Appl. Ent. Phytopath.
Vol. 73, No. 2, March 2006

Effect of different fig pruning methods on population of *Eriophyes ficus* Cotte in Saveh region

M. ARBABI[1], P. BARADARAN[1] and V. RANJBAR[2]

1- Plant Pests and Diseases Research Institute, Tehran

2- Plant Breeding and Seed Technology Research Institute, Karaj

ABSTRACT

Eriophyes ficus Cotte (Acari: Eriophyidae) is a serious mite pest and vector of Fig Mosaic Virus on fig trees in Iran and else where. Effects of different pruning methods (one, two, three, four shoots trees, fan and indigenous types) were investigated on population *E. ficus* for two years (2000-2001) in Saveh region. The one square centimeter of under side of fig leaf selected for counting mites. Four section of each leaf used in four replications to determine mite abundance. A fortnight sampling intervals applied from month of May till October of both years. The SAS program was used to analyse mean of collected mite data. Mean analysis of mite data statistically were found significant at one percent level in all pruning methods. Results also indicated that, maximum mean of mite population recorded 42.24 and 40.06 mites for two and three shoots type of pruning in first years respectively while in second year this means were 56.47 and 53.9 mites in four shoots and indigenous type of pruning and placed them in low affecting group of DMRT.

Least mean of eriophyid mite among pruning methods recorded for one shoot type of pruning while maximum mean of mite observed for two, four and indigenous types pruning. Adult female mite diapause initiated with decreasing mean of temperature and day period from Sep. till November in Saveh region.

Key words: *Eriophyes ficus*, Pruning methods, Mite population, Saveh region

References

AMERINE, J. W., Jr. and E. E. LINDQUIST, 1996. Systematic, Diagnosis for major taxa and keys to families and genera with species on plants of economic importance. In: Eriophyid mites, their biology, natural enemies and control. Lindquist, E. E. and Sabelis, M. W.,(eds.) Elsevier Publ. Amsterdam, pp 33-89.

ARBABI, M., 1995. Study on plant mite fauna of Sistan and Baluchestan province. Abs. Proc. 12th Iranian Plant Protection Cong., 2-7 Sep. Karaj, Iran, Page 335.

ARBABI, M., R. K. SINGH and J. SINGH, 1994. Effect of injurious mites on their host plants in Varanasi, J. Pestology, 18: 5-14.

ARBABI, M., P. BARADARAN and M. KHOSROWSHAHI, 1997. Study of eriophyid mites on their agricultural host plants in Iran. Abstract Proc. First Iranian Cong. Zoology, Teacher Education Univ. Tehran 17- 18 Sept., Page 66.

DANESHVAR, H., 1978. A study on the fauna of plant mite in Azarbiyjan. Applied Entomology and Phytopathology J., Vol. 46 (1&2): 116-128 (in Persian with English summary)

GUPTA, S. K., 1985. Hand book of plant mites of India. Zoological Survey of India Publ. Calcutta. 511 pp.

JEPPSON, L. R., H. H. KEIFER and E. W. BAKER, 1975. Mites injurious to economic plants. Univ. Calif. press, Berkeley, 614 pp.

KAMALI, K., 1990. A part of phytophagous mite fauna of khozestan. Shahid Chamran Agric. Sci. J., 13: 73-83.

KEIFER, H. H., E. W. BAKER, T. KONO, M. DELFINADO and W. STYER, 1982. An illustrated guide to plant abnormalities caused by eriophyid mites in North America. United States Dept. Agriculture. Agriculture Handbook No. 573: 1-178.

KHALIL-MANESH, B. Y., 1973. Plant mite fauna of Iran. Applied Entomology and Phytopathology J., Vol. 35: 30-38 (in Persian with English summary)

OLDFIELD, G. N., 1970. Mite transmission of plant viruses. Ann. Rev. Entomol., Vol. 15: 343-380.

TALAIE, A. R., 1998. In: Physiology of temperate zone fruit trees, Miklos, F (ed.). (Translate in Persian) Tehran Univ. Press, 411 pp.

Address of the authors: M. ARBABI and P. BARADARAN, Plant Pests and Diseases Research Institute, P. O. Box 1454, Tehran 19395, Iran; V. RANJBAR, Plant Breeding and Seed Technology Research Institute, Karaj, Iran.