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# THREE NEW SPECIES OF *ACROLOPHUS* FROM THE SOUTHEASTERN UNITED STATES WITH REMARKS ON THE STATUS OF THE FAMILY ACROLOPHIDAE (LEPIDOPTERA: TINEOIDEA)

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*Abstract.*—Three new species of *Acrolophus*, ranging mainly through the southeastern United States are described and illustrated. ***Acrolophus heppneri*** n. sp. is the most common, widely distributed species and is reported from Grand Bahama Island west to Texas. Its larva is suspected to bore in sugarcane. ***Acrolophus spilotus*** n. sp. appears to be largely restricted to Florida. ***Acrolophus mycetophagus*** n. sp. has been reared from bracket fungus and occurs along the eastern seaboard from southern Florida to as far north as southern Virginia.

The current status of the family Acrolophidae is reviewed. The principal synapomorphies for the family are the presence of an incomplete metafurcal bridge and absence of anterior apophyses in the female ovipositor, and the partially divided spiracular plate and pronotum of the larva.

*Key Words:* Lepidoptera, Acrolophidae, *Acrolophus*, bracket fungus, sugarcane

Three new species of *Acrolophus* are described so that their names can be included in a proposed revision of Kimball's Lepidoptera of Florida. Together with *A. pholeter* Davis, recently described from Florida gopher tortoise burrows (Davis and Milstrey 1988), the number of *Acrolophus* reported from this state now totals 16 species, as compared to 63 from the continental United States (Davis 1983).

The systematic position of the genus *Acrolophus* has varied between recognition as either a distinct family (Dyar 1903) or as a subfamily of Tineidae (Hinton 1955). Because no discrete synapomorphy has been found to define the Tineidae, I have previously followed Hinton's treatment (based upon larval evidence) and retained the Acrolophinae within Tineidae. Recent analysis by Robinson (1989) re-establish the genus as constituting a distinct family allied to Psychidae. Robinson's conclusion was based largely on the broadly joined larval hypostomal sclerites (postgenae of Hinton, 1955) and, more significantly, the presence of a rudimentary furcal bridge (i.e. tendons) arising from the secondary arms of the metafurcasternum. Robinson interpreted this condition as a derivation of the complete bridge found in Psychidae and Arrhenophanidae, thus closely associating these two families. I concur with this interpretation and wish to add the following remarks.

Although the Tineidae currently is not a well defined family, I believe that its definition will become clearer as monophyletic groups such as the Acrolophidae are removed. The Acrolophidae are not a monogeneric family as previously supposed (Hasbrouck 1964, Robinson 1989), but one which also includes the genera *Amydria*,

*Exoncotis,* and *Ptilopsaltis.* The characteristics and relationships of all four genera will be treated in a future paper. In addition to the synapomorphic, incomplete metafurcal bridge, other features such as the abbreviated ovipositor, and in particular, the absence of distinct anterior apophyses, serve to characterize the group. The relative width of the hypostomal bridge is too variable (Davis 1987) within both Acrolophidae and Tineidae to be considered an autapomorphy for the former. Although all *Acrolophus* larvae I have examined (seven species) possess a broadly contiguous hypostoma (i.e. a probable autapomorphy for this genus), the hypostomal bridge of *Amydria* (Davis 1987) and *Ptilopsaltis* (Davis unpubl.) is more reduced, approximating the width occurring in such Tineidae as *Nemapogon.* The only synapomorphy I have discovered for the acrolophid larva is the partial separation of the prothoracic spiracular plate from the pronotum (Davis and Milstrey 1988). This condition most resembles the completely fused spiracular-pronotal plate in Psychidae, and thus, it may constitute another feature linking these two families.

The presence of multiple (more than five) frenular bristles in the female appears to be another character shared by the Acrolophidae, Arrhenophanidae, and Psychidae. The standard number in female Tineidae is two or three, with five bristles reported in female *Opogona sacchari* (Bojer) (Davis and Peña 1990). Female Arrhenophanidae and alate Psychidae tend to possess 6 to 12 frenular bristles, including the genus *Kearfottia,* which I regard as the most primitive psychid known. A more derived psychid genus, *Narycia,* was exceptional and found to possess only three bristles in the female.

Deposition of specimens referred to in this paper are: BMNH, for British Museum (Natural History), London, England; BrM, collection of Bryant Mather, Clinton, Mississippi; ECK, collection of Edward C. Knudson; FSCA, Florida State Collection of Arthropods, Gainesville, Florida; JBH, collection of John B. Heppner, Gainesville, Florida; MCA, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; UCB, University of California, Berkeley, California; USNM, National Museum of Natural History (formerly United States National Museum), Smithsonian Institution, Washington, D.C.; and USSC, United States Sugar Corporation, Clewiston, Florida.

