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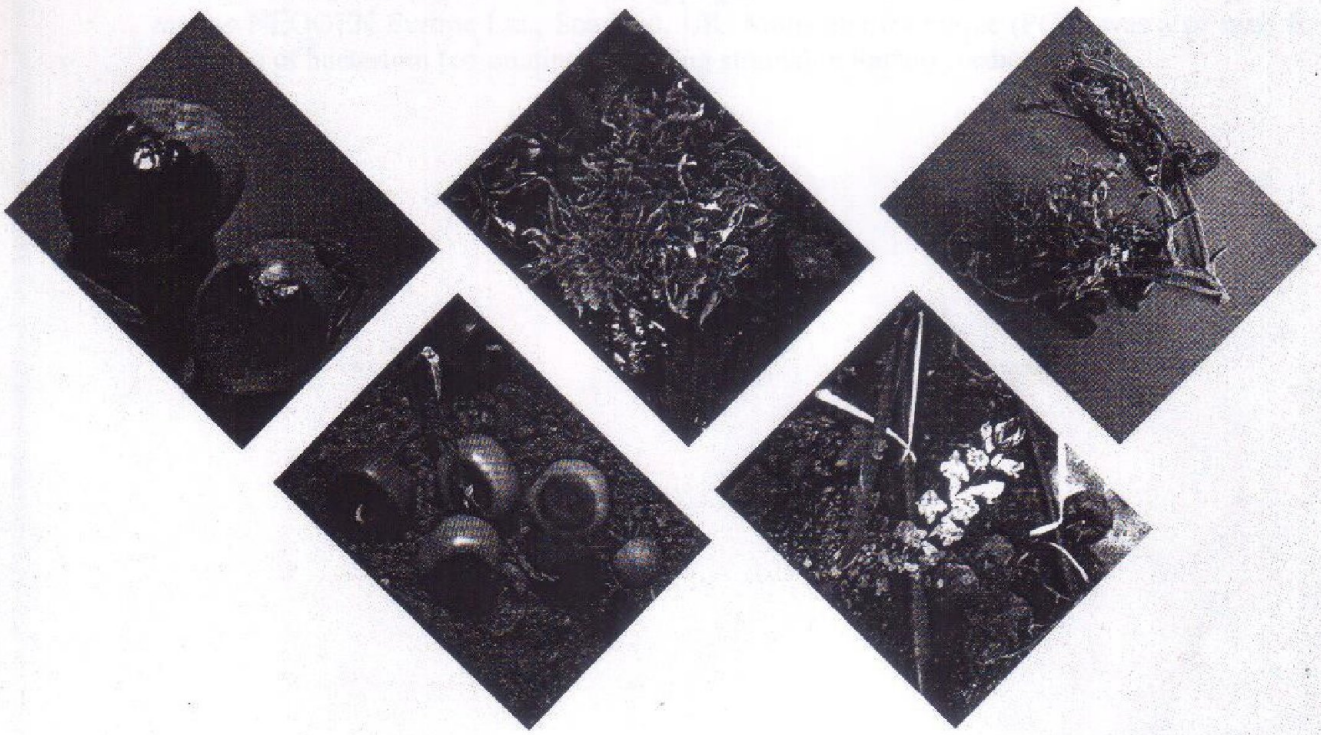
Program and Abstract Book

SECOND INTERNATIONAL SYMPOSIUM ON TOMATO DISEASES



CONVENER

Hikmet SAYGILI

8-12 October, 2007

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P45

MOLECULAR AND SEROLOGICAL IDENTIFICATION OF *PSEUDOMONAS SYRINGAE* PV. *TOMATO* IN COMMERCIAL TOMATO SEEDS

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The bacterium *Pseudomonas syringae* pv. *tomato* is seedborne pathogen, causal agent of bacterial speck disease on tomatoes. Frequent appearance of disease was recorded in growing areas in Serbia (Vojvodina province). Symptoms may cause lesions on fruits deep enough to reduce quality of tomatoes. Infected tomato seed is the most significant source of inoculum, and healthy seed is the best measure for disease prevention. Seeds were collected from several major growing areas of tomato in Vojvodina. A study was carried out to determine presence of this pathogen on commercial tomato seeds using serological and molecular methods of identification. Isolation of pathogen was done according to NSHS CDFA Method So 5.1. Chosen isolates were used for further investigation including referent strain of *P. s.* pv. *tomato* (KFB 145), Agricultural faculty, Zemun. Bacterium identification was done using serological method (ELISA test) with appropriate antibodies of *Pseudomonas syringae* pv. *tomato* NEOGEN Europe Ltd., Scotland, UK. Molecular technique (PCR) was also used for detection of bacterium (coronatine producing strains) in tomato seeds.