

Community-Wide *Lygus* Action Plan No. 4

June 9, 2000

The University of Arizona • College of Agriculture

The seed alfalfa dry-down period has already begun, and the suitability of this crop as a host for *Lygus* bugs is in decline. A major objective of this project is to help identify periods and locations of *Lygus* movement.

We have added over 120 cotton field sites to our weekly sampling, and *Lygus* numbers are detectable in some fields but at extremely low levels. Many fields of alfalfa hay are increasing in *Lygus* numbers. Adults especially have increased there in recent weeks. This may reflect the relative attractiveness of alfalfa to *Lygus* over cotton. This underscores the importance preserving a strip-, block-, or alternate field cutting strategy.

Field Specific Trends

Individual field trends continue to be quite dynamic (see Fig. 1, below). The total *Lygus* per 100 sweeps are depicted below for 7 representative field sites (field codes below each graph) for each major host crop at this time (seed alfalfa, alfalfa hay, and weeds). Most seed alfalfa fields are trending downward in *Lygus* numbers as the crop continues to dry down.

As an aside, it is interesting to note that at the same time that *Lesquerella* (20 A at MAC) dried down and ceased to be attractive to *Lygus*, adult numbers in adjacent forage hay increased dramatically. *Lygus* adults will move to locally-preferred hosts.

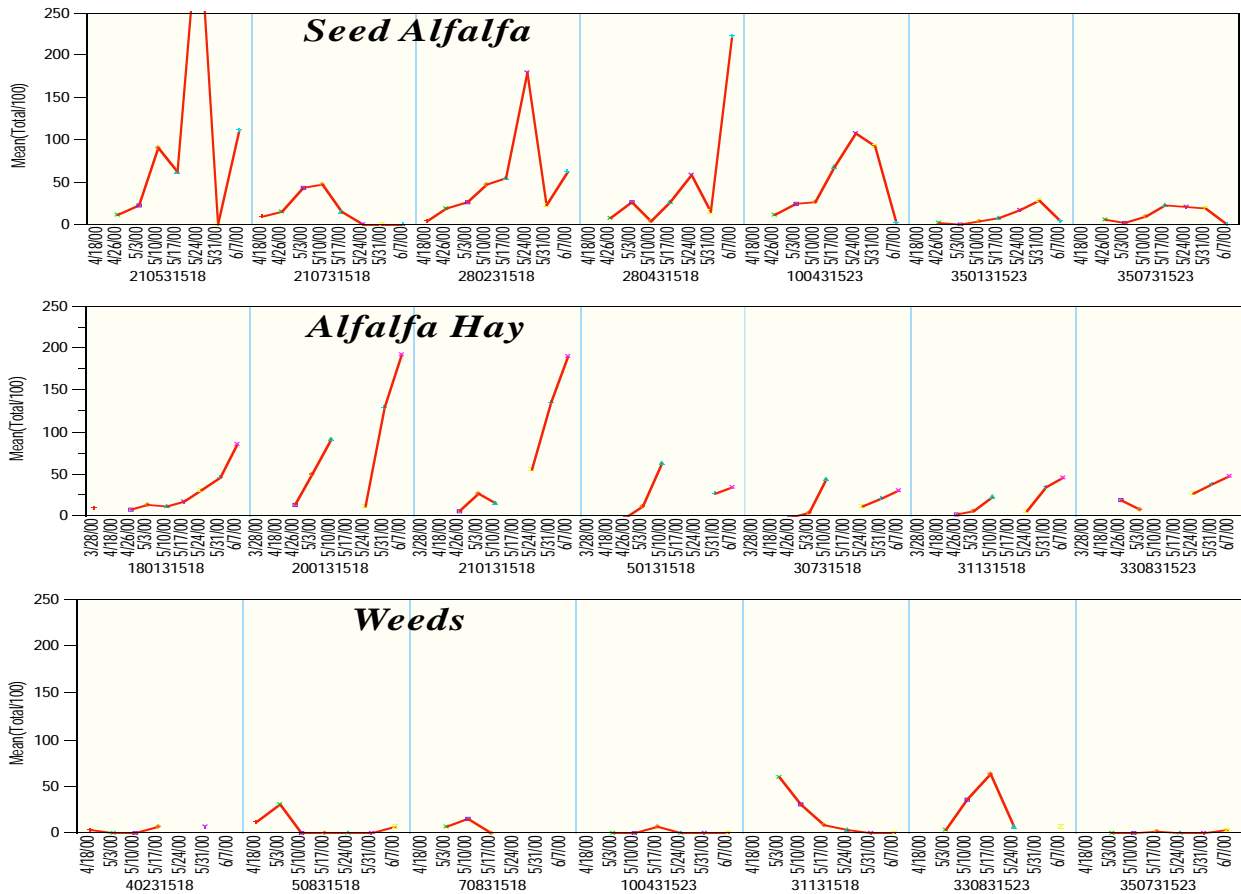
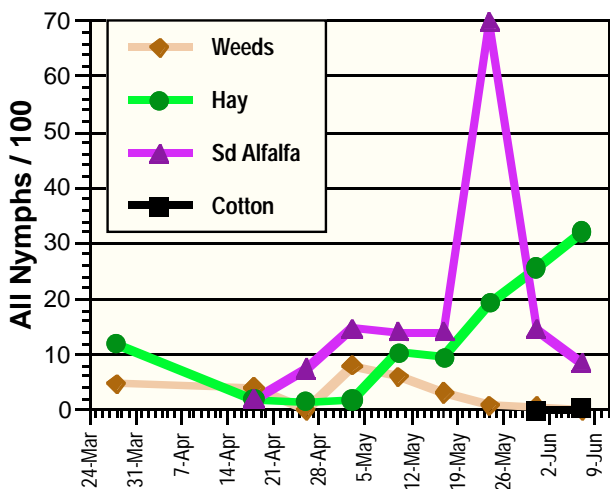
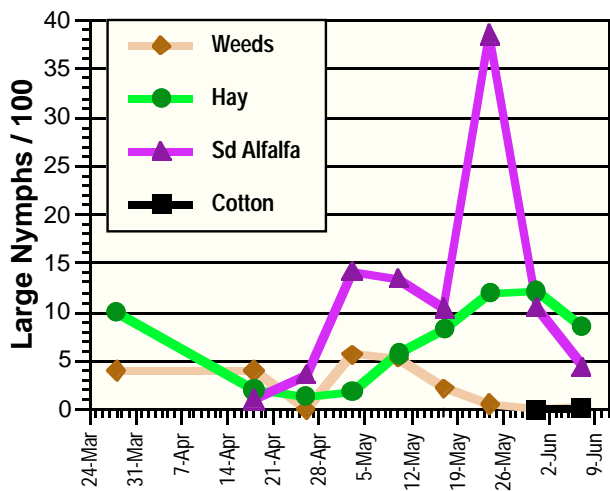
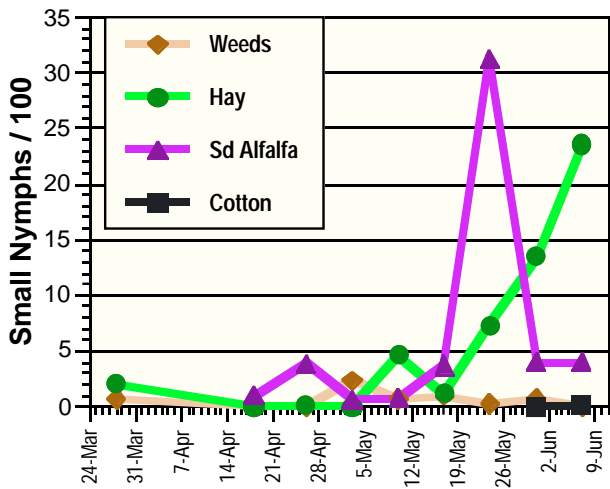