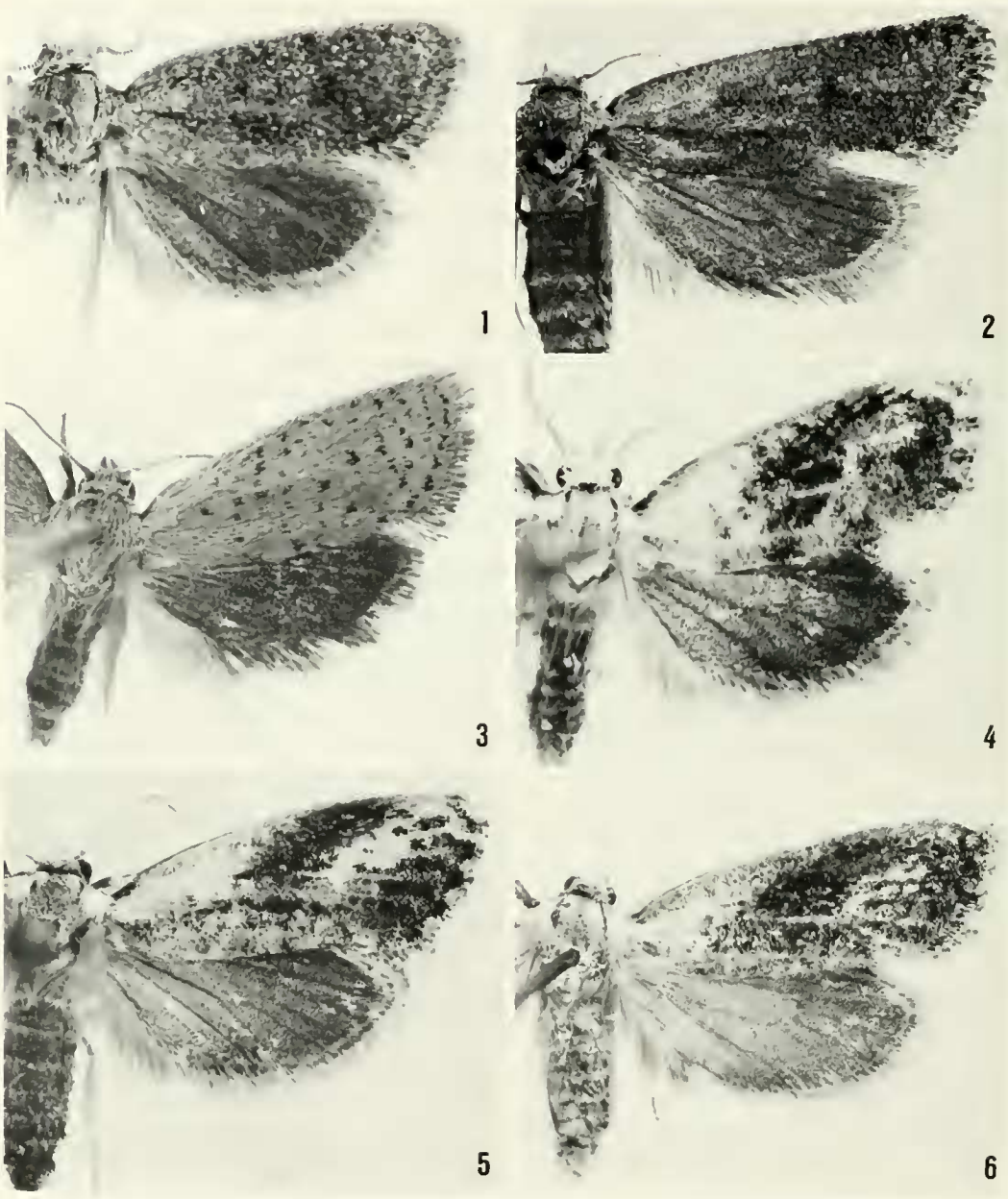
### *Acrolophus heppneri* Davis, New Species

