CONTROL OF MOLE CRICKETS IN TURF—(Note). In Florida and other south-eastern states, mole crickets are one of the major turf pests that damage grass by feeding on the roots. The characteristic burrowing also damages the root system, uproots plants, and allows excessive soil water evaporation.

Four species of mole crickets have been described in Florida but only 2, *Scapteriscus vicinus* Scudder and *S. aequus* Rehn and Hebard, are considered economically important. They have similar life cycles and habits (N. C. Hayslip; 1943, Fla. Ent., 26:33-46).

Chemical controls have not provided consistently good control. Weather conditions and timing of applications greatly affect insecticide performance. Short and Driggers (1973; Fla. Ent. 56:19-23) noted that although sprays and granules may produce high mortality in the spring, toxic baits normally fail to provide control at that time. They also proposed that toxic baits would provide control in summer and early fall. Kochler and Short (1976; J. Econ. Ent. 69:229-32) found that certain toxic baits would provide high nymphal mortality when applied to pastures in summer. This report presents field evaluations of candidate insecticidal baits, granules, and sprays for mole cricket control in turf.

Experiments were conducted on a heavily infested bermudagrass golf course in Jacksonville, Fla. One hundred thirty plots measuring 10 x 10 ft separated by 3 ft borders were treated with candidate insecticidal baits (B), granules (G), or sprays. Five control plots were not treated. A randomized complete block design with 27 treatments replicated 5 times was used.

Twelve insecticides were applied on 27 Aug. 1975 to determine their efficacy for the control of mole crickets at various rates of application. Baits and granules were applied by hand, and sprays were applied with a 2 gal water can. Two gallons of formulated spray were applied to each plot. Plots treated with sprays or granules were irrigated with ca. 1/4 in. of water immediately following application. Plots treated with toxic baits were irrigated with 1/4 in. of water prior to treatment.

For the first 3 days (28, 29, and 30 Aug. 1975) following application, dead or moribund mole crickets found on the soil surface were counted and removed from each plot. A total of 4,257 mole crickets was collected from treated plots, and a representative sample of 88 was identified. All specimens were *S. vicinus*. The data from number of dead or moribund crickets were analyzed by Analysis of Variance, and Means were separated by Duncan’s Multiple Range Test.

All chlordane applications failed to provide significant mole cricket mortality. A commercially available bait containing chlordane + toxaphene also failed to provide significant mortality. It may be concluded that chlordane is no longer providing adequate mole cricket control in northeast Florida.

In general, bait formulations performed significantly better than most sprays and granules when applied in late August. The only emulsion to provide excellent mole cricket mortality was 0-[5-Chloro-1-(1-methyl-ethyl)-1H-1,2,4-triazol-3-y]-O,O-diethyl phosphorothioate (ENT-29128) at a rate of 4 lb AI/acre. At 2 lb AI/acre it gave moderate mortality. Two percent bait formulations of malathion, chlorpyrifos, propoxur, and primifos ethyl gave excellent mortalities at rates of 0.5, 1.0, 1.0, and 2.0 lb AI/acre, respectively. Chlorpyrifos 0.5% B applied at the recommended 0.75 lb AI/acre also provided excellent control. Carbofuran 15% G (6 lb...
AI/acre) and 2,3-(isopropylidenedioxy)phenyl methylcarbamate (Ficam*) 80% WP (0.5 lb AI/acre) provided moderate mole cricket mortality. The remaining materials did not provide significant mortality.

As a result of these and previous findings (Koehler and Short; 1976, J. Econ. Ent. 69:229-32) several insecticide registrations have been petitioned for mole cricket control. Two registrations have been granted and Florida recommendations have been revised accordingly.

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REDISCOVERY OF POLYSPHINCTA ALBIPES CRESSON (HYMENOPTERA: ICHNEUMONIDAE).—(Note). Cresson (1880, Ann. Rep. USDA for 1879, p. 208) described Polysphincta albipes from a male reared from cocoons collected on an orange leaf at Rockledge, Brevard Co., Florida. Hubbard (1885, Insects Affecting the Orange, p. 153) gave a description, biological note and host (Platynota rostrana). Townes and Townes (1960, Bull. U.S. Nat. Mus. 216(2):255-256) could not locate the holotype, and reported that "no specimen has since been collected which fits the original description", which they cited. A female fitting the original description was collected in a wall-type insect flight trap by G. B. Fairchild at Paynes Prairie, Alachua Co., Florida on 16-18 March 1977. In addition, the Florida State Collection of Arthropods, Gainesville, has specimens with the following data: FLORIDA: Sarasota Co., Sarasota, 10-III-1972, B. H. Strickland, Trap McPhail (male), 13-III-1972, L. L. Carpenter, Trap McPhail (female); (Manatee Co.) Palmetto, 22-II-1967, D. C. Chancey, in Fruit Fly Trap (male). Apparently this species flies in early-spring, since adult collection dates above are late-February through mid-March. The FSCA specimens were determined by C. C. Porter; the Paynes Prairie specimen is in the personal collection of the author. H. N. Greenbaum, Univ. Florida, Gainesville, 32611.