



## Book review

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Comprehensive reports on technical items presented to the International Committee or to Regional Commissions 2000. *Office International Des Epizooties*. Trilingual, 2000. ISSN 1022-1050. ISBN 92-9044-523-8. 301 pp. Ref.: T102. Price: 25 euros

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Topics are presented by leading experts in each field, and include reports received from OIE Member countries. The tests are published in the language in which the original document was presented, usually together with a translation into one or both of the other official languages of the OIE.

**Principles of prevention and control of aquatic animal diseases**, by Tore Håstein (original in English—translated into French, Spanish and Russian). Eliminating or reducing the risk of introducing serious diseases to aquatic animals and avoiding the resulting financial losses for the aquaculture and fishery sector has to be based on a set of principles for preventing and controlling such diseases. This report, written by the President of the OIE Fish Diseases Commission, describes in detail the factors involved in the protection and control of aquatic animal diseases. The most important factors are establishing a list of diseases, inspection and control procedures, regulations governing imports, quarantine measures, procedures for introducing new species, transport regulations and restrictions on movement, disinfection methods, emergency plans and staff training, as well as the prevention of diseases in aquaculture establishments by means of water treatment, vaccination, treatments with medicinal products, hygiene and cleaning measures.

**Advances in the diagnosis, control and eradication of tuberculosis (*Mycobacterium bovis*), in domestic and wild animals**, by Paul Livingstone (original in English—translated into French, Spanish and Russian). This report was written by one of the

leading international experts on preventing tuberculosis. It presents the latest developments in the field of diagnosis of bovine tuberculosis (including blood and serum tests), the use of epidemiological tools and vaccination against the disease. The BCG vaccine, at low dosage, effectively protects domestic cattle and deer against a test inoculation of *M. bovis*, and a test would make it possible to distinguish between vaccinated subjects and infected animals. This offers new combat options to countries that do not currently have a mandatory tuberculosis prevention programme, or where wild animals act as reservoirs of infection.

**Screwworm eradication programme in the Republic of Panama**, by José Dimas Espinosa (original in Spanish—translated into English). The Director-General of the Panama/United States Commission for the Eradication and Prevention of Screwworm describes the historical background, legal regulations and chronology of the programme's development in the Republic of Panama between 1994 and 1999. He refers to the preliminary scientific studies and the measures taken to build the Sterile Fly Production Facility, with a view to establishing a permanent biological barrier in the border region between Panama and Colombia and protecting the entire Central and North American region.

**Screwworm: progress in its eradication and its prevention in the Americas**, by Javier Garcia Manrique (original in Spanish—translated into English). The Director of the Mexico-American Commission for the Eradication of Screwworm briefly outlines the creation of this Commission and he describes the establishment of sterile fly barriers as the programmes progressed in North and Central America. He presents the costs and benefits for countries, notably

those in the Caribbean islands, which represent the main threat of the pest being introduced into a continent that has been freed from it; he then discusses the possible creation of a new Sterile Fly Production Facility in Panama in order to create a barrier of sterile flies between Central and South America.

**Surveillance, diagnosis and monitoring systems for vesicular stomatitis**, by Alejandro López Inzaurrealde and Rossana Allende (original Spanish—translated into English). Even though a system for providing periodic information about vesicular diseases has been in place in South America since 1961, it has always clearly been aimed at recording foot and mouth disease, with vesicular stomatitis only forming part of the process of differential diagnosis for foot and mouth disease. One may therefore assert that no specific vesicular stomatitis information system exists at the continental level with the ability to consolidate all of the information required to carry out full epidemiological surveillance of the disease. The epidemiological surveillance of vesicular stomatitis involves integrating information from both the field and the laboratory. Two experts from the Pan American Foot and Mouth Disease Centre make detailed recommendations for establishing a reliable epidemiological surveillance system for this disease in the region.

**Brucellosis in the Americas: prospects for diagnosis and control using new vaccines**, by Klaus Nielsen (original in English—translated into Spanish). The author, Head of the OIE Reference Laboratory for Brucellosis in Canada, recalls that a substantial effort has gone into the control and eradication of this highly contagious zoonosis. A number of regions are free from the disease but the majority are not, including the Americas. Major gains were made by the widespread use of vaccine in the early stages of control campaigns. However, the use of vaccines until a few years ago caused considerable diagnostic problems because of cross-reactivity. This problem was solved in two ways: by the recent development of a non-interfering vaccine and the development of serological tests that distinguish vaccinal and other cross-reacting antibodies from those induced by pathogenic *Brucella*.

**Screwworm eradication in the Americas**, by John H. Wyss (original in English—translated into Spanish). This report is presented by the Director of the Screwworm Eradication Program based in Panama. The New World Screwworm (*Cochliomyia hominivora*) first became established east of the Mississippi River in the United States of America in 1933. Subsequent research led to the development of the 'Sterile Insect Technique' by the US Department of Agriculture, Agriculture Research Service. A successful screwworm eradication program was therefore implemented in the involved States, from 1957–1959 and the United States was declared screwworm-free in 1966. Due to the interest of Mexican livestock producers in controlling screwworms, it was decided to eradicate screwworms in Mexico. Following indications of interest in screwworm eradication from all the Central American countries, a plan was successfully developed to extend the Screwworm Eradication Program throughout Central America.

**Swine vesicular disease: incidence, pathogenicity, epidemiology, diagnosis, economic impact**, by Kris De Clercq (original in English—translated into French, Spanish and Russian). Swine vesicular disease is a contagious viral disease sometimes confused with foot and mouth disease. According to the author of the report, a renowned expert in vesicular diseases, the virulence of strains of the swine vesicular disease virus varies and the disease can therefore take very different clinical forms. Nowadays, diagnosis differentiating between this disease and foot and mouth disease or vesicular stomatitis is no longer a problem in the laboratory. However, 80% of OIE Member Countries believe that swine vesicular disease should remain on OIE List A because the economic consequences of an outbreak of swine vesicular disease are considered to be very serious for the pig industry.

**Ensuring a limited disease environment for optimal production in the livestock industry**, by Katharina Stärk (original in English—translated into French, Spanish and Russian). In many European countries, the most important diseases from an economic standpoint are not those on the OIE List A and List B, but enzootic diseases. Many European countries are therefore heavily involved in combating such diseases, despite differing regional situations. Prevention programmes in progress in the countries concerned are accompanied by an obligation to declare certain diseases, inspections in abattoirs and laboratory screening. The author of this report, responsible for combating such diseases in Switzerland, believes that the optimum level of control should be dictated firstly by economic considerations, which currently does not appear to be the case.