



Plant pathology

Research Area

Plant pathology and phytopathological technologies

Topics

- Diagnosis of fungal, bacterial and viral diseases of crops and identification of the etiologic agent (Causin, Favaron, Montecchio, Raiola, Sella).
- Characterization of virulence factors of plant pathogenic fungi and bacteria, and of plant defense mechanisms (Favaron, Raiola, Sella).
- Improving resistance to pathogens by modifying the plant cell wall (Favaron, Raiola, Sella).
- Identification and testing of natural molecules with antimicrobial activity (Causin, Favaron, Montecchio, Raiola, Sella).
- Characterization of proteins and secondary compounds to be used to induce disease resistance in plants of agricultural interest (Causin, Favaron, Raiola, Sella).
- Control of diseases using biocontrol agents (BCA) (Causin, Favaron, Raiola, Sella).
- Plant protection efficacy trials with chemicals (Causin).
- Evaluation of mycotoxigenic species colonization of different samples and quantification of mycotoxins on grain samples (Causin, Raiola).
- Plant viruses: pathogenicity, diagnosis and control (Raiola).
- Investigation on activities and technological applications of fungal enzymes involved in the degradation of plant cell wall (Favaron, Raiola, Sella).
- Epidemiological studies of crops and forestry plants (Causin, Montecchio).
- Ecologic and management aspects related to the health of forests and trees in urban populations (Montecchio).
- Ectomycorrhizal species and communities as indicators of health status of forest plants (Montecchio).
- Monitoring, epidemiology and control of quarantine pathogenic fungi (Montecchio).
- Pathogenetic expression of fungi with endophytic behavior (Montecchio).

People

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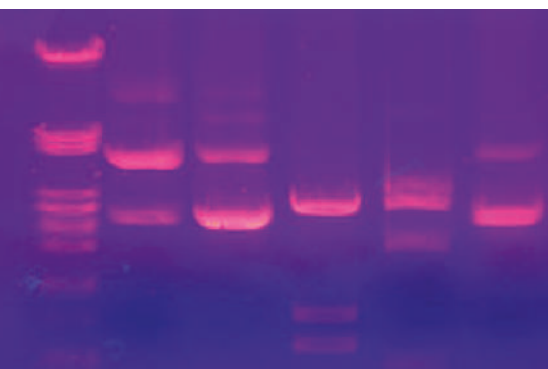
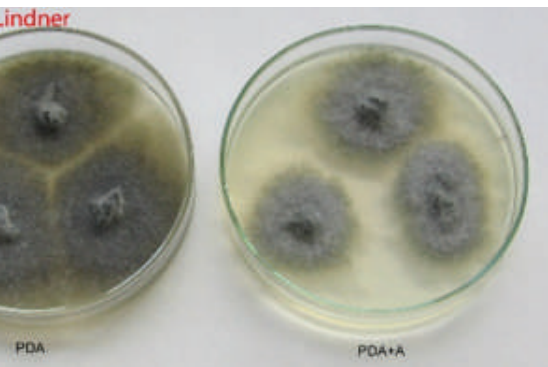
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Research projects

- European Project: **BIOCOMES** - Biological control manufacturers in Europe develop novel biological control products to support the implementation of Integrated Pest Management in agriculture and forestry (Causin, Raiola).
- Scientific and technical support to various Companies operating on crop production and protection.
- International Project *Italy-Vietnam*: Characterization of some industrially relevant polysaccharide monooxygenases and related enzymes (Sella, Favaron).



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