for	
	the production of veneer sheets.	
3. Wood of <i>Quercus</i> L. , other than in the form of:	Official statement that the wood:	Not applicable to South Africa
	(a) is squared so as to remove entirely	
— chips, particles, sawdust, shavings,	the rounded surface, or	
wood waste and scrap,	(b) is bark-free and the water content	
 casks, barrels, vats, tubs and other 	is less than 20% expressed as a	
coopers' products and parts thereof, of	percentage of the dry matter, or	
wood, including staves where there is	(c) is bark-free and has been	
documented evidence that the wood has	disinfected by an appropriate hot-air	
been produced or manufactured using	or hot water treatment, or	
heat treatment to achieve a minimum	(d) if sawn, with or without residual	
temperature of 176 °C for 20 minutes	bark attached, has undergone kiln-	
	drying to below 20% moisture content,	
but including wood which has not kept its	expressed as a percentage of dry	
natural round surface, originating in the	matter, achieved through an	
USA.	appropriate time/temperature	
	schedule. There shall be evidence	
	thereof by a mark 'Kiln-dried' or 'KD'	
	or another internationally recognised	
	mark, put on the wood or on any	
	wrapping in accordance with current usage.	
5. Wood of <i>Platanus</i> L., except that in	Official statement that:	Not applicable to South Africa
the form of:	omoidi otatomont that.	Thot applicable to obttil Allica
	the wood has undergone kiln-drying to	
— chips, particles, sawdust, shavings,	below 20% moisture content,	
wood waste and scrap,	expressed as a percentage of dry	
in the master and bottap,	matter, achieved through an	
but including wood which has not kept its	appropriate time/ temperature	



Plants, plant products and other objects	Special requirements	Export certification guidelines
natural round surface, originating in the	schedule. There shall be evidence	
USA or Armenia.	thereof by a mark 'kiln-dried' or 'KD' or	
	another internationally recognised	
	mark, put on the wood or on any	
	wrapping in accordance with current	
	usage.	
6. Wood of <i>Populus</i> L., except that in the form of:	Official statement that the wood:	Not applicable to South Africa
	— is bark-free, or	
— chips, particles, sawdust, shavings,	 has undergone kiln-drying to below 	
wood waste and scrap,	20% moisture content, expressed as a	
	percentage of dry matter, achieved	
but including wood which has not kept its	through an appropriate time/	
natural round surface, originating in	temperature schedule. There shall be	
countries of the American continent.	evidence thereof by a mark 'kiln dried'	
	or 'KD' or another internationally	
	recognised mark, put on the wood or on any wrapping in accordance with	
	current usage.	
7.1. Whether or not listed among the CN	Official statement that the wood:	Not applicable to South Africa
codes in Annex V, Part B, wood in the	Cinicial statement that the weed.	That applicable to could Affica
form of chips, particles, sawdust,	(a) has been produced from debarked	
shavings, wood waste and scrap and	round wood, or	
obtained in whole or in part from:	(b) has undergone kiln-drying to below	
	20% moisture content, expressed as a	
— Acer saccharum Marsh., originating	percentage of dry matter achieved	
in the USA and Canada,	through an appropriate time/	
— <i>Platanus</i> L., originating in the USA or	temperature schedule, or	
Armenia,	(c) has undergone an appropriate	
— <i>Populus</i> L., originating in the	fumigation to a specification approved	
American continent.	in accordance with the procedure laid	

Plants, plant products and other objects	Special requirements	Export certification guidelines
7.2. Whether or not listed among the CN codes in Annex V, Part B, wood in the form of chips, particles, sawdust, shavings, wood waste and scrap and obtained in whole or part from <i>Quercus</i> L. originating in the USA.	down in Article 18.2. There shall be evidence of the fumigation by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the minimum wood temperature, the rate (g/m3) and the exposure time (h), or (d) has undergone an appropriate heat treatment to achieve a minimum core temperature of 56 °C for at least 30 minutes, the latter to be indicated on the certificates referred to in Article 13.1.(ii). Official statement that the wood: (a) has undergone kiln-drying to below 20% moisture content, expressed as a percentage of dry matter achieved through an appropriate time/ temperature schedule, or (b) has undergone an appropriate fumigation to a specification approved in accordance with the procedure laid down in Article 18.2. There shall be evidence of the fumigation by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the minimum wood temperature, the rate (g/m3) and the exposure time (h), or	Not applicable to South Africa
	(c) has undergone an appropriate	

Plants, plant products and other objects	Special requirements	Export certification guidelines
	heat treatment to achieve a minimum core temperature of 56 °C for at least 30 minutes, the latter to be indicated on the certificates referred to in 13.1.(ii).	
7.3. Isolated bark of conifers (Coniferales), originating in non-European countries	Official statement that the isolated bark:	Applicable to South Africa.
	(a) has been subjected to an appropriate fumigation with a fumigant approved in accordance with the procedure laid down in Article 18.2. There shall be evidence thereof by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the minimum bark temperature, the rate (g/m3) and the exposure time (h), or (b) has undergone an appropriate heat treatment to achieve the minimum temperature of 56 °C for at least 30 minutes, the latter to be indicated on the certificates referred to in Article 13.1.(ii).	
8. Wood used to wedge or support non-wood cargo, including that which	The wood shall:	Refer to ISPM 15
has not kept its natural round surface, except raw wood of 6 mm thickness or	(a) be made from debarked round wood, and	
less and processed wood produced by glue, heat and pressure, or a combination thereof, coming from third	be subject to one of the approved measures as specified in Annex I to FAO International Standard for	

Plants, plant products and other objects	Special requirements	Export certification guidelines
countries, except Switzerland.	Phytosanitary Measures No 15 on Guidelines for regulating wood packaging material in international trade, and — display a mark with at least the two-letter ISO country code, a code identifying the producer and the code identifying the approved measure applied to the wood packaging material in the mark as specified in Annex II to FAO International Standard for Phytosanitary Measures No 15 on Guidelines for regulating wood packaging material in international trade. The letters 'DB' shall be added to the abbreviation of the approved measure included in the said mark, or on a temporary basis until 31 December 2007 (b) be made from bark-free wood that is free from pests and signs of live pests. The first line of point (a), requiring wood packaging material to be made from debarked round wood, shall only apply from 1 January 2009. This paragraph shall be reviewed by 1 September 2007.	
8.1. Plants of conifers (Coniferales),	Without prejudice to the prohibitions	The following plants of conifers are
other than fruit and seeds, originating in	applicable to the plants listed in Annex	prohibited to be exported from
non-European countries	III(A)(1), where appropriate, official	South Africa (Annex III(A)(1):

Plants, plant products and other objects	Special requirements	Export certification guidelines
	statement that: - the plants have been produced in nurseries and that the place of production is free from <i>Pissodes</i> spp. (non-European).	 Abies Mill., Cedrus Trew, Chamaecyparis Spach, Juniperus L., Larix Mill., Picea A. Dietr., Pinus L., Pseudotsuga Carr. Tsuga Carr. Of all the non-European species regulated, Pissodes nemorensis 1;8 (northern pine weevil) occurs in South Africa.
8.2. Plants of conifers (Coniferales), other than fruit and seeds, over 3 m in height, originating in non-European countries	Without prejudice to the prohibitions applicable to the plants listed in Annex III(A)(1), and Annex IV(A)(I)(8.1), where appropriate, official statement that: - the plants have been produced in nurseries and that the place of production is free from <i>Scolytidae</i> spp. (non- European).	 The following plants of conifers are prohibited to be exported from South Africa (Annex III (A)(1): Abies Mill., Cedrus Trew, Chamaecyparis Spach, Juniperus L., Larix Mill., Picea A. Dietr., Pinus L., Pseudotsuga Carr. Tsuga Carr. None of the non-European species in



Plants, plant products and other objects	Special requirements	Export certification guidelines
		the Scolytidae family listed in the EPPO A1 and A2 lists of pests recommended for regulation as quarantine pests, occurs in South Africa
9. Plants of <i>Pinus</i> L., intended for planting, other than seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), and Annex IV(A)(I)(8.1), (8.2), official statement that: - no symptoms of Scirrhia acicola (Dearn.) Siggers or Scirrhia pini Funk and Parker have been observed at the place of production or its immediate vicinity since the beginning of the last complete cycle of vegetation.	Not applicable to South Africa Plants of Pinus L. is prohibited to be exported from South Africa (Annex III (A) (1).
10. Plants of Abies Mill., Larix Mill., Picea A. Dietr., Pinus L. Pseudotsuga Carr. and Tsuga Carr., intended for planting, other than seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), and Annex IV(A)(I)(8.1), (8.2) or (9), where appropriate, official statement that: - no symptoms of <i>Melampsora medusae</i> Thümen have been observed at the place of production or its immediate vicinity since the beginning of the last complete cycle of vegetation.	 Not applicable to South Africa The following plants of conifers are prohibited to be exported from South Africa (Annex III(A)(1): Abies Mill., Larix Mill., Picea A. Dietr., Pinus L., Pseudotsuga Carr. Tsuga Carr.
11.01. Plants of <i>Quercus</i> L., other than fruit and seeds, originating in the USA	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(2), official statement that: — the plants originate in areas	Not applicable to South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
	known to be free from Ceratocystis fagacearum (Bretz) Hunt.	
11.1. Plants of Castanea Mill. and Quercus L., other than fruit and seeds, originating in non-European countries	Without prejudice to the prohibitions applicable to the plants listed in Annex III(A)(2) and IV (A)(I)(11.01.), official statement that:: - no symptoms of <i>Cronartium</i> spp. (non-European) have been observed at the place of production or its immediate vicinity since the beginning of the last complete cycle of vegetation.	Not applicable to South Africa Plants of Castanea Mill. and Quercus L., is prohibited to be exported from South Africa (Annex III(A)(2).
11.2. Plants of Castanea Mill. and Quercus L., intended for planting, other than seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(2) and IV(A)(I)(11.1), official statement that:: (a) the plants originate in areas known to be free from <i>Cryphonectria parasitica</i> (Murrill) Barr; or (b) no symptoms of <i>Cryphonectria parasitica</i> (Murrill) Barr have been observed at the place of production or its immediate vicinity since the beginning of the last complete cycle of vegetation.	Not applicable to South Africa Plants of Castanea Mill. and Quercus L., is prohibited to be exported from South Africa (Annex III(A)(2).
11.3. Plants of <i>Corylus</i> L., intended for planting, other than seeds, originating in Canada and the United States of America	Official statement that the plants have been grown in nurseries and : (a) originate in an area, established in	Not applicable to South Africa

Plants, plant products and other objects	Special requirements	Export certification guidelines
objects	the country of export by the national plant protection service in that country, as being free from Anisogramma anomala (Peck) E. Müller, in accordance with relevant International Standards for Phytosanitary Measures, and which is mentioned on the certificates referred to in Articles 7 or 8 of this Directive under the rubric 'Additional declaration', or (b) originate in a place of production, established in the country of export by the national plant protection service in that country, as being free from Anisogramma anomala (Peck) E. Müller on official inspections carried out at the place of production or its immediate vicinity since the beginning of the last three complete cycles of vegetation, in accordance with relevant International Standards for Phytosanitary Measures, and which is mentioned on the certificates referred to in Articles 7 or 8 of this Directive under the rubric 'Additional declaration' and declared free from Anisogramma anomala (Peck) E.	
12. Plants of <i>Platanus</i> L., intended for	Müller. Official statement that:	Not applicable to South Africa
planting, other than seeds, originating in	no symptoms of <i>Ceratocystis</i>	• Not applicable to South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
the USA or Armenia	fimbriata f. sp. platani Walter have been observed at the place of production or its immediate vicinity since the beginning of the last complete cycle of vegetation.	
13.1. Plants of <i>Populus</i> L., intended for planting, other than seeds, originating in third countries	Without prejudice to the prohibitions applicable to the plants listed in Annex III(A)(3), official statement that: - no symptoms of <i>Melampsora medusae</i> Thümen have been observed at the place of production or its immediate vicinity since the beginning of the last complete cycle of vegetation.	Melampsora medusae Thümen ^{1,2,8} are known to occur in South Africa
13.2. Plants of <i>Populus</i> L., other than fruit and seeds, originating in countries of the American continent	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(3) and IV(A)(I)(13.1), official statement that:: - no symptoms of Mycosphaerella populorum G. E. Thompson have been observed at the place of production or its immediate vicinity since the beginning of the last complete cycle of vegetation.	Not applicable to South Africa
14. Plants of <i>Ulmus</i> L., intended for planting, other than seeds, originating in North American countries	Official statement that: - no symptoms of Elm phlöem necrosis mycoplasm have been observed at the place of production or in its immediate vicinity since the beginning of the	Not applicable to South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
	last complete cycle of vegetation.	
15. Plants of Chaenomeles Lindl., Crataegus L., Cydonia Mill., Eriobotrya Lindl., Malus Mill., Prunus L. and Pyrus L., intended for planting, other than seeds, originating in non-European countries	Without prejudice to the prohibitions applicable to the plants listed in Annex III(A)(9), (18) and Annex III(B)(1), where appropriate, official statement that: — the plants originate in a country known to be free from <i>Monilinia fructicola</i> (Winter) Honey; or — the plants originate in an area recognized as being free from <i>Monilinia fructicola</i> (Winter) Honey, in accordance with the procedure referred to in Article 18(2), and no symptoms of <i>Monilinia fructicola</i> (Winter) Honey have been observed at the place of production since the beginning of the last complete cycle of vegetation.	 The following plants are prohibited to be exported from South Africa [Annex III(A)(9), (18): Chaenomeles Lindl., Crataegus L., Cydonia Mill., Malus Mill., Prunus L. Pyrus L. Plants of Eriobotrya Lindl are not prohibited to be exported to certain protected zones from South Africa [Annex III(B)(1)]: Monilinia fructicola (Winter) Honey^{1,2} are not known to occur in South Africa.
16. From 15 February to 30 September, fruits of <i>Prunus</i> L., originating in non-European countries	Official statement:: — the fruits originate in a country known to free from <i>Monilinia</i> fructicola (Winter) Honey, or — the fruits originate in an area recognized as being free from <i>Monilinia fructicola</i> (Winter) Honey, in accordance with the procedure referred to in Article 18(2), or — the fruits have been subjected to	Monilinia fructicola (Winter) Honey ^{1,2} are not known to occur in South Africa.



Export certification guidelines
treatment t and/or rom
• Applicable to South Africa. ging shall mark.
• Xanthomonas campestris ^{1;4;8} are not known to occur in South Africa • Country rom • (all strains coordance of to in do n the rticles 7 or
s cd

Plants, plant products and other objects	Special requirements	Export certification guidelines
	control and examination regime, no symptoms of <i>Xanthomonas campestris</i> (all strains pathogenic to Citrus) have been observed in the field of production and in its immediate vicinity since the beginning of the last cycle of vegetation and none of the fruits harvested in the field of production has shown symptoms of <i>Xanthomonas campestris</i> (all strains pathogenic to Citrus), and the fruits have been subjected to treatment such as sodium orthophenylphenate, mentioned on the certificates referred to in Articles 7 or 8 of this Directive, and the fruits have been packed at premises or dispatching centres registered for this purpose, or — any certification system, recognized as equivalent to the above provisions in accordance with the procedure referred to in Article 18(2), has been complied with.	
16.3. Fruits of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf. and their hybrids, originating in third countries	Without prejudice to the provisions applicable to the fruits in Annex IV(A)(I)(16.1), (16.2), (16.4) and (16.5), official statement that: (a) the fruits originate in a country	Cercospora angolensis 1;2; Carv. et Mendes are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Export certification guidelines
	recognized as being free from Cercospora angolensis Carv. et Mendes in accordance with the procedure referred to in Article 18(2), or (b) the fruits originate in an area recognized as being free from Cercospora angolensis Carv. et Mendes, in accordance with the procedure referred to in Article 18(2) and mentioned on the certificates referred to in Articles 7 or 8 of this Directive, or (c) no symptoms of Cercospora angolensis Carv. et Mendes have been observed in the field of production and in its immediate vicinity since the beginning of the last cycle of vegetation, and none of the fruits harvested in the field of production has shown, in appropriate official examination,	
16.4. Fruits of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their	symptoms of this organism. Without prejudice to the provisions applicable to the fruits in Annex	Guignardia citricarpa 1;2;8 Kiely (citrus black spot) does occur in certain
hybrids, other than fruits of <i>Citrus</i> aurantium L., originating in third	IV(A)(I)(16.1), (16.2), (16.3) and (16.5),	citrus production areas in South Africa.
countries	official statement that:	 Pest free areas are regulated by the Agricultural Pest Act 36 of
	(a) the fruits originate in a country recognized as being free from	1983

Plants, plant products and other objects	Special requirements	Export certification guidelines
Objects	Guignardia citricarpa Kiely (all strains pathogenic to Citrus), in accordance with the procedure referred to in Article 18(2), or (b) the fruits originate in an area recognized as being free from Guignardia citricarpa Kiely (all strains pathogenic to Citrus), in accordance with the procedure referred to in Article 18(2), and mentioned on the certificates referred to in Articles 7 or 8 of this Directive, or (c) no symptoms of Guignardia citricarpa Kiely (all strains pathogenic to Citrus), have been observed in the field of production and in its immediate vicinity since the beginning of the last cycle of vegetation, and none of the fruits harvested in the field of production has shown, in appropriate official examination, symptoms of this organism, or (d) the fruits originate in a field of production subjected to appropriate treatments against Guignardia citricarpa Kiely (all strains pathogenic to Citrus), and none of the fruits harvested in the field of production has shown, in appropriate official examination, symptoms of this	
	organism.	



