



## HUMA GRO® TURF PROMAX™ Organic Pest Control Reduces Nematodes on a Golf Course in CA

### Field Report

**Summary:**

Soil testing in early August indicated nematode count of 1,203 per cc. on the 9th green. All greens are infested with nematodes.

Greens are infested with Ring Nematodes that are killing the bent grass greens at a Golf Club in large patches. Toxic fumigation has taken place, closing the course for three days. Large portions of the most infested 9th green have been replaced with new turf.

The Nematode count on the 9th green will be our gauge in nematode reduction, using Huma Gro® Turf's PROMAX™ organic pest control product.

### Purpose

Nematodes eat the roots of the turf grass and cause large dead spots in the greens that can cause disease. Whether new turf is seeded or sod is laid in Nematode infested soil, it will not survive due to the destruction that the Nematodes cause.

Ring Nematodes life cycle lasts 25-35 days. Second stage juveniles (J2) hatch from the egg in 11-15 days, molt to a J3 in 3-5 days and stage 4 juvenile (J4) in 4-7 days, becoming an adult 5-6 days after that.



Adult females begin to lay eggs in 2-3 days and can lay 25 to 30 eggs. An adult female will deposit single eggs every 2-4 days. So it is very important to stop the life cycle.

### Description

**1st soil sample already completed.**

**1st application:** (9-1-11) 2 gallons PROMAX™ per acre  
**Water:** Enough to get penetration of the entire root profile plus an inch or 2 below for buffer zone

**Day 14:** (from 1st application 9-14-11): Course took 2nd soil sample  
**2nd application:** 1.5 gallons PROMAX™ per acre  
**Water:** Full penetration of entire root profile plus 1 to 2 inches for buffer zone

**Day 28:** (2 weeks from second application): Course took 3rd soil test  
**3rd application:** 1 to 2 gallons PROMAX™  
**Water:** Full penetration of root profile plus 1 to 2 inches for buffer zone

**Day 42:** Soil test is required before last application. Apply ZAP® @ 1 gallon per acre for the rebuilding of healthy soil biology

### PROMAX™ Application Procedure

When	Who	What
Early August	Super.	Soil Samples and Analysis
8-29-11	Michael BHN	Delivery of product
9-1-11	Super.	1st PROMAX™ @ 2 Gal./Acre - Start 42 Day Schedule. COMPLETE
9-14-11	Super.	2nd PROMAX™ @ 1.5 Gal./Acre + 2nd Test COMPLETE
9-28-11	Super.	3rd PROMAX™ + Test COMPLETE
10-5-11	Super.	3rd PROMAX™ @ 1 Gal./Acre COMPLETE
10-12-11	Super.	Detour from 42 Day Schedule
10-26-11	Super.	Apply ZAP® + 4th Soil Test COMPLETE

## Results

### Nematode Count 9th Green

August '11	1,203 per cc
9-14-11	589 per cc
9-28-11	87 per cc
10-26-11	No Test Taken



## Conclusion

In a phone conversation with the Superintendent, he said that management was so pleased with the results, and that the greens had already filled in, they would wait to do the ZAP® and last soil test at the end of October.

The postponing of the ZAP® application could effect the timely rebuilding of the soil to a healthy state. This healthy soil will help combat the return of nematodes through competitive exclusion.

**PROMAX™ was able to efficiently and effectively kill a majority of the population of nematodes per acre, improving the soil and turf health, vigor and quality.**

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.

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**.

