

Estimation of deteriorative effect of *Aspergillus niger* on onion seed germination and seedling vigour

■ RENU GUPTA, M.K. KHOKHAR AND RAM LAL

SUMMARY

Samples of onion seeds were collected from farmer's houses to prove the pathogenicity of mycoflora, two tests were performed viz., Seed and bulb inoculation techniques. Seed inoculation techniques revealed that *Aspergillus niger* reduced seed germination, root and shoot elongation by causing higher percentage of pre and post-emergence mortality and subsequently it also reduced vigor index in comparison to control. The same fungi was also found to cause bulb rot by inoculating the healthy surface sterilized white bulbs and it was observed that *Aspergillus niger* found to be more pathogenic in comparison to *Aspergillus flavus* per cent incidence and per cent intensity and it caused maximum per cent incidence (4.00% / 100.00%) and per cent intensity (2.80% / 30.00%).

Key Words : Seed germination, Onion, Vigour index, Inoculation

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MEMBERS OF THE RESEARCH FORUM

Author to be contacted :

M. K. KHOKHAR, Department of Plant Pathology, Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, UDAIPUR, (RAJASTHAN) INDIA
Email: khokharmk3@gmail.com

Address of the Co-authors:

RENU GUPTA AND RAM LAL, Department of Plant Pathology, S.K.N. College of Agriculture (R.A.U.), JOBNER (RAJASTHAN) INDIA