



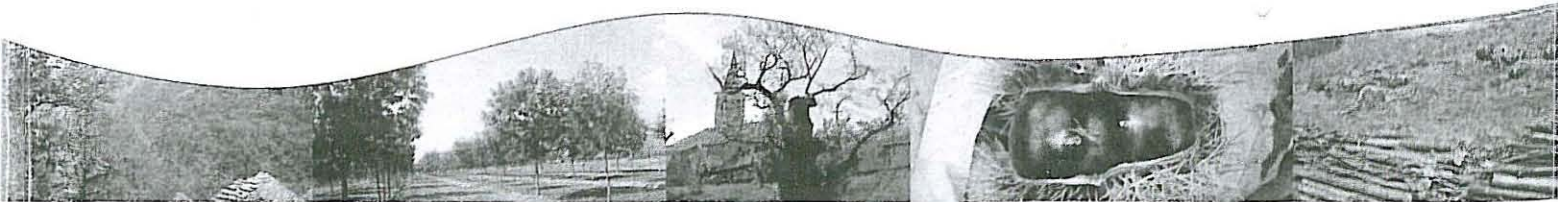
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## ABSTRACTS



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**POTENTIAL OF LOCAL HYPOVIRULENT STRAINS OF  
*CRYPHONECTRIA PARASITICA* FOR BIOLOGICAL CONTROL OF  
CHESTNUT BLIGHT**

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*Cryphonectria parasitica*, introduced in the NE of Portugal since 1989, is now an important and widespread pathogen of chestnut (*Castanea sativa* Mill.) which causes losses in chestnut fruit production and led to decline and death of many chestnut trees. Hypovirulence, a virus mediated attenuation of fungal pathogenesis, has not been frequent until now in Portugal but recently some cases of healing cankers were reported by chestnut growers. We assessed these sites and one of them, where healing cankers were clustered, was intensively surveyed. From all the trees with healing cankers, white and orange phenotypes of *C. parasitica* were isolated, which are both of the same vc type (EU-11). White isolates of *C. parasitica* showed reduced pigmentation in colony colour which was not completely stable, suppressed conidiation, reduction of phenol oxidase but no significant differences in lesion length and sporulation on chestnut twigs on dormant chestnut trees. Hypovirulent strains have dsRNA virus in the cytoplasm which is the typical element that reduces virulence in *C. parasitica*. Bands of dsRNA were identified in all of the white isolates and some variation in band dimension and number of bands was detected.

The L-dsRNA (12 kbp), which is the diagnostic fragment of *C. parasitica* infection, was detected. The presence of white phenotypes of infected *C. parasitica* (CHV) and the fact that spreads occur in natural conditions is promising for its development as a biological control agent of Chestnut Blight.

**POTENZIALITÀ DI CEPPI LOCALI DI *CRYPHONECTRIA*  
*PARASITICA* NELLA LOTTA BIOLOGICA AL CANCRO CORTICALE  
DEL CASTAGNO**

Il lavoro mette in luce le promettenti potenzialità di alcuni ceppi ipovirulenti di *Cryphonectria parasitica* nella lotta biologica al cancro corticale del castagno nel Nord Est del Portogallo.

