Spider Mites

Spider mites have been relatively light so far this growing season. A few corn fields have been sprayed, but overall mites have not been an issue. I have even had difficulty finding a producer’s corn field with enough mites so I could collect leaves to take back to infest test plots at the Texas AgriLife North Plains Research Field at Etter. Gary Gray and John Quillin (local consultants), have been scouting a few fields where mites infested leaves could be collected and used to infest the test plots. The populations in these fields were along the outer edge of the field and not causing much damage. Thrips that had migrated into the field were keeping the mite populations under control. But, this week we were beginning to find mite densities moving up the plant in one of the fields and starting to cause more feeding damage. The high temperatures and stressful conditions we have had this week are ideal for spider mite populations to start flaring.

Western Bean Cutworm

Moth activity of western wean cutworm has increased in Dallam and Hartley counties and to a lesser extent in Moore and Sherman counties (see graph below). This increased activity is about the same time as last year. Determining what will happen with this WBC moth activity is difficult to predict because there are fields in all different growth stages. Fields that are close to tasseling or will be tasseling during the egg laying activity in the next 3 to 4 weeks are at a greater risk of becoming infested.

The female WBC moths will lay eggs at night to the top surface of leaves in the upper third of the corn plant. Eggs are pearly white when freshly laid and will gradually darken to a purplish color. Larvae hatch from the eggs in five to seven days. Newly hatched larvae will either feed on pollen in the

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developing tassel within the flag leaf or move to the silks of ears if corn has tasseled. The ear ultimately becomes the primary feeding site with larvae eating developing kernels. The two tables on this page show the time frame for larval development and movement of larvae from the tassel to inside the ear. These tables show that by day 10 after hatching 89% of the larvae are 2nd instar and 73% of the larvae have moved to the silks. Therefore, there is approximately a 10 to 14 day window to control larvae before they move into the ear and still be fairly small for better control. Research has shown that it is economical to apply insecticides when 8% of the plants have egg masses or small larvae. Treat when the crop is at least 95% tasseled but before larvae have started feeding on the silks if most of the eggs have already hatched. If most of the eggs have not hatched and the field is completely tasseled the field should be treated when most of the eggs are in the purple color stage. (WBC information taken from Dr. Frank Peairs, extension entomologist at Colorado State University, publication at http://www.ext.colostate.edu/pubs/insect/05538.html

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