

## 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 °C) 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 °C 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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