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Summary

APPLE YELLOW MITE

EOTETRANYCHUS PRUNI (OUDEMANS)

ACARI : (TETRANICHIDAE)

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Apple yellow mite is one of the important pests of apple trees in Khorassan. In the year 1967 this mite first was seen on apple trees in Mashhad. This mite was identified as *Eotetranychus pruni* (Oudemans) by Dr. Parsi at Plant Pests and Diseases Research Institute, Teheran, Iran.

The adults colour are commonly yellow. Females have elliptical shape and their length are about 4 mm. Males are fusiform and smaller than females. Eggs are spherical and clear.

In winter the mite is in the form of female under the bark of parts inside the soil. In the middle of April it emerges on leaves gradually. In the spring because of moderate climate the density of mite is rather low but from the last days of June when weather gets warm and the temperature is higher than 35°C its population and activity would be very high and merge all the trees so that the number of mite may reach up to 500 on a leaf and cause shedding of the leaves severely.

E. pruni has 11 generations in a year. The number of eggs is averaged 25

per female. This mite is centralized in the lower of the leaves and it does not create web generally .

To control apple yellow mite natural methods like enough irrigation and predators are effective .

To find best measures of control an experiment was conducted in a randomized complete block design with four replications. Five Miticides were tested against apple yellow mite, In Kharv- olya region of Khorasan. Each plot consisted of 2 uniform apple trees with one tree between adjacent plots as safety margin. The Acaricides used were Dichofol 18. 5% E. C. (0. 2%), propargite 57% E. C.(. 0. 1%), Binapacryl 40% E. C. (0. 1%). Bromopropilate 20% E. C. (0. 15%) and Tetradifon 8% E. C. (0. 2%) .

A ten (10) leaf random sample was taken from each tree at 1, 4, 7, 10,- 14, 20 and 30 days after treatment and number of mites present on each leaf were determined by a brushing machine and stereo- binocular. Percent reduction in population was calculated according to the method of Henderson and Tilton. The results indicated that of the Acaricides tested Dichofol, Propargite, Bina- pacryl and Bromopropilate all behaved similarly and gave an average control of 92% based on the obtained results. It was concluded that any of the selective Acaricides under the trade names of Kelthane, Omite, Morocide and Neoron could be used in Khorasan area for control of apple spider mite with an expectant persistence of at least 14 and up to 30 days .

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