Plants, plant products and other objects	Special requirements	Export certification guidelines
16.5. Fruits of Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, originating in third countries where Tephritidae (non- European) are known to occur on these fruits	Without prejudice to the provisions applicable to the fruits in Annex III(B)(2), (3), and Annex IV(A)(I)(16.1), (16.2) and (16.3), official statement that: (a) the fruits originate in areas known to be free from the relevant organism; or, if this requirement cannot be met (b) no signs of the relevant organism have been observed at the place of production and in its immediate vicinity since the beginning of the last complete cycle of vegetation, on official inspections carried out at least monthly during the three months prior to harvesting, and none of the fruits harvested at the place of production has shown, in appropriate official examination, signs of the relevant organism, or if this requirement can also not be met; (c) the fruits have shown, in appropriate official examination on representative samples, to be free from the relevant organism in all stages of their development; or, if this requirement can also not be met; (d) the fruits have been subjected to an appropriate treatment, any acceptable vapour heat treatment,	Of all the Tephritidae (non-European) regulated under Annex I, the following fruit flies occur in South Africa: Dacus ciliatus Loew 1,5 Pardalaspis (Ceratitis) quinaria Bezzi 1,5 Perandrus (Ceratitis) rosa (Karsch) 1,5 One of all the Tephritidae (non-European) regulated under Annex I, the following fruit flies occur in South Africa: Pardalaspis (Ceratitis) quinaria Bezzi 1,5 Perandrus (Ceratitis) rosa (Karsch) 1,5



Plants, plant products and other objects	Special requirements	Export certification guidelines
17. Plants of Amelanchier Med., Chaenomeles Lindl., Cotoneaster Ehrh., Crataegus L., Cydonia Mill., Eriobotrya Lindl., Malus Mill., Mespilus L., Photinia davidiana (Dcne.) Cardot, Pyracantha Roem., Pyrus L. and Sorbus L., intended for planting, other than seeds	cold treatment, or quick freeze treatment, which has been shown to be efficient against the relevant organism without damaging the fruit, and, where not available, chemical treatment as far as it is acceptable by Community legislation. Without prejudice to the provisions applicable to the plants listed in Annex III(A)(9), (9.1), (18), Annex III(B)(1)(2) or Annex IV(A)(I)(15), where appropriate, official statement:: (a) that the plants originate in countries recognised as being free from <i>Erwinia amylovora</i> (Burr.) Winsl. et al. in accordance with the procedure laid down in Article 18(2), or (b) that the plants originate in pest free areas which have been established in relation to <i>Erwinia amylovora</i> (Burr.) Winsl. <i>Et al.</i> in accordance with the relevant International Standard for Phytosanitary Measures and recognised as such in accordance with the procedure laid down in Article 18(2), or (c) that the plants in the field of production and in its immediate	The following plants are prohibited to be exported from South Africa [Annex III(A)(9), (18): Chaenomeles Lindl., Crataegus L., Cydonia Mill., Malus Mill., Pyrus L. Plants of Eriobotrya Lindl are not prohibited to be exported to certain protected zones from South Africa [Annex III(B)(1)]: Monilinia fructicola (Winter) Honey ^{1,2} are not known to occur in South Africa. [Annex IV(A)(I)(15)]: The following plants are not prohibited to be exported to certain protected zones from South Africa [Annex III(B)(1),(2)]: Amelanchier Med., Cotoneaster Ehrh., Eriobotrya Lindl., Mespilus L.,



Plants, plant products and other objects	Special requirements	Export certification guidelines
18. Plants of <i>Citrus</i> L., <i>Fortunella</i>	vicinity, which have shown symptoms of <i>Erwinia amylovora</i> (Burr.) Winsl. <i>et al.</i> , have been removed. Without prejudice to the prohibitions	 Photinia davidiana (Dcne.) Cardot, Pyracantha Roem. Sorbus L., Erwinia amylovora (Burr.) Winsl. et al.^{1;4;8} are not known to occur in South Africa. The following plants are prohibited
Swingle, <i>Poncirus</i> Raf., and their hybrids, other than fruit and seeds and plants of <i>Araceae, Marantaceae, Musaceae, Persea</i> spp. and <i>Strelitziaceae</i> , rooted or with growing medium attached or associated	applicable to the plants listed in Annex III(A)(16), where appropriate, official statement that:: (a) the plants originate in countries known to be free from <i>Radopholus citrophilus</i> Huettel <i>et al.</i> and <i>Radopholus similis</i> (Cobb) Thorne; or (b) representative samples of soil and roots from the place of production have been subjected, since the beginning of the last complete cycle of vegetation, to official nematological testing for at least <i>Radopholus citrophilus</i> Huettel <i>et al.</i> and <i>Radopholus similis</i> (Cobb) Thorne and have been found, in these tests, free from those harmful organisms.	to be exported from South Africa [Annex III(A)(16)]: - Citrus L., - Fortunella Swingle, - Poncirus Raf • The following plants are not prohibited to be exported from South Africa: - Araceae, - Marantaceae, - Musaceae, - Persea spp., - Strelitziaceae - Radopholus similis (Cobb) Thorne 1;6;7;8;15 (burrowing nematode) are known to occur in South Africa Only R. similis are recognized and not R. citrophilus or the subspecies R. similis similis and R. similis citrophilus.



Plants, plant products and other objects	Special requirements	Export certification guidelines
19.1. Plants of <i>Crataegus</i> L. intended for planting, other than seeds, originating in countries where <i>Phyllosticta solitaria</i> Ell. and Ev. is known to occur	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(9), and Annex IV(A)(I)(15) and (17), official statement that: - no symptoms of <i>Phyllosticta</i> solitaria Ell. and Ev. have been observed on plants at the place of production since the beginning of the last complete cycle of vegetation.	The following plants are prohibited to be exported from South Africa [Annex III(A)(9)]: Crataegus L.,
19.2. Plants of Cydonia Mill., Fragaria L., Malus Mill., Prunus L., Pyrus L., Ribes L., Rubus L. intended for planting, other than seeds, originating in countries where the relevant harmful organisms are known to occur on the genera concerned: The relevant harmful organisms are — on Fragaria L.: Phytophthora fragariae var. fragariae Hickman, Arabis mosaic virus, Raspberry ringspot virus, Strawberry crinkle virus, Strawberry latent ringspot virus, Strawberry mild yellow edge virus,	Without prejudice to the provisions applicable to the plants where appropriate listed in Annex III(A)(9) and (18), and Annex IV(A) (I)(15) and (17), official statement that:: - no symptoms of diseases caused by the relevant harmful organisms have been observed on the plants at the place of production since the beginning of the last complete cycle of vegetation.	 The following plants are prohibited to be exported from South Africa [Annex III(A)(9), (18)]: Cydonia Mill., Fragaria L., Malus Mill., Prunus L., Pyrus L., The following plants are not prohibited to be exported from South Africa: Ribes L., Rubus L. on Rubus L.: Arabis mosaic virus ⁴ are not known to occur in South Africa;



Plants, plant products and other objects	Special requirements	Export certification guidelines
 Tomato black ring virus, Xanthomonas fragariae Kennedy et King; on Malus Mill.: Phyllosticta solitaria Ell. and Ev.; on Prunus L.: Apricot chlorotic leafroll mycoplasm, Xanthomonas campestris pv. prunis (Smith) Dye, on Prunus persica (L.) Batsch: Pseudomonas syringae pv. persicae (Prunier et al.) Young et al.; on Pyrus L.: Phyllosticta solitaria Ell. and Ev.; on Rubus L.: Arabis mosaic virus, Raspberry ringspot virus, Strawberry latent ringspot virus, Tomato black ring virus, non-European viruses and virus like organisms. 		 Raspberry ringspot virus ^{1;4;25} are not known to occur in South Africa; Strawberry latent ringspot virus ^{1;4;28} are not known to occur in South Africa; Tomato black ring virus ^{1;4;30} are not known to occur in South Africa
20. Plants of <i>Cydonia</i> Mill. and <i>Pyrus</i> L. intended for planting, other than seeds,	Without prejudice to the provisions applicable to the plants listed in Annex	The following plants are prohibited to be exported from South Africa
originating in countries where Pear decline mycoplasm is known to occur	III(A)(9) and (18), and Annex IV(A)(I)(15), (17) and (19.2) official	[Annex III(A)(9), (18)]: – <i>Crataegus</i> L.,
accinic mycopiacin is known to cooli	statement that:	– Crataegus L.,– Pyrus L.
	 plants at the place of production 	



Plants, plant products and other objects	Special requirements	Export certification guidelines
	and in its immediate vicinity, which have shown symptoms giving rise to the suspicion of contamination by Pear decline mycoplasm, have been rouged out at that place within the last three complete cycles of vegetation.	
21.1 . Plants of <i>Fragaria</i> L. intended for planting, other than seeds, originating in countries where the relevant harmful organisms are known to occur	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(18), and Annex IV(A)(I)(19.2), official statement that:	 The following plants are prohibited to be exported from South Africa [Annex III(A)(18)]: Fragaria L.,
The relevant harmful organisms are: — Strawberry latent 'C' virus, — Strawberry vein banding virus, perry witches' broom mycoplasm	(a) the plants, other than those raised from seed, have been: — either officially certified under a certification scheme requiring them to be derived in direct line from material which has been maintained under appropriate conditions and subjected to official testing for at least the relevant harmful organisms using appropriate indicators or equivalent methods and has been found free, in these tests, from those harmful organisms, or — derived in direct line from material which is maintained under appropriate conditions and has been subjected, within the last three complete cycles of vegetation, at least once, to official testing for at least the relevant harmful	

Plants, plant products and other objects	Special requirements	Export certification guidelines
	organisms using appropriate indicators or equivalent methods and has been found free, in these tests, from those harmful organisms, (b) no symptoms of diseases caused by the relevant harmful organisms have been observed on plants at the place of production, or on susceptible plants in its immediate vicinity, since the beginning of the last complete cycle of vegetation.	
21.2. Plants of <i>Fragaria</i> L. intended for planting, other than seeds, originating in countries where <i>Aphelenchoides besseyi</i> Christie is known to occur	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(18), and Annex IV(A)(I)(19.2) and (21.1), official statement that: (a) either no symptoms of Aphelenchoides besseyi Christie have been observed on plants at the place of production since the beginning of the last complete cycle of vegetation, or (b) in the case of plants in tissue culture the plants have been derived from plants which complied with section (a) of this item or have been officially tested by apprentiate	The following plants are prohibited to be exported from South Africa [Annex III(A)(18)]: Fragaria L.,
	officially tested by appropriate nematological methods and have been found free from <i>Aphelenchoides besseyi</i> Christie.	



Plants, plant products and other objects	Special requirements	Export certification guidelines
21.3. Plants of <i>Fragaria</i> L., intended for planting, other than seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(18), and Annex IV(A)(I)(19.2), (21.1) and (21.2), official statement that: - the plants originate in an area known to be free from Anthonomus signatus Say and Anthonomus bisignifer (Schenkling).	The following plants are prohibited to be exported from South Africa [Annex III(A)(18)]: - Fragaria L.,
22.1. Plants of <i>Malus</i> Mill. intended for planting, other than seeds, originating in countries where the relevant harmful organisms are known to occur on <i>Malus</i> Mill. The relevant harmful organisms are: — Cherry rasp leaf virus (American), — Tomato ringspot virus,	Without prejudice to the provisions applicable to the plants, listed in Annex III(A)(9) and (18), Annex III(B)(1) and Annex IV(A)(I)(15), (17) and (19.2), official statement that: (a) the plants have been: — either officially certified under a certification scheme requiring them to be derived in direct line from material which has been maintained under appropriate conditions and subjected to official testing for at least the relevant harmful organisms using appropriate indicators or equivalent methods and has been found free, in these test, from those harmful organisms, or — derived in direct line from material	The following plants are prohibited to be exported from South Africa [Annex III(A)(9), (18)]: Malus Mill.,

Plants, plant products and other	Special requirements	Export certification guidelines
objects	which is maintained under appropriate conditions and subjected, within the last three complete cycles of vegetation, at least once, to official testing for at least the relevant harmful organisms using appropriate indicators or equivalent methods and has been found free, in these tests, from those harmful organisms; (b) no symptoms of diseases caused by the relevant harmful organisms have been observed on plants at the place of production, or on susceptible plants in its immediate vicinity, since the beginning of the last complete cycle of vegetation.	
22.2. Plants of <i>Malus</i> Mill., intended for planting, other than seeds, originating in countries where apple proliferation mycoplasm is known to occur	Without prejudice to the provisions applicable to the plants, listed in Annex III(A)(9) and (18), Annex III(B)(1) and Annex IV(A)(I)(15), (17), (19.2) and (22.1), official statement that: (a) the plants originate in areas known to be free from apple proliferation mycoplasm; or (b) (aa) the plants, other than those raised from seeds, have been: — either officially certified under a certification scheme requiring them to	The following plants are prohibited to be exported from South Africa [Annex III(A)(9), (18)]: Malus Mill.,

Plants, plant products and other objects	Special requirements	Export certification guidelines
	be derived in direct line from material which has been maintained under appropriate conditions and subjected to official testing for at least Apple proliferation mycoplasm using appropriate indicators or equivalent methods and has been found free, in these tests, from that harmful organism, or — derived in direct line from material which is maintained under appropriate conditions and subjected, within the last six complete cycles of vegetation, at least once, to official testing for at least Apple proliferation mycoplasm using appropriate indicators or equivalent methods and has been found free, in these tests, from the harmful organism, (bb) no symptoms of diseases caused by Apple proliferation mycoplasm have been observed on plants at the place of production, or on susceptible plants in its immediate vicinity, since the beginning of the last complete	
23.1. Plants of following species of	three cycles of vegetation. Without prejudice to the provisions	The following plants are prohibited
Prunus L., intended for planting, other than seeds, originating in countries where Plum pox virus is known to occur:	applicable to the plants, listed in Annex III(A)(9) and (18), and Annex IV(A)(I)(15) and (19.2), official statement that:	to be exported from South Africa [Annex III(A)(9),(18)]: — Prunus L.,
— Prunus amygdalus Batsch,		

Plants, plant products and other objects	Special requirements	Export certification guidelines
— Prunus armeniaca L.,		
— <i>Prunus blireiana</i> Andre,	(a) the plants other than these raised	
— Prunus brigantina Vill.,	(a) the plants, other than those raised	
— Prunus cerasifera Ehrh.,	from seed, have been:	
— Prunus cistena Hansen,		
— Prunus curdica Fenzl and Fritsch.,	— either officially certified under a	
— Prunus domestica ssp. domestica L.,	certification scheme requiring them to	
— Prunus domestica ssp. insititia (L.)	be derived in direct line from material	
C.K. Schneid.,	which has been maintained under	
— Prunus domestica ssp. italica (Borkh.)	appropriate conditions and subjected	
Hegi.,	to official testing for, at least, Plum	
— Prunus glandulosa Thunb.,	pox virus using appropriate indicators	
— Prunus holosericea Batal.,	or equivalent methods and has been	
— Prunus hortulana Bailey,	found free, in these tests, from that	
— Prunus japonica Thunb.,	harmful organism,	
— <i>Prunus mandshurica</i> (Maxim.) Koehne,	or	
— Prunus maritima Marsh.,	— derived in direct line from material	
— Prunus mume Sieb and Zucc.,	which is maintained under appropriate	
— Prunus nigra Ait.,	conditions and has been subjected,	
— Prunus persica (L.) Batsch,	within the last three complete cycles	
— Prunus salicina L.,	of vegetation, at least once, to official	
— Prunus sibirica L.,	testing for at least Plum pox virus	
— Prunus simonii Carr.,		
— Prunus spinosa L.,— Prunus tomentosa Thunb.,	using appropriate indicators or	
— <i>Prunus tomentosa</i> Thunb., — <i>Prunus triloba</i> Lindl.,	equivalent methods and has been	
— other species of <i>Prunus</i> L. susceptible	found free, in these tests, from that	
to Plux pox virus.	harmful organism;	
to I lux pox viius.	(b) no symptoms of disease caused	
	by Plum pox virus have been	
	observed on plants at the place of	
	production or on susceptible plants in	
	its immediate vicinity, since the	
	beginning of the last three complete	
	cycles of vegetation	



(c) plants at the place of which have shown symptodisease caused by other virus-like pathogens, has rouged out. 23.2. Plants of <i>Prunus</i> L., intended for Without prejudice to the	otoms of r viruses or ve been
23.2 Plants of Prunus L intended for Without prejudice to the	The fellowing plants are machibited
planting (a) originating in countries where the relevant harmful organisms are known to occur on <i>Prunus</i> L. (b) other than seeds, originating in countries where the relevant harmful organisms are known to occur (c) other than seeds, originating in non-European countries where the relevant harmful organisms are known to occur The relevant harmful organisms are: — for the case under (a): • Tomato ringspot virus; — or the case under (b): • Cherry rasp leaf virus (American), • Peach mosaic virus (American), • Peach phony rickettsia, • Peach rosette mycoplasm, • Plum line pattern virus (American), • Peach X-disease mycoplasm; • Peach X-disease mycoplasm;	where nex III(A)(9) n(I)(15), (19.2) ment that: n: ed under a nuiring them to from material ned under and subjected east the sms using r equivalent found free, in harmful from material der appropriate n subjected, nplete cycles nce, to official elevant harmful oriate to be exported from South Africa [Annex III(A)(9),(18)]: — Prunus L.



