

centration of fat red 7B was increased to 200 or 500 mg per 125 mg of diet, the adults were colored red for 2 days after eclosion, similarly, as they were colored red in diet with 125 mg of fat red 7B. Eggs did not hatch on diets mixed with janus green B, quinaldine red, crystal violet, fast red PDC salt, and 2,3,5-triphenyltetrazolium chloride (the latter 2 diets dried out completely). Perhaps some dyes are ovicidal. Larval development was delayed 2 to 3 days if larvae fed on diets with methylene blue and the 4 Tinex® dyes. The average number of recovered pupae ranged from 26 from diet with Tinex black to 2475 from typan blue; an average number of 1935 pupae was recovered from diet with fat red 7B (125 mg) and 1980 from the control diet. This note discerns 55 chemicals that were unsuitable internal dye markers for adult *A. suspensa*. (Mention of a commercial or proprietary product does not constitute an endorsement by the USDA.)

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MYNDUS CRUDUS (HOMOPTERA: CIXIIDAE) IN
CANCUN, MEXICO

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Myndus crudus Van Duzee (Homoptera: Cixiidae) es una chicharrita asociada a los céspedes y a las palmeras y está implicada como un vector del amarillamiento letal (AL) de palmeras en Florida (Howard et al. 1983). Está ampliamente distribuido en América tropical y subtropical y ha sido registrado de las localidades afectadas por el amarillamiento letal notadas en seguida: el sur de Florida, Cuba, Jamaica (Kramer 1979), Grand Cayman Island (Fennah 1971) y el Valle del Rio Bravo del Norte, Texas (Meyerdirk y Hart 1982). Las areas de las Américas afectadas por el AL donde no se ha registrado *M. crudus* incluyen Hispanola, donde se ha registrada una especie de *Myndus* no descrita pero proxima a *M. crudus* (Howard et al. 1981) y la isla de Nueva Provedencia, Bahamas. Se conoce la presencia de la especie en varias localidades en México, pero hasta ahora no se la

(This note has been prepared in both Spanish and English versions since the topic is of particular interest to readers in the Caribbean, Central and South America.—Ed.)

habia registrada en el area de Cancún, Quintana Roo, donde recientemente se ha registrada la enfermedad (McCoy et al. 1983). Durante el período 2-3 de Septiembre 1983 se examinó el follaje de cocoteros en varios sitios de Punta Cancún, la tierra firme cercana, e Isla Mujeres. Cuarenta ejemplares de *Myndus crudus* se colectaron en un sitio en Punta Cancún durante un período de unas dos horas. Los ejemplares se depositaron en las colecciones del U.S. National Museum, Florida State Collection of Arthropods, y la Dirección de Sanidad Vegetal, y en las colecciones de los autores. Con este registro, se conoce *M. crudus* de 6 de las 8 localidades de las Americas donde se ha registrado el AL. Parece probable que el insecto está presente en Hispaniola y en Nueva Providencia, pero se debe llevar a cabo unos reconocimientos en estas localidades para confirmar este hipótesis. Se debe llevar a cabo un reconocimiento extenso de los insectos auchenorrhynchos asociados a palmeras en el area de Cancún, como un primer paso en intentar implicar un vector de AL en Quintana Roo.

Myndus crudus Van Duzee is a planthopper that is associated with grasses and palms and is implicated as a vector of lethal yellowing (LY) diseases of palms in Florida (Howard et al. 1983). It is widespread in tropical and subtropical America and has been reported from the following LY-affected localities: southern Florida, Cuba, Jamaica (Kramer 1979), Grand Cayman Island (Fennah 1971) and the Rio Grand Valley, Texas (Meyerdirk and Hart 1982). LY-affected areas in the Americas where *M. crudus* has not been reported include Hispaniola, where an undescribed but closely related species of *Myndus* was reported (Howard et al. 1981) and New Providence, Bahamas. *Myndus crudus* is known from several localities in Mexico, but to date has not been reported from the Cancun, Quintana Roo, area, where LY was reported recently (McCoy et al. 1983). Foliage of coconut palms in several sites on Punta Cancun, the nearby mainland and on Isla Mujeres, was examined on 2-3 September 1983. Forty specimens of *Myndus crudus* were collected from coconut palm at one site on Punta Cancun within ca. 2 h. Specimens were deposited in the collections of the U.S. National Museum, the Florida State Collection of Arthropods, the Dirección de Sanidad Vegetal, Mexico, and in the authors' collections. With this record, *M. crudus* is known from 6 of the 8 LY-affected areas of the Americas. It is likely that the insect is present in Hispaniola and New Providence, but these areas should be surveyed further to confirm this hypothesis. An extensive survey of auchenorrhynchous insects associated with palms in the Cancun area should be made as a first step in attempting to implicate a vector of LY in Quintana Roo.

Mark Schuiling, National Coconut Development Programme, Tanzania, accompanied us and captured the first of our series of *M. crudus*. Travel was partially funded through a gift from Dow Chemical Company to the University of Florida Foundation and through the Center for Tropical Agriculture of the University of Florida. Florida Agricultural Experiment Station Journal Series Number 5373.

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