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RESEARCH ARTICLE :

Integrated management of stem rot and pod rot (*Sclerotium rolfsii*) of groundnut (*Arachis hypogaea* L.)

D.P. KULDHAR AND A.P. SURYAWANSHI

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Arachis hypogaea, Bioagents, Botanicals, Fungicides, Organic and inorganic amendments, *Sclerotium rolfsii*

SUMMARY : The studies were carried out on stem rot and pod rot caused by *Sclerotium rolfsii* Sacc. on Groundnut (*Arachis hypogaea* L.), at Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani. The *in-vitro* evaluation (@ 1000, 1500 and 2000 ppm) revealed highest average mycelial growth inhibition with fungicides, Thiram + Carbendazim (96.31 %), Carbendazim (95.26 %) and Thiram (94.80 %). Of the bioagents evaluated, significantly highest mycelial growth inhibition was recorded with *T. harzianum* (78.37%), *T. viride* (74.70 %) and *T. hamatum* (73.96 %). Aqueous extracts of all botanicals tested (@ 10, 15 and 20%) exhibited antifungal potential and significantly highest average mycelial growth inhibition was recorded with *Azadirachta indica* (70.02 %), *Z. officinale* (66.58 %) and *P. hysterophorus* (65.52 %). Significantly highest seed germination (98.33%) was recorded with the treatment Thiram + Carbendazim + *T. harzianum* + *P. fluorescens* + NSC + *A. indica* extract. Significantly highest reduction in pre-emergence (97.61 %), post-emergence (95.77 %) and average (96.69 %) mortality were recorded with treatment of Thiram + Carbendazim + *T. harzianum* + *P. fluorescens* + NSC + *A. indica* extract. Thus, it is concluded that groundnut stem rot and pod rot can be managed effectively by seed treatment with fungicides (Thiram, Carbendazim), bioagent (*T. harzianum* + *P. fluorescens*) and soil amendment with Neem seed cake + *A. indica* extract.

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Author for correspondence :

D.P. KULDHAR
Department of Agricultural Entomology, Vasantrao Naik Marathwada KrishiVidyapeeth, PARBHANI (M.S.) INDIA
Email:dinkumar007@gmail.com

See end of the article for authors' affiliations