

VIRGIN ISLAND RECORDS OF THE CHANGA,
SCAPTERISCUS DIDACTYLUS
(ORTHOPTERA: GRYLLOTALPIDAE)

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The distribution of introduced mole crickets in the United States, Puerto Rico, and the Virgin Islands was recently documented (Nickle and Castner 1984). Since then, additional data have become available on the species occurring on the various Virgin Islands. These islands are all small, and their isolated populations and limited ecological diversity would allow a degree of control over field studies. Therefore, information on the distribution of these economically important species on these islands may be important in offering potential pilot-study sites for biological control attempts.

Two specimens of the long-winged species *Scapteriscus didactylus* (Latreille) constitute the first records of mole crickets from the northern Virgin Islands (one nymph: St. Thomas, Estate Dorothea, elev. 800', 25-V-1979, M. A. Ivie colr.; and one female: St. John, V.I.E.R.S., Lameshur Bay, V-1979, W. B. Muchmore colr.; both placed in the NMNH, Washington). These islands have received much less attention from entomologists than St. Croix and belong to the group of islands lying on the Puerto Rican Bank, approx. 65 km north of St. Croix.

A short-winged mole cricket (*Scapteriscus abbreviatus* Scudder), reported from St. Croix by Miskimen and Bond (1970: 18) is the only previously verified Virgin Island record of a mole cricket. Three Cruzian specimens of this species collected by Beatty in 1940 and reported to be in the University of Michigan collection (UMMZ) by Nickle and Castner (1984), document its occurrence on that island. However, Beatty's St. Croix record of the long-winged *S. vicinus* (1944: 117), and lack of a record for *S. abbreviatus* remain a mystery. The UMMZ material available in 1940 would certainly have been included in the 1944 faunal treatment (Beatty 1944). Beatty stated that specimens of Orthoptera reported were determined by A. B. Gurney, and that the vouchers were deposited in the National Museum of Natural History, yet no such vouchers were found there (Nickle and Castner 1984).

Miskimen and Bond, in their insect fauna of St. Croix (1970: 18), merely repeated Beatty's record of *S. vicinus* and added *S. abbreviatus* as the only mole cricket they found on the island. Some 250 blacklight traps were operated for 3 1/2 years on St. Croix in 1966-1969 (Cantelo, *et al.* 1974), and this material was available to Miskimen and Bond (Miskimen, pers. comm. to MAI), yet they reported no long-winged mole crickets. One of us (MAI) has examined many light-trap catches from St. Croix without seeing a long-winged mole cricket. It is possible that Beatty did not actually submit his specimens for determination, perhaps assuming they were the same as the species receiving so much attention in neighboring Puerto Rico. Alternatively, perhaps the vouchers were immatures, misidentified and discarded by Gurney. In any case, the

record of a long-winged mole cricket on St. Croix, either *S. vicinus* or *S. didactylus* (as suggested by Nickle and Castner 1984) is best dropped.

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AN EVALUATION OF THE STRAW ITCH MITE,
PYEMOTES TRITICI (ACARI: PYEMOTIDAE)
FOR CONTROL OF THE RED IMPORTED FIRE ANT,
SOLENOPSIS INVICTA (HYMENOPTERA: FORMICIDAE)

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The straw itch mite, *Pyemotes tritici* (LaGreze-Fossat and Montagne) was proposed by Bruce and LeCato (1980) as a potential biological control agent for the red imported fire ant, *Solenopsis invicta* Buren. Although *P. tritici* may be regarded as a pest species (a cause of dermatitis in man and animals), it is an effective parasite of stored product insects (Bruce and LeCato 1979). In their 1980 paper, Bruce and LeCato reviewed the desirable characteristics of this mite, and reported success in preliminary tests against individual *S. invicta* colonies sufficient to warrant further evaluation. We are aware of only one other reference to attempted ant control with *P. tritici*, and that was on leaf-cutting ants (species not specified) in Brazil (Vilela 1986). He reported that the ant nests became inactive after 2 or 3 days but recovered within 16 days.

Jouvenaz et al. (1981) reviewed the status of biological control of imported fire ants and concluded that non-specific predators, such as *P. tritici*, might be useful if they could be applied without danger to the user or environment. While the goal of our USDA-ARS research program on biological control of fire ants is to establish a complex