Plants, plant products and other objects	Special requirements	Export certification guidelines
Little cherry pathogen.	has been found free, in these tests, from those harmful organisms, (b) no symptoms of diseases caused by the relevant harmful organisms have been observed on plants at the place of production or on susceptible plants in its immediate vicinity, since the beginning of the last three complete cycles of vegetation.	
24. Plants of <i>Rubus</i> L., intended for planting:	Without prejudice to the requirements applicable to the plants, listed in Annex IV(A)(I)(19.2),	The relevant harmful organisms are:— in the case of (a):
 (a) originating in countries where harmful organisms are known to occur on Rubus L. (b) other than seeds, originating in countries where the relevant harmful organisms are known to occur The relevant harmful organisms are: — in the case of (a): • Tomato ringspot virus, • Black raspberry latent virus, • Cherry leafroll virus, • Prunus necrotic ringspot virus, — in the case of (b): • Raspberry leaf curl virus (American) • Cherry rasp leaf virus (American) 	(a) the plants shall be free from aphids, including their eggs (b) official statement that: (aa) the plants have been: — either officially certified under a certification scheme requiring them to be derived in direct line from material which has been maintained under appropriate conditions and subjected to official testing for at least the relevant harmful organisms using appropriate indicators or equivalent methods and has been found free, in these tests, from those harmful organism, or — derived in direct line from material	 Tomato ringspot virus^{1,4,8} are not known to occur in South Africa; Black raspberry latent virus ^{1;4} (Tobacco streak virus) are known to occur in South Africa Cherry leafroll virus ^{1;4} are not known to occur in South Africa;, Prunus necrotic ringspot virus ^{1;4} are known to occur in South Africa in the case of (b): Raspberry leaf curl virus ^{1,4,8} are not known to occur in South Africa Cherry rasp leaf virus ^{1,4,8} are known to occur in South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
	which is maintained under appropriate conditions and has been subjected, within the last three complete cycles of vegetation, at least once, to official testing for at least relevant harmful organisms using appropriate indicators for equivalent methods and has been found free, in these tests, from those harmful organism (bb) no symptoms of diseases caused by the relevant harmful organisms have been observed on plants at the place of production, or on susceptible plants in its immediate vicinity, since the beginning of the last complete cycles of vegetation.	
25.1. Tubers of Solanum tuberosum L., originating in countries where Synchytrium endobioticum (Schilbersky) Percival is known to occur	Without prejudice to the prohibitions applicable to the tubers listed in Annex III(A)(10), (11) and (12), official statement that: (a) the tubers originate in areas known to be free from <i>Synchytrium endobioticum</i> (Schilbersky) Percival (all races other than Race 1, the common European race), and no symptoms of <i>Synchytrium endobioticum</i> (Schilbersky) Percival have been observed either at the place of production or in its immediate vicinity since the beginning of an	Tubers of Solanum tuberosum are prohibited to be exported from South Africa [Annex III(A)(10),(11) and (12)]



Plants, plant products and other objects	Special requirements	Export certification guidelines
·	adequate period; or (b) provisions recognised as equivalent to the Community provisions on combating Synchytrium endobioticum (Schilbersky) Percival in accordance with the procedure referred to in Article 18(2) have been complied with, in the country of origin	
25.2. Tubers of Solanum tuberosum L.	Without prejudice to the provisions listed in Annex III (A)(10), (11) and (12) and Annex IV(A)(I)(25.1), official statement that:	Tubers of Solanum tuberosum are prohibited to be exported from South Africa [Annex III(A)(10),(11) and (12)]
	 (a) the tubers originate in countries known to be free from Clavibacter michiganensis ssp. sepedonicus (Spieckermann and Kotthoff) Davis et al.; or (b) provisions recognised as equivalent to the Community provisions on combating Clavibacter michiganensis ssp. Sepedonicus (Spieckermann and Kotthoff) Davis et al. in accordance with the procedure referred to in Article 18(2), have been complied with, in the country of origin. 	
25.3. Tubers of Solanum tuberosum L., other than early potatoes, originating in countries where Potato spindle tuber viroid is known to occur	Without prejudice to the provisions applicable to the tubers listed in Annex III(A)(10), (11) and (12) and Annex IV (A)(I)(25.1) and (25.2), suppression of the faculty of	Tubers of Solanum tuberosum are prohibited to be exported from South Africa [Annex III(A)(10),(11) and (12)]



Plants, plant products and other objects	Special requirements	Export certification guidelines
	germination	
25.4. Tubers of Solanum tuberosum L., intended for planting	Without prejudice to the provisions applicable to the tubers listed in Annex III(A)(10), (11) and (12) and Annex IV (A)(I)(25.1), (25.2) and (25.3), official statement that:: - the tubers originate from a field known to be free from Globodera rostochiensis (Wollenweber) Behrens and Globodera pallida (Stone) Behrens, and	Tubers of Solanum tuberosum are prohibited to be exported from South Africa [Annex III(A)(10),(11) and (12)]
	(aa) either, the tubers originate in areas in which <i>Pseudomonas</i> solanacearum (Smith) Smith is known not to occur; or (bb) in areas where <i>Pseudomonas</i> solanacearum (Smith) Smith is known to occur, the tubers originate from a place of production found free from <i>Pseudomonas</i> solanacearum (Smith) Smith, or considered to be free thereof, as a consequence of the implementation of an appropriate procedure aiming at eradicating <i>Pseudomonas</i> solanacearum (Smith) Smith which shall be determined in accordance with the procedure referred to in Article 18(2), and	

Plants, plant products and other objects	Special requirements	Export certification guidelines
	areas where Meloidogyne chitwoodi	
	Golden et al. (all populations) and	
	Meloidogyne	
	fallax Karssen are known not to occur;	
	or	
	(dd) in areas where Meloidogyne	
	chitwoodi Golden et al. (all	
	populations) and Meloidogyne fallax	
	Karssen are known to occur,	
	— either the tubers originate from a	
	place of production which has been	
	found free from Meloidogyne	
	chitwoodi Golden et al. (all	
	populations), and Meloidogyne fallax	
	Karssen based on an annual survey of	
	host crops by visual inspection of host	
	plants at appropriate times and by	
	visual inspection both externally and	
	by cutting of tubers after harvest from	
	potato crops grown at the place of	
	production, or	
	— the tubers after harvest have been	
	randomly sampled and, either	
	checked for the presence of	
	symptoms after an appropriate	
	method to induce symptoms, or	
	laboratory tested, as well as inspected	
	visually both externally and by cutting	
	the tubers, at appropriate times and in	
	all cases at the time of closing of the	
	packages or containers before	
	marketing according to the provisions	



Plants, plant products and other objects	Special requirements	Export certification guidelines
	on closing in Council Directive 66/403/EEC of 14 June 1996 on the marketing of seed potatoes ⁽¹⁾ and no symptoms of <i>Meloidogyne chitwoodi</i> Golden <i>et al.</i> (all populations) and <i>Meloidogyne fallax</i> Karssen have been found.	
25.5. Plants of Solanaceae, intended for planting, other than seeds, originating in countries where Potato stolbur mycoplasm is known to occur	Without prejudice to the provisions applicable to tubers listed in Annex III(A)(10), (11), (12) and (13), and Annex IV(A)(I)(25.1), (25.2), (25.3) and (25.4), Official statement that: - no symptoms of Potato stolbur mycoplasm have been observed on the plants at the place of production since the beginning of the last complete cycle of vegetation.	Plants of Solanaceae are prohibited to be exported from South Africa [Annex III(A)(10), (11), (12) and (13)]
25.6. Plants of Solanaceae, intended for planting, other than tubers of Solanum tuberosum L. and other than seeds of Lycopersicon lycopersicum (L.) Karsten ex Farw., originating in countries where Potato spindle tuber viroid is known to occur	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(11), (13), and Annex IV(A)(I) (25.5), where appropriate, official statement that: - no symptoms of Potato spindle tuber viroid have been observed on plants at the place of production since the beginning of the last complete cycle of vegetation	Plants of Solanaceae are prohibited to be exported from South Africa [Annex III(A)(11) and (13)]



Plants, plant products and other objects	Special requirements	Export certification guidelines
25.7. Plants of Capsicum annuum L., Lycopersicon lycopersicum (L.) Karsten ex Farw., Musa L., Nicotiana L. and Solanum melongena L., intended for planting other than seeds, originating in countries where Pseudomonas solanacearum (Smith) Smith is known to occur	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(11) and (13), and Annex IV(A)(I)(25.5) and (25.6), where appropriate, official statement that: (a) the plants originate in areas which have been found free from <i>Pseudomonas solanacearum</i> (Smith) Smith; or (b) no symptoms of <i>Pseudomonas solanacearum</i> (Smith) Smith have been observed on the plants at the place of production since the beginning of the last complete cycle of vegetation.	 The following plants are prohibited to be exported from South Africa [Annex III(A)(11) and (13)], Capsicum annuum L., Lycopersicon lycopersicum (L.) Karsten ex Farw., Nicotiana L., Solanum melongena L. Plants of Musa L. are allowed to be exported from South Africa: Pseudomonas (Ralstonia) solanacearum race 1 1,4,8 are known to occur on South Africa Pseudomonas (Ralstonia) solanacearum race 2 1,4,8 are not known to occur in South Africa Pseudomonas (Ralstonia) solanacearum race 3 1,4,8 are known to occur in South Africa Pseudomonas (Ralstonia) solanacearum race 3 1,4,8 are known to occur in South Africa
25.8. Tubers of Solanum tuberosum L., other than those intended for planting	Without prejudice to the provisions applicable to tubers listed in Annex III(A)(12) and Annex IV(A)(I)(25.1), (25.2) and (25.3), Official statement that: - the tubers originate in areas in which Pseudomonas solanacearum (Smith) Smith is not known to occur.	Tubers of Solanum tuberosum are prohibited to be exported from South Africa [Annex III(A)(12)]
26. Plants of <i>Humulus lupulus</i> L. intended for planting, other than seeds	Official statement that: - no symptoms of <i>Verticillium</i>	Verticillium albo-atrum Reinke and Berthold ^{1;2;8} [Verticillium albo-atrum



Plants, plant products and other objects	Special requirements	Export certification guidelines
	albo-atrum Reinke and Berthold and Verticillium dahliae Klebahn have been observed on hops at the place of production since the beginning of the last complete cycle of vegetation.	hop strains Reinke & Berthold] (verticillium wilt of hop) are not known to occur in South Africa • Verticillium dahliae Klebahn 1;2;8 [Verticillium dahliae hop strains Klebahn] (verticillium wilt of hop) are not known to occur in South Africa
27.1. Plants of <i>Dendranthema</i> (DC.) Des Moul., <i>Dianthus</i> L. and <i>Pelargonium</i> l'Herit. ex Ait., intended for planting, other than seeds	Official statement that: (a) no signs of Heliothis armigera Hübner, or Spodoptera littoralis (Boise.) have been observed at the place of production since the beginning of the last complete cycle of vegetation, or (b) the plants have undergone appropriate treatment to protect them from the said organisms.	 Heliothis (Helicoverpa) armigera (Hübner) ^{1,8} are known to occur in South Africa Spodoptera littoralis (Boisduval) ^{1,8} are known to occur in South Africa
27.2. Plants of <i>Dendranthema</i> (DC.) Des Moul., <i>Dianthus</i> L. and <i>Pelargonium</i> l'Herit. ex Ait., other than seeds	Without prejudice to the requirements applicable to the plants listed in Annex IV(A)(I)(27.1), (a) no signs of <i>Spodoptera eridania</i> Cramer, <i>Spodoptera frugiperda</i> Smith, or <i>Spodoptera litura</i> (Fabricius) have been observed at the place of production since the beginning of the last complete cycle of vegetation, or (b) the plants have undergone	 Spodoptera eridania (Cramer) ^{1,8} are not known to occur in South Africa Spodoptera frugiperda (Smith) ^{1,8} are not known to occur in South Africa Spodoptera litura (Fabricus) ^{1,8} are not known to occur in South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
	appropriate treatment to protect them from the said organisms.	
28. Plants of <i>Dendranthema</i> (DC.) Des Moul., intended for planting, other than seeds	Without prejudice to the requirements applicable to the plants listed in Annex IV(A)(I)(27.1) and (27.2), official statement that:: (a) the plants are no more than third generation stock derived from material which has been found to be free from Chrysanthemum stunt viroid during virological tests, or are directly derived from material of which a representative sample of at least 10% has been found to be free from Chrysanthemum stunt viroid during an official inspection carried out at the time of flowering; (b) the plants or cuttings: — have come from premises which have been officially inspected at least monthly, during the three months prior to dispatch and on which no symptoms of <i>Puccinia horiana</i> Hennings have been known to have observed during that period, and in the immediate vicinity of which no symptoms of <i>Puccinia horiana</i>	Chrysanthemum stunt viroid 1;4;8 are known to occur in South Africa Puccinia horiana Hennings 1;2;8 (white rust of chrysanthemum) are known to occur in South Africa Didymella ligulicola (Baker, Dimock and Davis) v. Arx 2 (ray blight of chrysanthemum) are known to occur in South Africa
	Hennings have been known to have occurred during the three months prior to export, or	

Plants, plant products and other objects	Special requirements	Export certification guidelines
29. Plants of <i>Dianthus</i> L., intended for planting, other than seeds	— have undergone appropriate treatment against <i>Puccinia horiana</i> Hennings; (c) in the case of unrooted cuttings, no symptoms of <i>Didymella ligulicola</i> (Baker, Dimock and Davis) v. Arx were observed either on the cuttings or on the plants from which the cuttings were derived, or that, in case of rooted cuttings, no symptoms of <i>Didymella ligulicola</i> (Baker, Dimock and Davis) v. Arx were observed either on the cuttings or on the rooting bed. Without prejudice to the requirements applicable to the plants listed in Annex IV(A)(I)(27.1) and (27.2), official statement that:: — the plants have been derived in direct line from mother plants which have been found free from <i>Erwinia chrysanthemi</i> pv. <i>dianthicola</i> (Hellmers) Dickey, <i>Pseudomonas caryophylli</i> (Burkholder) Starr and Burkholder and <i>Phialophora cinerescens</i> (Wollenw.) Van Beyma on officially approved tests, carried out at least once within the two previous years, — no symptoms of the above harmful	• Erwinia chrysanthemi pv. dianthicola (Hellmers) Dickey ^{1;4;8} are not known to occur in South Africa • Pseudomonas caryophylli (Burkholder) Starr and Burkholder ^{1;4;8} are not known to occur in South Africa • Phialophora cinerescens (Wollenweber) van Beyma ^{1;2;8} are not known to occur in South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
	organisms have been observed on the plants.	
30. Bulbs of <i>Tulipa</i> L. and <i>Narcissus</i> L., other than those for which there shall be evidence by their packaging, or by other means, that they are intended for sale to final consumers not involved in professional cut flower production	Official statement that: - no symptoms of <i>Ditylenchus dipsaci</i> (Kühn) Filipjev have been observed on the plants since the beginning of the last complete cycle of vegetation.	Ditylenchus dipsaci (Kühn) Filipjev 1;6;7;8 (stem and bulb nematode) are known to occur in South Africa
31. Plants of <i>Pelargonium</i> L'Herit. ex Ait., intended for planting, other than seeds, originating in countries where Tomato ringspot virus is known to occur:	Without prejudice to the requirements applicable to the plants listed in Annex IV(A)(I)(27.1 and) (27.2),	Not applicable to South Africa Tomato ringspot virus 1,4,8 are not known to occur in South Africa
(a) where <i>Xiphinema americanum</i> Cobb <i>sensu lato</i> (non-European	official statement that the plants:	
populations) or other vectors of Tomato ringspot virus are not known to occur	 (a) are directly derived from places of production known to be free from Tomato ringspot virus; or (b) are of no more than fourth generation stock, derived from mother plants found to be free from Tomato ringspot virus under an official 	
(b) where <i>Xiphinema americanum</i> Cobb sensu lato (non-European populations) or other vectors of Tomato ringspot virus	approved system of virological testing. official statement that the plants:	
are known to occur	(a) are directly derived from places of production known to be free from Tomato ringspot virus in the soil or plants; or (b) are of no more than second	



Plants, plant products and other objects	Special requirements	Export certification guidelines
32.1. Plants of herbaceous species, intended for planting, other than:	generation stock, derived from mother plants found to be free from Tomato ringspot virus under an officially approved system of virological testing. Without prejudice to the requirements applicable to the plants in Appe	Not applicable to South Africa Liriomyza sativao Blanchard ¹ aro
intended for planting, other than: — bulbs, — corms, — plants of the family Gramineae, — rhizomes, — seeds, — tubers, originating in third countries where Liriomyza sativae (Blanchard) and Amauromyza maculosa (Malloch) are known to occur	applicable to the plants in Annex IV, Part A, Section I(27.1), (27.2), (28) and (29), where appropriate, official statement that: - the plants have been grown in nurseries and: (a) originate in an area, established in the country of export by the national plant protection service in that country, as being free from <i>Liriomyza sativae</i> (Blanchard) and <i>Amauromyza maculosa</i> (Malloch) in accordance with relevant International Standards for Phytosanitary Measures, and which is mentioned on the certificates referred to in Articles 7 or 8 of this Directive under the rubric 'Additional declaration', or (b) originate in a place of production, established in the country of export by the national plant protection service in that country, as being free from <i>Liriomyza sativae</i> (Blanchard) and <i>Amauromyza maculosa</i> (Malloch) in	 Liriomyza sativae Blanchard¹ are not known to occur in South Africa Amauromyza maculosa (Malloch)¹ are not known to occur in South Africa
	accordance with relevant International Standards for Phytosanitary	

Plants, plant products and other objects	Special requirements	Export certification guidelines
	Measures, and which is mentioned on the certificates referred to in Articles 7 or 8 of this Directive under the rubric 'Additional declaration', and declared free from <i>Liriomyza sativae</i> (Blanchard) and <i>Amauromyza maculosa</i> (Malloch) on official inspections carried out at least monthly during the three months prior to export, or (c) immediately prior to export, have been subjected to an appropriate treatment against <i>Liriomyza sativae</i> (Blanchard) and <i>Amauromyza maculosa</i> (Malloch) and have been officially inspected and found free from <i>Liriomyza sativae</i> (Blanchard) and <i>Amauromyza maculosa</i> (Malloch). Details of the treatment shall be mentioned on the certificates referred to in Articles 7 or 8 of this Directive.	
32.2. Cut flowers of <i>Dendranthema</i>	Official statement that the cut flowers	• Liriomyza sativae Blanchard¹ are not
(DC) Des. Moul., <i>Dianthus</i> L., <i>Gypsophila</i> L. and <i>Solidago</i> L., and	and the leafy vegetables: — originate in a country free from	known to occur in South Africa
leafy vegetables of Apium graveolens	Liriomyza sativae (Blanchard) and	 Amauromyza maculosa (Malloch)¹ are not known to occur in South
L. and <i>Ocimum</i> L.	Amauromyza maculosa (Malloch),	Africa
	or — immediately prior to their export, have been officially inspected and found free from <i>Liriomyza sativae</i> (Blanchard) and <i>Amauromyza</i>	



