

RESEARCH ARTICLE

Potential of plant material as protectant to wheat seed against grain weevil (*Sitophilus oryzae* L.)

■ S.D. PATIL^{1*}, P.N. RASAL², K.M. SONAWANE² AND V.S. PAWAR²

¹Department of Entomology, Agricultural Research Station, Niphad, NASIK (M.S.) INDIA

²Agricultural Research Station, Niphad, NASIK (M.S.) INDIA

ARTICLE INFO

Received : 18.09.2013

Revised : 13.02.2014

Accepted : 28.02.2014

Key Words :

Vekhand powder, *Acorus calamus*,
Sitophilus oryzae, Sweet flag, Wheat
neem leaves

ABSTRACT

The various plant material viz., Neem leaves (*Azadiracta indica*), Vekhand powder (*Acorus calamus*), Jangli Imli powder (*Phyllanthus niruri*) and Giloe (*Tinospora cordifolia*) 10 g each per kg seed alone and in combination with each other @ 5g+ 5g each and untreated control were tested against grain weevil infesting wheat seed. The observations on per cent reduction of population of grain weevil, weight of grains at 15 days interval, after 45 days after inoculation up to 180 days, per cent infestation of seed by grain weevil, seed germination and seedling vigour index at 180 days after inoculation were recorded. Among the various plant materials, the seed treatment with Vekhand powder @ 10 g/kg seed was found most effective and promising in reducing the per cent grain weevil population (99.21 %) and maintained highest seed weight (0.964 g), lowest per cent infestation of seed (0.30%), maximum germination of seed (88.75%) and highest seedling vigour index (87.76%).

How to view point the article : Patil, S.D., Rasal, P.N., Sonawane, K.M. and Pawar, V.S. (2014). Potential of plant material as protectant to wheat seed against grain weevil (*Sitophilus oryzae* L.). *Internat. J. Plant Protec.*, 7(1) : 82-85.

*Corresponding author: