

Seed-borne mycoflora of safflower (*Carthamus tinctorius* L.) and their impact on seed germination

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Abstract

The incidence and frequency of fungi on safflower seed with their role in seed germination was investigated. Three samples each of five safflower cultivars/lines were collected from National Oil Development Programme (NODP), NARC Islamabad. Eleven different fungal species belonging to seven genera i.e., *Alternaria*, *Aspergillus*, *Chaetomium*, *Curvularia*, *Fusarium*, *Helminthosporium* and *Rhizopus* were observed. The incidence and frequency of these fungi varied with cultivar and lines with maximum fungal prevalence in Thori-78 (7.7) and minimum in Dholka Sindh (5.4). Maximum germination was noticed on Dholka Sindh (85%) with least fungal incidence (23%) and minimum seed germination was observed on Thori-78 (60%) with higher fungal incidence (55%).

Key words:- *Carthamus tinctorius*, Safflower, Seed germination, Seed mycoflora.