

SUMMARY

Wild strains of *Pleurotus* spp. with potential of cultivation in the central region of the State of Veracruz

In Mexico, the cultivation of *Pleurotus* spp. is mainly based on the use of foreign strains of high quality and productivity, mainly *P. ostreatus*; although native fungal resources have not yet been evaluated at commercial level with better prospects at the local level. For this reason, native strains of *Pleurotus* spp. from five localities belonging to the Central Region of the state of Veracruz, were collected, isolated and characterized to know its attributes as a productive and feeding alternative, and the potential for cultivation on horticultural substrates in the states of Veracruz and Puebla. Three commercial strains of *P. ostreatus*, CP-50, CP-753 and CP-871 strains were evaluated, and compared by measuring mycelial growth rate, color, and texture in PDA and EMA culture media. Basidiocarp production and biological efficiency (EB) were also evaluated on different substrates. Time of mycelial development of the strains on the substrates was of 17 days, with appearance of primordios from the two days. The results show that the CP-871 strain presented higher mycelial growth in EMA media, followed by the wild-type strain CP-870 *Pleurotus djamor* which showed growth similarity. In crop development tests in the production module, showed that CP-869 *Pleurotus* sp. was optimal in EB, similar to the CP-753 strain used as control. Differences in colonization of the fungus on substrates were identified, being the substrate of straw of wheat and bean the fastest colonized. All the strains showed qualities to be cultivated in the horticultural substrates tested in both states.

Key words: *Pleurotus*, strain, mycelium, basidiocarp