COTTON NEMATODE MANAGEMENT IN THE SOUTHEASTERN UNITED STATES

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Abstract

Southern root-knot, reniform and Columbia lance are the primary nematodes affecting cotton in the Southeastern United States. The voluntary withdrawal of Temik 15G by Bayer CropScience forced many growers to reevaluate their nematode management schemes in 2011. Growers were forced to choose between Telone II which is highly efficacious but rather expensive and seed-treatment nematicides which are less expensive than Telone II but are only effective where nematode populations are relatively low. These decisions need to be made on a field by field basis. Each field needs to be sampled and the relative numbers of each important nematode species determined. Thresholds are available in each state to determine whether densities of each species are above the levels that justify the use of Telone II or whether the numbers are low enough to allow the use of seed treatments. Site-specific applications of Telone II can help reduce input costs. Rotation can be a valuable tool to help reduce nematode densities. Peanut will reduce levels of Southern root-knot, reniform and Columbia lance nematodes however, corn will only reduce levels of reniform nematode. Additional control of Southern root-knot nematode can be obtained by growing either PHY 367WRF, ST 5458B2RF, ST 4288B2RF or DP 174RF. Growers should be aware that these cultivars offer no resistance to reniform or Columbia lance nematode. Since none of our available controls will eliminate nematodes we must manage nematodes on a yearly basis based on nematode sample results for individual fields.