Cooperative Extension University of California Ventura County

Landscape Notes

By James Downer, Farm Advisor
669 County Square Dr., Suite 100, Ventura, CA 93003-5401 - 805-645-1458

Vol.22 No.1 July 2009

What is wrong with Pygmy Date Palms???

Have you notice that pygmy dates palms don't look quite right? Evidently many of you have, because I have been getting two or three samples or emails a week about this problem. Although many problems can occur on this palm the culpret is probably the Palm planthopper or datebug (*Asarcopus palmarum*). The palm planthopper infests date palms in their native ranges in North Africa and the Middle East. The insect has been known in California since the 1920's as a pest on young palms in the genus Phoenix.

Planthoppers attach and feed on inflorescences stalks and tender new growth, usually of the newest leaves which may not have expanded fully. The insects prefer to feed on lighter colored tissues at the base of the petiole, but will also feed further along the rachis of unexpanded leaves. Adult insects are secretive and will hide from view and move constantly if disturbed. When populations are dense they may produce copious honeydew and attract ants. Adults are difficult to find because they live between unexpanded leaves inside the crown of the plant. Insects are active throughout the year. Females lay eggs on the foliage sometimes several feet away from where they congregate but upon hatching, nymphs will travel back to the basal portions of the leaf. The female insects are up to 3mm long by 1.5mm (males smaller) brownish in color, they have no wings and all stages have red eyes. There are five nymphal instars.

Although the insect has been known for a long time, it has only recently become a greater problem to the point where many pygmy date palms (*Phoenix roebelini*) in Southern California are noticeably affected. Other sources around the world (Oman) also indicate an increase in its prevalence and damage on date producing palms. The damage is first seen as speckling or small yellow blotches on newly emerging leaves. In time, palms become stunted and frond loss increases giving the palm a tattered or sickly appearance. How would you know if you have a secretive insect problem that is hidden from view--mostly because *Phoenix roebelini* have few other problems. They are not affected by Fusarium wilt disease, are fairly resistant to pink rot and have few other insect problems with the exception of some scale insects that occur on palm. One possible confusing disorder would be potassium deficiency which shows symptoms of yellow spotting or speckling of the foliage, however this would be on older leaves not newly emergent leaves and the spots are much smaller than those made by the datebug.

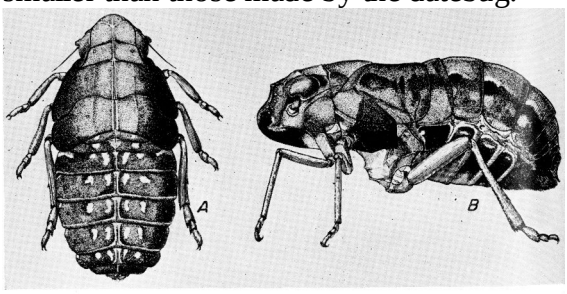

Figure 7.—Datebugs: *A*, Nymph; *B*, adult.
Image from Stickney et al., 1950.

I know of no spray trials or research on control methods. There are only anecdotal reports of spray efficacy. In general most pest control advisors I have queried indicate this is a difficult insect to control. PCA's that have controlled the pest indicate that directed sprays/drenches of insecticides registered for landscape use into the bud of the palm have been effective. Recovery and monitoring of the palm for recurrent symptoms or insects is necessary to gauge spray intervals. The pest is tenacious and difficult to manage but can be controlled with aggressive treatments. It is also advised to carefully inspect palms before planting so that the insect is not brought "on site" with infested nursery stock.

References:

Ebling, W. 1959. Subtropical Fruit Pests. University of California Division of Ag. Sciences, San Franciso 436p.

Howard, F.W., D. Moore, R. Giblin-Davis, and R. Abad. 2001. Insects on Palms. 2nd ed. CABI publishing , Oxon, UK. 410pp.

Stickney, F.S. D.F. Barnes and P. Simmons. 1950. Date Palm Insects in the United States. Circular 846. United States Department of Agriculture, Washington, D.C. 54pp.