Plants, plant products and other objects	Special requirements	Export certification guidelines
	maculosa (Malloch).	
32.3. Plants of herbaceous species, intended for planting, other than: — bulbs, — corms, — plants of the family Gramineae, — rhizomes, — seeds, — tubers, originating in third countries	Without prejudice to the requirements applicable to the plants in Annex IV, Part A, Section I(27.1), (27.2), (28), (29) and (32.1), official statement that: (a) the plants originate in an area known to be free from Liriomyza huidobrensis (Blanchard) and Liriomyza trifolii (Burgess), or (b) either no signs of Liriomyza huidobrensis (Blanchard) and Liriomyza trifolii (Burgess) have been observed at the place of production, on official inspections carried out at least monthly during the three months prior to harvesting, or (c) immediately prior to export, the plants have been officially inspected and found free from Liriomyza huidobrensis (Blanchard) and Liriomyza trifolii (Burgess) and have been subjected to an appropriate treatment against Liriomyza huidobrensis (Blanchard) and	• Liriomyza huidobrensis (Blanchard) 1 (serpentine leafminer) are known to occur in South Africa • Liriomyza trifolii (Burgess) (American serpentine leafminer) are known to occur in south Africa
33. Plants with roots, planted or	Liriomyza trifolii (Burgess). Official statement that:	Clavibacter michiganensis ssp.
intended for planting, grown in the open	the place of production is known	sepedonicus ^{1,4,8} (Spieckermann and
air	to be free from <i>Clavibacter</i>	Kotthoff) Davis <i>et al.</i> are not known
	michiganensis ssp.	to occur in South Africa
	sepedonicus (Spieckermann and	Globodera pallida 1,6,7,8 (Stone)



Plants, plant products and other objects	Special requirements	Export certification guidelines
	Kotthoff) Davis <i>et al.</i> , <i>Globodera pallida</i> (Stone) Behrens, <i>Globodera rostochiensis</i> (Wollenweber) Behrens and <i>Synchytrium endobioticum</i> (Schilbersky) Percival	Behrens are not known to occur in South Africa • Globodera rostochiensis 1,6,7,8 (Wollenweber) Behrens are known to occur in South Africa • Synchytrium endobioticum 1,2,8 (Schilbersky) Percival are known to occur in South Africa
34. Soil and growing medium, attached to or associated with plants, consisting in whole or in part of soil or solid organic substances such as parts of plants, humus including peat or bark or consisting in part of any solid inorganic substance, intended to sustain the vitality of the plants, originating in: — Turkey, — Belarus, Georgia, Moldova, Russia, Ukraine, — non-European countries, other than Algeria, Egypt, Israel, Libya, Morocco, Tunisia	Official statement that: (a) the growing medium, at the time of planting, was: — either free from soil, and organic matter, or — found free from insects and harmful nematodes and subjected to appropriate examination or heat treatment or fumigation to ensure that it was free from other harmful organisms, or — subjected to appropriate heat treatment or fumigation to ensure freedom from harmful organisms, and (b) since planting: — either appropriate measures have been taken to ensure that the growing medium has been maintained free from harmful organisms, or — within two weeks prior to dispatch,	Applicable to South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
•	the plants were shaken free from the medium leaving the minimum amount necessary to sustain vitality during transport, and, if replanted, the growing medium used for that purpose meets the requirements laid down in (a).	
35.1. Plants of <i>Beta vulgaris</i> L. intended for planting, other than seeds	Official statement that: - no symptoms of Beet curly top virus (non-European isolates) have been observed at the place of production since the beginning of the last complete cycle of vegetation.	Beet curly top virus ^{1;4} are not known to occur in South Africa
35.2. Plants of <i>Beta vulgaris</i> L. intended for planting, other than seeds, originating in countries where Beet leaf curl virus is known to occur	Without prejudice to the requirements applicable the plants listed in Annex IV(A)(I)(35.1), official statement that:	Not applicable to South Africa Beet leaf curl virus 1;4;8 are not known to occur in South Africa
	 (a) Beet leaf curl virus has not been known to occur in the area of production; and (b) no symptoms of Beet leaf curl virus have been observed at the place or production or in its immediate vicinity since the beginning of the last complete cycle of vegetation. 	
36.1 . Plants, intended for planting, other than:	Without prejudice to the requirements applicable to the plants in Annex IV,	Thrips palmi Karny ¹ are not known to occur in South Africa
— bulbs,	Part A, Section I(27.1), (27.2), (28),	to occur in South Africa
— corms,	(29), (31), (32.1) and (32.3), official	
— rhizomes,	statement that:	

Plants, plant products and other	Special requirements	Export certification guidelines
objects		
Plants, plant products and other objects — seeds, — tubers, originating in third countries	 the plants have been grown in nurseries and: (a) originate in an area, established in the country of export by the national plant protection service in that country, as being free from <i>Thrips palmi</i> Karny in accordance with relevant International Standards for Phytosanitary Measures, and which is mentioned on the certificates referred to in Articles 7 or 8 of this Directive under the rubric 'Additional declaration', or (b) originate in a place of production, established in the country of export by the national plant protection service in that country, as being free from <i>Thrips palmi</i> Karny in accordance with relevant International Standards for Phytosanitary Measures, and which is mentioned on the certificates referred to in Articles 7 or 8 of this Directive under the rubric 'Additional declaration', and declared free from <i>Thrips palmi</i> Karny on official inspections carried out at least monthly during the three months prior to export, or 	Export certification guidelines
	(c) immediately prior to export, have been subjected to an appropriate	
	treatment against <i>Thrips palmi</i> Karny	



Plants, plant products and other objects	Special requirements	Export certification guidelines
	and have been officially inspected and found free from <i>Thrips palmi</i> Karny. Details of the treatment shall be mentioned on the certificates referred to in Article 7 or 8 of this Directive.	
36.2. Cut flowers of Orchidaceae and fruits of <i>Momordica</i> L. and <i>Solanum melongena</i> L., originating in third countries	Official statement that the cut flowers and the fruits: — originate in a country free from Thrips palmi Karny, or — immediately prior to their export, have been officially inspected and found free from Thrips palmi Karny.	Thrips palmi Karny¹ are not known to occur in South Africa
37. Plants of Palmae intended for planting other than seeds, originating in non-European countries	Without prejudice to the prohibitions applicable to the plants listed in Annex III(A)(17), where appropriate, official statement that:: (a) either the plants originate in an area known to be free from Palm lethal yellowing mycoplasm and Cadang-Cadang viroid, and no symptoms have been observed at the place of production or in its immediate vicinity since the beginning of the last complete cycle of vegetation; or (b) no symptoms of Palm lethal yellowing mycoplasm and Cadang-Cadang viroid have been observed on the plants since the beginning of the last complete cycle of vegetation, and plants at the place of production	 No plants of Palmae are prohibited to be exported from South Africa [Annex III(A)(17)] Palm lethal yellowing mycoplasm ^{1;4;19} [palm lethal yellowing phytoplasma] are not known to occur in South Africa Cadang-Cadang viroid ^{1;4;8} [Coconut cadang-cadang viroid] are not known to occur in South Africa Myndus crudus Van Duzee ^{1,8} are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Export certification guidelines
38.1. Plants of <i>Camellia</i> L. intended for	which have shown symptoms giving rise to the suspicion of contamination by the organisms have been rouged out at that place and the plants have undergone appropriate treatment to rid them of <i>Myndus crudus</i> Van Duzee; (c) in the case of plants in tissue culture, the plants were derived from plants which have met the requirements laid down in (a) or (b) Official statement that:	• <i>Ciborinia camellia</i> e Kohn ^{1;2;8} are not
planting, other than seeds, originating in non-European countries	(a) the plants originate in areas known to be free from <i>Ciborinia camelliae</i> Kohn; or (b) no symptoms of <i>Ciborinia camelliae</i> Kohn have been observed on plants in flower on the place of production since the beginning of the last complete cycle of vegetation.	known to occur in South Africa
38.2. Plants of <i>Fuchsia</i> L. intended for planting, other than seeds, originating in the USA or Brazil	Official statement that: - no symptoms of Aculops fuchsiae Keifer have been observed at the place of production and that immediately prior to export the plants have been inspected and found free from Aculops fuchsiae Keifer.	Not applicable to South Africa
39. Trees and shrubs , intended for planting, other than seeds and plants in	Without prejudice to the provisions applicable to the plants listed in Annex	Applicable to South AfricaThe following are prohibited to be



Plants, plant products and other objects	Special requirements	Export certification guidelines
tissue culture, originating in third countries other than European and Mediterranean countries	III(A)(1), (2), (3), (9), (13), (15), (16), (17), (18), Annex III(B)(1) and Annex IV(A)(I)(8.1), (8.2), (9), (10), (11.1), (11.2), (12), (13.1), (13.2), (14), (15), (17), (18), (19.1), (19.2), (20), (22.1), (22.2), (23.1), (23.2), (24), (25.5), (25.6), (26), (27.1), (27.2), (28), (29), (32.1), (32.2), (33), (34), (36.1), (36.2), (37), (38.1) and (38.2), where appropriate, official statement that the plants: — are clean (i.e. free from plant debris) and free from flowers and fruits, — have been grown in nurseries, — have been inspected at appropriate times and prior to export and found free from symptoms of harmful bacteria, viruses and virus-like organisms, and either found free from signs or symptoms of harmful nematodes, insects, mites and fungi, or have been subjected to appropriate treatment to eliminate such organisms.	exported from South Africa [Annex III(A)(1), (2), (3), (9), (13), (15), (16), (17), (18)]: - Abies Mill., Castanea Mill., Cedrus Trew, Chaenomeles Ldl., Chamaecyparis Spach, Citrus L., Crateagus L., Cydonia Mill., Fragaria L., Fortunella Swingle Juniperus L., Larix Mill., Malus Mill., Picea A. Dietr., Pinus L., Poncirus Raf., Prunus L., Pseudotsuga Carr., Pyrus L., Quercus L., Rosa L., Solanaceae, Tsuga Carr., Vitis L.
40. Deciduous trees and shrubs, intended for planting, other than seeds and plants in tissue culture, originating in third countries other than European and Mediterranean countries	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(2), (3), (9), (15), (16), (17) and (18), Annex III(B)(1) and Annex IV(A)(I), (11.1), (11.2), (11.3), (12), (13.1), (13.2), (14), (15), (17), (18),	 Applicable to South Africa The following are prohibited to be exported from South Africa [Annex III(A)(2), (3), (9), (15), (16), (17), (18)]: Castanea Mill., Chaenomeles Ldl., Citrus L., Crateagus L.,



Plants, plant products and other objects	Special requirements	Export certification guidelines
	(19.1), (19.2), (20), (22.1), (22.2), (23.1), (23.2), (24), (33), (36.1), (38.1), (38.2), (39) and (45.1) where appropriate, official statement that: - the plants are dormant and free from leaves	Cydonia Mill., Fragaria L.,Fortunella Swingle, Malus Mill., Poncirus Raf., Prunus L., Pyrus L., Quercus L., Rosa L., Vitis L.
41. Annual and biennial plants, other than Gramineae, intended for planting, other than seeds, originating in countries other than European and Mediterranean countries	Without prejudice to the provisions applicable to the plants, where appropriate, listed in Annex III(A)(11), (13), and Annex IV(A)(I)(25.5), (25.6), (32.1), (32.2), (32.3), (33), (34), (35.1) and (35.2), official statement that the plants: — have been grown in nurseries, — are free from plant debris, flowers and fruits, — have been inspected at appropriate times and prior to export, and — found free from symptoms of harmful bacteria, viruses and virus-like organisms, and — either found free from signs or symptoms of harmful nematodes, insects, mites and fungi, or have been subjected to appropriate treatment to eliminate such organisms.	Applicable to South Africa Plants of Solanaceae are prohibited to be exported from South Africa [Annex III (A)(11), (13)
42. Plants of the family Gramineae of	Without prejudice to the requirements	Applicable to South Africa
ornamental perennial grasses of the	applicable to the plants, where	
subfamilies Bambusoideae,	appropriate, listed in Annex	



Plants, plant products and other objects	Special requirements	Export certification guidelines
Panicoideae and of the genera Buchloe, Bouteloua Lag., Calamagrostis, Cortaderia Stapf., Glyceria R. Br., Hakonechloa Mak. ex Honda, Hystrix, Molinia, Phalaris L., Shibataea, Spartina Schreb., Stipa L. and Uniola L. intended for planting, other than seeds, originating in countries other than European and Mediterranean countries	IV(A)(I)(33) and (34), official statement that the plants: — have been grown in nurseries, and — are free from plants debris, flowers and fruits, and — have been inspected and prior to export, and — found free from symptoms of harmful bacteria, viruses and virus-like organisms, and — either found free from signs or symptoms of harmful nematodes, insects, mites and fungi, or have been subjected to appropriate treatment to eliminate such organisms.	
43. Naturally or artificially dwarfed plants intended for planting other than seeds, originating in non-European countries	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), (2), (3), (9), (13), (15), (16), (17), (18), Annex III(B)(1), and Annex IV(A)(I)(8.1), (9), (10), (11.1), (11.2), (12), (13.1), (13.2), (14), (15), (17), (18), (19.1), (19.2), (20), (22.1), (22.2), (23.1), (23.2), (24), (25.5), (25.6), (26), (27.1), (27.2), (28), (32.1), (32.2), (33), (34), (36.1), (36.2), (37), (38.1), (38.2), (39), (40) and (42), where appropriate, official statement that: (a) the plants, including those collected directly from natural habitats, shall have been grown, held and	 Applicable to South Africa The following are prohibited to be exported from South Africa [Annex III(A)(1), (2), (3), (9), (13), (15), (16), (17), (18)]: Abies Mill., Castanea Mill., Cedrus Trew, Chaenomeles Ldl., Chamaecyparis Spach, Citrus L., Crateagus L., Cydonia Mill., Fragaria L., Fortunella Swingle Juniperus L., Larix Mill., Malus Mill., Picea A. Dietr., Pinus L., Poncirus Raf., Prunus L., Pseudotsuga Carr., Pyrus L., Quercus L., Rosa L., Solanaceae, Tsuga Carr., Vitis L.

Plants, plant products and other objects	Special requirements	Export certification guidelines
	trained for at least two consecutive years prior to dispatch in officially registered nurseries, which are subject to an officially supervised control regime, (b) the plants on the nurseries referred to in (a) shall:	
	(aa) at least during the period referred to in (a): — be potted, in pots which are placed on shelves at least 50 cm above ground, — have been subjected to appropriate treatments to ensure freedom from non-European rusts: the active ingredient, concentration and date of application of these treatments shall be mentioned on the phytosanitary certificate provided for in Article 7 of this Directive under the rubric 'disinfestation and/or disinfection treatment'. — have been officially inspected at least six times a year at appropriate	
	intervals for the presence of harmful organisms of concern, which are those in the Annexes to the Directive. These inspections, which shall also be carried out on plants in the immediate vicinity of the nurseries referred to in (a), shall be carried out at least by	

Plants, plant products and other objects	Special requirements	Export certification guidelines
	visual examination of each row in the field or nursery and by visual examination of all parts of the plant above the growing medium, using a random sample of at least 300 plants from a given genus where the number of plants of that genus is not more than 3 000 plants, or 10% of the plants if there are more than 3 000 plants from that genus,	
	— have been found free, in these inspections, from the relevant harmful organisms of concern as specified in the previous indent. Infested plants shall be removed. The remaining plants, where appropriate, shall be effectively treated, and in addition shall be held for an appropriate period and inspected to ensure freedom from such harmful organisms of concern, — have been planted in either an unused artificial growing medium or in	
	a natural growing medium, which has been treated by fumigation or by appropriate heat treatment and has been of any harmful organisms, — have been kept under conditions which ensure that the growing medium has been maintained free from harmful organisms and within two weeks prior to dispatch, have been:	

Plants, plant products and other objects	Special requirements	Export certification guidelines
	— shaken and washed with clean	
	water to remove the original growing	
	medium and kept bare rooted, or	
	 shaken and washed with clean 	
	water to remove the original growing	
	medium and replanted in growing	
	medium which meets the conditions	
	laid down in (aa) fifth indent, or	
	 subjected to appropriate treatments 	
	to ensure that the growing medium is	
	free from harmful organisms, the	
	active ingredient, concentration and	
	date of application of these treatments	
	shall be mentioned on the	
	phytosanitary certificate provided for	
	in Article 7 of this Directive under the	
	rubric 'disinfestation and/or	
	disinfection treatment'.	
	(bb) be packed in closed containers	
	which have been officially sealed and	
	bear the registration number of the	
	registered nursery; this number shall	
	also be indicated under the rubric	
	additional declaration on the	
	phytosanitary certificate provided for	
	in Article 7 of this Directive, enabling	
	the consignments to be identified.	
44. Herbaceous perennial plants,	Without prejudice to the requirements	Applicable to South Africa
intended for planting, other than seeds,	applicable to plants, where	F.F. 1
of the families Caryophyllaceae (except	appropriate, listed in Annex	



