## SEASONAL ABUNDANCE AND POPULATION DYNAMICS OF THE SCIRTOTHRIPS DORSALIS AND APHIS GOSSYPII ON CHILLI

## Mithlesh Kumar Sahu\*, Yugal Kishore Yadu and Devender Verma

Indira Gandhi Agricultural University, Raipur, Chhattisgarh 492 006

Received-03.10.2015, Revised-11.10.2015

**Abstract:** The experiment was conducted during *rabi-summer* season 2010-11 at Mango orchard, Department of Horticulture, College of Agriculture, Indira Gandhi Krishi Vishwavidyalaya, Raipur (C.G). The thrips, *Scitrothrips dorsalis* and aphid, *Aphis gossypii* were recorded as major insect pests in chilli crop. The in festation of thrips began in the first week of February (5<sup>th</sup> Standard Meteorological Week) and reached to its peak in 3<sup>rd</sup> week of March. (12<sup>th</sup> SMW), that of aphid began in the first week of February (5<sup>th</sup> SMW) and reached its peak in the 2<sup>nd</sup> week of February (6<sup>th</sup> SMW). The abiotic factors of the environment i.e. evening relative humidity had significant negative correlation with the population of thrips. The aphid population was negatively correlated to minimum temperature and positively influenced by morning relative humidity.

Keyword: Population dynamics, Chilli thrips, Aphid

## REFERENCES

**Anonymous** (2010). <a href="http://www.techno-preneur.net/information-desk/sciencetech-magazine/2010/dec10/Prospects.pdf">http://www.techno-preneur.net/information-desk/sciencetech-magazine/2010/dec10/Prospects.pdf</a>

Baloch, H.B.; Baloch, L.S.; Rustamani, M.A.; Hussain, T.; Talpur, M.A. and Rao, S.A. (1994). "Insect pests associated with *Capsicum annum* (Linn.) during summer season at Tandojam."14<sup>th</sup> Pakistan Congress of Zoology held from 1-3 Ap.1994 at Uni. of Karachi, Pakistan. *Proceeding of Pakistan Congress of Zoology*. 14:243-247.

**Banerji, B.** (1972). Rainfall and pest activity "Two and a Bud" half yearly news letters. Tea research association, Tocdai experimental station, jorhar, 19(1):44-45.

Ettouradjou, C. (2003). "Bio-efficacy of newer insecticides and decontamination of endosulfan on *capsicum annum* (L.) (chilli)" M.Sc.(Ag) thesis, IGKV, Raipur,(C.G.), pp.83.

**Kumar, S.; Mani, C. and Singh, R.N.** (2005). Field evaluation of omite and some other acaricides against broad mite, *Polyphagotarsonemuslatus* (Banks) on chilli under Varanasi conditions of Eastern Uttar Pradesh. *Pestology* 29(11):61-63.

Manjunatha, M.; Hanchinal, S.G. and Reddy, G.V.P. (2001). Survey of yellow mite and thrips on chilli in North Karnataka. *Insect- Environment* 6:4,178.

**Panickar, B.K. and Patel, J.R.** (2001). Population dynamics of different species of thrips on chilli, cotton and pigeonpea. *Indian J. Ent.* 63(2): 170-175.

**Patel, N.G. and Gupta, H.C.L.** (1998). Estimation of loss and management of thrips infesting chillies in Udaipur. Seminar on entomology in 21<sup>st</sup> century, Udaipur, bio-diversity, sustainability, environmental safety and Human Health, Udaipur, pp.99.

**Saha, S. and Raychaudhari, D.** (1995). Insect plant interaction with cotton aphid, *Aphis gossypii* Glower and chilli as a model. *Annls. Ent.* 13(2):71-86.

**Shukla, A.** (2006). Seasonal activity of thrips, *Scirtothrips dorsalis* on chilli crop. *Indian Journal of Tropical Biodiversity*. 14(2): 171-174.

**Varadharajan, S. and Veeravel, R.** (1995). Population dynamics of chilli thrips *Scirtothrips dorsalis* hood in Annamalai nagar. *Indian J. Eco.* 22(1): 27-30

<sup>\*</sup>Corresponding Author