Figs. 1, 2, 7–12, 23

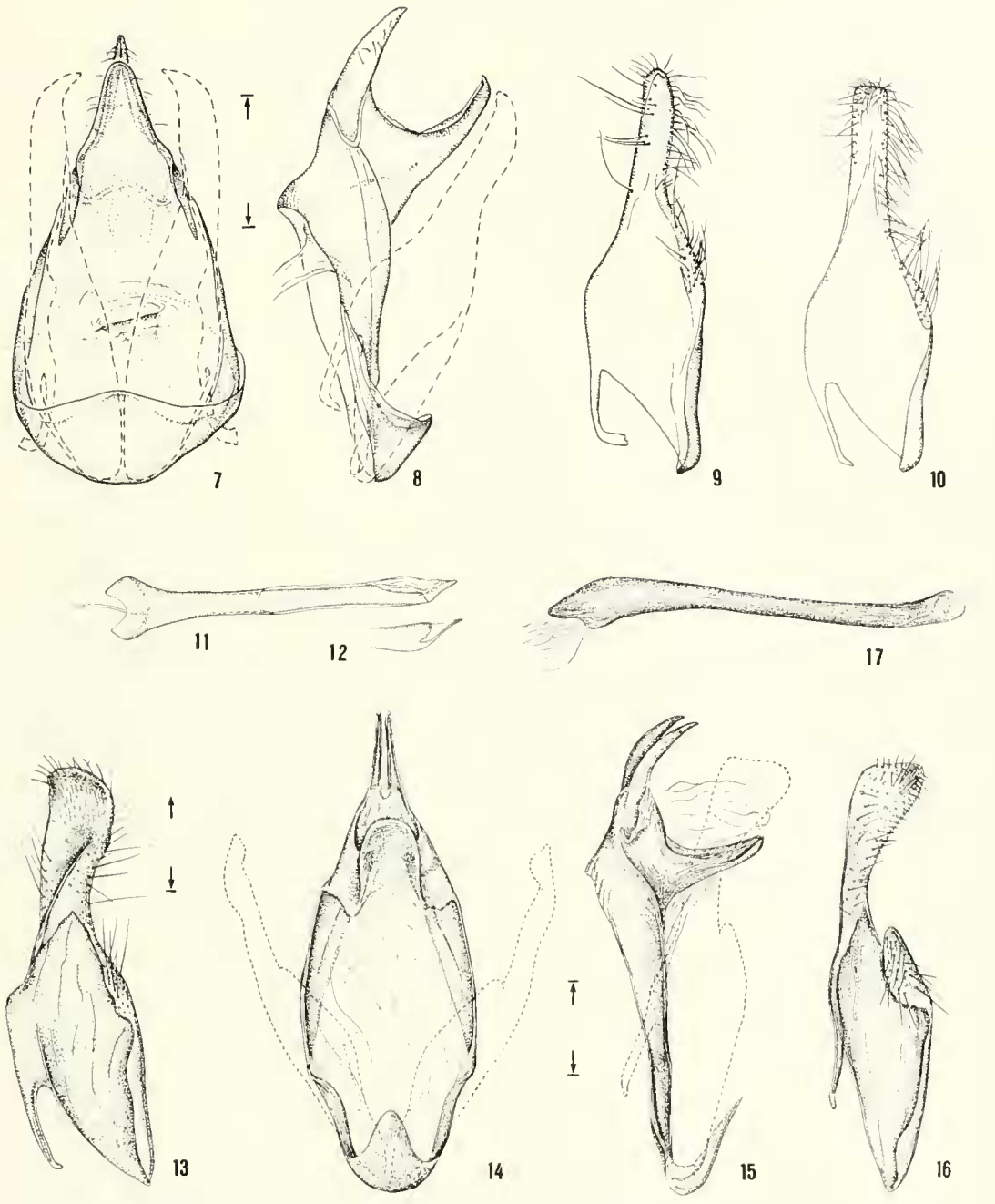
Adult (Figs. 1, 2).—*Length of forewing:* Male, 4–5.5 mm; female, 5.5–9 mm. A relatively small, uniformly brown to brownish fuscous moth with short labial palpi in male that curve upwards no further than level of antennal bases.

*Head:* Vestiture smooth; scales piliform, light to medium brown with paler, grayish apices. Eye small, interocular index approximately 0.63; cornea without interfacetal setae; eyelash absent. Antenna about 0.4–0.5 the length of forewing, 37–38 segmented; scape mostly light brown, without pecten; flagellomeres light brown, simple in form, and densely covered with minute sensilla chaetica. Mandible absent. Haustellum reduced, about 0.6 the length of basal segment of labial palpus. Maxillary palpus reduced to two short segments. Labial palpus 3-segmented, relatively short in both sexes, length approximately 1.75× maximum eye diameter, and upcurved in male to base of antenna; more porrect in female, predominantly light brown, tending to be paler, more whitish at base of first segment.