Plants, plant products and other objects	Special requirements	Export certification guidelines
Dianthus L.), Compositae (except Dendranthema (DC.) Des Moul.), Cruciferae, Leguminosae and Rosaceae (except Fragaria L.), originating in third countries, other than European and Mediterranean countries	IV(A)(I)(32.1), (32.2), (32.3), (33) and (34), official statement that the plants: — have been grown in nurseries, and — are free from plant debris, flowers and fruits, and — have been inspected at appropriate times and prior to export, and — found free from symptoms of harmful bacteria, viruses and virus-like organisms, and — either found free from signs or symptoms of harmful nematodes, insects, mites and fungi, or have been subjected to appropriate treatment to eliminate such organisms.	
45.1. Plants of herbaceous species and plants of Ficus L. and Hibiscus L., intended for planting, other than bulbs, corms, rhizomes, seeds and tubers, originating in non-European countries	Without prejudice to the requirements applicable to the plants in Annex IV, Part A, Section I(27.1), (27.2), (28), (29), (32.1), (32.3) and (36.1), official statement that the plants: (a) originate in an area, established in the country of export by the national plant protection service in that country, as being free from <i>Bemisia tabaci</i> Genn. (non-European populations) in accordance with relevant International Standards for Phytosanitary Measures, and which is mentioned on the certificates referred to in Articles 7 or 8 of this Directive	Applicable to South Africa Bemisia tabaci 1 (Biotype B) Genn. (non-European populations) [tobacco whitefly; silver leaf whitefly] are known to occur in South Africa

Plants, plant products and other objects	Special requirements	Export certification guidelines
	under the rubric 'Additional	
	declaration', or	
	(b) originate in a place of production,	
	established in the country of export by	
	the national plant protection service in	
	that country, as being free from	
	Bemisia tabaci Genn. (non-European	
	populations) in accordance with	
	relevant International Standards for	
	Phytosanitary Measures, and which is	
	mentioned on the certificates referred	
	to in Articles 7 or 8 of this Directive	
	under the rubric 'Additional	
	declaration', and declared free from	
	Bemisia tabaci Genn. (non-	
	European populations) on official	
	inspections carried out at least once	
	each three weeks during the nine	
	weeks prior to export, or	
	(c) in cases where Bemisia tabaci	
	Genn. (non-European populations)	
	has been found at the place of	
	production, are held or produced in	
	this place of production and have	
	undergone an appropriate treatment	
	to ensure freedom from Bemisia	
	tabaci Genn. (non-European	
	populations) and subsequently this	
	place of production shall have been	
	found free from Bemisia tabaci Genn.	
	(non-European populations) as a	
	consequence of the implementation of	



Plants, plant products and other objects	Special requirements	Export certification guidelines
	appropriate procedures aiming at eradicating <i>Bemisia tabaci</i> Genn. (non-European populations), in both official inspections carried out weekly during the nine weeks prior to export and in monitoring procedures throughout the said period. Details of the treatment shall be mentioned on the certificates referred to in Article 7 or 8 of this Directive.	
45.2. Cut flowers of Aster spp., Eryngium L., Gypsophila L., Hypericum L., Lisianthus L., Rosa L., Solidago L., Trachelium L., and leafy vegetables of Ocimum L., originating in non-European countries	Official statement that the cut flowers and leafy vegetables: — originate in a country free from Bemisia tabaci Genn. (non-European populations), or — immediately prior to their export, have been officially inspected and found free from Bemisia tabaci Genn. (non-European populations).	Bemisia tabaci ¹ (Biotype B) Genn. [(non-European populations) tobacco whitefly; silver leaf whitefly] are known to occur in South Africa
45.3. Plants of Lycopersicon lycopersicum (L.) Karsten ex Farw. intended for planting, other than seeds, originating in countries where Tomato yellow leaf curl virus is known to occur	Without prejudice to the requirements applicable to plants listed in Annex III(A)(13) and Annex IV(A)(I)(25.5), (25.6) and 25.7 where appropriate	Not applicable to South Africa Tomato yellow leaf curl virus 1;4;8 are not known to occur in South Africa
(a) Where <i>Bemisia tabaci</i> Genn. is not known to occur	Official statement that: - no symptoms of Tomato yellow leaf curl virus have been observed on the plants	

Plants, plant products and other objects	Special requirements	Export certification guidelines
(b) Where Bemisia tabaci Genn. is known to occur	Official statement that: (a) no symptoms of Tomato yellow leaf curl virus have been observed on the plants, and (aa) the plants originate in areas known to be free from Bemisia tabaci Genn., or (bb) the place of production has been found free from Bemisia tabaci Genn. on official inspections carried out at least monthly during the three months	
	prior to export; or (b) no symptoms of Tomato yellow leaf curl virus have been observed on the place of production and the place of production has been subjected to an appropriate treatment and monitoring regime to ensure freedom from <i>Bemisia tabaci</i> Genn.	
46. Plants intended for planting, other than seeds, tubers, corms, rhizomes, originating in countries where the relevant harmful organisms are known to occur. The relevant harmful organisms are: — Bean golden mosaic virus, — Cowpea mild mottle virus, — Lettuce infectious yellow virus, — Pepper mild tigré virus,	Without prejudice to the requirements applicable to the plants listed in Annex III(A)(13) and Annex IV(A)(I)(25.5) (25.6), (32.1), (32.2), (32.3), (35.1), (35.2), (44), (45), (45.1), (45.2) and (45.3) where appropriate	 Applicable to South Africa Plants of Solanaceae are prohibited to be exported from South Africa [Annex III (A) (13). Bean golden mosaic virus ^{1,4,8} are not known to occur in South Africa Cowpea mild mottle virus ^{1,4} are



Plants, plant products and other objects	Special requirements	Export certification guidelines
 Squash leaf curl virus, other viruses transmitted by Bemisia tabaci Genn. (a) Where Bemisia tabaci Genn. (non-European populations) or other vectors of the relevant harmful organisms are not known to occur (b) Where Bemisia tabaci Genn. (non-European populations) or other vectors of the relevant harmful organisms are known to occur 	Official statement that: - no symptoms of the relevant harmful organisms have been observed on the plants during their complete cycle of vegetation Official statement that: - no symptoms of the relevant harmful organisms have been observed on the plants during an adequate period, and (a) the plants originate in areas known to be free from <i>Bemisia tabaci</i> Genn. and other vectors of the relevant harmful organisms; or (b) the place of production has been found free from <i>Bemisia tabaci</i> Genn. and other vectors of the relevant harmful organisms on official inspections carried out at appropriate times; or (c) the plants have been subjected to an appropriate treatment aimed at eradicating <i>Bemisia tabaci</i> Genn.	Africa Lettuce infectious yellows virus 1,4,8 are not known to occur in South Africa Pepper mild tigré virus ⁴ are known to occur in South Africa Squash leaf curl virus ¹ are not known to occur in South Africa Euphorbia mosaic virus ⁴ are not known to occur in South Africa Florida tomato virus ¹ are not known to occur in South Africa Bemisia tabaci ¹ (Biotype B) Genn. [(non-European populations) tobacco whitefly; silver leaf whitefly] are known to occur in South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
47. Seeds of Helianthus annuus L.	(a) the seeds originate in areas known to be free from <i>Plasmopara halstedii</i> (Farlow) Berl. and de Toni; or (b) the seeds, other than those seeds that have been produced on varieties resistant to all races of <i>Plasmopara halstedii</i> (Farlow) Berl. and de Toni present in the area of production, have been subjected to an appropriate treatment against <i>Plasmopara halstedii</i> (Farlow) Berl. and de Toni.	Plasmopara halstedii (Farlow) Berl. and de Toni 1;21 (downy mildew of sunflower) are known to occur in South Africa
48. Seeds of Lycopersicon lycopersicum (L.) Karsten ex Farw.	Official statement that: - the seeds have been obtained by means of an appropriate acid extraction method or an equivalent method approved in accordance with the procedure referred to in Article 18(2), and (a) either the seeds originate in areas where Clavibacter michiganensis ssp. michiganensis (Smith) Davis et al., Xanthomonas campestris pv. vesicatoria (Doidge) Dye and Potato spindle tuber viroid are not known to occur; or (b) no symptoms of diseases caused by those harmful organisms have been observed on the plants at the place of production during their	 Clavibacter michiganensis spp. michiganensis 1;4;8 (Smith) Davis et al. (bacterial canker of tomato) are known to occur in South Africa Xanthomonas campestris pv. vesicatoria 1;4;8 (Doidge) Dye (bacterial spot of tomato and pepper) are known to occur in South Africa Potato spindle tuber viroid 1,4,8 are not known to occur in South Africa



Plants, plant products and other objects	Special requirements	Export certification guidelines
	complete cycle of vegetation; or (c) the seeds have been subjected to official testing for at least those harmful organisms, on a representative sample and using appropriate methods, and have been found, in these tests, free from those harmful organisms.	
49.1. Seeds of Medicago sativa L.	Official statement that: (a) no symptoms <i>Ditylenchus dipsaci</i> (Kühn) Filipjev have been observed at the place of production since the beginning of the last complete cycle of vegetation and no <i>Ditylenchus dipsaci</i> (Kühn) Filipjev has been revealed by laboratory tests on a representative sample; or (b) fumigation has taken place prior to export.	Ditylenchus dipsaci (Kühn) Filipjev 1;6;7;8 (stem and bulb nematode) are known to occur in South Africa
49.2. Seeds of Medicago sativa L., originating in countries where Clavibacter michiganensis ssp. insidiosus Davis et al. is known to occur	Without prejudice to the requirements applicable to plants listed in Annex IV(A)(I)(49.1), official statement that: (a) Clavibacter michiganensis ssp. insidiosus Davis et al. has not been known to occur on the farm or in the immediate vicinity since the beginning of the past 10 years; (b) either — the crop belongs to a variety	Clavibacter michiganensis spp. insidiosus (McCulloch) Davis et al. 1;4;8 (bacterial lucerne wilt) are known to occur in South Africa

Plants, plant products and other objects	Special requirements	Export certification guidelines
	recognized as being highly resistant to Clavibacter michiganensis ssp. insidiosus Davis et al., or — it had not yet started its fourth complete cycle of vegetation from sowing when the seed was harvested and there was not more than one preceding seed harvest from the crop, or — the content of inert matter which has been determined in accordance with the rules applicable for the certification of seed marketed in the Community, does not exceed 0,1% by weight; (c) no symptoms of Clavibacter michiganensis ssp. insidiosus Davis et al. have been observed at the place of production, or on any Medicago sativa L. crop adjacent to it, during the last complete cycle of vegetation or, where appropriate, the	Export certification guidelines
	last two cycles of vegetation; (d) the crop has been grown on land on which no previous <i>Medicago sativa</i> L.	
	crop has been present during the last three years prior to sowing.	
50. Seeds of Oryza sativa L.	Official statement that:	• Aphelenchoides besseyi 1;7;8 Christie (rice leaf nematode) are known to



Plants, plant products and other objects	Special requirements	Export certification guidelines
	(a) the seeds have been officially tested by appropriate nematological tests and have been found free from <i>Aphelenchoides besseyi</i> Christie; or (b) the seeds have been subjected to an appropriate hot water treatment or other appropriate treatment against <i>Aphelenchoides besseyi</i> Christie.	occur in South Africa
51. Seeds of <i>Phaseolus</i> L.	(a) the seeds originate in areas known to be free from <i>Xanthomonas</i> campestris pv. phaseoli (Smith) Dye; or (b) a representative sample of the seeds has been tested and found free from <i>Xanthomonas</i> campestris pv. phaseoli (Smith) Dye in these tests.	Xanthomonas campestris pv. phaseoli (Smith) Dye 1;4;8 (bean blight) are known to occur in South Africa
52. Seeds of Zea mays L.	Official statement that: (a) the seeds originate in areas known to be free from <i>Erwinia stewartii</i> (Smith) Dye; or (b) a representative sample of the seeds has been tested and found free from <i>Erwinia stewartii</i> (Smith) Dye in this test.	Erwinia stewartii (Smith) Dye 1;4;8 are not known to occur in South Africa
53 . Seeds of the genera <i>Triticum</i> , Secale and X <i>Triticosecale</i> from Afghanistan, India, Iran, Iraq, Mexico, Nepal, Pakistan, South Africa and the	Official statement that: - the seeds originate in an area where <i>Tilletia indica</i> Mitra is known not to occur. The name of	 Tilletia indica Mitra^{1,2,8} are known to occur in South Africa Pest free areas are regulated by the Agricultural Pest Act 36 of



Plants, plant products and other objects	Special requirements	Export certification guidelines
USA where <i>Tilletia indica</i> Mitra is known to occur.	the area shall be mentioned on the phytosanitary certificate provided for in Article 7.	1983
54. Grain of the genera <i>Triticum</i> , Secale and x <i>Triticosecale</i> from Afghanistan, India, Iran, Iraq, Mexico, Nepal, Pakistan, South Africa and the USA where <i>Tilletia indica</i> Mitra is known to occur.	Official statement that: either, (i) the grain originates in an area where <i>Tilletia indica</i> Mitra is known not to occur. The name of the area or areas shall be mentioned on the phytosanitary certificate provided for in Article 7, under the rubric 'place of origin' or (ii) no symptoms of <i>Tilletia indica</i> Mitra have been observed on the plants at the place of production during their last complete cycle of vegetation and representative samples of the grain have been taken both at the time of harvest and before shipment and have been tested and found free from <i>Tilletia indica</i> Mitra in these tests; the latter shall be mentioned on the phytosanitary certificate provided for in Article 7, in the rubric 'name of produce' as 'tested and found free from <i>Tilletia indica</i> Mitra'.	 Tilletia indica Mitra^{1,2,8} are known to occur in South Africa Pest free areas are regulated by the Agricultural Pest Act 36 of 1983



PART B

SPECIAL REQUIREMENTS WHICH SHALL BE LAID DOWN BY ALL MEMBER STATES FOR THE INTORDUCTION AND MOVEMENT

OF PLANTS, PLANT PRODUCTS AND OTHER OBJECTS INTO AND WITHIN CERTAIN PROTECTED ZONES

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
1. Wood of conifers (Coniferales)	Without prejudice to the requirements applicable to the wood listed in Annex IV(A)(I)(1.1), (1.2), (1.3), (1.4), (1.5), (7), where appropriate: (a) the wood shall be stripped of its bark; or (b) official statement that the wood originates in areas known to be free from <i>Dendroctonus micans</i> Kugelan; or (c) there shall be evidence by a mark 'Kilndried', 'KD' or another internationally recognised mark, put on the wood or on its packaging in accordance with current commercial usage, that it has undergone kilndrying to below 20% moisture content, expressed as a percentage of dry matter, at time of manufacture, achieved through an appropriate time/ temperature schedule.	(Northern Ireland, Isle of Man and Jersey)	Dendroctonus micans Kugelan 1;11 are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
2. Wood of conifers (Coniferales)	Without prejudice to the requirements applicable to the wood listed in Annex IV(A)(I)(1.1), (1.2), (1.3), (1.4), (1.5), (7), where appropriate, and Annex IV(B)(1), (a) the wood shall be stripped of its bark; or (b) official statement that the wood originates in areas known to be free from <i>Ips duplicatus</i> Sahlbergh; or (c) there shall be evidence by a mark 'Kilndried', 'KD' or another internationally recognised mark, put on the wood or on its packaging in accordance with current commercial usage, that it has undergone kilndrying to below 20% moisture content, expressed as a percentage of dry matter, at time of manufacture, achieved through an appropriate time/ temperature schedule.		Ips duplicatus Sahlberg 1;36 are not known to occur in South Africa
3. Wood of conifers (Coniferales)	Without prejudice to the requirements applicable to the wood listed in Annex IV(A)(I)(1.1), (1.2), (1.3), (1.4), (1.5), (7), where appropriate, and Annex IV(B)(1) and (2): (a) the wood shall be stripped of its	IRL, UK	Ips typographus Heer 1;38 are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
4. Wood of conifers (Coniferales)	bark; or (b) official statement that the wood originates in areas known to be free from <i>Ips typographus</i> Heer; or (c) there shall be evidence by a mark 'Kilndried', 'KD' or another internationally recognised mark, put on the wood or on its packaging in accordance with current commercial usage, that it has undergone kilndrying to below 20% moisture content, expressed as a percentage of dry matter, at time of manufacture, achieved through an appropriate time/temperature schedule. Without prejudice to the requirements applicable to the wood listed in Annex IV(A)(I)(1.1), (1.2), (1.3), (1.4), (1.5), (7), where appropriate, and Annex IV(B)(1), (2), (3): (a) the wood shall be stripped of its bark; or (b) official statement that the wood originates in areas known to be free from <i>Ips amitinus</i> Eichhof; or (c) there shall be evidence by a mark 'Kilndried', 'KD' or another internationally recognised mark, put on the wood or on its packaging in	EL, F (Corsica), IRL, UK	Ips amitinus Eichhof ^{1;34} are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	accordance with current commercial usage, that it has undergone kilndrying to below 20% moisture content, expressed as a percentage of dry matter, at time of manufacture, achieved through an appropriate time/temperature schedule.		
5. Wood of conifers (Coniferales)	Without prejudice to the requirements applicable to the wood listed in Annex IV(A,)(I)(1.1), (1.2), (1.3), (1.4), (1.5), (7), where appropriate, and Annex IV(B)(1), (2), (3), (4): (a) the wood shall be stripped of its bark; or (b) official statement that the wood originates in areas known to be free from <i>Ips cembrae</i> Heer, or (c) there shall be evidence by a mark 'Kilndried', 'KD' or another internationally recognised mark, put on the wood or on its packaging in accordance with current commercial usage, that it has undergone kilndrying to below 20% moisture content, expressed as a percentage of dry matter, at time of manufacture, achieved through an appropriate time/ temperature schedule.	EL, IRL, UK (Northern Ireland, Isle of Man)	Ips cembrae Heer 1;35 are not known to occur in South Africa
6. Wood of conifers	Without prejudice to the requirements	IRL, CY, UK	Ips sexdentatus Börner 1;37 are not

