

Community-Wide *Lygus* Action Plan ^{No. 8}

The University of Arizona • College of Agriculture

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*Our action plan called for community-wide sampling of *Lygus* over multiple hosts. Much work remains in understanding the large dataset collected during the past four months. Cotton production is several weeks ahead of last year's schedule. Seed alfalfa production is even farther ahead of schedule. There were few, significant non-crop sources of *Lygus* this year. *Lygus* were found mainly in alfalfa crops in the spring and early summer. Movement and distribution of *Lygus* are related to host availability and adult preferences. We need your input on what is now needed by this community of growers and how, if at all, this project has helped meet your needs this year.*

Lygus Sampling Comes to an End

This small group of concerned growers and affiliated personnel put in action this community-wide plan. Central to this plan was the organized, independent sampling of area fields for *Lygus*. Sampling concludes next week. We now have an objective source of data that will help answer questions about the distribution and abundance of this shared pest.

Forage Alfalfa Host Management

Another aspect of this action plan was the planned management of forage alfalfa host availability. *Lygus* adults will preferentially move to or stay in vigorously growing or flowering alfalfa. Conventional cutting of alfalfa forces adults out of these fields and into more sensitive crops like cotton or seed alfalfa. The MAC farm managed several large fields of alfalfa using a bench-cutting strategy. This practice was begun early in the spring season and continues today. Cotton fields immediately adjacent to these hay fields have stayed nearly *Lygus*-free.

When alfalfa hay prices decrease during the summer, some growers elect to withhold water and discontinue cutting. These fields can remain green, start flowering, and serve to produce large numbers of emigrating *Lygus*. Efforts are needed to identify these situations early enough so that contingency plans can be made.

Communication

A goal of this group and this newsletter is to foster better communication. In Cooperative Extension we seek to deliver science-based, educational programs and to facilitate communication and cross-commodity interactions that enable our agricultural clientele to compete globally. We welcome any feedback about this newsletter, our action plan, or other programs that relate to your interests.

Credit Where Credit is Due!

A project of this size or nature, planned and implemented so quickly, relies on the good faith efforts of many different people. The sampling efforts alone constitute the individual contributions of several members of my staff in the field, but many others have contributed, too. We hope it helps make a difference. We also want to give credit where credit is due:

Samplers: Francisco Borjorquez, Gilberto Castro, Gloria Gomez, John Hawkins, John Huen, Curtis Main, Sam Goodwin

Mapping: Larry Antilla, Mike Whitlow, Jerry Kerr, Bill Tompkins, and the rest of the ACRPC Staff

Organization and Data Entry: Virginia Barkley, Ghislaine Majeau

Newsletter Review & Distribution: Bob Roth, Jennifer Jones (Web), Lily Reyes (mail)

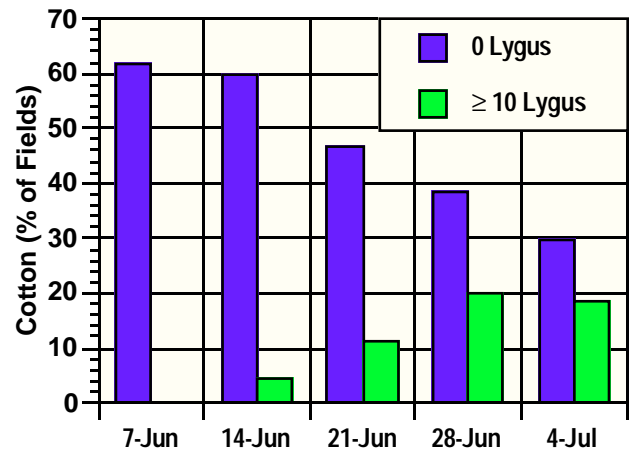
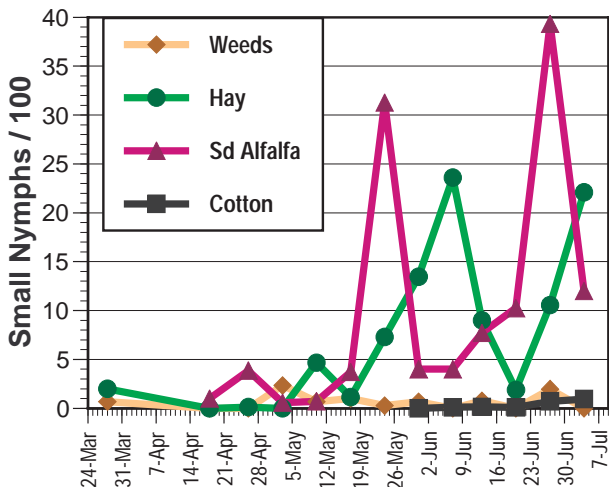


Figure 1: Weekly percentage of cotton fields in the area (of those that we sample) that had no (0) or ≥ 10 Lygus per 100 sweeps.