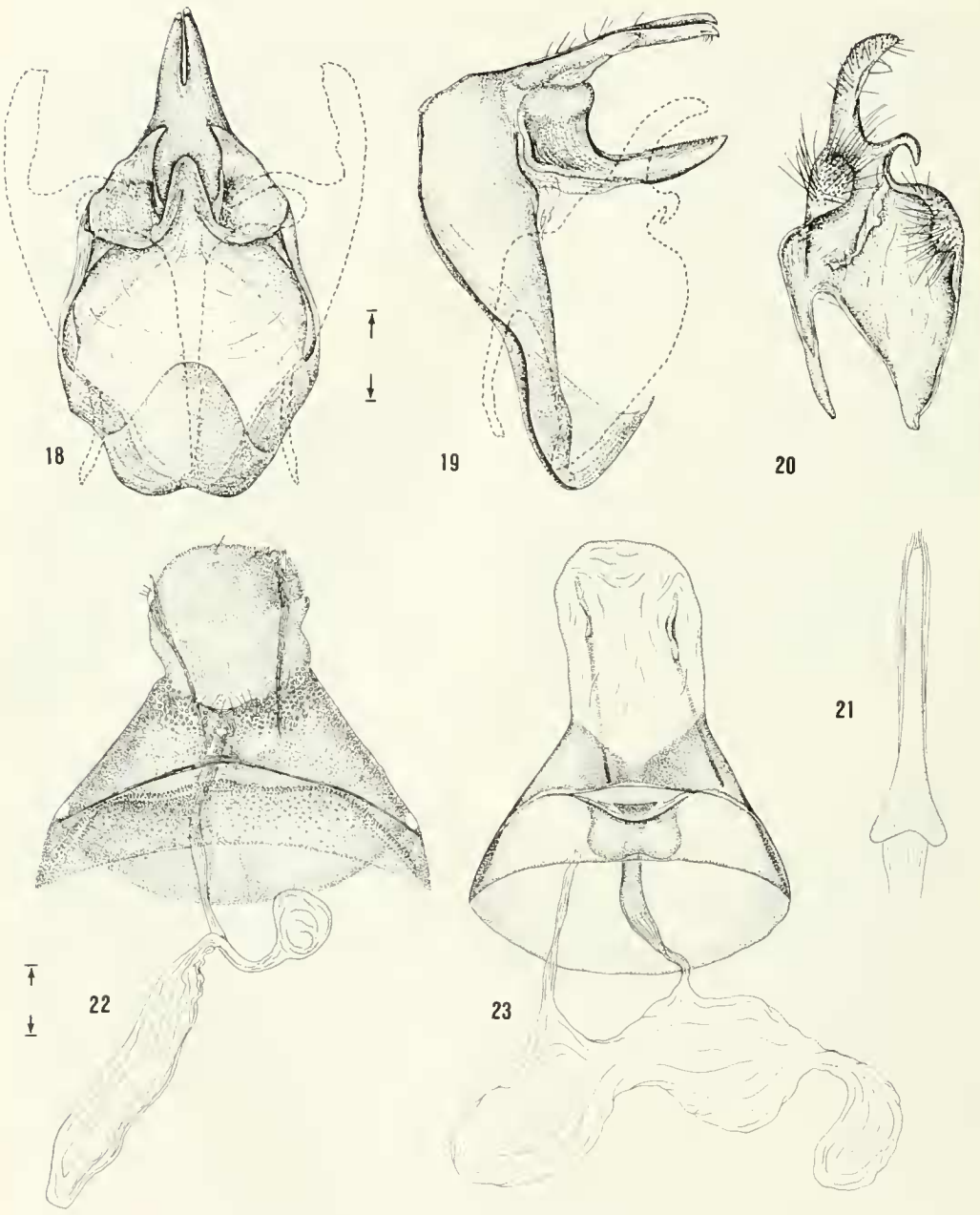
*Thorax:* Pronotum uniformly light to medium brown; scales of tegula usually with pale gray to white apices. Forewing uniformly medium to dark brown (darker in male), with a pair of small, barely visible, darker spots often present at base and apex of discal cell and usually more evident in lighter female; under low magnification most scales with pale bases and darker apices; R3



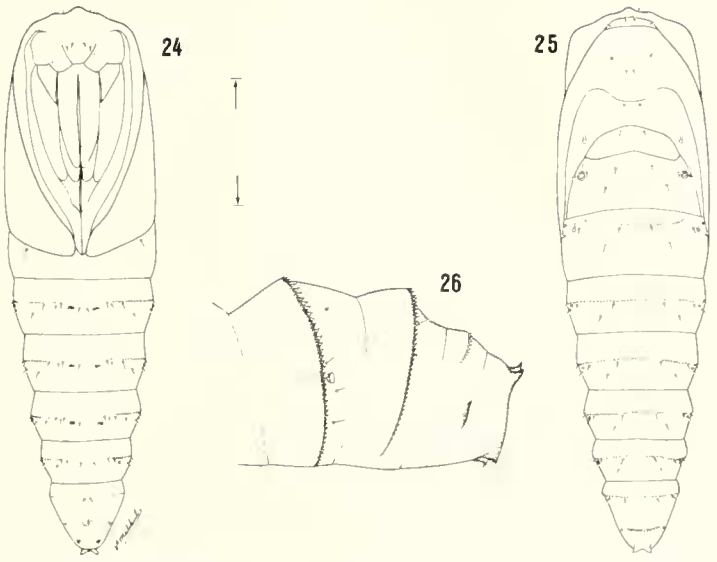

Figs. 1–6. Adult moths. 1, *Acrolophus heppneri,* holotype ♂ (5 mm). 2, *Acrolophus heppneri,* paratype ♀ (8.1 mm). 3, *Acrolophus spilotus,* holotype ♂ (6.7 mm). 4, *Acrolophus mycetophagus,* holotype ♂ (7 mm). 5, *Acrolophus mycetophagus,* paratype ♀ (11 mm). 6, *Acrolophus mycetophagus,* paratype ♀ (11 mm). (Length of forewing in parenthesis.)




Figs. 7–17. *Acrolophus,* male genitalia. 7, *Acrolophus heppneri,* ventral view. 8, Lateral view. 9, Valva, mesal-lateral view. 10, Valva, mesal-lateral view. 11, Aedoeagus, ventral view. 12, Aedoeagus, lateral view of apex. 13, *Acrolophus panamae,* valva, mesal-lateral view. 14, *Acrolophus spilotus,* ventral view. 15, Lateral view. 16, Valva, mesal-lateral view. 17, Aedoeagus, lateral view. (All scales = 0.25 mm.)




Figs. 18–23. *Acrolophus,* male and female genitalia. 18, *Acrolophus mycetophagus,* ventral view. 19, Lateral view. 20, Valva, mesal-lateral view. 21, Aedoeagus, ventral view. 22, *Acrolophus mycetophagus,* female genitalia, ventral view. 23, *Acrolophus heppneri,* female genitalia, ventral view. (All scales = 0.5 mm.)