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
(Coniferales)	applicable to the wood listed in Annex IV(A)(I)(1.1), (1.2), (1.3), (1.4), (1.5), (7), where appropriate, and Annex IV(B)(1), (2), (3), (4), (5):	(Northern Ireland, Isle of Man)	known to occur in South Africa
	(a) the wood shall be stripped of its bark; or (b) official statement that the wood originates in areas known to be free from <i>Ips sexdentatus</i> Börner; or (c) there shall be evidence by a mark 'Kilndried', 'KD' or another internationally recognised mark, put on the wood or on its packaging in accordance with current commercial usage, that it has undergone kilndrying to below 20% moisture content, expressed as a percentage of dry matter, at time of manufacture, achieved through an appropriate time/ temperature schedule.		
6.3. Wood of Castanea Mill.	(a) The wood shall be bark free, or(b) Official statement that the wood:	CZ, EL, (Crete, Lesvos) IRL, S, UK (except the	• Cryphonectria parasitica (Murrill.) Barr. Mill. ^{1;2;8} are not known to occur in South Africa
	(i) originates in areas known to be free from <i>Cryphonectria parasitica</i> (Murrill.) Barr., or (ii) has undergone kiln- drying to below 20% moisture content, expressed as a percentage of dry	Isle of Man)	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
7. Plants of <i>Abies</i> Mill.,	matter, achieved through an appropriate time/ temperature schedule. There shall be evidence thereof by a mark 'Kiln- dried' or 'KD' or another internationally recognised mark, put on the wood or on any wrapping in accordance with current usage. Without prejudice to the provisions	EL, IRL, UK	Not Applicable to South Africa The following plants are probable to delivery and the follo
Larix Mill., Picea A. Dietr., Pinus L. and Pseudotsuga Carr., over 3 m in height, other than fruit and seeds	applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (9), (10) and Annex IV(A) (II)(4), (5), where appropriate, official statement that: - the place of production is free from Dendroctonus micans Kugelan.	(Northern Ireland, Isle of Man and Jersey).	 The following plants are prohibited to be exported from South Africa [Annex III (A)(1)]: Abies Mill., Larix Mill., Picea A. Dietr., Pinus L., Pseudotsuga Carr.
8. Plants of <i>Abies</i> Mill. <i>Larix</i> Mill., <i>Picea</i> A. Dietr. and <i>Pinus</i> L., over 3 m in height, other than fruit and seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (9), (10), Annex IV(A)(II) (4), (5), and Annex IV(B)(7), where appropriate, official statement that: - the place of production is free from <i>Ips duplicatus</i> Sahlberg.	EL, IRL, UK	 Not Applicable to South Africa The following plants are prohibited to be exported from South Africa [Annex III (A)(1)]: Abies Mill., Larix Mill., Picea A. Dietr., Pinus L.,
9. Plants of Abies Mill., Larix Mill., Picea A., Dietr., Pinus L. and	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (9),	IRL, UK	 Not Applicable to South Africa The following plants are prohibited to be exported from South Africa



Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
Pseudotsuga Carr., over 3 m in height, other than fruit and seeds	(10), Annex IV(A)(II) (4), (5) and Annex IV(B)(7), (8), where appropriate, official statement that : — the place of production is free from <i>lps typographus</i> Heer.		[in Annex III (A)(1)]: - Abies Mill., - Larix Mill., - Picea A. Dietr., - Pinus L., - Pseudotsuga Carr.
10. Plants of Abies Mill., Larix Mill., Picea A. Dietr., and Pinus L. over 3 m in height, other than fruit and seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (9), (10), Annex IV(A)(II) (4), (5), and Annex IV(B)(7), (8), (9), where appropriate, official statement that: — the place of production is free from <i>Ips amitinus</i> Eichhof.	EL, F (Corsica), IRL, UK	 Not Applicable to South Africa The following plants are prohibited to be exported from South Africa [Annex III (A)(1)]: Abies Mill., Larix Mill., Picea A. Dietr., Pinus L.,
11. Plants of Abies Mill., Larix Mill., Picea A. Dietr., Pinus L., Pseudotsuga Carr., over 3 m in height, other than fruit and seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (9), (10), Annex IV(A)(II) (4), (5), and Annex IV(B)(7), (8), (9), (10), where appropriate, official statement that:: — the place of production is free from <i>Ips cembrae</i> Heer.	EL, IRL, UK (Northern Ireland, Isle of Man)	Not Applicable to South Africa The following plants are prohibited to be exported from South Africa [Annex III (A)(1)]: - Abies Mill., - Larix Mill., - Picea A. Dietr., - Pinus L., - Pseudotsuga Carr.
12. Plants of <i>Abies</i> Mill., <i>Larix</i> Mill., <i>Picea</i> A. Dietr. and <i>Pinus</i> L., over 3 m in height, other than fruit and seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (9), (10), Annex IV(A)(II) (4), (5), and Annex IV(B)(7), (8), (9), (10), (11),	IRL,CY, UK (Northern Ireland, Isle of Man)	 Not Applicable to South Africa The following plants are prohibited to be exported from South Africa [Annex III (A)(1)]: Abies Mill.,

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	where appropriate, official statement that: - the place of production is free from <i>lps sexdentatus</i> Börner.		Larix Mill.,Picea A. Dietr.,Pinus L.,
14.1. Isolated bark of conifers (Coniferales)	Official statement that the consignment: (a) has been subjected to fumigation or other appropriate treatments against bark beetles; or (b) originates in areas known to be free from <i>Dendroctonus micans</i> Kugelan.	EL, IRL, UK (Northern Ireland, Isle of Man and Jersey).	Dendroctonus micans Kugelan ^{1;11} are not known to occur in South Africa
14.2. Isolated bark of conifers (Coniferales)	Without prejudice to the provisions applicable to the bark listed in Annex IV(B)(14.1), official statement that the consignment: (a) has been subjected to fumigation or other appropriate treatments against bark beetles; or (b) originates in areas known to be free from <i>Ips amitinus</i> Eichhof.	EL, F (Corsica), IRL, UK	Ips amitinus Eichhof ^{1;34} are not known to occur in South Africa
14.3. Isolated bark of conifers (Coniferales)	Without prejudice to the provisions applicable to the bark listed in Annex IV(B)(14.1), (14.2), official statement that the consignment: (a) has been subjected to fumigation	EL, IRL, UK (Northern Ireland, Isle of Man)	Ips cembrae Heer 1;35 are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	or other appropriate treatments against bark beetles; or (b) originates in areas known to be free from <i>lps cembrae</i> Heer.		
14.4. Isolated bark of conifers (Coniferales)	Without prejudice to the provisions applicable to the bark listed in Annex IV(B)(14.1), (14.2), (14.3), official statement that the consignment: (a) has been subjected to fumigation or other appropriate treatments against bark beetles; or (b) originates in areas known to be free from <i>Ips duplicatus</i> Sahlberg.	EL, IRL, UK	Ips duplicatus Sahlberg ^{1;36} are not known to occur in South Africa
14.5. Isolated bark of conifers (Coniferales)	Without prejudice to the provisions applicable to the bark listed in Annex IV(B)(14.1), (14.2), (14.3), (14.4), official statement that the consignment: (a) has been subjected to fumigation or other appropriate treatments against bark beetles; or (b) originates in areas known to be free from <i>lps sexdentatus</i> Börner.	IRL,CY,UK (Northern Ireland, Isle of Man)	Ips sexdentatus Börner 1;37 are not known to occur in South Africa
14.6. Isolated bark of conifers (Coniferales)	Without prejudice to the provisions applicable to the bark listed in Annex IV(B)(14.1), (14.2), (14.3), (14.4), (14.5), official statement that the consignment:	IRL, UK	Ips typographus Heer ^{1;38} are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	 (a) has been subjected to fumigation or other appropriate treatments against bark beetles; or (b) originates in areas known to be free from <i>lps typographus</i> Heer. 		
14.9. Isolated bark of Castanea Mill.	Official statement that the isolated bark: (a) originates in areas known to be free from <i>Cryphonectria parasitica</i> (Murrill.) Barr., or (b) has been subjected to fumigation or other appropriate treatment against <i>Cryphonectria parasitica</i> (Murrill.) Barr. to a specification approved in accordance with the procedure laid down in Article 18.2. There shall be evidence of the fumigation by indicating on the certificates referred to in Article 13.1.(ii), the active ingredient, the minimum bark temperature, the rate (g/ m 3) and the exposure time (h)	CZ, DK, EL, (Crete, Lesvos) IRL, S, UK (except the Isle of Man).	Not Applicable to South Africa Isolated bark of Castanea Mill. are prohibited to be exported to South Africa [Annex III (A) (5)]:
15. Plants of <i>Larix</i> Mill., intended for planting, other than seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (10), Annex IV(A)(II)(5) and Annex IV(B)(7), (8), (9), (10), (11), (12), (13), official statement that:	IRL, UK (Northern Ireland, Isle of Man and Jersey)	 Not Applicable to South Africa Plants of Larix Mill. are prohibited to be exported from South Africa [Annex III (A)(1)]:

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	 the plants have been produced in nurseries and that the place of production is free from Cephalcia lariciphila (Klug.) 		
16. Plants of Pinus L., Picea A. Dietr., Larix Mill., Abies Mill. and Pseudotsuga Carr., intended for planting, other than seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (9), Annex IV(A)(II)(4) and Annex IV(B)(7), (8), (9), (10), (11), (12), (13), (15), where appropriate, official statement that: - the plants have been produced in nurseries and that the place of production is free from Gremmeniella abiedina (Lag.) Morelet.	IRL, UK (Northern Ireland)	Not Applicable to South Africa The following plants are prohibited to be exported from South Africa [Annex III (A)(1)]: Abies Mill., Larix Mill., Picea A. Dietr., Pinus L., Pseudotsuga Carr
17. Plants of <i>Pinus</i> L., intended for planting, other than seeds	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (9), Annex IV(A)(II)(4) and Annex IV(B)(7), (8), (9), (10), (11), (12), (13), (16), official statement that: - the plants have been produced in nurseries and that the place of production and its immediate vicinity is free from Thaumetopoea pityocampa (Den. And Schiff.).	E (Ibiza)	 Not Applicable to South Africa Plants of <i>Pinus</i> L. are prohibited to be exported from South Africa [Annex III (A)(1)]:
18. Plants of Picea A.	Without prejudice to the provisions	EL, IRL, UK	Not Applicable to South Africa



Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
Dietr., intended for planting, other than seeds	applicable to the plants listed in Annex III(A)(1), Annex IV(A)(I)(8.1), (8.2), (10), Annex IV(A)(II)(5) and Annex IV(B)(7), (8), (9), (10), (11), (12), (13), (16), official statement that: - the plants have been produced in nurseries and that the place of production is free from Gilpinia hercyniae (Hartig).	(Northern Ireland, Isle of Man and Jersey)	Plants of <i>Picea</i> A Dietr are prohibited to be exported from South Africa [Annex III (A)(1)]:
19. Plants of Eucalyptus l'Herit, other than fruit and seeds	Official statement that: (a) the plants are free from soil, and have been subjected to a treatment against <i>Gonipterus scutellatus</i> Gyll.; or (b) the plants originate in areas known to be free from <i>Gonipterus</i> scutellatus Gyll.	EL, P (Azores)	Gonipterus scutellatus Gyll. ^{1;33} (eucalyptus weevil) are known to occur in South Africa
20.1. Tubers of Solanum tuberosum L., intended for planting	Without prejudice to the provisions applicable to the plants listed in Annex III (A)(10), (11), Annex IV(A) (I)(25.1), (25.2), (25.3), (25.4), (25.5), (25.6), Annex IV(A)(II) (18.1), (18.2), (18.3), (18.4), (18.6), official statement that the tubers: (a) were grown in an area where Beet necrotic yellow vein virus (BNYVV) is known not to occur; or (b) were grown on land, or in growing	F (Britanny), FI, IRL, P (Azores), UK (Northern Ireland).	 Not Applicable to South Africa Tubers of Solanum tuberosum are prohibited to be exported from South Africa [Annex III (A)(10), (11)]

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
20.2. Tubers of Solanum tuberosum L., other than those mentioned in Annex IV(B)(20.1)	media consisting of soil that is known to be free from BNYVV, or officially tested by appropriate methods and found free from BNYVV; or (c) have been washed free from soil. (a) The consignment or lot shall not contain more than 1% by weight of soil, or (b) the tubers are intended for processing at premises with officially approved waste disposal facilities which ensures that there is no risk of	F (Britanny), FI, IRL, P (Azores), UK (Northern Ireland).	 Not Applicable to South Africa Tubers of Solanum tuberosum are prohibited to be exported from South Africa [Annex III (A)(10), (11)]
20.3. Tubers of Solanum tuberosum L.	spreading BNYVV. Without prejudice to the requirements listed in Annex IV(A)(II)(18.1), (18.2), (18.5), official statement that: - provisions are complied with in respect of Globodera pallida (Stone) Behrens and Globodera rostochiensis (Wollenweber) Behrens which are in accordance with those laid down in Council Directive 69/465/EEC of 8 December 1969 on control of Potato Cyst Eelworm.	LV, SI, SK, FI	Not Applicable to South Africa Tubers of Solanum tuberosum are prohibited to be exported from South Africa [Annex III (A)(10), (11)]



Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
21. Plants and live pollen for pollination of: Amelanchier Med., Chaenomeles Lindl., Cotoneaster Ehrh., Crataegus L., Cydonia Mill., Eriobotrya Lindl., Malus Mill., Mespilus L., Photinia davidiana (Dcne.) Cardot, Pyracantha Roem., Pyrus L. and Sorbus L., other than fruit and seeds	Without prejudice to the prohibitions applicable to the plants listed in Annex IIIA (9), (9.1), (18) and IIIB (1), (2), where appropriate, official statement that:: a) the plants originate in third countries recognised as being free from <i>Erwinia amylovora</i> (Burr.) Winsl. et al. in accordance with the procedure laid down in Article 18(2), or b) the plants originate in pest free areas in third countries which have been established in relation to <i>Erwinia amylovora</i> (Burr.) Winsl. et al. in accordance with the relevant International Standard for Phytosanitary Measures and recognised as such in accordance with the procedure laid down in Article 18(2), or (c) the plants originate in one of the following Cantons of Switzerland: Berne (with the exceptions of the districts of Signau and Trachselwald), Fribourg, Grisons, Vaud, Valais, or (d) the plants originate in the protected zones listed in the right-hand column, or (e) the plants have been produced, or,	E, EE, .F (Corsica), IRL, I (Abruzzi; Apulia; Basilicata; Calabria; Campania; Emilia- Romagna: provinces of Forlí- Cesena (with exclusion of the provincial area situated to the North of the State road n. 9 — Via Emilia) ., Parma, Piacenza and Rimini (with exclusion of the provincial area situated to the North of the State road n. 9 — Via Emilia) .; Friuli- Venezia Giulia; Lazio; Liguria; Lombardy; Marche; Molise;	 Not Applicable to South Africa The following plants are prohibited to be exported from South Africa [Annex IIIA (9), (9.1), (18)]: Chaenomeles Ldl., Cydonia Mill., Crateagus L., Malus Mill., Pyrus L., Applicable to South Africa The following plants are not prohibited to be exported to protected zones from South Africa [Annex III (B) (1), (2)]: Amelanchier Med., Eriobotrya Lindl., Mespilus L., Pyracantha Roem., Sorbus L., Cotoneaster Ehrh. Photinia davidiana (Dcne.) Cardot Erwinia amylovora (Burr.) Winsl. et al.^{1;4;8} are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	if moved into a «buffer zone» kept and maintained for a period of at least 7 months including the period 1 April to 31 October of the last complete cycle of vegetation, on a field: (aa) located at least 1 km inside the border of an officially designated «buffer zone» of at least 50 km2 where host plants are subject to an officially approved and supervised control regime established at the latest before the beginning of the complete cycle of vegetation preceding the last complete cycle of vegetation, with the object of minimising the risk of <i>Erwinia amylovora</i> (Burr.) Winsl. <i>et al.</i> being spread from the plants grown there. Details of the description of this «buffer zone» shall be kept available to the Commission and to other Member States. Once the «buffer zone» is established, official inspections shall be carried out in the zone not comprising the field and its surrounding zone of 500 m width, at least once since the beginning of the last complete cycle of vegetation at the most appropriate time, and all host plants showing symptoms of <i>Erwinia amylovora</i> (Burr.) Winsl. <i>et al.</i> should	Piedmont; Sardinia; Sicily; Trentino- Alto Adige: autonomous province of Trento; .Tuscany; Umbria; Valle d'Aosta; Veneto: except in the province of Rovigo the communes Rovigo, Polesella, Villamarzana, Fratta Polesine, San Bellino, Badia Polesine, Trecenta, Ceneselli, Pontecchio Polesine, Arquà Polesine, Costa di Rovigo, Occhiobello, Lendinara, Canda,	
	be removed immediately. The results	Ficarolo,	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	of these inspections shall be supplied	Guarda Veneta,	
	by 1 May each year to the	Frassinelle	
	Commission and to other Member	Polesine,	
	States, and	Villanova del	
	(bb) which has been officially	Ghebbo, Fiesso	
	approved, as well as the «buffer	Umbertiano,	
	zone», before the beginning of the	Castelguglielmo	
	complete cycle of vegetation	, Bagnolo di Po,	
	preceding the last complete cycle of	Giacciano con	
	vegetation, for the cultivation of plants	Baruchella,	
	under the requirements laid down in	Bosaro,	
	this point, and	Canaro, Lusia,	
	(cc) which, as well as the surrounding	Pincara,	
	zone of a width of at least 500 m, has	Stienta, Gaiba,	
	been found free from <i>Erwinia</i>	Salara, and in	
	amylovora (Burr.) Winsl. et al. since	the province of	
	the beginning of the last complete	Padova the	
	cycle of vegetation, at official	communes	
	inspection carried out at least:	Castelbaldo,	
		Barbona,	
	 twice in the field at the most 	Piacenza	
	appropriate time, i.e. once during June	d'Adige,	
	to August and once during August to	Vescovana, S.	
	November, and	Urbano, Boara	
	 once in the said surrounding zone at 	Pisani, Masi,	
	the most appropriate time, i.e. during	and in the	
	August to November, and	province of	
		Verona the	
	(dd) from which plants were officially	communes	
	tested for latent infections in	Palù,	
	accordance with an appropriate	Roverchiara,	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	laboratory method on samples officially drawn at the most appropriate period. Between 1 April 2004 and 1 April 2005, these provisions shall not apply to plants moved into and within the protected zones listed in the right-hand column which have been produced and maintained on fields located in officially designated «buffer zones», according to the relevant requirements applicable before 1 April 2004.	Legnago, Castagnaro, Ronco all'Adige, Villa Bartolomea, Oppeano, Terrazzo, Isola Rizza, Angiari), LV, LT, A (Burgenland, Carinthia, Lower Austria, Tirol (administrative district Lienz), Styria, Vienna), P, SI (except the Gorenjska and Maribor regions), SK (except the communes of Blahová, Horné Mýto and Okoc è (Dunajská Streda County), Hronovce and Hronské Klacany (Levice County), Velké Ripnany	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
		(Topolcany County), Málinec (Poltár County), Hrhov (Rožnava County), Kazimír, Luhyna, Malý Horeš, Svätuše and Zatín (Trebišov County)) ., FI, UK (Northern Ireland, Isle of Man and Channel Islands)	
21.1. Plants of Vitis L., other than fruit and seeds	Without prejudice to the prohibition in Annex III Part A point 15, on introducing plants of <i>Vitis</i> L. other than fruits from third countries (except Switzerland) into the Community, official statement that the plants: (a) originate in an area known to be free from <i>Daktulosphaira vitifoliae</i> (Fitch); or (b) have been grown at a place of production which has been found free	CY	Not Applicable to South Africa Pants of Vitis L. are prohibited to be exported from South Africa [Annex IIIA (15)]:

