

## Section 1 Abstracts: Molecular Biology of Hypovirulence

**Mitotic Stability, Pathogenicity and Vegetative Compatibility of *Cryphonectria parasitica* Transformants.** G. Minervini,<sup>1</sup> A. Vannini,<sup>2</sup> M. Intropido,<sup>1</sup> A. De Martinol and P. Cortesi<sup>1</sup>. <sup>1</sup>Istituto di Patologia Vegetale, Università degli Studi di Milano 20133, Milano, and <sup>2</sup>Dipartimento di Protezione delle Piante, Università degli Studi della Tuscia 01100, Viterbo, ITALY

DNA mediated transformation of virulent strain E4 of *Cryphonectria parasitica* was obtained with high efficiency ( $10^5$  transformants/mg DNA) by using the pHRC12 plasmid vector containing HMP (hygromycin-B phosphotransferase) gene and the *Aspergillus nidulans* trpC promoter. Transformation occurred by integration of the plasmid DNA in the fungal genome. Mitotic stability of transformants *in vitro* and *in vivo* was studied.

Growth at different temperatures, vegetative compatibility with hypovirulent *C. parasitica* strains and pathogenicity on chestnut, were compared with untransformed E4 virulent strain. The possibility of using the transformants as marked strains for epidemiological studies will be discussed.