

NEWS

Research for Cycad Conservation

Fairchild joins a team effort to save cycads in the Pacific.

In the last few years, the genus *Cycas* has been infected with the cycad aulacaspis scale (CAS) insect throughout the world. South Florida saw the pest devastate the king sago (*Cycas revoluta*) in the mid-1990s.

More on scales

For practical information on the cycad aulacaspis scale (CAS) and how to control it on your own cycads, visit www.fairchildgarden.org/fairchildnews/articles/newsid/9. Another resource for technical references and other Internet links is the IUCN/SSC Cycad Specialist Group CAS web page: www.iucn.org/themes/ssc/sqs/csg/pages/CAS.htm.

Currently in Guam, the native *Cycas micronesica* is being killed at an alarming rate in the wild due to heavy infestation of this and other insects, and *Cycas* in many countries—including Taiwan, Australia and China—are being eliminated by this introduced pest.

The Cycad Specialist Group of the IUCN has recognized CAS as one of the greatest conservation problems facing wild *Cycas* populations. Fairchild scientist Dr. Jack Fisher flew to Thailand to collect stem samples for microscopic study. His research project is being funded by the Mauget Company, which specializes in tree injection systems. The company wants to find out if their method for injecting trees with insecticide at high pressure, which performs well on conifers



The underside of a *Cycas revoluta* leaf infested with CAS (white) and a few brown-shelled scale insects.

JACK FISHER

and hardwood trees, also works on soft-wooded cycads, and whether the high pressure and the drill holes damage the trunk.

Tommy Marler, a plant physiologist and local cycad expert at the University of Guam, and Anders Lindstrom, cycad curator at the Nong Nooch Tropical Garden in Thailand, will collaborate. Expendable cultivated trees at Nong Nooch will be treated, and the histology of the trunk will be examined at intervals at Fairchild's Center for Tropical Plant Conservation to see if permanent injury occurs. Researchers need this information before the wild cycads in Guam and elsewhere can be recommended for mass treatment.