

## SEASONAL ABUNDANCE OF SOME INSECT PESTS AND ASSOCIATED NATURAL ENEMIES ON FENUGREEK PLANTS

A. F. E. AFSAH

Plant Protection Research Institute, ARC, Dokki, Giza

(Manuscript received 7 October 2009)

### Abstract

The effect of environmental conditions on population of some insect pests and associated natural enemies on fenugreek plants was studied during the two successive seasons of 2006/2007 and 2007 / 2008. *Thrips tabaci* recorded one peak on the second week of March and terminal buds harboured the highest numbers. During the first season, simple correlation ( $r$ ) value was significantly positive between its population and both temperature and wind velocity, while it was insignificant for RH% but in the second season ( $r$ ) value was insignificantly positive except with temperature that proved to be insignificantly negative. Berseem leaf weevil, *Phytonomus bruneipennis* had three peaks on 14<sup>th</sup> and 28<sup>th</sup> of February and 14<sup>th</sup> of March. Simple correlation values ( $r$ ) between the insect population and the three weather factors were insignificant during both years. *Liriomyza* spp. showing three peaks on 24<sup>th</sup> of January, 28<sup>th</sup> of February and 28<sup>th</sup> of March and positively correlated with both temperature and wind velocity during two seasons. In the first season both, *Aphis craccivora* and *Myzus persicae* showed two peaks on (31<sup>st</sup> January, 7<sup>th</sup> March) and (14<sup>th</sup> February, 14<sup>th</sup> March), respectively but *A. pisum* showed four peaks on mid and late February, mid March and late April. *A. craccivora*, *A. pisum* and *M. persicae* recorded three peaks for each during the second season. The effects of the three weather factors on aphid populations had insignificant influence during the two seasons except in the relation between *A. pisum* and temperature degree, it was highly significant and significant in the first and second seasons, respectively. Two natural enemies were associated to pests infesting fenugreek plants. *Coccinella* spp. which began to appear in the first week of February and second half of January during the first and second seasons, respectively. Simple correlation values were not significantly positive for both temperature and wind velocity, while they were negative for RH% during two seasons. *Oruis* spp. appeared from last half of February during the two growing seasons. Temperature had insignificant and positive effect during the two seasons, but RH% and wind velocity had insignificant and negative during the two seasons except wind velocity was insignificant and positive in the first season.

### INTRODUCTION

Fenugreek, *Trigonella foenum graecum* L. is an annual herb native to countries bordering on the eastern shores of the Mediterranean and largely cultivated in