Figs. 24–26. *Acrolophus heppneri*, pupae. 24, Ventral view (scale = 2 mm). 25, Dorsal view. 26, Lateral view of A7–10 (enlarged).

and 4 shortly stalked over one third their length; A1 and 2 faint; fringe approximately same color as forewing. Hindwing similar to forewing color, uniformly medium to dark brown, sometimes slightly darker than forewing in male. Legs generally light to medium brown dorsally; paler, more grayish white ventrally and at apices of tarsal segments; epiphysis well developed, 0.8 the length of foretibia.

*Abdomen:* Light to medium brown dorsally, pale buff ventrally.

*Male genitalia:* As shown in Figs. 7–12. Uncus triangular, apex indistinctly divided less than one sixth the length of uncus; lobes tightly appressed. Gnathos fused medially, moderately broad with rounded apex extending to apex of uncus. Juxta absent. Valva relatively simple, moderately broad at base, gradually narrowing at middle to slender, usually truncate apex (Fig. 10). Aedoeagus slender, nearly as long as valva; base broader, with median depression on anterior margin; apex with slender, flaplike extension from one side (Fig. 11); cornuti absent.

*Female genitalia:* As shown in Fig. 23. A single pair of moderately short, posterior apophyses present. Caudal margin of lamella antevaginalis slightly concave with a shallow, broad pocket containing a relatively broad ostium; venter of pocket (part of lamella antevaginalis) with a bilobed, sclerotized, median plate. Ductus bursae moderately large, with slightly thickened walls, constricting just before junction with corpus. Corpus bursae elongate, moderately large with three relatively distinct lobes; spicules absent.

Pupa (Figs. 24–26).—*Length* (male): 8.3 mm. Light reddish brown in color. Vertex smooth except for a pair of minute setae. Antenna to middle of A3 just short of wings which extend slightly beyond middle of A3. Frons with two pairs of minute setae. Mesonotum with two pairs of minute setae, the more anterior pair widely separated, the caudal pair arising close together near midline. Dorsum of A3–9 with a transverse ridgelike row of minute spines; spines on A4–8 nearly encircling segment at middle. A10 with a pair of short, stout cremasteral spines dorsally as well as ventrally (Fig. 26).

Holotype.—Male; Subtropical Research

Station, 4 mi [6.4 km] NW Homestead, Dade Co, Florida; 10 Jun 1974, J. B. Heppner, at blacklight, USNM slide 29852 (USNM).

Paratypes.—BAHAMAS: Grand Bahama Island: Freeport: 2 ♂, 2 ♀, 20–27 Jun 1987, W. Steiner, M. and R. Molineaux. Xanadu Beach; 2 ♂, 1 ♀, 23 Jun 1987, W. Steiner, M. and R. Molineaux. UNITED STATES: FLORIDA: Broward Co: 0.5 mi [0.8 km] S. Wiles: 1 ♂, 31 Mar 1976, D. Habeck and P. Eliazar. Dade Co: Florida City: 1 ♀, 13 May 1975, C. Covell. Homestead: 1 ♀, 11 May 1975, C. Covell; 1 ♂, 22 Nov 1972, D. Wolfenbarger. Homestead, Fuch's Hammock: 1 ♂, 16 May 1979; 1 ♂, 7 Jun 1978; 1 ♂, 8 Jun 1978; 3 ♂, 13–14 Jun 1978; 1 ♂, 11 Oct 1978; 1 ♂, 22 Oct 1978; 2 ♂, 26 Oct 1978; 4 ♂, 3 Nov 1978; 1 ♂, 14 Nov 1978; 3 ♂, 24 Nov 1978; 2 ♂, 30 Dec 1978, Dickel and Weems. Subtropical Research Station, 4 mi [6.4 km] NW Homestead: 1 ♂, 1 ♀, 24 Apr 1975; 20 ♂, 155 ♀, 9 Jun 1974; 10 ♂, 49 ♀, 10 Jun 1974, J. B. Heppner, at blacklight. Henry Co: Dunwody Plantation [19 km W of Clewiston]: 1 ♀, 17 Aug 1983, reared from larva, borer in sugarcane stalk, D. Hall. Highlands Co: Archbold Biological Station: 1 ♂, 31 Jul 1978; 7 ♂, 5 Aug 1978; 4 ♂, 8–10 Aug 1978; 6 ♂, 19 Aug 1978; 4 ♂, 27 Aug 1978; 1 ♂, 30 Dec 1978, Weems, Chance, Connors, Dickel, Frolich, and Halkin. Monroe Co: Big Pine Key, 2 km N Big Pine: 1 ♂, 27 Feb 1984, W. Steiner, A. Gerberich, and J. Lowry. TEXAS: Bexar Co: San Antonio: 2 ♀, 27 Apr 1972, B. Mather. Cameron Co: Brownsville: 1 ♀, 22 Nov 1966, A. and M. Blanchard. Padre Island: 1 ♂, 1 Mar 1978, A. and M. Blanchard. Harris Co: Bellaire: 1 ♂, 1 ♀, 20 Apr 1982; 1 ♂, 4 May 1982; 1 ♀, 10 Jul 1980; 3 ♀, 15 Sep 1980, E. Knudson. Houston: 1 ♀, 13 Mar 1969; 1 ♂, 31 May 1980; 1 ♂, 5 Jul 1980; 1 ♂, 17 Jul 1979; 2 ♂, 21 Jul 1979; 2 ♂, 23 Jul 1980; 2 ♀, 26 Jul 1979; 2 ♂, 27 Jul 1980; 1 ♀, 20 Aug 1980; 3 ♂, 13 Sep 1980; 1 ♀, 14 Sep 1965; 1 ♂, 11 Oct 1980, A. and M. Blanchard. Hidalgo Co: Bentsen State Park: 1 ♂, 11 Oct 1980, E. Knudson. Santa Ana Refuge: 1 ♂, 27 Oct 1979; 3 ♂, 30 Nov 1981, E. Knudson. Slide dissections: ECK 250, 272, 280; USNM 19954, 20369, 29848, 29850, 29851, 29960–63, 29965. Paratypes deposited in BMNH, BrM, FSCA, JBH, ECK, MCZ, UCB, USNM and USSC.

