

USE OF STABLE HYALIN VARIANTS OF *V. DAHLIAE* FOR STUDYING HOST-PARASITE INTERACTIONS AND CROSS-PROTECTION IN TOMATO

Claude BOISSON

ORSTOM - Laboratoire de Phytopathologie
B.P. 5045 - 34032 - MONTPELLIER CEDEX 01 - FRANCE

Wild isolates or clones of *Verticillium dahliae* are variable in their pathogenicity whereas hyalin variants harvested in monospore progenies of clones are very stable.

Therefore, hyalin variants of low or high pathogenicity were used to study *V. dahliae*-tomato interactions. Phytoalexin production was measured in several resistant or susceptible varieties of tomatoes inoculated with more or less aggressive variants. Likewise, histological reactions to infection were characterized in compatible or incompatible interactions.

Tomato cultivars with Va gene showed reduced symptoms of verticilliosis if they were preinoculated with non pathogenic hyalin variants of races 1 or 2 (which were able to penetrate into xylem vessels of tomato). The possible role of phytoalexin synthesis in this cross protection has been envisaged.

First results obtained in similar studies in *V. dahliae*-Cotton interactions are briefly reported.

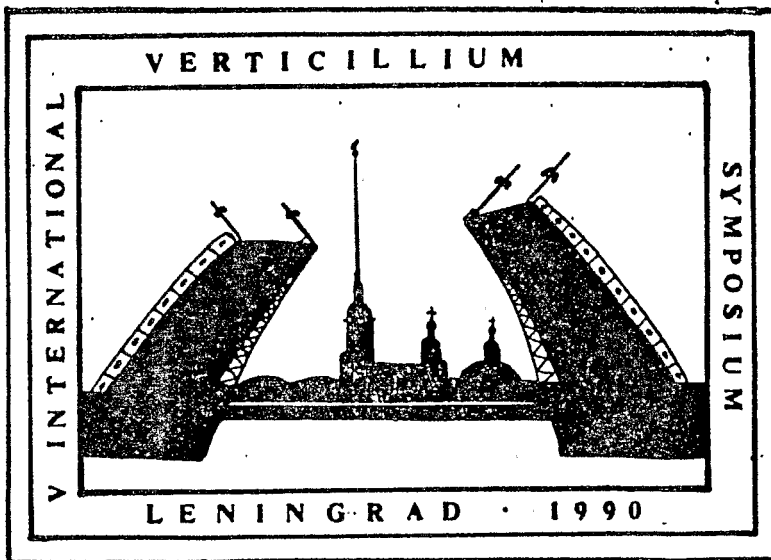
C. BOISSON
FRANCE

5

5th INTERNATIONAL VERTICILLIUM SYMPOSIUM

25th—30th JUNE
1990

LENINGRAD, USSR



LENINGRAD
1990