Mycoflora Population and Species Dynamics in selected Vegetable Crop Nurseries

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ABSTRACT

Eighty fungal isolates belonging to twenty five genera were obtained on potato dextrose agar from rhizosphere and bulk soils of egg plant, cauliflower and tomato nurseries. From rhizosphere soil of egg plant, cauliflower and tomato nurseries and bulk soil assessed, egg plant and cauliflower rhizosphere gave better support to soil mycoflora with higher Rhizosphere and Soil ratio (R:S). Tomato rhizosphere was found to offer lesser support to the soil mycoflora with lower R:S ratio. Thirty four isolates belonging to fourteen genera, twenty isolates belonging to eight genera and twenty six isolates belonging to ten genera were obtained from egg plant, cauliflower and tomato nursery systems respectively. Among these, *A. niger, A. flavus*, *Fusarium*, *Macrophomina* and *Phoma* were all appeared by 10th day in all the three test crops rhizosphere indicating their better rhizosphere colonizing ability as primary colonizers. Native *Trichoderma* sp. could be isolated in the rhizosphere of only egg plant system 20 days after sowing and hence regarded as a secondary colonizer which required stimulus from rhizosphere. *Trichoderma* population was found nil in the rhizosphere soils of tomato and cauliflower indicating that these crops could not stimulate growth of native *Trichoderma* species.

Key words : Bulk soil, Population dynamics, Rhizosphere soil.