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THE EARLIEST KNOWN DATE OF COLLECTION OF MYNDUS CRUDUS (HOMOPTERA: CIXIIDAE) FROM COCONUT PALMS IN JAMAICA

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Recent studies provide evidence that a cixiid planthopper Myndus crudus Van Duzee is a vector of lethal yellowing disease (LY) of palms (Howard et al. 1983). Johnson and Eden-Green (1978) stated that this insect had not been identified in collections from coconut palms until 1969, in spite of intense research by entomologists in Jamaica during the 1960's. Actually, the apparent association between this insect and coconut palms was known as early as 1958 when Dr. José Ramos of the University of Puerto Rico identified specimens collected from coconut in Jamaica as Haplaxius cocois (Fennah), subsequently synonimized with M. crudus (Kramer 1979).

The late Dr. Arthur Reid, Entomologist at the Jamaican Ministry of Agriculture, began a survey of insects of coconut palms about 1957 in an effort to find possible vectors of LY which at the time was thought to be caused by a virus. One of his methods was to place "sticky board" traps among foliage of coconut palms. The insects so collected were washed off the boards with xylene and brought to me at the Institute of Jamaica for sorting. In these collections were several specimens of *M. crudus*. Since some fulgorids are known to be vectors of plant viruses, we suspected these cixiids as possible LY vectors. Our collections were examined by various LY researchers in the 1960's but during that period a number of species other than *M. crudus* were under scrutiny.

In the 1970's, several discoveries concerning LY (Reviewed by Howard et al. 1983) focused attention on *M. crudus* as the prime suspect vector.

Some of the specimens of *M. crudus* sent to Dr. Ramos were collected at Round Hill, Hanover Parish (western Jamaica) on 18.IV. 1958. Five of

these specimens, one with Dr. Ramos' label still on it, are in the collections of the Institute of Jamaica. The correspondence with Dr. Ramos regarding this matter is here also.

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FIRST RECORDS OF HYMENOPTEROUS PARASITES OF APHIDS FROM TRINIDAD, WEST INDIES

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According to Kirkpatrick (1954, 1955), the only aphid parasite known from Trinidad was *Pseudendaphis maculans* Barnes (Cecidomyiidae). Similarly, Taylor (1952), during his intensive collecting for natural enemies of aphids, did not find any Hymenopterous aphid parasites. Although I repeatedly collected aphids and associated natural enemies, I failed to find any Hymenopterous aphid parasites in Trinidad during the first 17 years (January 1952-January 1969) I spent in the West Indies. This contrasted sharply with the situation in Barbados and elsewhere in the Lesser Antilles where during even short collecting trips, I regularly encountered mummified aphids.

On February 10, 1969, I reared Aphelinus mali Haldeman (det. B. D. Burks, USDA) from Aphis gossypii Glover on the ornamental Petraea arborea in my garden at Santa Margarita Hill, Curepe, and on other occasions from aphids on Ixora sp. and Lantana montividensis, also in Curepe. In January (1977), again in my garden, I noted the remanents of numerous mummified aphids on an introdued shrub Leucophyllum texanum. No live aphids were present but two intact aphid mummies contained dead teneral Aphidiid adults. In April 1977, I collected several mummified aphids on Ixora, which with few exceptions, had already produced parasites. Dead teneral adults dissected from the remaining aphid mummies were Lysiphlebus testacipes (Cress) (det. P. Stary, Czechoslovak Acad. of Sciences), a species known to attack a wide range of aphids in North America, South America and the West Indies. This parasite has subequently become common and has been reared or observed frequently in Trinidad. For example,