

Community-Wide *Lygus* Action Plan No.1

The University of Arizona • College of Agriculture

May 18, 2000

Our goal is to manage Lygus populations over a large, local area in as many crops as possible so as to maximize each grower's ability to profitably produce their crops.

After agreeing to the above goal, the working group settled on a number of objectives, activities, and actions that would be taken this spring. This note is to update the group on the progress that has been made so far in monitoring *Lygus* activities in the local area.

After receiving and verifying crop maps (courtesy of ACRPC), we identified strategic areas that represent the types, diversity and distribution of crops typical of the western Pinal County area. Starting in March, two trained scouts have been monitoring pre-selected fields/areas for the presence and numbers of *Lygus* bugs. Our intent is to monitor focal areas of production (for seed-alfalfa, forage alfalfa, weeds, and cotton) and the areas immediately adjacent to these fields. Once cotton is available to us for sweeping, we will monitor fields at fixed distances from each of these focal areas.

We are currently monitoring over 50 locations in about 35 fields. All sweeps are standardized on a row-type sweeping pattern (cotton-style) for a total of 25 sweeps per sample. At least 100 sweeps are made in each focal area, and all numbers are standardized on a per 100 sweeps basis. The relatively dry winter has not provided for much in the way of large stands of weeds. Further, those weeds that are present change in composition, size, and even presence over time. Thus, the "weeds" numbers do not necessarily track the same number of sites each week. Similarly, no sweeping is conducted in sprayed fields (while posted), nor in cut or recently-watered fields.

Interpretation of this highly summarized data must be guarded. For now, they depict generalized trends of *Lygus* presence and abundance. If the patterns begin to deviate significantly among fields, it will be necessary to examine individual field responses.

General Observations to Date

Lygus are present in most of the areas surveyed. Most of the weed species examined have not harbored large numbers of *Lygus*. One exception, Alkali Heliotrope (*Heliotropium curassavicum* var. *oculatum*), was found to be an excellent reproductive host for *Lygus*. This weed has white flowers and grows along some ditch banks, though it has not been abundant in our area. Lesquerella, an experimental crop, was found this past week to harbor large numbers of *Lygus* adults and nymphs (> 150 / 100 sweeps). *Lygus* numbers have steadily increased in seed alfalfa and have or will likely reach densities that require control.



© 1972 The Arizona Board of Regents

Figure 1: Alkali heliotrope (*Heliotropium curassavicum* var. *oculatum*).