J. Exp. Zool. India Vol. 20, No. 1, pp. 397-400, 2017 | www.connectjournals.com/jez | *ISSN 0972-0030*

PHYTOTOXICITY OF EMAMECTIN BENZOATE 1.9% EC ON SOYBEAN AND ITS EFFECT ON NATURAL ENEMIES OF SOYBEAN PESTS

D. N. Kambrekar, Prashant K. Natikar and R. A. Balikai*

Department of Agricultural Entomology, College of Agriculture, Dharwad
University of Agricultural Sciences, Dharwad - 580 005, India
* Dean (Agri.), College of Agriculture, Hanumanamatti - 581 115, India.
e-mail: kambrekarn@gmail.com

(Accepted 2 November 2016)

ABSTRACT : A field study was carried out to know the phyto-toxicity of emamectin benzoate 1.9% EC on soybean and its effect on natural enemies of soybean insect pests at the Main Agricultural Research Station, University of Agricultural Sciences, Dharwad (Karnataka, India) during 2014-15 and 2015-16. Emamectin benzoate 1.9% EC @ 425 ml/ha and even at double the dose of 850 ml/ha did not show any phytotoxic symptoms on soybean plants such as yellowing, leaf injury, vein clearing, necrosis, wilting, epinasty and hyponasty at different days after treatment. The study on the effect of emamectin benzoate 1.9% EC on spiders and coccinellids indicated that there was no statistical difference among the treatments as for as spiders and coccinellid population is concerned. It is clear from the present study that the new formulation of emamectin benzoate 1.9% EC did not show any phytotoxicity symptoms even at the higher dosages and was safer to the potential natural enemies in the soybean crop ecosystem.

Key words : Phytotoxicity, natural enemies, emamectin benzoate, soybean.