

Missouri Cotton Growers – Beware Of Root-Knot Nematodes



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Crop-threatening levels of root-knot nematodes (RKN) are present in several cotton fields in southeast Missouri. The symptoms of RKN injury will initially be visible 6 to 8 weeks after cotton emergence and may include yellow-green leaf color, stunt, and these plants may wilt more quickly than healthy plants during a hot afternoon. In addition, plants injured by these nematodes will have swollen areas (galls) visible on infected roots from 6 to 8 weeks after emergence to harvest. Farmers and consultants should be cautious about diagnosing the cause of yellow-green leaf color and stunt of midseason cotton because other factors such as low soil pH and drought may cause this, but only RKN causes galls on roots.

We learned from University of Missouri field trials that the best method for detecting the location of yield-robbing RKN in fields is to examine cotton roots for galls soon after harvest. This method was more reliable, more rapid, and less expensive than analysis of soil samples for root-knot nematodes.

Nothing can be done this year to help RKN infected cotton plants. However, cotton farmers can take action to protect their crop against these nematodes during 2013, but their options are limited. There are no cotton varieties highly resistant to these nematodes, and crop rotation is not helpful since these nematodes also attack soybean, corn, and grain sorghum. Growers should consider using a nematicide such as Telone prior to planting next year, or a seed treatment such as Avicta or Aeris. There are advantages and disadvantages to the use of each of these products. Δ

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