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**Microorganisms on Seeds
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SOYBEAN SEED-BORNE FUNGAL DISEASES IN VOJVODINA PROVINCE

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Numerous phytopathogenic microorganisms are associated with soybean seeds. Seed serves as a mean of survival for pathogen and can provide primary inoculum for infected the new crop. The most significant and the most harmful are fungi. Soybean seed-borne diseases are present in Vojvodina province too. Occurrence of seed mycoflora is typically low, but intensive disease attacks may occur in some years. The aim of this paper was to determine the presence of phytopatogenic fungi on and in soyabean seed originating from 6 different seed companies in Vojvodina region. The following varieties most commonly used in production were tested: (2001-2002) 75 seed lots were tested. Fungi determination was done on the basis of morphological and growing characteristics.

Presence of *P. manshurica* was determined by inspection of dry seeds. From soybean seed were isolated fungi belonging to genera *Diaporthe/Phomopsis* (*Phomopsis longicolla*, *D. p. var. caulivora* and *Phomopsis sojae*) and *Fusarium* (*F. graminearum*, *F. semitectum*, *F. equiseti*, *F. sporotrichoides*, *F. acuminatum* and *F. proliferatum*). In most of the soybean seed samples fungi belonging to *Alternaria*, *Aspergillus* and *Penicillium* genera were present. Besides above mentioned microflora, a certain number of bacteria was also found on soybean seed, but they did not investigated further.

Degree of soybean seed infection by parasitic mycoflora in both years of observation was relatively low. From 75 tested seed lots 11 were free from parasitic fungi. Most of the samples had small percentage of seed infected by parasitic fungi (1-2%). Percentage of seed infection per sample with *P. manshurica* ranging from 1-5%, *Diaporthe/Phomopsis* complex 1-11%, and *Fusarium* species 1-7%. Seed of Afrodita variety had the lowest percentage of infection, then comes Vojvodjanka, while Balkan and Ravnica varieties had the highest percentage of seed infection. Humidity, relatively high air temperature during maturation and harvesting time (August-September) in 2001 favoured intense appearance and distribution of parasites compared with the same extremely dry period in 2002 and significantly lower infection by parasitic fungi.