ture was 50% (wt/wt). The vials were maintained in the laboratory at 27°C under natural L-D cycles for February-May (ca 14 h photophase). Observations were made weekly and life stage recorded.

After 4 months in soil or on diet, 80% of the larvae maintained in the soil had emerged as adult weevils compared to none from diet. When the test was terminated (4 mo), 14% of the vials with soil contained large larvae, pupae, or a dead insect. The mean development time for formation of pupae in the soil was 49 ± 3 days and from pupae-adults 20 ± 4 days. The first pupa was observed after 30 days and the first adult emerged after 60 days from the date when they were placed in soil. About 2% died in both treatments. Four larvae maintained on diet pupated during the 4-mo period. The technique of transferring 4-mo larvae from diet to a soil mix enabled us to maintain the laboratory colony with diet-reared weevils, and to synchronize adult emergence to research needs.

REFERENCES CITED


A NEW SPECIES AND SYNONYM IN THE ULIDIINAE (DIPTERA, OTITIDAE)

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The following is presented at this time in order to provide names for 2 species that have been confused. Euxesta scoriacea Loew, 1876, has long been misunderstood. My examination of the type in the Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, revealed that it should be placed in genus Stenomyia Loew: Stenomyia scoriacea (Loew), N. COMB. It is the same as a species that has been known as Euxesta tenuissima Hendel, 1910, N. SYN. Stenomyia fasciapennis Cresson, 1913, and Chaetopga brooksi Johnson, 1926, were cited as synonyms of E. tenuissima in the Catalog of the Diptera of America North of Mexico (Stone, A., et al., 1965, U.S. Dept. Agric., Handboook No. 276: 654). The genus Stenomyia is more similar to Chaetopga than to Euxesta and may be distinguished by my key (Steyskal 1961) and one due to appear shortly in the 2nd volume of McAlpine, et al, Manual of Nearctic Diptera.

Specimens exist in several collections under the name Euxesta scoriacea Loew, but they actually represent an undescribed species, one that is a true Euxesta. Inasmuch as excellent series of specimens have come to hand, the species is described here.
Euxesta zacki Steyskal, New Species

Euxesta zacki n. sp. (E. scoriacea auctt., nec Loew) runs to E. scoriacea in the only comprehensive keys to Euxesta so far available (Hendel, 1909, Ann. Mus. Nat. Hungarici 7: 152-172, and Curran, 1935, American Mus. Novitates 812: 11-13), but in a manuscript key forming part of a larger work in progress it may be distinguished by the following characters: Wing with 4 complete dark brown crossbands (one subbasal band crossing humeral crossvein; one basimedian band from slightly distal of base of discal cell to anterior crossvein exactly on its margin and with proximal and distal margins nearly parallel, and 2 apical bands joined anteriorly from costa to R₄₊₅ and separated posterior to that vein by triangular hyaline area); parallel-sided hyaline crossband between 2nd and 3rd dark bands narrower than either adjacent brown band; face and lunule wholly yellowish; abdomen wholly metallic bronzy black; costa and veins normal; extension of cell bcu (anal) much shorter than main part of cell; legs wholly yellowish; thorax dorsally whitish cinereous; scutellum shining black.

Holotype, ♂, allotype ♀, and 3 ♂ and 2 ♀ paratypes, Texas, Nueces County, Packers Channel County, near Corpus Christi, 11 December 1984 (Richard S. Zack); holotype, allotype, and one additional pair of paratypes in United States National Museum of Natural History (Washington, D.C.) and 2 ♂ and 1 ♀ paratype in Washington State University (Maurice T. James Entomological Museum, Pullman); Florida, Monroe County, Fleming Key, 9 July-30 December 1979, 11 January-19 May 1980 (J. A. Acree, H. V. Weems, Jr. and H. E. Williams), 6 ♂, 11 ♀; and South Carolina, Parris Island, 2-8 October 1980, 1 ♂; same locality, 2-9 April 1981, 3 ♂ (J. F. Retner), in Florida State Collection of Arthropods, Gainesville.

I am very grateful to Richard Zack and Howard Weems for submitting the material for determination and am glad to name the species for Richard Zack in token of his excellence as a collector of Diptera. The holotype is designated out of the Texas series because the type of Stenomyia scoriacea is also from Texas, thereby stressing the fact that these two similar species occur in the same area.

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