



Eurofins STA Attends the International Workshop on Grapevine Trunk Diseases

By Judit Monis, Ph. D

Above Photo: Vineyard in Santa Cruz, Chile

At Eurofins STA (ESTA) our philosophy is to stay current with scientific literature and technologies. From time to time we review, update, and add new methods and tests to our Menu of Services. This is why we offer the most reliable and complete testing services available to the wine industry. In January 2010, we attended the 7th International Workshop on Grapevine Trunk Diseases (ICGTD) held in Santa Cruz- Colchagua Valley, Chile. The ICGTD meeting, held every two years, is ideal for collaboration and interaction among grapevine pathologists. Through these interactions our lab personnel is able to stay up to date with current technology and share our discoveries with other specialists in the field.

Scientists from 16 countries, including the USA, presented 81 scientific papers (34 Posters and 47 oral) on the following topics: "Pathogen Identification and Characterization", "Disease Detection and Losses", "Host-Pathogen Interactions", and "Disease Management.". A vineyard visit (Lolol Valley) was organized to learn about local disease problems and factors (soil, varieties planted, diseases, and human influence) that influence local vineyard performance and wine production.

Judit Monis presented a paper on the "Association of Seimatosporium spp. in Symptomatic Grapevine Wine Varieties in California Vineyards". This fungus was isolated from three different symptomatic wine grape varieties in California. The symptoms observed in the affected vines differed in each variety tested. Cabernet Franc exhibited "blotchy red leaf" symptoms, which could

have been confused with the presence of virus infection, and streaking in the wood. Sauvignon Blanc displayed wedge shaped necrosis and dead arm symptoms. While the Syrah variety displayed the most severe symptoms which included cracked trunk with extensive necrosis, pitting, dead arm, severe decline, and mortality. In all varieties, except Syrah, the growers were able to control the disease using cultural practices. Specific HealthCheck™ Panel A and B http://www.stalabs.com/Grapevine_Testing/Grapevine_Healthcheck.php were performed to detect viruses associated with decline and/or leafroll disease. All tests ruled out the presence of known viruses in the symptomatic vines. However, Seimatosporium spp. was the only significant fungus isolated and identified using taxonomic reference guides. This is the first report of Seimatosporium spp. in grapevines grown in California. However, Seimatosporium spp. causes "Almond Leaf blight" disease in California. In addition, Seimatosporium spp. and other related species were reported previously to affect grapevines in Australia.

At the meeting, Pestalotiopsis spp. (a species related to Seimatosporium) among other fungal pathogens were reported to be associated with grapevine cankers in California and United States. Pathogenicity studies at the Gubler lab showed that these species are capable of causing disease in Vitis vinifera and hybrid species.

Other topics of interest focused on the disease prevention, management, and control of pathogens associated with trunk disease. These control measures included differential tolerance of rootstocks to fungal pathogens,

fungicidal treatments, double and late pruning (with subsequent fungicidal application), application of bio-control agents, and remedial surgery. Nursery prevention measures presented included ozonization of scion material, hot water treatment, cold storage of cuttings, and the amendment of nursery soils with mustard seed meal (bio-fumigation) to control young vine decline causing pathogens. Judit also attended the 16th meeting of the International Council for the Study of Virus and Virus-Like Diseases of the Grapevine (ICVG) held in Dijon, France August 31-September 4, 2009. An article highlighting topics discussed at the meeting will be published in the May/June issue of Practical Winery and Vineyard Magazine this year.

Please contact Judit Monis (juditmonis@eurofinsus.com) if you like to discuss the information or have questions about our grapevine disease testing program.



eurofins | STA Laboratories

Colorado Laboratory
1821 Vista View Drive
Longmont, Colorado 80504
(303) 651-6417

Gilroy Laboratory
7240 Holsclaw Rd.
Gilroy, CA 95020
(408) 846-9964

www.stalabs.com
info@stalabs.com