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	from Daktulosphaira vitifoliae (Fitch) on official inspections carried out during the last two complete cycles of vegetation; or (c) have been subject to fumigation or other appropriate treatment against		
21.2. Fruits of <i>Viti</i> s L.	Daktulosphaira vitifoliae (Fitch). The fruits shall be free from leaves and official statement that the fruits:	CY	Daktulosphaira vitifoliae (Fitch) (grapevine phylloxera) are known to occur in South Africa
	(a) originate in an area known to be free from <i>Daktulosphaira vitifoliae</i> (Fitch)(b) have been grown at a place of production which has been found free from <i>Daktulosphaira vitifoliae</i> (Fitch) on official inspections carried out during the last two complete cycles of vegetation; or (c) have been subject to fumigation or other appropriate treatment against <i>Daktulosphaira vitifoliae</i> (Fitch).		
21.3 From 15 March to 30 June, beehives	There shall be documented evidence that the beehives: a) originate in third countries recognised as being free from <i>Erwinia amylovora</i> (Burr.) Winsl. et al. in accordance with the procedure laid	EE, .F (Corsica), IRL, I (Abruzzi; Apulia; Basilicata; Calabria; Campania;	Erwinia amylovora (Burr.) Winsl. et al. ^{1;4;8} are not known to occur in South Africa
	down in Article 18(2), or b) originate in one of the following	Emilia- Romagna:	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	Cantons of Switzerland: Berne (with the exceptions of the districts of Signau and Trachselwald), Fribourg, Grisons, Vaud, Valais, or c) originate in the protected zones listed in the right-hand column, or d) have undergone an appropriate quarantine measure before being moved.	provinces of Forlí- Cesena (with exclusion of the provincial area situated to the North of the State road n. 9 — Via Emilia) ., Parma, Piacenza and Rimini (with exclusion of the provincial area situated to the North of the State road n. 9 — Via Emilia) .; Friuli- Venezia Giulia; Lazio; Liguria; Lombardy; Marche; Molise; Piedmont; Sardinia; Sicily; Tuscany; Umbria; Valle d'Aosta; Veneto: except in the province of Rovigo the	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
		Rovigo,	
		Polesella,	
		Villamarzana,	
		Fratta Polesine,	
		San Bellino,	
		Badia Polesine,	
		Trecenta,	
		Ceneselli,	
		Pontecchio	
		Polesine, Arquà	
		Polesine, Costa	
		di Rovigo,	
		Occhiobello,	
		Lendinara,	
		Canda,	
		Ficarolo,	
		Guarda Veneta,	
		Frassinelle	
		Polesine,	
		Villanova del	
		Ghebbo, Fiesso	
		Umbertiano,	
		Castelguglielmo	
		, Bagnolo di Po,	
		Giacciano con	
		Baruchella,	
		Bosaro,	
		Canaro, Lusia,	
		Pincara,	
		Stienta,	
		Gaiba, Salara,	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
		and in the	
		province of	
		Padova the	
		communes	
		Castelbaldo,	
		Barbona,	
		Piacenza	
		d'Adige,	
		Vescovana, S.	
		Urbano, Boara	
		Pisani, Masi,	
		and in the	
		province of	
		Verona the	
		communes	
		Palù, Roverchiara,	
		Legnago, Castagnaro,	
		Ronco	
		all'Adige, Villa	
		Bartolomea,	
		Oppeano,	
		Terrazzo, Isola	
		Rizza, Angiari),	
		LV, LT, A	
		(Burgenland,	
		Carinthia,	
		Lower Austria,	
		Tirol	
		(administrative	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
		district Lienz),	
		Styria, Vienna),	
		P, SI (except	
		the Gorenjska	
		and Maribor	
		regions) .,SK	
		(except the	
		communes of	
		Blahová, Horné	
		Mýto and Okoc	
		è (Dunajská	
		Streda County),	
		Hronovce and	
		Hronské	
		Klacany (Levice	
		County), Velké	
		Ripnany	
		(Topolcany	
		County),	
		Málinec (Poltár	
		County), Hrhov	
		(Rožnava	
		County),	
		Kazimír,	
		Luhyna, Malý	
		Horeš,	
		Svätuše and	
		Zatín (Trebišov	
		County)) ., FI,	
		UK (Northern	
		Ireland, Isle of	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
		Man and Channel Islands)	
22. Plants of Allium porrum L., Apium L., Beta L., other than those mentioned in Annex IV (B)(25) and those intended for animal fodder, Brassica napus L., Brassica rapa L., Daucus L., other than plants intended for planting	 (a) The consignment or lot shall not contain more than 1% by weight of soil, or (b) the plants are intended for processing at premises with officially approved waste disposal facilities which ensures that there is no risk of spreading BNYVV 	F (Brittany), FI, IRL, P (Azores), UK (Northern Ireland),	Beet necrotic yellow vein virus ^{1,4,8} are not known to occur in South Africa
23. Plants of Beta vulgaris L., intended for planting, other than seed	(a) Without prejudice to the requirements applicable to the plants listed in Annex IV(A)(I) (35.1), (35.2), Annex IV(A)(II)(25) and Annex IV(B)(22), official statement that the plants: (aa) have been officially individually tested and found free from Beet necrotic yellow vein virus (BNYVV); or (bb) have been grown from seeds complying with the requirements listed in Annex IV(B)(27.1) and (27.2), and grown in areas where BNYVV is known not to occur, or	F (Brittany), FI, IRL, P (Azores), UK (Northern Ireland)	Beet necrotic yellow vein virus ^{1,4,8} are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
24.1. Unrooted cuttings of Euphorbia pulcherrima	 grown on land, or in growing media, officially tested by appropriate methods and found free from BNYVV, and sampled, and the sample tested and found free from BNYVV; (b) the organisation or research body holding the material shall inform their official Member State plant protection service of the material held. Without prejudice to the requirements applicable to the plants listed in Annex 	IRL, P (Azores, Beira Interior,	Bemisia tabaci Genn. (European populations)¹ [tobacco whitefly; silver]
Willd., intended for planting	IV(A)(I) (45.1), where appropriate, official statement that: (a) the unrooted cuttings originate in an area known to be free from Bemisia tabaci Genn. (European populations), or (b) no signs of Bemisia tabaci Genn. (European populations) have been observed either on the cuttings or on the plants from which the cuttings are derived and held or produced at the place of production on official inspections carried out at least each three weeks during the whole production period of these plants on this place of production, or (c) in cases where Bemisia tabaci Genn. (European populations) has	Beira Interior, Beira Litoral, Entre Douro e Minho, Madeira, Ribatejo e Oeste (communes of Alcobaça, Alenquer, Bombarral, Cadaval, Caldas da Rainha, Lourinhã, Nazaré, Obidos, Peniche and Torres Vedras)	leaf whitefly] are known o occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	been found at the place of production, the cuttings and the plants from which the cuttings are derived and held or produced in this place of production have undergone an appropriate treatment to ensure freedom from <i>Bemisia tabaci</i> Genn. (European populations) and subsequently this place of production shall have been found free from <i>Bemisia tabaci</i> Genn. (European populations) as a consequence of the implementation of appropriate procedures aiming at eradicating <i>Bemisia tabaci</i> Genn. (European populations), in both official inspections carried out weekly during the three weeks prior to the movement from this place of production and in monitoring procedures throughout the said period. The last inspection of the above weekly inspections shall be carried out immediately prior to the above movement	and Trás- os- Montes .), FI, S, UK	
24.2. Plants of Euphorbia pulcherrima Willd., intended for planting, other than: – seeds,	Without prejudice to the requirements applicable to the plants listed in Annex IV(A)(I) (45.1), where appropriate official statement that: (a) the plants originate in an area	IRL, P (Azores, Beira Interior, Beira Litoral, Entre Douro e Minho, Madeira,	Bemisia tabaci Genn. (European populations)¹ [tobacco whitefly; silver leaf whitefly] are known o occur in South Africa
those for which there	known to be free from <i>Bemisia tabaci</i>	Ribatejo e	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
shall be evidence by their packing or their flower (or bract) development or by other means that they are intended for sale to final consumers not involved in professional plant production, – those specified in 24.1	(b) no signs of <i>Bemisia tabaci</i> Genn. (European populations) have been observed on plants at the place of production on official inspections carried out at least once each three weeks during the nine weeks prior to marketing, or (c) in cases where <i>Bemisia tabaci</i> Genn. (European populations) has been found at the place of production, the plants, held or produced in this place of production have undergone an appropriate treatment to ensure freedom from <i>Bemisia tabaci</i> Genn. (European populations) and subsequently this place of production shall have been found free from <i>Bemisia tabaci</i> Genn. (European populations) as a consequence of the implementation of appropriate procedures aiming at eradicating <i>Bemisia tabaci</i> Genn. (European populations), in both official inspections carried out weekly during the three weeks prior to the movement from this place of production and in monitoring procedures throughout the said period. The last inspection of the above weekly inspections shall be carried out immediately prior to the	Oeste (communes of Alcobaça, Alenquer, Bombarral, Cadaval, Caldas da Rainha, Lourinhã, Nazaré, Obidos, Peniche and Torres Vedras) and Trás- os- Montes .), FI, S, UK	

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	above movement, and		
	(d) evidence is available that the		
	plants have been produced from cuttings which:		
	cuttings which.		
	(da) originate in an area known to be		
	free from <i>Bemisia tabaci</i> Genn.		
	(European populations), or		
	(db) have been grown at a place of		
	production where no signs of Bemisia		
	tabaci Genn. (European populations)		
	have been observed on official		
	inspections carried out at least once		
	each three weeks during the whole		
	production period of these plants, or (dc) in cases where <i>Bemisia tabaci</i>		
	Genn. (European populations) has		
	been found at the place of production,		
	have been grown on plants held or		
	produced in this place of production		
	having undergone an appropriate		
	treatment to ensure freedom from		
	Bemisia tabaci Genn. (European		
	populations) and subsequently this		
	place of production shall have been		
	found free from <i>Bemisia tabaci</i>		
	Genn. (European populations) as a		
	consequence of the implementation of		
	appropriate procedures aiming at		
	eradicating <i>Bemisia tabaci</i> Genn.		
	(European populations), in both official		

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	inspections carried out weekly during the three weeks prior to the movement from this place of production and in monitoring procedures throughout the said period. The last inspection of the above weekly inspections shall be carried out immediately prior to the above movement		
24.3. Plants of Begonia L., intended for planting, other than seeds, tubers and corms, and plants of Ficus L. and Hibiscus L., intended for planting, other than seeds, other than those for which there shall be evidence by their packing or their flower development or by other means that they are intended for sale to final consumers not involved in professional plant production	Without prejudice to the requirements applicable to the plants listed in Annex IV(A)(I) (45.1), where appropriate, official statement that: (a) the plants originate in an area known to be free from <i>Bemisia tabaci</i> Genn. (European populations), or (b) no signs of <i>Bemisia tabaci</i> Genn. (European populations) have been observed on plants at the place of production on official inspections carried out at least once each three weeks during the nine weeks prior to marketing, or (c) in cases where <i>Bemisia tabaci</i> Genn. (European populations) has been found at the place of production, the plants, held or produced in this place of production have undergone an appropriate treatment to ensure freedom from <i>Bemisia tabaci</i> Genn. (European	IRL, P (Azores, Beira Interior, Beira Litoral, Entre Douro e Minho, Madeira, Ribatejo e Oeste (communes of Alcobaça, Alenquer, Bombarral, Cadaval, Caldas da Rainha, Lourinhã, Nazaré, Obidos, Peniche and Torres Vedras) and Trás- os-Montes .), FI, S,	Bemisia tabaci Genn. (European populations)¹ [tobacco whitefly; silver leaf whitefly] are known o occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
25. Plants of <i>Beta</i>	populations) and subsequently this place of production shall have been found free from <i>Bemisia tabaci</i> Genn. (European populations) as a consequence of the implementation of appropriate procedures aiming at eradicating <i>Bemisia tabaci</i> Genn. (European populations), in both official inspections carried out weekly during the three weeks prior to the movement from this place of production and in monitoring procedures throughout the said period. The last inspection of the above weekly inspections shall be carried out immediately prior to the above movement Official statement that:	F (Brittany), FI,	Beet necrotic yellow vein virus ^{1,4,8}
vulgaris L., intended for industrial processing	(a) the plants are transported in such a manner as to ensure that there is no risk of spreading BNYVV, and are intended to be delivered to a processing plant with officially approved waste disposal facilities, which ensures that there is no risk of spreading BNYVV, or (b) the plants have been grown in an area where BNYVV is known not to occur	IRL, P (Azores), UK (Northern Ireland).	are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
26. Soil from beet and unsterilized waste from beet (Beta vulgaris L.)	Official statement that soil or waste: (a) has been treated to eliminate contamination with BNYVV, or (b) is intended to be transported for disposal in an officially approved manner, or (c) comes from Beta vulgaris plants grown in an area where BNYVV is known not to occur	F (Brittany), FI, IRL, P (Azores), UK (Northern Ireland)	Beet necrotic yellow vein virus ^{1,4,8} are not known to occur in South Africa
27.1. Seeds and fodder beet seed of the species Beta vulgaris L.	Without prejudice to the provisions of Council Directive 66/400/EEC of 14 June 1966 on the marketing of beet seed18, where applicable, official statement that: (a) the seed of the categories "basic seed" and "certified seed" satisfies the conditions laid down in Annex I(B)(3) to Directive 66/400/EEC; or (b) in the case of "seed not finally certified", the seed: – satisfies the conditions laid down in Article (15)(2) of Directive 66/400/EEC, and – is intended for processing that will satisfy the conditions laid down in Annex I(B) to Directive 66/400/EEC and delivered to a processing enterprise with officially approved	F (Brittany), FI, IRL, P (Azores), UK (Northern Ireland)	Beet necrotic yellow vein virus ^{1,4,8} are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
O7 O Manadalla anadad	controlled waste disposal, to prevent the spread of Beet necrotic yellow vein virus (BNYVV) ; (c) the seed has been produced from a crop grown in an area where BNYVV is known not to occur.	E (D : 11) El	148
27.2. Vegetable seed of the species Beta vulgaris L	Without prejudice to the provisions of Council Directive 70/458/EEC of 29 September 1970 on the marketing of vegetable seed19, where applicable, official statement that: (a) the processed seed contains no more than 0,5% by weight of inert matter, in the case of pelleted seed this standard shall be met prior to pelleting; or (b) in the case of non-processed seed, the seed: — shall be officially packed in such a manner as to ensure that there is no risk of spread of BNYVV, and — is intended for processing that will satisfy the conditions laid down in (a) and delivered to a processing enterprise with officially approved controlled waste disposal, to prevent the spread of Beet necrotic yellow vein virus (BNYVV); or (c) the seed has been produced from a crop grown in an area where	F (Brittany), FI, IRL, P (Azores), UK (Northern Ireland)	Beet necrotic yellow vein virus ^{1,4,8} are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	BNYVV is known not to occur		
28. Seeds of Gossypium spp.	Official statement that: (a) the seed has been aciddelinted, and (b) no symptoms of Glomerella gossypii Edgerton have been observed at the place of production since the beginning of the last complete cycle of vegetation, and that a representative sample has been tested and has been found free from Glomerella gossypii Edgerton in those tests.	EL	Glomerella gossypii Edgerton 1;2;8 [Colletotrichum gossypii Southw.] (anthracnose of cotton) are known to occur in south Africa
28.1. Seeds of	Official statement that:	EL, E	Applicable to south Africa
Gossypium spp	the seed has been aciddelinted.	(Andalucía, Catalonia, Extremadura, Murcia, Valencia)	
29. Seeds of <i>Mangifera</i> spp.	Official statement that: - the seeds originate in areas known to be free from Sternochetus mangiferae Fabricius.	E (Granada and Malaga), P (Alentejo, Algarve and Madeira)	Sternochetus mangiferae Fabricius 1;8 (mango seed weevil) are known to occur in south Africa
30. Used agricultural machinery	(a) The machinery shall be cleaned and free from soil and plant debris when brought in on places of production where beets are	F (Brittany), FI, IRL, P (Azores), UK (Northern Ireland)	Beet necrotic yellow vein virus ^{1,4,8} are not known to occur in South Africa

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	grown, or (b) the machinery shall come from an area where BNYVV is known not to occur		
31. Fruits of <i>Citrus</i> L., <i>Fortunella</i> Swingle, <i>Poncirus</i> Raf., and their hybrids originating in E, F (except Corsica), CY and I	Without prejudice to the requirement in Annex IV Part A Section II point 30.1 that packaging should bear an origin mark: (a) the fruits shall be free from leaves and peduncles; or (b) in the case of fruits with leaves or peduncles, official statement that: - the fruits are packed in closed containers which have been officially sealed and shall remain sealed during their transport through a protected zone, recognised for these fruits, and shall bear a distinguishing mark to be reported on the passport.	EL, F (Corsica), M, P	Not applicable to South Africa
32. Plants of <i>Vitis</i> L., other than fruit and seeds.	Without prejudice to the provisions applicable to the plants listed in Annex III(A)(15), IVA(II) 17, and IVB21.1, official statement that:: (a) the plants originate and have been grown in a place of production in a country where Grapevine flavescence dorée MLO is not known to occur; or	CZ, FR (Champagne- Ardenne, Lorraine and Alsace), IT (Basilicata)	 Not Applicable to South Africa Pants of Vitis L. are prohibited to be exported from South Africa [Annex IIIA (15)]:

Plants, plant products and other objects	Special requirements	Protected zone(s)	Export Certification guidelines
	(b) the plants originate and have been grown in a place of production in an area free from Grapevine flavescence dorée MLO established by the national plant protection organisation in accordance with the relevant international standards; or (c) the plants originate and have been grown in either the Czech Republic, France (Champagne- Ardennes, Lorraine and Alsace), or Italy (Basilicata); or (d) the plants originate and have been grown in a place of production where: (aa) no symptoms of Grapevine flavescence dorée MLO have been observed on the mother- stock plants since the beginning of the last two complete cycles of vegetation; and (bb) either (i) no symptoms of Grapevine flavescence dorée MLO have been found on the plants in the place of production; or, (ii) the plants have undergone hot water treatment of at least 50 °C for 45 minutes in order to eliminate the presence of Grapevine flavescence dorée MLO.		