Host.—Gramineae: *Saccharum officinarum* L. (sugarcane).

Flight period.—Possibly bivoltine, with early flights from March to June and later brood July through December.

Distribution.—This species has been collected in the Bahamas (Grand Bahama Island), Florida and Texas. It is one of only a few North American *Acrolophus* that also occur in the Bahamas.

Etymology.—The specific name is proposed for John B. Heppner, who collected most of the specimens used in this study and who is currently revising Kimball's Lepidoptera of Florida.

Discussion.—*Acrolophus heppneri* exhibits a rather remarkable uniformity over its broad and somewhat disjunct range. The uniformly brown to brownish fuscous forewings normally are sufficient to distinguish it from its sister species, *A. panamae* Busck. The latter typically possesses a distinct pattern of irregular, dark fuscous bands across the forewings, more evident in the males than the females. Morphologically the two species are very close and share the peculiar, indistinctly divided apex of the uncus and similar aedoeagus. The most reliable means for distinguishing *A. heppneri* is by the more slender distal third of the valva. In addition to having a broader apex, the valvae of *A. panamae* (Fig. 13) possess a low, diagonal ridge across their inner surface that is lacking in the relatively flat valvae of *A. heppneri*.

The host association for this species is based upon a single Florida rearing record which needs to be confirmed. Label data states that the larva was boring in the stalks of sugarcane. Because of uncertainty with regard to the host record, Hall (1988) did

not include this species in his list of Florida sugarcane pests. Busck (1913) described *Acrolophus sachari* from Guyana where it was found living within silken tubes on decaying sugarcane roots underground. *Acrolophus sachari* is easily distinguished from *A. heppneri* in being larger (16–23 mm) with more heavily marked forewings. Box (1953) also lists another member of this family (*Amydria* species) as feeding on rotten, underground stems of sugarcane.

### *Acrolophus spilotus* Davis, New Species
Figs. 3, 14–17

Adult (Fig. 3).—*Length of forewing:* Male, 5–7 mm. Female unknown. A small, brownish gray to dark fuscous moth with slightly darker, unicolorous hindwings and minutely spotted forewings. Labial palpi of male short, strongly curved dorsally to level of antennal bases.

*Head:* Vestiture relatively smooth; scales slender to piliform, intermixed with slightly broader scales over frons; light gray to almost white in color. Eye small, interocular index approximately 0.89; cornea without interfacetal setae; eyelash absent. Antenna about 0.4 the length of forewing, 40–43 segmented; scape uniformly light gray, without pecten; flagellomeres of similar color, simple in form and densely covered with short sensilla chaetica. Mandible absent. Haustellum minute, approximately same length as first segment of maxillary palpus. Maxillary palpus reduced to 2 short segments. Labial palpus 3 segmented, relatively short, length approximately 1.5× maximum eye diameter, mostly grayish white, slightly more gray dorsally.

*Thorax:* Pronotum light brownish gray to dark fuscous, same color as head and forewing. Forewing lightly speckled with darker, fuscous spots; spots small in size, most consisting of only 3–4 dark scales arranged primarily in a transverse row; R3 and 4 stalked 0.3 their length. Hindwing usually darker, uniformly fuscous (same color as dark spots in forewing). Legs mostly light gray, tending to be more white ventrally. Epiphysis well developed, approximately 0.6 the length of foretibia.

*Abdomen:* Light brownish gray to dark fuscous dorsally, grayish white ventrally.

*Male genitalia:* As shown in Figs. 14–17. Uncus elongate and divided most of its length. Gnathos fused, with relatively broad, rounded caudal margin. Juxta absent. Valva moderately slender, with gradual constriction near distal two thirds, then enlarging to form triangular apex. Aedoeagus slender, equalling length of valva, with simple apex and cornuti absent.

Holotype.—Male; Lake Placid, Archbold Biological Station, Highlands Co; Florida, 16–22 May 1964, R. W. Hodges (USNM).

