PESTS, PATHOGENS, COMPETITORS AND WEED FUNGI OF CULTIVATED OYSTER MUSHROOMS (PLEUROTUS SPP) IN SOUTH AFRICA

by

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ABSTRACT

Commercial production of the oyster mushroom, *Pleurotus* spp., is barely ten years old in South Africa. Although the local industry is expanding, progress is not taking place at a satisfactory rate. Regular difficulties that are encountered put the growers into discouraging financial situations. Furthermore they rely mainly on information from abroad for the control of the pests and diseases of their crop.

This study investigated some of the problems confronting the South African cultivators. Samples were collected from farms in Gauteng and the Western Cape during various stages of production. A distinction was made between weed fungi and competitive fungi based on the incidence and severity of the infection. The presence of invertebrate pests was recorded as well. A correlation between meteorological factors and infective episodes was established.

An infective episode in the substrate often reflects the general farming hygiene. The pests and diseases of mushroom cultivation can, however, be controlled with good planning and careful management and certain recommendations are made in this regard.
OPSOMMING

Die kommersiële verbouing in Suid Afrika van die oestersampioen, *Pleurotus* spp., is skaars tien jaar oud. Alhoewel die plaaslike industrie uitbrei, is die groeitempo daarvan nie na wense nie. Kwekers ondervind gereeld probleme wat hulle in ontmoedigende finansiële posisies plaas. Verder maak hulle hoofsaaklik op inligting vanaf die buiteland staat vir oplossings rondom die beheer van plaagdiere en siektes van hul gewas.

Hierdie studie het ondersoek ingestel na sommige van die probleme waarmee die kwekers in Suid Afrika gekonfronteer word. Monsters is tydens verskillende stadiums van die verbouingsproses versamel op plase in Gauteng en die Wes-Kaap. Daar word onderskei tussen onkruid fungi en kompetierende fungi op grond van die voorkoms en erns van die infeksies, terwyl die teenwoordigheid van invertebrate plaagdiere ook aangeteken is. Daar is bevind dat ‘n korrelasie bestaan tussen die meteorologiese faktore en die infektiewe episodes.

‘n Infektiewe episode in die substraat is dikwels ‘n aanduiding van die algemene boerdery higiëne. Die plaagdiere en siektes van oestersampioenverbouing kan egter beheer word met goeie beplanning en versigtige bestuur en sekere aanbevelings in hierdie verband word gemaak.
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