

## Update On Anguina Pacificae Turf Research From UC Davis

November 13, 2001

1. For one year, monitor population cycling of *A. pacificae* on a biweekly basis.

Various extraction techniques for *A. pacificae* and other nematodes present in turfgrass have been tested and standardized and we are ready to proceed with the biweekly sampling of one green at the Olympic Club and one green at Spyglass Hill.

2. Determine the distribution of *A. pacificae* in northern California golf courses.

A tour of 16 golf courses confirmed that *A. pacificae* galls were present in all but two of the courses (Presidio and Lake Merced). Subsequent lab examination of samples from an unhealthy and a healthy green at the Presidio indicated *A. pacificae* was present in the unhealthy green but not in the healthy green. Samples from 4 of the 16 courses were examined for the presence of other plant parasitic nematodes as well. Spiral, ring, root-knot, and sheath nematodes were found to be present. All of these could be damaging to turf. Nematodes extracted from the other 12 courses were accidentally cooked by a malfunctioning refrigerator before they could be counted. These courses will be sampled again.

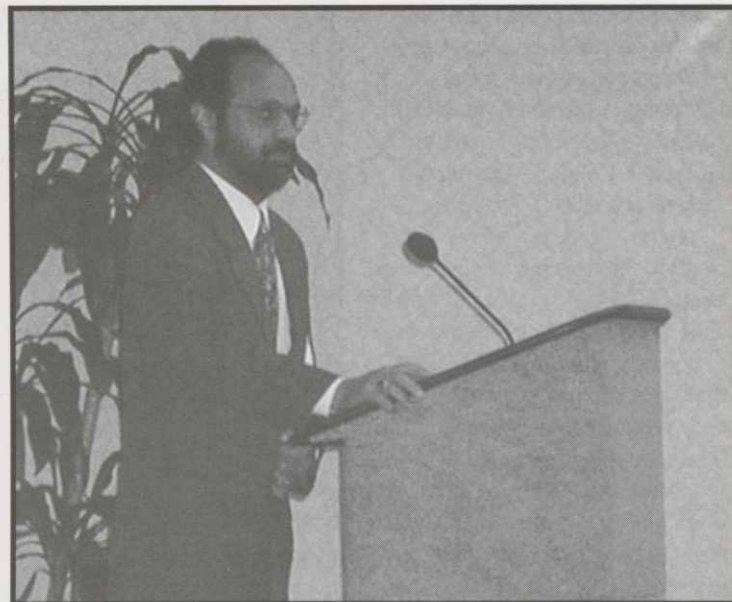
3. Determine the efficacy of possible new post-plant treatments for *A. pacificae*.

A multiple application technique for NemaCur developed for use on grapes and citrus was tested

in a preliminary experiment at the Olympic Club. Instead of one full rate application, three lower rate applications are applied. This is often more effective because the nematicide may not be equally effective on eggs, adults, and juveniles which are simultaneously present. Areas of a green were given 0, 1, 2 or 3 applications at approximately weekly intervals. Subsequent examination of samples from the green showed that more galls were present in the untreated area than in the single application area, that 2 applications had still fewer galls with some dead nematodes present, and that no galls were found following 3 applications. This work will be replicated in additional trials.

Laboratory trials indicate that *A. pacificae* can be killed by heating at much lower temperatures than many other nematodes. A preliminary trial conducted at the Olympic Club indicated turf could survive an application of water as hot as 144F. Additional work is planned which could lead to development of heat treatments for nematode control.

Following up on an observation by Poppy Hills that acidified water applied several times a week appeared to be reducing nematode damage, we examined samples from 2 locations that had not been treated with acidified water and 3 that had been. The samples from treated areas had fewer nematode galls than those from the untreated. Additional trials with acidified water will be conducted.



*Dr. Harivandi presides at the Institute*

## Ball Mark Repair Week Pays Dividends

Under the direction of Media Consultant Emmy Moore-Minister the GCSANC sponsored Ball Mark Repair Week was a great success. The week long event, which climaxed with a booth at the Transamerica Senior golf event, produced numerous mentions in local golf columns, articles in golf publications and three live radio interviews.

According to Bob Costa who serves the GCSANC media liaison, the event provided valuable exposure for NorCal superintendents. Our goal was to use "Ball mark repair week as a platform to both educate golfers and bring notice to superintendents" said Costa. "Emmy, through her numerous contacts was able to expand our visibility well beyond what we achieved last year".

At the Transamerica, Bob Lopic was joined by Gary Carls, Vince Keats, Mike Willis, Steve Good and Ray Leland where they passed out GCSANC logoed ball mark repair tools and answered questions regarding the superintendent profession.