Agrotechnol 2014, 2:4
http://dx.doi.org/10.4172/2168-9881.S1.008

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference on
Agricultural & Horticultural Sciences
Radisson Blu Plaza Hotel, Hyderabad, India February 03-05, 2014

Effect of different insecticidal treatments on yield and yield contributing traits of *Brassica rapa* var sarson infested by aphid *Lipaphis erysimi* Kaltenbach

S D Sharma and Swaroop Kumar
Chaudhary Sarwan Kumar Himachal Pradesh Krishi Vishvavidyalaya (CSKHPKV), India

Rapeseed-mustard crops are attacked by a wide array of insect pests and mustard aphid, of which *Lipaphis erysimi* Kaltenbach is the most destructive one. It causes heavy losses in terms of quality and quantity. Bakhetia and Sekhon (1989) reported 35.0 to 73.3 per cent losses in yield in different agroclimatic regions with a mean loss of 54.2 per cent on all India basis. High incidence of this pest can cause complete loss of the crop. Among various practices recommended for the management of this aphid, use of chemical insecticides is a quite common practice among farmers. But their use particularly at flowering stage of the crop, *inter alia* results into serious losses of pollinators and natural enemies. The present investigations were therefore carried out to see the effect of the insecticides applied in the soil prior to flowering succeeded by post bloom sprays in order to avoid the spraying during peak bloom period and to perceive the effect of soil applied chemicals and post bloom sprays on the yield and yield contributing traits of the crop as well as on the infestation of mustard aphid, *Lipaphis erysimi*. The results of two years studies conducted during *rabi* 2009-10 and 2010-11 revealed that the number of primary and secondary branches/plant, seeds/siliqua, thousand seed weight and seed yield were significantly higher under the pre flowering treatment of carbofuran succeeded by post bloom spray of cypermethrin (T_2). This treatment also provided the best control of *Lipaphis erysimi* as significantly least dried siliquae/plant (3.03 and 2.09) were recorded during the two years observations. This treatment was followed by preflowering application of carbosulfan succeeded by post bloom spray of cypermethrin (T_4). In case of unprotected crop, significantly higher numberof dried siliqua/plant (16.70 and 16.73) were recorded during the two years of observations.

Biography

S D Sharma did his Ph.D. in Agricultural Entomology at the age of 25 years with degree of Honours from CSK Himachal Pradesh Krishi Vishvavidyalaya, Palampur. At Present he is working as Sr. Entomologist at CSK HPKV, Hill Agricultural Research and Extension Centre, Bajaura, Kullu, HP, India. He has published more than 60 papers in reputed national and international journals and serving as an editor/referee for some journals of repute. He has also published more than 110 popular articles in various magazines and news papers.

sukhdevsharma40@gmail.com

Pathogenicity of varying inoculum levels of *Meloidogyne incognita* infecting *Vigna radiata* and management by fly-ash application

Abbasi, Hisamuddin, Rushda Sharf and Ambreen Akhtar
Aligarh Muslim University, India

The experiment was conducted under pot conditions to evaluate the damage potential of *Meloidogye incognita* against *Vigna radiata* at different inoculum levels, by inoculating 200, 400, 800 and 1600 J_2/2kg soil. The results showed that the number of galls, egg masses per root system and gall size increased as the inoculum level increased from 200 to 1600 J_2. The threshold level of inoculum was (800 J_2) at which rate of reproduction of nematode was increased and prominent symptoms were developed. Plant growth parameters including plant length, fresh weight, dry weight, leaf area, nodule number were significantly decreased at 800 inoculum level along with the decrease in number of pods, seeds and seed weight. Fly ash was added @ 15%, 30%, 45% and 60% into the soil, and 15% fly ash amendment found to be most effective which probably acted as a stimulant for growth and yield of *Vigna radiata* in nematode infested soil.

Biography

Abbasi is presently working as a Research Scholar at the Department of Botany, Section of Plant Pathology and Nematology, Aligarh Muslim University, Aligarh and actively involved in bio-control management of nematodes, particularly in leguminous crops.

abbasisyed222@gmail.com