

PRESENTATION OVERVIEW

2019 WESTERN CHAPTER ISA
CONFERENCE & TRADE SHOW

Witches Broom on Blue Palo Verde

Date/Time/Session: **WEDNESDAY, 5.01.2019, 4:15:00 PM, in the PESTS session**

Presentation Length: **45 minutes**

Presented by: **Ursula Schuch, PhD**

Co-Presenter (if scheduled):



Overview of Presentation:

Palo verde witches broom occurs primarily in the blue palo verde tree *Parkinsonia florida*, the state tree of Arizona. Symptoms of witches broom disease are dense clusters of short, flexible, thornless branches with stunted leaves, and branch dieback. The disease is widespread in nursery-grown trees and landscape trees in southern Arizona. We found evidence that a previously undescribed emaravirus causes the broom tissue and the previously suspected eriophyid mite vector is always found in great numbers in brooms. Healthy blue palo verde contain no emaravirus-like genome and the suspected mite vector is generally absent. The disease is now so prevalent that municipalities have banned the planting of *P. florida* on their properties until control methods become available. The disease is also found in neighboring states and in wildlands away from urban areas. Movement of infected nursery stock increases the risk of further spread of the disease. This presentation addresses the conference theme by introducing arborists to a disease that has been present in southern Arizona for more than 50 years without causing much harm, but has become a threat to the state tree within the last decade. The presentation covers disease description, diagnostics, and latest research results of control methods.

Presenter Bio:

Dr. Ursula Schuch is a University of Arizona Extension Specialist and Professor with responsibility in commercial horticulture. Dr. Schuch received a Ph.D. in Horticulture and a MS in Forest Science from Oregon State University. She presents seminars for green industry professions and conducts research to address relevant issues in horticulture production practices and landscape management. Her research interests include irrigation requirements of trees, abiotic stress affecting plants, and water conservation in nurseries and landscapes.