Susceptibility of *Cupressus arizonica* and *Pinus pinea* to *Pestalotiopsis funerea* Isolates

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Abstract – *Pestalotiopsis funerea* is a fungus reported mainly as a weak pathogen of conifers, although it has also been found causing severe damage on several hosts. The main aim of the study was to determine the optimal growth conditions *in vitro* for Spanish isolates of *P. funerea* and to evaluate the pathogenic effect of those isolates on *Pinus pinea* and *Cupressus arizonica* under field and lab conditions. Eight isolates of *P. funerea* derived from *C. sempervirens*, *C. arizonica* and *Quercus pyrenaica* were used in the assays. In the growth rate experiment, five culture media (PDA, MEA, WA, PCA and SCALA) and six temperatures (5, 10, 15, 20, 25 and 30 ºC) were evaluated. In the pathogenicity tests, two different experiments were carried out: those in the lab consisted of inoculations in 30 mm long twigs of *C. arizonica*. In those of the field, twigs and needles of *C. arizonica* and *P. pinea* trees respectively were inoculated with mycelia by means of a wound. Four months after inoculations, twigs and needles were transported to the lab where necroses length was measured. The results presented here suggested that the *P. funerea* isolates from Spain had an optimum temperature for growth at 25 ºC on SCALA media. The results also indicated that the fungus showed a virulence on *C. arizonica* and *P. pinea* after inoculating mycelia into a wound but host-preference was not observed. A certain correlation between growth rate in culture media and virulence was also observed on *P. pinea* needles.

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