PATHOGENICITY AND COMPETENCE OF *ARMILLARIA* SPECIES FOR INFECTING *PINUS* PLANTS.

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White root rot in *Pinus* sp. is mostly caused by *Armillaria ostoyae*, and in some cases by *A. mellea*. *Armillaria gallica* has also been reported infecting *Pinus* plants, although it is considered a weak parasite. A growth chamber experiment was carried out to study the pathogenicity of *A. mellea*, *A. ostoyae* and *A. gallica* and their competence in the rhizosphere for infecting plants of *Pinus radiata* and *Pinus pinaster*. Surface-disinfected seeds were seeded in 150 mL pots containing a sterile mixture of pine bark, peat and perlite. After six months, healthy well-developed plants were transplanted to 500 mL pots with the same substrate (one plant per pot), and allowed to grow for three months. Then inoculation treatments with each single fungus, and combined treatments with two or three of them, were established, as well as the corresponding uninoculated control, for each *Pinus* species. Inoculum of *Armillaria* consisted in 2.5 x 1 cm hazel rods, completely covered by mycelium and rhizomorphs, that were inserted close to roots in each pot. Uninoculated rods were placed in control and single or dual inoculated pots. There were 10 replicates per treatment. After four months growth, fresh and dry weights of roots, shoots and fungal rhizomorphs in soil were recorded in five replicates. Samples of rhizomorphs were also taken to identify *Armillaria* species by PCR-RFLP methods. Dual inoculation of *A. ostoyae* and *A. gallica* significantly decreased shoot dry weight of both *Pinus* species; however, when these two fungi were separately inoculated, no differences were found respect to the uninoculated control. In *P. pinaster*, root growth was significantly reduced when *A. mellea* and/or *A. ostoyae* were inoculated. It could be observed that the amount of rhizomorphs produced by *A. gallica* increased significantly when this fungus was simultaneously inoculated with *A. ostoyae* and/or *A. mellea*.

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