Figure 1: Individual field trends for Total *Lygus* per 100 sweeps are depicted above in a series of graphs for 7 representative field sites for each of the 3 major hosts, seed alfalfa, alfalfa hay, and weeds. Field site identification numbers are located below each graph.



Community Trends

Our weekly samples are summarized in chart form below (Fig. 2). Some trends are evident:

- *Lygus*, including reproduction (note nymphs), are in decline in seed alfalfa, though there are exceptions (see Fig. 1),
- Weeds are of little importance at this time,
- Cotton numbers are exceedingly low, but dominated by adult numbers,
- *Lygus* in alfalfa hay are on the rise,
- Adult numbers are quite volatile.

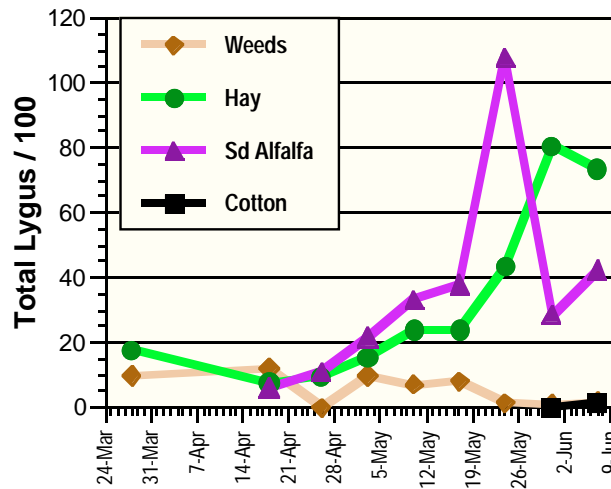
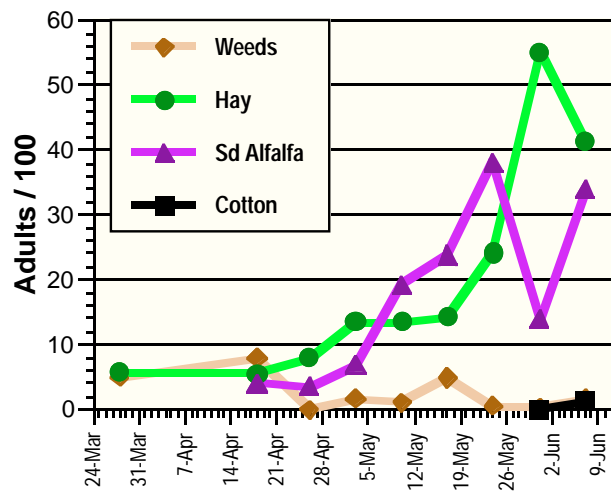


Figure 2: Number of *Lygus* per 100 'cotton-style' sweeps in various crops in the western Pinal County area. Each chart represents an average of multiple sites in multiple fields each week. Due to differences in the number of sites each week, these numbers are for general information only. No sample was taken from seed-alfalfa on 28 March. Each site is re-sampled each week unless it has been recently sprayed, cut or otherwise removed, or watered. Each chart shows the results for the entitled life stage. Small Nymphs are instars 1-3; Large Nymphs are instars 4-5; All Nymphs is the sum of these 2 nymphal categories; Total *Lygus* is the sum of all stages of *Lygus* including adults.

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