

JAPANESE BURROWING CRICKET WIDELY ESTABLISHED IN SOUTHEASTERN UNITED STATES—(Note). In August 1959, in Huntsville, Alabama, R. D. Alexander collected several crickets of a species not previously known from the New World. Alexander and I (1962, Ann. Ent. Soc. Amer. 55:90-94) reported that these crickets belonged to the African and oriental genus Scapsipedus (Gryllinae) and tentatively identified them as S. micado Saussure, originally described from Japan and Celebes. We coined the common name Japanese burrowing cricket from its presumed area of origin and its digging habits.

No more recent publication deals with the Japanese burrowing cricket in the New World, but R. L. Randell (1964, Can. Ent. 96:1565-1607) changed its presumed scientific name to *Velarifictorus micado* (Saussure) by making *S. micado* Saussure the type-species of the new genus *Velarifictorus*.

I here report that *V. micado* is now established in the District of Columbia and at least 23 counties in 6 southeastern states. Most of the new locality records are from field work this year. Similar field work in 1965 and earlier yielded few records. The Japanese burrowing cricket is apparently rapidly spreading throughout the Southeast

The distinctive calling song of males (R. D. Alexander, 1961, Behaviour 17:130-223) makes V. micado easy to locate and identify. Calling occurs throughout the night. By careful listening while traveling at night in the calling season, one can determine where colonies do and do not occur. Northern records of V. micado are chiefly from suburbs and small towns and are of spotty distribution. In western Florida and southernmost Alabama and Mississippi the species is widespread in rural areas, where it is especially abundant in wet or mesic, wooded and partially wooded habitats. Here it has probably occupied most sites that are suitable.

The winter apparently is spent in the egg stage, and a single generation occurs each year. Earliest and latest dates for adults are 9 August and 23 October.

The extensive nurseries in the area between Pensacola, Fla. and Mobile, Ala. suggest a means both of original importation and of subsequent spread of  $V.\ micado$ . The eggs may have arrived in soil on the roots of ornamental shrubs from the Orient, somehow surviving plant quarantine procedures. Once established in the nurseries,  $V.\ micado$  would be shipped—as eggs in the soil on burlap-wrapped roots—to localities throughout the Southeast. No soil fumigation is required for domestic shipment of ornamental shrubs. The largely suburban and spotty distribution of Japanese burrowing cricket agrees with this scenario.

The first macropterous specimens, males from Florida and North Carolina, were noted this year. If macropterous females occur and fly, as in *Gryllus* spp., the spread of *V. micado* into all its potential range should be rapid. There is little basis for predicting what that range will be. The absence of colonies in sandhill habitats (turkey oak and longleaf pine) in panhandle Florida suggests that inadequate soil moisture may eventually provide a barrier westward.

New records (Records only by song and by T. J. Walker except where noted. Specimens micropterous and in Florida State Collection of Arthropods, unless otherwise indicated.): WASHINGTON, D. C., 25 Aug. 1976. VIRGINIA, Fairfax Co., 17 and 23 Oct. 1968 (1 male); Dismal Swamp nr. Lake Drummond, 5-6 Sept. 1970 (3 male, 11 female, 1 last instar juv. female; D. C. Rentz, D. A. Nickle, A. B. Gurney; USNM collection). NORTH CAROLINA, Cabarrus, Duplin, Mecklenburg, Robeson, Scotland, Stanley, and Wake Counties, 23-24 Aug. 1977 and 12-13 Sept. 1977 (1 macropterous male, Raleigh). SOUTH CAROLINA, Chesterfield Co., Cheraw, 26 Aug. 1965 (2 male). FLORIDA, Santa Rosa Co., 31 Aug. 1965 (1 male, Milton), 9 Aug. 1975, 1 Oct. 1977; Walton Co., 31 Aug. 1965, 21 Aug. 1971, 30 Sept. 1977; Washington Co., 21 Aug. 1971; Bay, Holmes, Jackson and Okaloosa Counties, 18-20 Aug., 30 Sept.-2 Oct. 1977 (1 macropterous male, Cottondale; TJW and R. C. Paul). ALABAMA, Jefferson Co., Birmingham, 5 Sept. 1970, 20 Aug. 1971, 29 Aug. 1977; Marengo Co., Chickasaw St. Pk., 23 Aug. 1973; Mobile and Baldwin Counties, 1 Oct. 1977. MISSISSIPPI,

Hancock Co., 17 Aug. 1965 (1 female, Waveland, R. E. Love).—T. J. Walker. Dep. of Ent. and Nem., University of Florida, Gainesville.

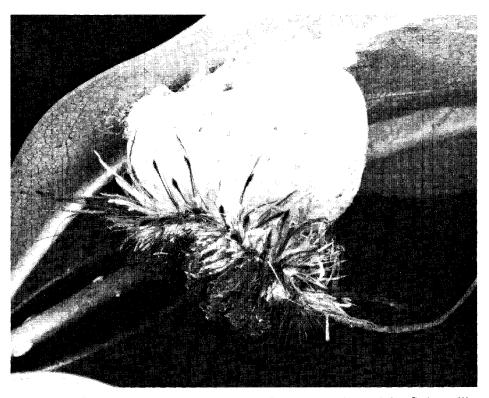


Photo Story—Can you identify this? It was collected in Gainesville. The answer, as well as readers' speculations, will be given in the next issue of the Fla. Ent.—J. E. Lloyd.

