



HUMA GRO® TURF PROMAX™ Nematode Control Virginia Tech Study

Field Report

Virginia Tech
Blacksburg, VA



Summary: A two-year experiment tested the suppression of plant-parasitic nematodes (Stunt, Lance, Ring, Spiral) and beneficial nematodes (Free-Living) on English Boxwood ornamental plants (20 total boxes) using PROMAX™ organic pest control and two beneficial nematode treatments, *S. feltiae* & *S. riobrave*, and then effectiveness was tested 7, 30, and 60 days after treatment.

Description

Each experimental unit consisted of two English Boxwood plants with a Wheeling silt loam soil type (20% sand, 64% silt, 16% clay). Each experimental unit was separated from the next by at least one untreated boxwood plant. In June, soil samples (15-20 cores) of boxwood were recorded before the treatment and at 7, 30, and 60 days after one treatment was given. Nematodes species were identified and counted after each soil sample was taken. The following year in June, the experiment was repeated with a second round of treatments and then calculating the nematode population densities.

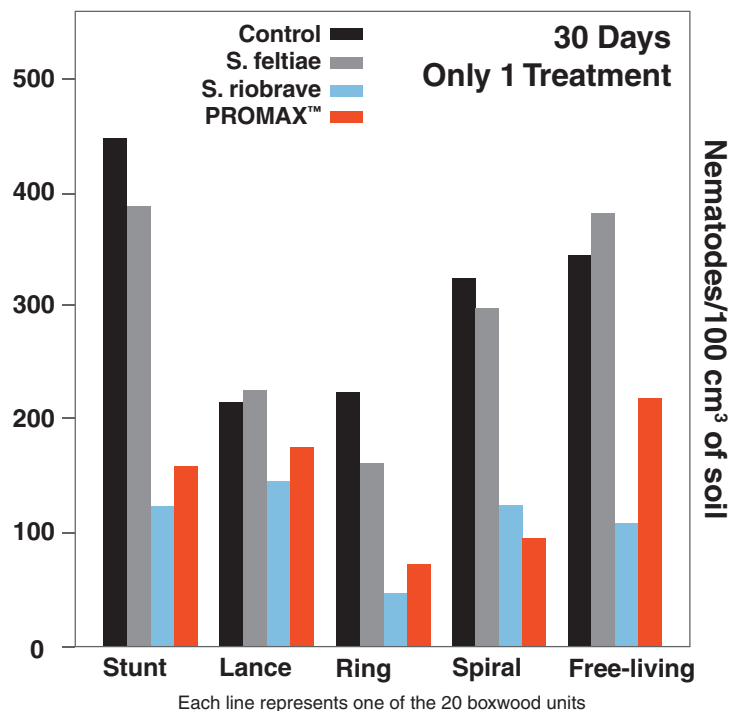
Results

Treatment with PROMAX™ affected population densities of plant-parasitic nematodes at all sample dates. Population densities of all plant-parasitic nematodes were lower seven days after treatment in plots treated with PROMAX™ than in the control plots. Population densities of *Mesocriconema* sp. (Ring) and *R. buxophilus* (Spiral) were less thirty days after treatment in plots treated with PROMAX™ than in the control plots. Population densities of only *R. buxophilus* (Spiral) were less 60 days after treatment in plots treated with PROMAX™ than in the control plots.

PROMAX™ organic pest control is a protective and curative pesticide recommended for control of soil borne diseases and plant parasitic nematodes of turf. The active ingredients of PROMAX™ are essential oils.

Conclusion

The results reported here demonstrate that application of the nematicide PROMAX™ reduced population densities of most plant-parasitic nematodes for a period of 30 days. In the 2002 season, *R. buxophilus* (Spiral) was reduced for 60 days. PROMAX™ also reduced population densities of free-living nematodes. This is an indication that PROMAX™ suppresses nematodes by killing them on contact. In laboratory experiments, specific essential oils in concentrations of 1,000 µL/L inhibited egg hatch and immobilized second-stage *Meloidogyne javanica*.



PROMAX™ applied at only 1 gallon per acre with impressive results. *S. feltiae* and *S. riobrave* applied at 1.5 billion infective juveniles per acre.

Full report available upon request

Huma Gro® Turf Products
Are Highly Efficient and Effective Due to Our Unique Delivery System



Micro Carbon Technology™

If you would like to learn more about this top quality product, contact us direct at 480-423-6815, email Michael@HumaGroTurf.com, or visit our website at www.HumaGroTurf.com.

