REACTION OF *CICER ARIETINUM* TO CULTURE FILTRATE OF *ASCOCHYTA RABIEI*

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Ascochyta rabiei (Pass.) Labr., the casual agent of the blight, is the most destructive pathogen of chickpea crop in areas where rainfall or high humidity occur during growing season. Until now, involvement of toxic metabolites in the pathogenesis have not been reported except for a note reported by Alam and Strange (1989, *NATO ASI Series*, Vol. H 27:385-386).

In our work we assessed the phytotoxic activity of culture filtrate of *A. rabiei*. Chickpea lines differently reacting to the artificial inoculation with the fungus have been challenged with the toxic filtrate.

On the basis of preliminary experiments, the toxic filtrate has been obtained by a static culture of *Ascochyta* virulent isolates for 21 days (21 ± 1 °C) on the broth described by Nachmias *et al.* (*Physiol. Plant. Path.* 1977, 10:147-157). The crude culture filtrate inhibited root elongation of germinating chickpea seeds and caused chlorosis and epinasty on chickpea cuttings.

Toxic activity of culture filtrate at different concentrations has been tested on chickpea lines both susceptible and resistant to the artificial inoculation with the fungus. When used at the concentration of 60%, a correlation between insensivity to the filtrate and resistance to the pathogen has been observed. Chickpea genotypes reacted differentially when tested with filtrates of different pathogenic groups of *A. rabiei* according to their reaction to artificial inoculation.

Our study indicates that toxic metabolites produced by *A. rabiei* could be involved in the pathogenesis and could have selective toxicity on chickpea genotypes. If these results will be reconfirmed, culture filtrate would have a practical importance as screning tool of resistant genetic matetial. The role as well as the host and race specificity of the filtrates have to be elucidated. A characterization of the phytotoxic compounds would be also profitable for an application of them as reliable selective agents in the screning for resistance to *Ascochyta* blight.

CHARACTERIZATION AND PHYTOTOXIC ACTIVITY OF PECTIC ENZYMES PRODUCED BY *PHOMA TRACHEIPHILA* (PETRI) KANC. ET GIK.

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Pectic enzymes produced by pathogens have been supposed to be involved in the pathogenesis of vascular diseases of plants. In order to elucidate the molecular mechanism of the pathogenesis of citrus malsecco disease, a severe wilt disease cau-