Paratypes.—FLORIDA: Alachua Co: Austin Cary Memorial Forest: 1 ♂, 26 Apr 1976, Fairchild and Weems. Gainesville: 1 ♂, 7 May 1981. Escambia Co: Pensacola: 1 ♂, 16 May 1963. Highlands Co: Lake Placid Archbold Biological Station: 1 ♂, 23 Mar 1957, J. Franclemont; 1 ♂, 28 Mar 1959; 2 ♂, 30 Mar 1959; 1 ♂, 31 Mar 1959; 1 ♂, 1–7 May 1964; 1 ♂, 8–15 May 1964, R. Hodges; 4 ♂, 29 Jul 1979; 2 ♂, 6 Aug 1979; 6 ♂, 7 Aug 1979; 2 ♂, 18–19 Aug 1979; 6 ♂, 24 Aug 1979; 2 ♂, 26 Aug 1979; 1 ♂, 11–13 Sep 1979, Weems, Halkin, and Webber. Slide dissections: USNM 19810, 19811, 29846. Paratypes in FSCA, MCZ, and USNM.

Host.—Unknown.

Flight period.—Apparently bivoltine; 23 March to 15 May and 29 July to 13 September.

Distribution.—Definitely known only from Florida from Escambia County south to Highlands County. One male examined but not dissected (thus, identity questionable) from Jackson, Hinds County, Mississippi (B. Mather).

Etymology.—The specific name is derived from the Greek *spilotus* (spotted, stained) in reference to the small dark scale clusters usually present on the forewings of unrubbed specimens.

Discussion.—The speckled forewing pattern of this species normally distinguishes it from all other *Acrolophus*. The pattern may not be visible in rubbed or extremely dark specimens. The only North American species that *A. spilotus* is likely to be confused with (and only in rubbed condition) is *A. panamae* Bsk. and *A. heppneri*, new species. Male genital characters, particularly the deeply divided uncus and more slender valvae of *A. spilotus*, readily separates it from all other species including the two just mentioned. Although a large series of males have been collected at light, it is interesting to note that no females are known. Further collecting at the Archbold Biological Station in Florida, where most of the type series originated, should eventually result in females.

### *Acrolophus mycetophagus* Davis, New Species
Figs. 4–6, 18–22

Adult (Figs. 4–6).—*Length of forewing:* Male, 5–8 mm; female, 8–11 mm. A moderately small moth with dull white forewings heavily marked with dark fuscous over distal half and uniformly dark fuscous hindwings. Labial palpi of male slightly longer than in female, curving dorsally to slightly above antennal bases.

*Head:* Vestiture relatively smooth; scales piliform, dull white. Eye small, interocular index approximately 0.86; cornea without interfacetal setae; eyelash absent. Antenna approximately 0.5 the length of forewing, 47–52 segmented; scape uniformly white, without pecten; flagellomeres of similar color, simple in form, and densely covered with minute sensilla chactica. Mandible absent. Haustellum reduced, about 0.8 the length of basal segment of labial palpus. Maxillary palpus reduced to 2 short segments. Labial palpus 3-segmented, relatively short in both sexes; in male upcurved to slightly beyond antennal base; shorter in female, just reaching level of antennal base, length approximately 1.5–2× maximum eye diameter; mostly white in color with basal 0.7 of first segment fuscous.

*Thorax:* Pronotum either uniformly white or with light brown to fuscous suffusion near center. Forewing with basal third and sometimes distal fourth dull white, occasionally with fuscous suffusion; a dark fuscous suffusion extending obliquely across wing from subapex to middle of hind margin; suffusion often more fasciate in male and more extensive in female, tending to obliterate or greatly reduce proportion of white scales over distal fourth; R3 and 4 shortly stalked; anal area slightly expanded, A 1 + 2 faint; fringe dull white to brown, often with 4–5 suffused, fuscous spots. Hindwing uniformly fuscous, fringe paler, light brown; costal margin slightly concave just basad to apex of Sc. Legs generally light brown dorsally and white ventrally with plumes of long white hairs from tibia and mesopleuron. Epiphysis well developed, about half the length of foretibia.

*Abdomen:* Brown to fuscous dorsally, cream colored ventrally.

*Male genitalia:* As shown in Figs. 18–21. Uncus elongate and divided for about half its length. Vinculum directed rather sharply ventrad. Gnathos fused medially, relatively slender, extending caudally to apex of uncus. Juxta absent. Valva highly modified, with a broad base, abruptly narrowing beyond saccular lobe to form an uncinate pollex from ventral margin, then continuing as a slender lobe to apex. Aedoeagus slender, straight, approximately two thirds the length of valva, with an acute, simple apex and cornuti absent.

*Female genitalia:* As shown in Fig. 22. A single pair of short, posterior apophyses present. Caudal margin of lamella antevaginalis smoothly curved. Ostium small in diameter. Ductus bursae extremely slender, moderately short, only slightly longer than posterior apophyses. Corpus bursae moderately large, with small accessory bursa; spicules absent.

Holotype.—Male; 7 mi [11.1 km] NE

Fargo, Clinch Co, Georgia; 6 May 1981, D. C. Ferguson (USNM).

