

## A New Species of *Trichotaphe* from Mexico and Hawaii (Lepidoptera: Gelechiidae)

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The moth described below was first received for identification in 1957 from N. L. H. Krauss, State Department of Agriculture, Hawaii, who had reared it from larvae collected in Mexico on sour bush (*Pluchea odorata*). Subsequently in 1957, this moth was liberated in Hawaii for control of *Pluchea* which had become a weed, and has now become established in the islands. Specimens included in the type series were recovered in April 1960 at Ewa, Oahu and submitted for identification by C. J. Davis, also of the Department of Agriculture.

*Trichotaphe aenigmatica* Clarke, new species (Figs. 1, 1a, 2).

Alar expanse 10–12 mm. Labial palpus slate gray; extreme tip of second segment very pale gray; outer side of third segment buff. Antenna dark slate gray. Head, thorax, and ground color of forewing slate gray; veins of forewing indicated by black streaks; fold indicated by black dash containing two small ochraceous-buff spots before outer end; in cell, at middle of wing, a black, longitudinal bar containing ochraceous-buff spot near middle and a smaller, similarly colored spot at end of cell; in apical fourth some pale blue-gray scaling; extreme termen narrowly edged with black; at base of cilia, around apex and termen, a series of five or six whitish spots; cilia blackish slate. Hind wing pale grayish fuscous; cilia concolorous except for a very narrow buff line at base. Fore- and midlegs blackish slate; hind legs gray except inner surface pale grayish buff. Abdomen light slate gray dorsally, paler ventrally.

*Male genitalia:* Harpe as long as tegumen and uncus combined, compressed and with a low, median, longitudinal ridge on inner surface. Vinculum elongate horseshoe-shaped; ventro-anteriorly a Y-shaped median extension, lateral arms of which are armed with short, dentate processes; from each side, ventro-anteriorly, a curved, compressed projection. Anellus mostly membranous, with lateral setose papillae. Aedeagus as long as tegumen and vinculum combined, very broad basally, sharply pointed and weakly sclerotized distally; armed with Y-shaped ventral attachment, one arm of which is twice as long as the other; cornutus long, slender. Gnathos a strong, curved hook. Uncus small, bluntly pointed.

*Female genitalia:* Ductus bursae and bursa copulatrix undifferentiated; inception of ductus seminalis from near anterior end of bursa copulatrix; bursa copulatrix armed with short spines anteriorly and corrugated with heavily sclerotized, longitudinal ridges on interior surface; posteriorly a patch of fine, sclerotized convolutions. Ostium broad.

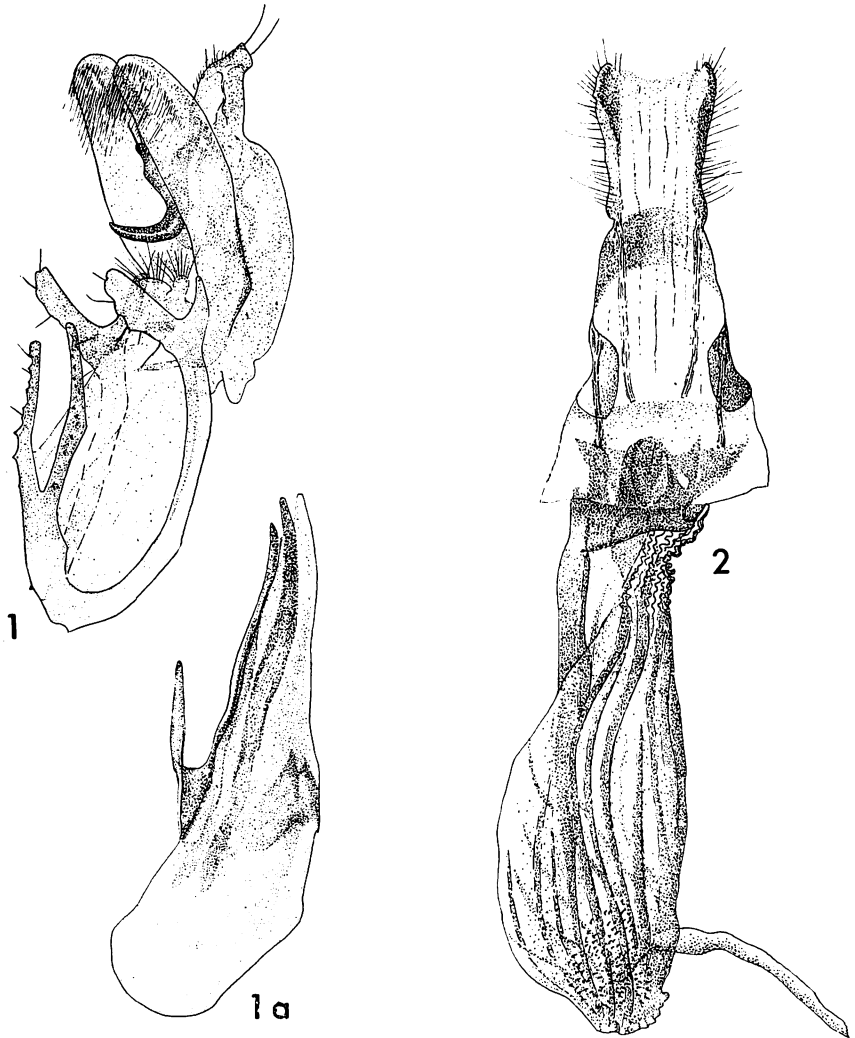


FIG. 1. *Trichotaphe aenigmatica* n.sp.: 1, oblique view of male genitalia with aedeagus removed; 1 a, aedeagus; 2, ventral view of female genitalia (Drawn by Andre Pizzini).

*Holotype*: Male, Mexico, Vera Cruz, Boca del Rio, December 1960, N. L. H. Krauss, USNM No. 65839. *Allotype*: Female, same data as holotype.

*Food plant*: *Pluchea odorata* (L.) Cass.

Described from the holotype male, allotype female, 10 male and 10 female paratypes. Paratypes: ♂, same data as holotype; ♂, ♀, Ewa, Oahu, April, 1960; 8 ♂♂, 9 ♀♀, Department of Agriculture Insectary, Honolulu, April 1959, C. J. Davis. Paratypes in the collections of the Experiment Station, Hawaiian Sugar Planters' Association, British Museum (Natural History), and the U.S. National Museum.