

# EVALUATION OF DIFFERENT INSECTICIDE FORMULATIONS AGAINST *APHIS GOSSYPII* IN OKRA CROP

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**Abstract:** Evaluation of insecticides against sucking pest like aphid in okra crop was conducted Department of Entomology, CoA, IGKV, Raipur during *Rabi*2013-14. During *first of spraying*, the lowest aphid population was recorded (4.91/plant) against treatment T<sub>6</sub> and highest in T<sub>1</sub> (9.41/plant) within fifteen day of spraying. Whereas, the aphid population was also exhibited lowest (5.92/plant) in T<sub>6</sub> and treatment T<sub>1</sub> observed highest (9.77/plant) during *second of spraying*. The mean of first and second of spraying the aphid population (5.42 aphid/ plant) was observed minimum in foliar application of treatment T<sub>6</sub> i.e. spinosad 45EC @75g a.i./ ha followed by treatment T<sub>4</sub> i.e. emamectin benzoate 5 SG@13 g a.i./ha (6.46aphid/plant). The maximum 9.60 aphid/ plant was recorded in treatment T<sub>1</sub> i.e. emamectin benzoate 5 SG@8 g a.i./ha. Thus, during this period spinosad 45EC was found to be best effective treatment and which minimized the aphid population while emamectin benzoate 5 SG@8 g a.i./ha was noticed the least effective as compared to among all treatments.

**Keywords:** Evaluation of insecticides, Okra aphid, *Aphis gossypii*, Sucking pest of okra

## REFERENCES

- Basha, A. A., Chelliah, S. and Gopalan, M. (1982). Effect of synthetic pyrethroids in the control of brinjal fruit borer, *Leucinodes orbanalis* Guen. *Pesticide*, **16**(9): 10-11.
- Butani, D.K. and Verma, S. (1976). Insect-pests of vegetables and their control-3: Lady's finger. *Pesticides*, **10**(7): 31-37.
- Ghosh, J. S. K.; Chatterjee, H., and Senapati, S. K. (1999). Pest constraints of okra under Terai region of West Bengal. *Indian Journal of Entomology* **61** (4): 362-371.
- Khalil, S. K.; Bartos, J. and Landa, Z. (1983). Effectiveness of *Verticillium lecanii* to reduce populations of aphid under glasshouse and field conditions. *Agric. Ecosyst. Environ.*, **12**, 151-156
- Mishra, H.P. (2002). Field evaluation of some newer insecticides against aphids (*Aphis gossypii*) and jassids (*Amrasca biguttula biguttula*) on okra. *Indian Journal of Entomology* **64** (1): 80-84.
- Mohan, N. J. and Mohan, N. J. (1985). Control of major insect-pests of okra. *Pesticides* **19**(7): 35-37.
- Nirmala, R.; Ramanujam, B.; Rabindra, R. J. and Rao, N. S., (2006). Effect entomofungal pathogen on mortality of three aphid species. *Journal of Biological Control*, **20**(1): 89- 94.
- Patel, N. C.; Patel, J. J.; Jayani, D. B.; Patel, J. R. and Patel, B. D. (1997b). Bioefficacy of conventional insecticides against pests of okra. *Indian Journal of Entomology* **59**(1): 51-53.
- Rai, S. (1985). Chemical control of bhindi pests. *Indian Journal of Entomology* **47** (2): 173-178.
- Ramarethinam, S., (2005). Neem formulations for integrated pest management. *Pestology* **22**(6): 62-71.
- Rao, T. B.; Reddy, G. P. V.; Murthy, M. M. K., and Prasad, D. V. (1991). Efficacy of neem products in the control of bhendi pest complex. *Indian Journal of Plant Protection* **19**: 49-52.
- Rawat, R.R. and Sahu, H.R. (1973). Estimation of losses in growth and yield of okra due to recommended insecticides against jassid on okra. *Himachal J. Agric. Res.*, **24**(1/2): 85-92.
- Stansly, T. M. (2001). Efficacy of spinosad against cotton aphid, *Aphis gossypii* by various application methods. *J. Pesticide Sci.*, **26** (4): 381-385.
- Yokomi, R. K. and Gottwald, T. R., (1998). Virulence of *Verticillium lecanii* isolates in aphids determined by bioassay. *Journal of Invertebrate Pathology*, **51**: 250-258.

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