Paratypes.—FLORIDA: Alachua Co: Archer Road Lab, 3 mi [4.8 km] SW Gainesville: 1 ♂, 13 Mar 1974; 1 ♂, 29 Mar 1976; 1 ♂, 2 Apr 1976; 3 ♂, 9 Apr 1975; 3 ♂, 3 Aug 1975; 1 ♂, 22 Aug 1972, J. Heppner. Edgecliff subdivision, 5 mi [8 km] S Gainesville: 1 ♂, 2 Feb 1983, em. 5 Apr 1983 from bracket fungus, D. Habeck. Gainesville: 1 ♂, 21 Apr 1968, D. Habeck; 5 ♂, 1 ♀, 2–6 May 1957, L. Hetrick; 1 ♂, 5 Aug 1957, 2 ♀, 5 Sep 1957, L. Hetrick. Charlotte Co: Punta Gorda: 1 ♂, 1 Apr 1940, H. Ramstadt. Duval Co: Jacksonville: 1 ♂, 11 Mar 1980, H. Baggett. Highlands Co: Parker Island: 1 ♂, 4–7 Jun 1964, R. Hodges. Lake Co: Leesburg: 1 ♂, 9 Sep 1963, C. Felshaw. Levy Co: Bronson: 1 ♂, 1 ♀, 5 Apr 1957, 1 ♂, 1 ♀, 25 Apr 1957, 1 ♀, 29 Apr 1957, 3 ♂, 30 Apr 1957, L. Hetrick. Liberty Co: Torreya State Park: 1 ♂, 1 May 1952, G. Walley. Manatee Co: Bradenton, Gulf Coast Exp. Station: 1 ♂, 5 Apr 1955, E. Kelsheimer. Oneco: 1 ♂, 25 Mar 1954; 1 ♂, 31 Mar 1954; 1 ♂, 2 Apr 1954, J. Franclemont; 4 ♂, Apr 1954; 1 ♂, 5 May 1954; 1 ♂, May 1954; 1 ♂, 25 Aug 1953; 2 ♂, 24 Sep 1955; 1 ♂, 27 Sep 1954, P. Dillman. Palm Beach Co: 3 mi [4.8 km] NE Pahokee: 1 ♂, 1 ♀, 31 Mar 1975, J. Heppner. Pinellas Co: St. Petersburg: 1 ♀, 17 Feb; 1 ♀, Mar; 3 ♂, 1 ♀, Apr; 2 ♂, 3 ♀, May; 1 ♀, 11 Dec; 4 ♂, 1 ♀, 15 Apr 1915, R. Ludwig; 1 ♂, 29 Apr 1914; 1 ♂, 3 Aug 1914, R. Ludwig. Sarasota Co: Siesta Key: 1 ♂, 13 Mar 1963; 1 ♂, 17 Mar 1963; 1 ♀, 25 Mar 1963; 1 ♂, 4 Apr 1970; 1 ♀, 7 Apr 1964; 1 ♂, 8 Apr 1962; 1 ♂, 10 Apr 1962; 1 ♂, 19 Apr 1962; 1 ♂, 2 May 1960; 1 ♂, 3 May 1960; 1 ♂, 5 May 1960; 1 ♂, 15 May 1960, C. Kimball. GEORGIA: Chatham Co: 1 ♂, 10 Jun 1946; 1 ♀, 30 Aug 1946, M. Mead. LOUISIANA: East Baton Rouge Par: Baton Rouge: 5 ♂, 18–26 Apr 1989, T. Friedlander. St. John Par: Edgard: 1 ♂, 9 Aug 1982; 1 ♂, 29 Aug 1982, V. Brou. NORTH CAROLINA: Columbus Co: Lake Waccamaw: 1 ♀, 25 May 1984, Steiner, Bogar, Boyd and Gerberich. Dare Co: Manteo, Roanoke Is: 1 ♂, 14 Jun 1974, S. M. Gifford. Wake Co: Raleight: 1 ♂, 16 June 1934, R. Leiby; 1 ♀, 10 Jul 1910. SOUTH CAROLINA: Berkeley Co: McClellansville, Wedge Plantation: 2 ♂, 22–23 Apr 1974, D. Ferguson; 1 ♂, 29 May 1972, 1 ♀, 3 Jun 1972, R. Dominick. VIRGINIA: Nansemond Co: Lake Drummond, Dismal Swamp: 1 ♂, 6–7 Jul 1962, D. Davis. Slide dissections: JBH 211, USNM 19812, 19813, 19815, 19816, 19831, 29847. Paratypes deposited in BMNH, FSCA, JBH, MCZ, UCB, and USNM.

Host.—Bracket fungus.

Flight period.—Possibly bivoltine, with most adults captured between Feb. 17 and June 10; a second, much smaller sample between Aug. 3 and Sept. 27. Fewer late summer records may simply represent less collecting effort.

Distribution.—This species ranges along the coastal plain of the southeastern United States from southern Florida as far north as the Dismal Swamp in southeastern Virginia.

Etymology.—The specific name is derived from the Greek *mykes* (fungus) and *phagein* (to eat).

Discussion.—*Acrolophus mycetophagus* demonstrates no affinities to any particular member of the genus. The morphology of the rather unique male genitalia supports this as well as its atypical biology. It is the first *Acrolophus* I know of to have been reared from fungus. A single specimen was reared by Dale Habeck from larva boring in an unidentified bracket fungus near Gainesville, Florida. Considering the enormous diversity of species as well as host preference (Davis 1987, Davis and Milstrey 1988) and how little we know of their biology, a fungivorus habit may eventually be discovered as not uncommon among tropical *Acrolophus*.

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