ANNEX V

PLANTS, PLANT PRODUCTS AND OTHER OBJECTS WHICH MUST BE SUBJECT TO A PLANT HEALTH INSPECTION (AT THE PLACE OF PRODUCTION IF ORIGINATING IN THE COMMUNITY, BEFORE BEING MOVED WITHIN THE COMMUNITY — IN THE COUNTRY OF ORIGIN OR THE CONSIGNOR COUNTRY, IF ORIGINATING OUTSIDE THE COMMUNITY) BEFORE BEING PERMITTED TO ENTER THE COMMUNITY

PART B

PLANTS, PLANT PRODUCTS AND OTHER OBJECTS ORIGINATING IN TERRITORIES, OTHER THAN THOSE TERRITORIES REFERRED TO IN PART A

- I. Plants, plant products and other objects which are potential carriers of harmful organisms of relevance for the entire Community
- 1. Plants, intended for planting, other than seeds but including seeds of *Cruciferae Gramineae*, *Trifolium* spp., originating in Argentina, Australia, Bolivia, Chile, New Zealand and Uruguay, *genera Triticum, Secale* and *X Triticosecale* from Afghanistan, India, Iran, Iraq, Mexico, Nepal, Pakistan, South Africa and the USA. *Capsicum* spp. *Helianthus annuus* L., *Lycopersicon lycopersicum* (L.) Karsten ex Farw., *Medicago sativa* L., *Prunus* L., *Rubus* L., *Oryza* spp., *Zea mays* L., *Allium ascalonicum* L., *Allium cepa* L., *Allium porrum* L., *Allium schoenoprasum* L. and *Phaseolus* L.
- 2. Parts of plants, other than fruits and seeds of:
- Castanea Mill., Dendranthema (DC) Des. Moul., Dianthus L., Gypsophila L., Pelargonium l'Herit. ex Ait, Phoenix spp., Populus L., Quercus L., Solidago L. and cut flowers of Orchidaceae.
- conifers (Coniferales).
- Acer saccharum Marsh., originating in North American countries,
- Prunus L., originating in non-European countries,
- Cut flowers of Aster spp., Eryngium L., Hypericum L., Lisianthus L., Rosa L. and Trachelium L., originating in non-European countries,
- Leafy vegetables of *Apium graveolens* L. and *Ocimum* L.
- 3. Fruits of:
- Citrus L., Fortunella Swingle, Poncirus Raf., and their hybrids, Momordica L. and Solanum melongena L.,
- Annona L., Cydonia Mill., Diospyros L., Malus Mill., Mangifera L., Passiflora L., Prunus L., Psidium L., Pyrus L., Ribes L. Syzygium Gaertn., and Vaccinium L., originating in non-European countries.
- 4. Tubers of Solanum tuberosum L.
- 5. Isolated bark of:



- conifers (Coniferales),
- Acer saccharum Marsh, Populus L., and Quercus L. other than Quercus suber L.
- 6. Wood within the meaning of the first subparagraph of Article 2(2), where it:
- (a) has been obtained in whole or part from one of the order, genera or species as described hereafter:
- Castanea Mill.,
- Castanea Mill., Quercus L., including wood which has not kept its natural round surface, originating in North American countries,
- Platanus L., including wood which has not kept its natural round surface,
- Conifers (*Coniferales*), other than *Pinus* L., originating in non- European countries, including wood which has not kept its natural round surface,
- Pinus L., including wood which has not kept its natural round surface,
- *Populus* L., originating in countries of the American continent,
- *Acer saccharum* Marsh., including wood which has not kept its natural surface, originating in North American countries, and
- b) meets one of the following descriptions laid down in Annex I, Part II to Regulation (EEC) No 2658/87.

CN code	Description
4401 10 00	Fuel wood, in logs, in billets, in twigs, in
	faggots or in similar forms
ex 4401 21 00	Wood in chips or particles
	— coniferous originating in non-
	European countries
4401 22	Wood in chips or particles
	— non-coniferous
ex 4401 30	Wood waste and scrap, not
	agglomerated in logs,
	briquettes, pellets, or similar forms
ex 4403 20	Wood in the rough, whether or not
	stripped of bark or sapwood or roughly
	squared
	— other than treated with paint, stains,
	creosote or other preservatives,
	coniferous originating in non-European
	countries
4403 91 00	Wood in the rough, whether or not
	stripped of bark or sapwood or
	squared:
	— other than treated with paint, stains,
	creosote or other preservatives
	— oak (<i>Quercus</i> spp.)
	— vak (Quercus spp.)

CN code	Description
4403 99	Wood in the rough, whether or not stripped of bark or sapwood, or squared: — other than treated with paint, stains, creosote or other preservatives, — other than coniferous, of oak (Quercus spp.) or of beech (Fagus
ex 4404 10 00	spp.) Split poles: piles, pickets and stakes of wood, pointed but not sawn lengthwise: — coniferous, originating in non- European countries
ex 4404 20 00	Split poles: piles, pickets and stakes of wood, pointed but not sawn lengthwise: — non-coniferous
4406 10 00	Railway or tramway sleepers (crossties) of wood: — not impregnated
ex 4407 10	Wood sawn or chipped lengthwise, sliced or peeled, not planed, sanded or finger-jointed, of a thickness exceeding 6 mm, in particular beams, planks, flitches, boards, laths: — coniferous originating in non-European countries
ex 4407 91	Wood sawn or chipped lengthwise, sliced or peeled, not planed, sanded or finger-jointed, of a thickness exceeding 6 mm, in particular beams, planks, flitches, boards, laths: — of oak (<i>Quercus</i> spp.)
ex 4407 99	Wood sawn or chipped lengthwise, sliced or peeled, not planed, sanded or finger-jointed, of a thickness exceeding 6 mm, in particular beams, planks, flitches, boards, laths: — other than coniferous, of tropical woods, of oak (<i>Quercus</i> spp.) or of beech (<i>Fagus</i> spp.)
ex 4415 10	Packing cases, crates and drums of wood originating in non-European countries
ex 4415 20	Pallets, box pallets and other load boards, of wood originating in non-European countries



CN code	Description
ex 4416 00	Barrels of wood, including staves, of
	oak (Quercus spp.)

Pallets and box pallets (CN code ex 4415 20) are also exempted where they satisfy the standard set up for 'UIC pallets' and are marked accordingly.

- 7. (a) Soil and growing medium as such, which consists in whole or in part of soil or solid organic substances such as parts of plants, humus including peat or bark, other than that composed entirely of peat.
- (b) Soil and growing medium, attached to or associated with plants, consisting in whole or in part of material specified in (a) or consisting in part of any solid inorganic substance, intended to sustain the vitality of the plants, originating in:
- Turkey,
- Belarus, Georgia, Moldova, Russia, Ukraine,
- non-European countries, other than Algeria, Egypt, Israel, Libya, Morocco, Tunisia.
- 8. Grain of the genera *Triticum, Secale* and *X Triticosecale* originating in Afghanistan, India, Iran, Iraq, Mexico, Nepal, Pakistan, South Africa and the USA.

II. Plants, plant products and other objects which are potential carriers of harmful organisms of relevance for certain protected zones

Without prejudice to the plants, plant products and other objects listed in I.

- 1. Plants of *Beta vulgaris* L., intended for industrial processing.
- 2. Soil from beet and unsterilized waste from beet (Beta vulgaris L.).
- 3. Live pollen for pollination of *Amelanchier* Med., *Chaenomeles* Lindl., *Cotoneaster* Ehrh., *Crataegus* L., *Cydonia* Mill., *Eriobotrya* Lindl., *Malus* Mill., *Mespilus* L., *Photinia davidiana* (Dcne.) Cardot, *Pyracantha* Roem., *Pyrus* L. and *Sorbus* L.;
- 4. Parts of plants, other than fruit and seeds, of *Amelanchier* Med., *Chaenomeles* Lindl., *Cotoneaster* Ehrh., *Crataegus* L., *Cydonia* Mill., *Eriobotrya* Lindl., *Malus* Mill., *Mespilus* L., *Photinia davidiana* (Dcne.) Cardot, *Pyracantha* Roem., *Pyrus* L. and *Sorbus* L.
- 5. Seeds of *Dolichos Jacq.*, *Mangifera* spp., *Beta vulgaris* L. and *Phaseolus vulgaris* L.
- 6. Seeds and fruits (bolls) of *Gossypium* spp. and unginned cotton.
- 6a. Fruits of Vitis L.
- 7. Wood within the meaning of the first subparagraph of Article 2(2), where it



- (a) has been obtained in whole or part from conifers (*Coniferales*), other than *Pinus* L., originating in European third countries; and
- (b) meets one of the following descriptions laid down in Annex I, Part II to Regulation (EEC) No 2658/87.

CN code	Description
4401 10 00	Fuel wood, in logs, in billets, in twigs, in
	faggots or in similar forms
4401 21 00	Wood in chips or particles
ex 4401 30	Wood waste and scrap, not
	agglomerated in logs, briquettes,
	pellets or similar forms
4403 20	Wood in the rough, whether or not
	stripped of bark or sapwood, or roughly
	squared:
	— other than treated with paint, stains,
	creosote or other preservatives
ex 4404 10 00	Split poles: piles, pickets and stakes of
	wood, pointed but not sawn lengthwise
4406 10 00	Railway or tramway sleepers (cross-
	ties):
	— not impregnated
ex 4407 10	Wood sawn or chipped lengthwise,
	sliced or peeled, not planed, sanded or
	finger-jointed, of a thickness exceeding
	6 mm, in particular beams, planks,
4445.40	flitches, boards, laths
4415 10	Packing cases, crates and drums
4415 20	Pallets, box pallets and other load
	boards

Pallets and box pallets (CN code ex 4415 20) are also exempted where they satisfy the standards set up for 'UIC pallets' and are marked accordingly.

8. Parts of plants of Eucalyptus l'Herit.



ANNEX VI

PLANTS AND PLANT PRODUCTS TO WHICH SPECIAL ARRANGEMENTS MAY BE APPLIED

- 1. Cereals and their derivatives.
- 2. Dried leguminous plants.
- 3. Manioc tubers and their derivatives.
- 4. Residues from the production of vegetable oils.



REFERENCES USED IN GUIDELINE:

- 1. CAB International (2007) *Crop Protection Compendium, 2007 edition.* Wallingford, UK: CAB International.
- 2. Crouse, P.W., Phillips, A.J.L. & Baxter, A.P. (2000) *Phytopathogenic Fungi from South Africa*. University of Stellenbosch, Department of Plant Pathology. University of Stellenbosch Printers. Stellenbosch, South Africa.
- 3. Ferris H. & Caswell-Chen, E.P. (1997) Nemabase 1.2. Department of Nematology. University of California Davis, California.
- 4. NDA. 2008. Database on pathogens of economic importance. Department of Agriculture, Pretoria.
- 5. White, I.M. AND Elson-Harris, M.M. (1992) *Fruit Flies of Economic Significance: Their Identification and Bionomics*. CAB International: Wallingford, UK. 601 pp.
- 6. Heyns, J. 1971. A guide to the plant and soil nematodes of South Africa. Balkema, Cape Town.
- 7. Kleynhans, Van den Berg, E., Swart, A., Marais & Buckley. 1996. Plant nematodes in South Africa. Plant Protection Research Institute. Pretoria.
- 8. EPPO (2007) EPPO A1 and A2 Lists of pests recommended for regulation as quarantine pests. http://www.eppo.org.
- 9. Ben-Dov, Y., Miller, D.R. & Gibson, G.A.P. (2006) ScaleNet. WEB site: http://www.sel.barc.usda.gov/scalenet/scalenet.htm. Accessed: April 2008.
- 10. EPPO/CABI (1997) Quarantine Pests for Europe (*Aschistonyx eppoi*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 11.EPPO/CABI (1997) Quarantine Pests for Europe (*Hishimonus phycitis*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 12. Department of Agriculture (2007) Official pest report ZA1/1: Scirtothrips dorsalis no longer present in South Africa. WEB site: http://www.ippc.int. Accessed January 2007.
- 13. Bedford, E.C.G., van den Berg, M.A. & de Villiers, E.A. (1998) *Citrus pests in the Republic of South Africa*. Second Edition. Institute for Tropical and Subtropical Crops. Agricultural Research Council, Nelspruit.
- 14. Jeppson, L.R., Keifer, H.H. & Baker, E.W. 1975) *Mites Injurious to Economic Plants*. University of California Press, Berkeley, California.

- 15. Personal communication (2008) Dr Esther van den Berg expert on *Radopholus* spp. 30-05-2008.
- 16.EPPO/CABI (1997) Quarantine Pests for Europe (Citrus blight disease). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK
- 17.EPPO/CABI (1997) Quarantine Pests for Europe (Cherry little cherry 'virus'). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 18.EPPO/CABI (1997) Quarantine Pests for Europe (Citrus ringspot virus). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 19.EPPO/CABI (1997) Quarantine Pests for Europe (Palm lethal yellowing phytoplasma). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 20. EPPO/CABI (1997) Quarantine Pests for Europe (Lime withes' broom phytoplasma). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 21. Department of Agriculture (1994) Press release by Dr D.P. Keetch, Director: Plant and Quality Control of the Department of Agriculture: Downey mildew on sunflower in South Africa. South African Government Information. WEB site: http://www.gov.za, Accessed April 2008.
- 22. EPPO/CABI (1997) Quarantine Pests for Europe (Citrus vein enation 'virus'). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 23.EPPO/CABI (1997) Quarantine Pests for Europe (Grapevine flavescence dorée phytoplasma). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 24.EPPO/CABI (1997) Quarantine Pests for Europe (Potato stolbur phytoplasma). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 25. EPPO/CABI (1997) Quarantine Pests for Europe (Raspberry ringspot nepovirus). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.

- 26. EPPO/CABI (1997) Quarantine Pests for Europe (Spiroplasma citri). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 27.EPPO/CABI (1997) Quarantine Pests for Europe (Strawberry crinkle cytorhabdovirus). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 28.EPPO/CABI (1997) Quarantine Pests for Europe (Strawberry latent ringspot 'nepovirus'. 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 29. EPPO/CABI (1997) Quarantine Pests for Europe (Strawberry mild yellow edge disease). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 30. EPPO/CABI (1997) Quarantine Pests for Europe (Tomato black ring nepovirus). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 31.EPPO/CABI (1997) Quarantine Pests for Europe (*Cephalcia lariciphila*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 32. EPPO/CABI (1997) Quarantine Pests for Europe (*Gilpinia hercyniae*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 33.EPPO/CABI (1997) Quarantine Pests for Europe (*Gonipterus gibberus* and *Gonipterus scutellatus*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 34.EPPO/CABI (1997) Quarantine Pests for Europe (*Ips amitinus*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 35.EPPO/CABI (1997) Quarantine Pests for Europe (*Ips cembrae* and *Ips subelongatus*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 36.EPPO/CABI (1997) Quarantine Pests for Europe (*Ips duplicatus*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 37.EPPO/CABI (1997) Quarantine Pests for Europe (*Ips sexdentatus*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.



- 38. EPPO/CABI (1997) Quarantine Pests for Europe (*Ips typographus*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 39.EPPO/CABI (1997) Quarantine Pests for Europe (*Thaumetopoea pityocampa*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 40.EPPO/CABI (1997) Quarantine Pests for Europe (*Gremmeniella abietina*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.
- 41.EPPO/CABI (1997) Quarantine Pests for Europe (*Hypoxylon mammatum*). 2nd edition. Edited by Smith IM, McNamara DG, Scott PR, Holderness M. CABI International, Wallingford, UK.