ERIOPHYID MITES NEW TO OHIO.<sup>1. 2</sup>—During the past four years three eriophyid mites were collected in Ohio for the first' time. These species have never before been reported in this state although Keifer (1964), the specialist on eriophyid mites in the United States, stated that they are probably distributed more widely than has been indicated in publications.

Leaf vagrant eriophyid mites are often overlooked in surveys because of their very small size. They differ from the common spider mites by being teardropshaped or vermiform, lacking a respiratory system, and possessing only two pairs of legs in the adult stage instead of four pairs.

The apple rust mite, *Aculus schlechtendali* (Nalepa), was found in large numbers in July, 1963, on the undersurface of Red Delicious apple leaves in a partially neglected orchard at Wooster, Wayne County, Ohio. Identification of this mite was made by D. E. Johnston of the Institute of Acarology, Ohio Agricultural Experiment Station, and was confirmed by H. H. Keifer of the California Department of Agriculture.

The second eriophyid mite, new to Ohio, is the pear rust mite, *Epitrimerus pyri* (Nalepa), which was found on April 16, 1964, in a commercial pear orchard at Geneva, Ashtabula County, Ohio. Practically every twig which was inspected showed numerous overwintering deutogynes of the pear rust mite. H. H. Keifer

THE OHIO JOURNAL OF SCIENCE 66(3): 265, May, 1966.

<sup>&</sup>lt;sup>1</sup>Published with the approval of the Director of the Ohio Agricultural Experiment Station as Journal Article 68-64.

<sup>&</sup>lt;sup>2</sup>Manuscript received October 27, 1964.

made the initial identification of this eriophyid. Additional specimens were collected on May 18, 1964, from Wayne County.

Another new state record of an eriophyid mite was obtained by the collection and identification of the plum finger gall mite, *Eriophyes emarginatae* Keifer, on May 5, 1960, at the Mt. Airy Arboretum in Cincinnati, Ohio. This mite heavily infested two wild goose plum trees (Prunus munsoniana). The identification was made by H. H. Keifer, but its occurrence in Ohio has not previously been reported. On June 1, 1960, additional infestations of E. emarginatae were found on wild plum (Prunus americana) in Ashland County near Loudonville and on European plum (Prunus domestica) near Sunbury in Delaware County, Ohio. According to Keifer (1960), E. emarginatae attacks bitter cherry (Prunus emarginata), western common chokecherry (Prunus virginiana demissa), and Klamath plum (Prunus subcordata) in California.

Several species of eriophyids are very important economically on fruit trees. Although the apple rust mite has not been found in commercial apple orchards in Ohio, it has been of some concern to growers in the Pacific Northwest. The pear rust mite is a very serious pest of pears in a number of states, including New York and California. The pear orchard in which it was collected in Ohio has suffered a serious fruit-russeting problem for the last two years. The plum finger gall mite is not considered an economically important pest and is evidently not specific in its host preferences. Two other important eriophyids, previously reported from Ohio, are the peach silver mite, Aculus cornutus (Banks) (Rings, 1956), and the pear leaf blister mite, Eriophyes pyri (Pagenstecher) (Gossard 1908).-H. Y. FORSYTHE, JR. and ROY W. RINGS. Department of Zoology and Entomology, Ohio Agricultural Experiment Station, Wooster, Ohio.

## REFERENCES

Gossard, H. A. 1908. Spring practice in economic zoology. Ohio Agric. Exp. Sta. Bul. 198: 1 - 88.

Keifer, H. H. 1960. Personal communication. 1964.

Personal communication.

**Rings, Roy W.** 768: 1–48. 1956. Insect and mite pests of peaches in Ohio. Ohio Agric. Exp. Sta. Bul.