## **P**ALM **NEWS**

**Pinanga simplicifrons** has been rediscovered in Singapore. About 30% of Singapore's native vascular plants are considered extinct, collateral damage brought about by the extraordinary rapid pace of development in a tiny island nation. The news of a long-lost palm rediscovered brings joy to the hearts of palm afficionados everywhere. Details of the discovery, along with color photos of this beautiful palm, were published recently by W.F. Ang et al. (Nature in Singapore 3: 83–86. 2010.). The palm is a dwarf species and is restricted to the Nee Soon Swamp Forest, the last of primary freshwater swamp forest in Singapore. Sadly, even this site is encroached by a golf course, military training area and a pipeline. A pdf copy of the publication is available at http://rmbr.nus.edu.sg/nis/bulletin2010/2010nis083-086.pdf.





Forgetful or unlucky rats are good for palms. Attendees at this year's Biennial in Brazil were wowed by the lush stands of *Allagoptera arenaria* in the dunes along Rio's beaches. We now learn that these stands of palms may owe their existence, in part, to rats. In "The role of *Cerradomys subflavus* (Rodentia, Cricetidae) as seed predator and disperser of the palm *Allagoptera arenaria*" (Mastozool. Neotrop. 17: 61–68. 2010.), V. Grenha and coworkers reported that the seeds of *Allagoptera arenaria* are a favorite food of the Terraced Rice Rat. The bad news is that the rat is a seed predator: it gnaws into the nuts to get to the edible seeds, eating them on the spot.

The good news is that not every seed is consumed. Grenha et al. found that about 12% of the seeds were buried up to several meters away for later consumption. The seeds dispersed and buried by a forgetful rat, or one killed by a predator, have an opportunity to germinate.

The Royal Palm Bug (*Xylastodoris luteolus*) is an insect that attacks the emerging leaves of *Roystonea regia*, and perhaps other species of *Roystonea*. Although the damage – frizzled and brown leaflets on new leaves – is not fatal, it is aesthetically undesirable. A recent test of systemic neonicotinoid insecticides applied as soil drenches examined the extent to which they are transported into the leaves of mature royal palms. Ali and Caldwell found that dinotefuran translocated the fastest of the three insecticides in their study. They noted that soil drenches are preferable to aerial sprays when treating tall palms, because the risk of spray drift is eliminated; however, the authors did not address the environmental risk of run-off or ground water contamination posed by soil drenches. The work, "Royal Palm Bug *Xylastodoris luteolus* (Hemiptera: Thaumastocoridae) control with soil applied systemics" (Florida Entomol. 93: 294–297. 2010.), is freely available on-line



at http://www.fcla.edu/FlaEnt/fe932.htm. We note that the manufacturer of dinotefuran was a sponsor of the study and performed some of the laboratory analyses reported therein.



Researchers in Australia have provided strong evidence that suggests that the 18 species of *Livistona* in Australia are not of ancient Gondwanic origin. Gondwana, the southern hemisphere supercontinent that included Australia, Africa, India, Antarctica and South America, began breaking up in the mid-Jurassic. Michael D. Crisp and co-workers analyzed nuclear and chloroplast DNA to arrive at the conclusion that that *Livistona* was absent from Australia during that time. They conclude that the entire representation of *Livistona* in Australia resulted from a single ancestor that colonized Australia from the north during the Miocene, about 10–17 million years ago. *Livistona* diversified within Australia to occupy arid, monsoonal and ever-wet habitats. (Crisp, M.D. et al. *Livistona* Palms in Australia: Ancient relics or opportunistic immigrants? Molec. Phylog. & Evol. 54: 512–523. 2010.)