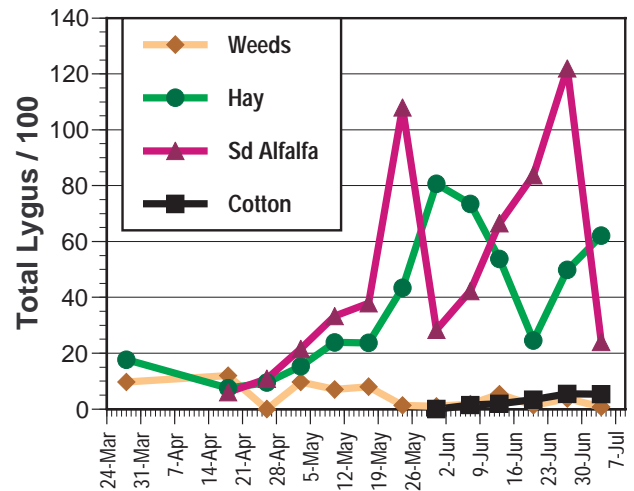
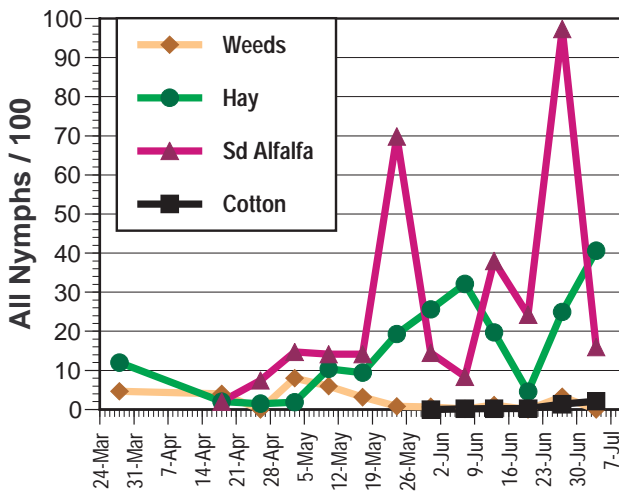
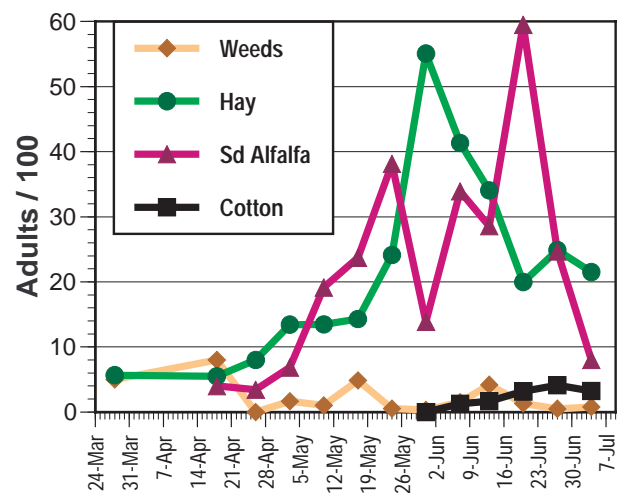
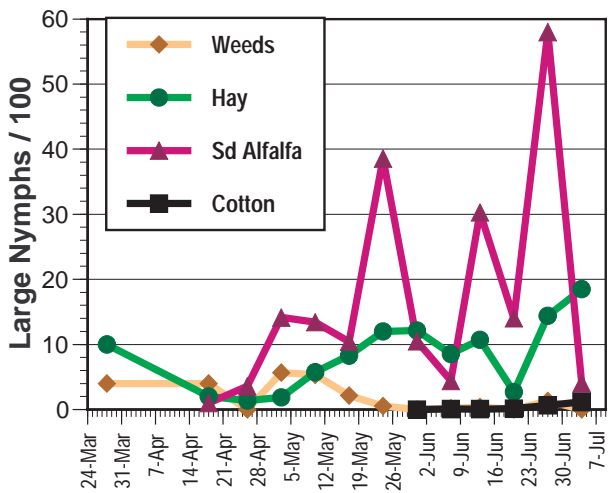


Figure 2: Number of Lygus per 100 'cotton-style' sweeps in various crops in the western Pinal County area. Each chart represents an average of multiple sites in multiple fields each week. Due to differences in the number of sites each week, these numbers are for general information only. No sample was 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.

Peter Ellsworth, IPM Specialist¹
 Steve Husman, Area Extension Agent²
 Dave Langston, MAC Farm Superintendent¹



¹Department of Entomology, Maricopa Agricultural Center, Maricopa, AZ
²Pinal County Cooperative Extension Office, Casa Grande, AZ