

Winter Grain Mites
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Picture of winter grain mite (Source: the University of Nebraska Department of Entomology)

During the past two growing seasons, we have had an infestation of winter grain mites in small grains (wheat, oats, etc.) and pastures over-seeded with ryegrass. These little critters caused significant havoc in our area in 2007-08 and 2008-09, and they may pose a threat to small grain and winter annual forage crops again this year.

The adult winter grain mites are small (1 mm) bugs that are dark brown to almost black with red legs. Small grains, including wheat, barley, and oats, are susceptible along with grasses, especially bluegrass, bentgrass, ryegrass, and fescue. The mite also infests and damages legumes, vegetables, ornamental flowers and various weeds.

Winter grain mites are active during cooler periods of the year (mid-fall to late spring) with peak populations in winter months. Infestations usually occur in January or February and appear to be more common in fields that have lots of thatch at the soil surface or have historically received poultry litter, other animal manures, or biosolids.

Heavily infested fields appear grayish or silvery, a result of the removal of plant chlorophyll by mite feeding. When high infestations occur and feed on the leaves of plants for several days, the tips of the leaves exhibit a scorched appearance and then turn brown, and the entire plant may die. The mites do not cause the yellowing of leaves characteristic of spider mite infestations. Many infected plants do not die, but are stunted and produce little forage or grain. Damage on young plants is more severe than on older more established plants. Damage also may be greater in plants stressed by nutrient deficiencies or drought conditions. The result of this damage is reduced forage yield and reduced grain yield.

Foliar applications of pyrethroids such as Warrior on small grains or Mustang Max on forage grasses are the best chemical controls available for winter grain mites. Be sure and follow the rate and usage restrictions on all chemical labels. Winter grain mites are another reason for good cropping practices, like crop rotations. For more information on this and other current local issues, the Georgia Forages website (www.georgiaforages.com) or contact your local County Cooperative Extension office at 1-800-ASK-UGA1.