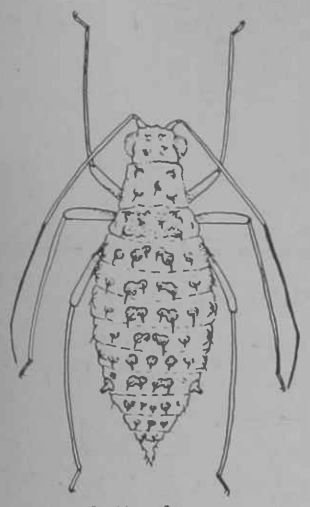
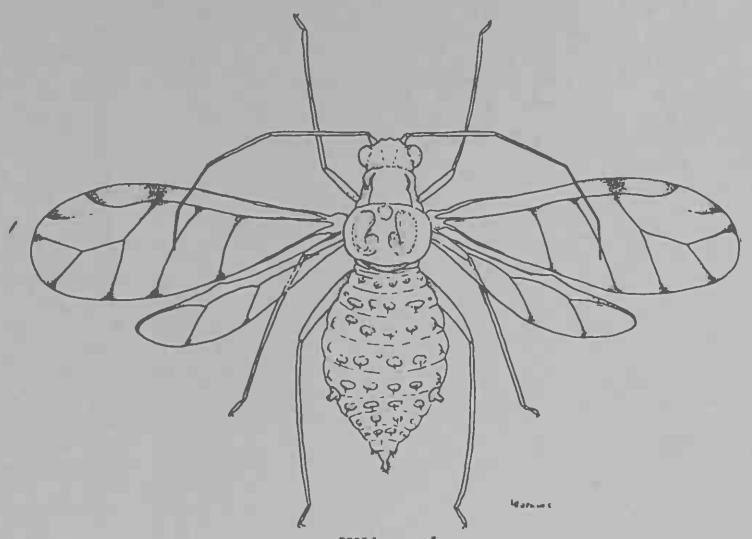


Wingless



Winged

(About 12 times natural size)

Yellow Clover Aphid

By D. M. Tuttle, L. Hopkins, and G. D. Butler, Department of Entomology

In 1954 the yellow clover aphid, *Therioaphis ononidus* (Kalt.), appeared for the first time in the southwestern United States as a serious pest of alfalfa, both for hay and seed. This aphid has long been known as a minor pest of clover in eastern United States.

In 1954, the yellow clover aphid was found infesting Arizona alfalfa near Yuma, Parker, Roll, Buckeye, Tucson, in parts of Cochise County and in the Salt River Valley. Other states of the Southwest from which this aphid was first reported in 1954 include California, New Mexico, Texas, Nevada and Colorado.

Plants Defoliated

When aphids of this species are abundant, the plants are defoliated. Large amounts of "honeydew" are deposited on the leaves, stems and ground, making baling difficult or impossible. The nymphs and adults of the yellow clover aphid are found on the undersides of the leaves. The lower leaves of the plant are infested first, become dry, and fall off.

This defoliation results in reduction of yield and quality of the hay due to stemminess. The quality of the hay is further reduced by discoloration from a black fungus on the honeydew. Indications are that defoliation of the plant affects seed yields and also retards regrowth of the alfalfa following cutting.

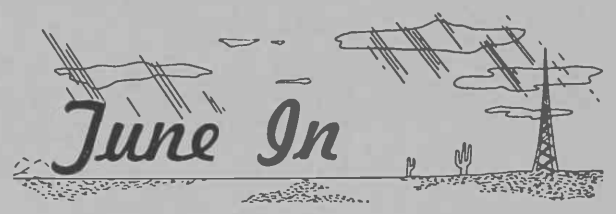
The control of the yellow clover aphid is easily accomplished with several insecticides. Some of the materials used in 1954 are shown in the table below.

For hay crops, malathion is recommended because of its effectiveness against the yellow clover aphid, its low toxicity to warm-blooded animals, and the short persistence of its residues. Although parathion is effective for the control of this aphid, it is very dangerous to both animals and humans.

Warning for Hay!

The combination of DDT, toxaphene, and sulfur should not be used for treating alfalfa grown for hay since the residues have longer persistence. However, in seed alfalfa, the latter combination affords control of the yellow clover aphid as well as the other harmful insects often present.

Other promising insecticides in preliminary tests included methyl parathion and clorothion, although as yet these are not registered for use on alfalfa.



Here are Radio and TV programs for farm listening. Be sure to tune in on your local stations.

Cochise County

Wednesday, 6:30 a.m.—KAWT

Graham County

Saturday, 1:00 p.m.—KGLU

Greenlee County

Wednesday, 12:15 p.m.—KCLF

Maricopa County

Monday through Saturday, 6:10 a.m.—KTAR

Sunday, 8:45 a.m.—KOY

Pinal County

Monday through Friday, 6:50 a.m. to 6:55 a.m. (County Agent); 8:50 to 8:53 a.m. (Home Demonstration Agent)—KCKY

Yavapai County

Monday, Wednesday, Friday, 8:45 to 8:50 a.m.—KYCA

Yuma County

Monday, Wednesday, Friday, 7:20 a.m. (Western Farm Digest)—KYUM

Tuesday and Thursday, 7:20 a.m. (On the Farm Front)—KYUM

Thursday (TV), 7:15 p.m.—KIVA

University of Arizona

Saturday, 12:30 to 1:00 p.m. (Arizona Farm and Ranch Hour)—KOY, Phoenix; KTUC, Tucson; KSUN, Bisbee; KYMA, Yuma; KCLS, Flagstaff; KVNC, Winslow; KAWT, Douglas

Saturday (TV), 4:30 to 5:00 p.m.—(Across the Fence)—KVAR, Mesa, Channel 12

Effect of Various Dust Formulations On Populations of Yellow Clover Aphid

(Treatments applied to alfalfa on July 6, 1954, using a Hardie duster, Yuma Mesa, Arizona.)

Treatment (18 pounds per acre)	Number of aphids per 100 net sweeps July 8	July 10
5% Malathion	8	43
2% Parathion	55	130
5% DDT, 15% Toxaphene, 40% Sulfur	236	17
Untreated	6200	1771
Difference required for significance: 5%	396	502
1%	538	683