PALM NEWS

Two recent publications **shed light on Hartrot, a lethal disease of coconuts** (and perhaps other palms) that threatens the coconut industry in the Latin America. The disease is caused by a parasitic microbe that colonizes the phloem of coconut stems. In "Fine structure of phloematic trypanosomatid-coconut tree interaction" (J. Gen. Plant Pathol. 76: 74–83. 2010.), M. da Cunha et al. studied the process by which the microbes "clogged" the phloem sieve cells in coconut tissues. They found the organism in shoot apex, leaves, stems and inflorescence in diseased plants, but not in the roots. In their work "*In vitro* cultivation and morphological characterization of phloemic trypanosomatids isolated from coconut trees" (J. Eukaryot. Microbiol. 57: 87–93. 2010.), D.G. Keller and F.C. Miguens cracked the problem of culturing the organism that causes Hartrot. Growing the organism in the laboratory will allow researchers to study the organism more easily and investigate possible control measures.


A. Popovkin

Once again, researchers have demonstrated the **importance of mycorrhizae in wild palms**. In "Contribution of mycorrhizae to early growth and phosphorus uptake by a neotropical palm" (J. Plant Nutr. 32: 855–866. 2009.), J. Ramos-Zapata et al. have show that mycorrhizae associated with the roots of *Desmoncus othacanthos* function like an extension of the palm's root system, soaking up nutrients, especially phosphorous, that would otherwise be unavailable to the palm. Their results showed that mycorrhizae play an important role in early growth and phosphorous uptake by *D. orthacanthos* seedlings but that the absence of mycorrhizae is easily and readily compensated for by the application of fertilizer. While mycorrhizae may not be relevant to palms growing in nurseries or gardens, the interaction is important in establishing plantations of palms on infertile soil, or in using palms in forest restoration projects.


Nobu Tamura

New fossils from Big Bend National Park suggest that **dinosaurs may have eaten *Sabal* palm fruits**. In their paper "Fossil palms (Arecaceae, Coryphoideae) associated with juvenile herbivorous dinosaurs in the Upper Cretaceous Aguja Formation, Big Bend National Park, Texas" (Internat. J. Plant Sciences 171: 679–689. 2010.), S. Manchester and coauthors described two new species of extinct *Sabal* from fossilized seeds that look remarkably similar to those of modern species. More surprisingly, they showed how the seeds were associated with the bones of juvenile dinosaurs (hadrosaurs and ceratopsians). They surmised that palms similar to modern *Sabal* species may have been food sources for young herbivorous dinosaurs.


M. Gibbons

The latest issue of *The Palm Journal* (No 194), the journal of our affiliate in Southern California, is devoted to ***Trachycarpus* and *Guihaia***; in it you will find a most useful illustrated account of the species of *Trachycarpus*, written for the grower. The paper by Chris Stevens is a comprehensive summary of what is known about this popular genus. The article concludes with a table that allows for a side-by-side comparison of the species. Tobias Spanner provided a key, which should allow growers to identify mystery *Trachycarpus* species in cultivation. *Guihaia*, which is less common in Southern California gardens, gets a less expansive treatment, but the information and the photos will surely spark an interest in this intriguing genus.