

Istituto per la Protezione Sostenibile delle Piante Consiglio Nazionale delle Ricerche





Seminario

The discovery of environmentally induced genomic evolution in parasites

Prof. Matteo Garbelotto

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Martedì 15 Novembre – ore 10.00

presso **Aula 1 - edificio F** Area di Ricerca CNR, via Madonna del Piano 10 – Sesto F.no

Epigenetic research has been extremely popular in recent times. Most of the focus of such research has been how the environment causes genomic alterations in hosts, possibly making them more susceptible to disease. A joint international research program led by Dr Takao Kasuga at Davis and Prof Matteo Garbelotto at Berkeley, California, has proven for the first time that the environment can lead to genomic alterations in parasites themselves.

This talk will detail the experiments documenting such discovery in the model system of the oak (host) - *Phytophthora ramorum* (parasite) in California. The seminar will end with a presentation of the recent discovery of gene expression changes caused in the host due to genetic interaction with the pathogen and responsible for its increased resistance to infection.