FOR IMMEDIATE RELEASE – April 11th, 2011

The 2011 grasshopper hazard map, based on the 2010 survey of adult grasshopper activity conducted by USDA-APHIS, shows a greater than normal risk for grasshopper outbreaks in some eastern Colorado counties. The map is viewable at CSU’s Extension Range Website: http://range.colostate.edu.

Higher risk of grasshopper infestation is predicted for Yuma, Logan, Morgan and Washington counties in northeastern Colorado. Other counties with more localized spots of high risk include Kit Carson, Weld, Phillips, Sedgwick, Lincoln, Cheyenne, Kiowa, Prowers, Bent and Otero.

Weather conditions will determine how much of the outbreak potential will be realized. For example, cool wet conditions after hatch can result in enough mortality in immature grasshoppers to prevent an outbreak. In addition, if adequate moisture is available, forage regrowth will offset much of the grasshopper damage. Most grasshopper outbreaks occur when drought conditions are prevalent.

There are over 100 different species of grasshoppers in Colorado but only about a dozen of these are considered important on rangeland, and five species of these cause most problems on crops.

Grasshoppers are important on rangeland because they compete with cattle for forage. The forage consumption of a grasshopper infestation averaging 8 per square yard over a 10 acre area is roughly equivalent to that of an individual cow.

Landowners in high risk areas should start monitoring grasshopper populations in rangeland soon after grasshoppers hatch, primarily during late May and June. Early scouting is important because treatments are most effective when grasshoppers are small. The goal of scouting is to get an estimate of grasshoppers per square yard, as well as their stage of development.

**Economic threshold for grasshoppers on rangeland:** The simple economic threshold for grasshoppers in rangeland is 15-20 grasshopper nymphs per square yard. This number should result in eight to ten adult grasshoppers per square yard. However, the economic importance of an infestation is affected by such factors as range condition, cattle prices, and treatment costs. CARMA is a computer program that allows the landowners to include these factors in their treatment decisions. CARMA is available at the same website as the hazard map mentioned earlier.

**Treatment options for grasshopper management** are based on the Reduced Agent and Area Treatment (RAAT) strategy, which alternates untreated swaths and swaths treated with reduced chemical rates. Using lower rates and leaving untreated areas reduces treatment costs by as much as 50% and preserves biological control. Grasshoppers move constantly, insuring that they will enter a treated swath and that levels of control will be only slightly lower than complete coverage applications.

Landowners working together to collaborate in aerial treatment of large tracks of rangeland can be the most practical and cost effective approach for controlling the expected grasshopper outbreaks this year. CSU Extension is working with local aerial applicators to educate landowners about the grasshopper risks. Dimilin® applications using the RAAT strategy can be made for less than $5 per acre and much less is several range sections are included. County Pest funds may be available as a cost share to assist landowners with the cost of grasshopper treatments. To find out if there is a treatment program in your counties check with your local county extension office.
Now is the critical time for landowners to start organizing and planning their grasshopper management strategies. The control treatments will probably begin in early June and there may not be time to organize then or to get on the applicator’s treatment calendars for timely treatments.

For more information on grasshopper survey results and technical assistance in rangeland grasshoppers’ management, you may contact USDA APHIS Colorado office at: 303-371-3355. They have a useful website that contains a large amount of useful grasshopper information, in addition to hazard maps: http://www.sidney.ars.usda.gov/grasshopper/index.htm.


Please contact Bruce Bosley for questions on this and other cropping systems topics at (970)768-6449 or bruce.bosley@colostate.edu.

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