

Corn Newsletter March 2008

Bob Kemerait

Plant parasitic nematodes that affect field corn are widespread across the production areas of Georgia and can reach damaging levels in specific fields. In a recent field survey conducted by county agents and supported by Dow Agrosiences, root-knot and stubby-root nematodes were found in over half of all fields that were sampled. This survey will be continued in 2008 to generate as much data as possible regarding the distribution and severity of nematodes that damage corn in our state.

In a field study conducted in 2007 in Seminole County, high populations of the southern root-knot nematodes severely affected the growth of the corn in the field. Use of Telone II, 3 gal/A, or Counter insecticide-nematicide (7 lb/A in-furrow at planting time) reduced early season levels of nematodes both in the soil and in the roots of the corn. Fumigation with Telone II led to dramatic increases in growth and also resulted in treated plants reaching tasseling approximately nine days ahead of corn not planted in fumigated soil. However at harvest, yields were similar in plots treated only with Poncho seed treatments, Counter, or Telone II + Poncho seed treatment. The University of Georgia will conduct more trials in 2008 to identify economic benefits for the grower when treating for control of nematodes.

Recommendations for 2008: Growers who will plant field corn where nematodes affecting the crop are believed to have reached damaging levels are encouraged to consider the use of a nematicide such as Counter (7 lb/A) at planting. In the past, growers who used Counter would not need to use an insecticidal seed treatment like Poncho because Counter is effective against the same early-season insect pests. However, in 2008 all corn seed from Pioneer will be pre-treated with Poncho, thus increasing the expense to the grower. Still, use of Counter can provide benefits to the grower in fields where nematodes damage the corn. Growers who use Counter at planting should not use an ALS herbicide in order to avoid phytotoxicity to the crop.

Fumigation with Telone II, 3 gal, per acre PRIOR to planting can help the growth of the corn crop; however the full benefits to yield at harvest continue to be investigated.