Community-Wide Lygus Action Plan

The University of Arizona . College of Agriculture

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Two major objectives have been identified by the group: 1) Determine patterns of Lygus activity, generational timing, and population build-up, and prevent damaging levels of Lygus in all crops; and 2) Limit Lygus movement from source areas to adjacent crops through host management, including, but not limited to, management of forage alfalfa availability.

We have been regularly tracking *Lygus* populations for several weeks (see figures on back page). General patterns of abundance are beginning to form. Weeds which at one time harbored small populations of Lygus are now becoming less important as the summer heat begins. The one large field of Lesquerella, now in its post-bloom period, appears to be declining in nymph production recently the MAC farm is spraying this crop on 26 May. Cotton still remains too young to support or attract Lygus populations. This leaves alfalfa as the primary harborage for Lygus at this time. Lygus populations in forage hay did increase, though the rate of increase has now slowed. Lygus numbers in seed-alfalfa, however, appear to be continuing an upward climb, especially in nymphal populations. Bees have been removed from the seed-alfalfa (as of 21 May), and local growers have been planning for a Lygus spray this week.

Host Management

Our second objective of host management is a critical one, too. The strategy in any local area is to provide for attractive, non-susceptible, hosts for *Lygus* at all times. Forage alfalfa which is subject to regular cuttings is ideal for this purpose. It requires special management, however. Managers must make the decision early in the spring to alternate cuttings and waterings in a local area such that lush, preferably blooming, alfalfa is always available for attracting migrating *Lygus* adults. This

can be accomplished in narrow swaths, alternating borders or benches, or in adjacent blocks or fields of alfalfa.

The MAC farm has done an excellent job of maintaining the presence of alfalfa that is attractive to *Lygus* at all times (see Fig. 1). Through attentive and early efforts to manage cuttings and waterings, the farm has alternated various benches or strips through their fields since March. This should help retain *Lygus* in the forage hay where they do not cause economic damage, prevent damaging localized migrations, and serve to conserve a healthy natural enemy community.

Cuttings

Water

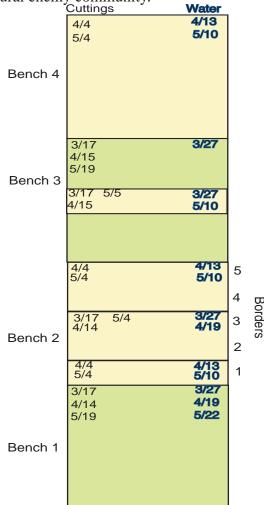


Figure 1: The MAC farm has been "bench-cutting" forage alfalfa since March to assist in the regional management and retention of Lygus in this preferred habitat. Cutting and watering dates are shown for 1 field above.