

A REVISION OF THE GENUS *ALEPTINA* (LEPIDOPTERA: NOCTUIDAE)

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Abstract.—The North American noctuid genus *Aleptina* is revised and a key to species provided. The adults, male, and female genitalia are illustrated. One new species, *Aleptina junctimacula*, is described. The five species occur in southwestern United States and in northern and central Mexico.

The genus *Aleptina* is a small group of five species from the desert regions of southwestern United States and northern and central Mexico. The genus is currently placed in the Acontiinae in the tribe Eustrotiini. This placement is not correct because in *Aleptina* the hood of the tympanic region is well developed. In the Eustrotiini the hood is typically greatly reduced or entirely absent. It cannot be placed in the tribe Acontiini either. In addition to the presence of the hood (absent in the Acontiini), the alula is not large and sclerotized, veins M_3 and Cu_1 of the hindwing are not stalked, and the hair pencil of the last abdominal sternite is brush-shaped, not as two eversible hair pencils as found in the Acontiini. For the moment its exact placement must remain uncertain. Some diagnostic characters are: 1) the front is strongly produced into a shelf-like process or swollen, 2) the base of the uncus is modified into a large, balloon-shaped structure, 3) the hindwing venation is unambiguously quadrifid, 4) an accessory cell is present in the forewing, 5) the eyes are neither hairy nor lashed, 6) the tibiae are unspined and without claws, 7) the juxta is usually (but not always) produced into a long, thin spine, 8) the valves of the male genitalia are membranous with a long, sharp, pointed clasper, and 9) the outward side of the uncus is armed with spines.

Aleptina Dyar

Aleptina Dyar, 1902, Can. Entomol. 34: 105. Type-species: *Aleptina inca* Dyar, 1902, Can. Entomol. 34: 105, by monotypy.

Paracretonia Dyar, 1912, Proc. Entomol. Soc. Wash. 14: 167. Type-species: *Paracretonia xithon* Dyar, 1912, Proc. Entomol. Soc. Wash. 14: 167, by monotypy.

Adult.—*Head:* Front produced into a large shelf in type species, but merely swollen in others, front covered with scales, descending as a flattened tuft from apex of head between antennal bases; antennae simple, minutely hairy, covered with scales dorsally; eyes naked, not lashed; palpi with first segment with large white scales on outer side, third segment not at an angle with second; proboscis not reduced. *Thorax:* Covered with scales; no noticeable tufts except for weak

tuft at posterior end of thorax. Wing venation: Forewing venation typical of trifold noctuids, accessory cell present; hindwing with Cu_1 and M_3 not stalked, M_2 present. *Legs*: No significant tufts or hair pencils; prothoracic tibia without claw; tarsal spines of first four tarsal segments arranged in three rows; spines of fifth segment irregular in no set pattern; tarsal claw toothed; mesothoracic tibia with one pair of spurs, metathoracic tibia with two. *External tympanic area*: Alula neither reduced nor enlarged, not greatly sclerotized; anterior edge of first abdominal tergite membranous, lobed; hood moderate to large, separated by a depression from a small bulla in intersegmental membrane toward rear margin of the first abdominal tergite; tympanal groove not extended into second abdominal tergite. *Internal tympanic structure*: Not examined. *Abdomen*: First abdominal tergite with a small tuft; abdomen covered with scales; last tergite of male with U-shaped sclerotization with lateral projections present; hair pencil of tergite a brush and non-eversible; sclerotization of last sternite weak, generally consisting of two distal round flat areas and a proximal diamond-shaped area projecting proximally into a rounded knob. *Male genitalia*: Uncus with spines on outer edge of apex; bases of uncus swollen into two slightly membranous balloons; juxta either produced into a long spine or not; valve various but always with a long, point clasper; aedeagus with apex usually produced into a point; vesica with two groups of spines, one at the base and a second on a rounded lobe distal to that; vesica continued as a slightly spinose tail. *Female genitalia*: Ovipositor lobes unmodified; ostium produced into a variety of spine-like processes depending on the species; ductus bursae long, not strongly sclerotized; corpus bursae single lobed, slightly spiculate, ductus seminalis arising from top of bursa.

KEY TO SPECIES OF *Aleptina*

1. Front produced into a large shelf-like prominence *inca* Dyar
- Front swollen but not produced into a shelf-like prominence 2
2. Forewing dirty white with a dull black median area *semiatra* (Smith)
- Forewing not as above 3
3. Forewing with most of basal area light red-brown, contrasting with remainder of wing *clinopetes* (Dyar)
- Forewing with basal area not light red-brown, not contrasting with rest of wing 4
4. Forewing with orbicular laterally elongate, fusing with reniform; claviform elongate, superficially appearing to run to base of wing; Texas
..... *junctimacula* A. Blanchard, new species
- Forewing with orbicular round, not laterally elongate or fusing with reniform; claviform not elongate, not appearing to run to base of wing; Mohave Desert region of California and Arizona
..... *aleptivoides* (Barnes and McDunnough)

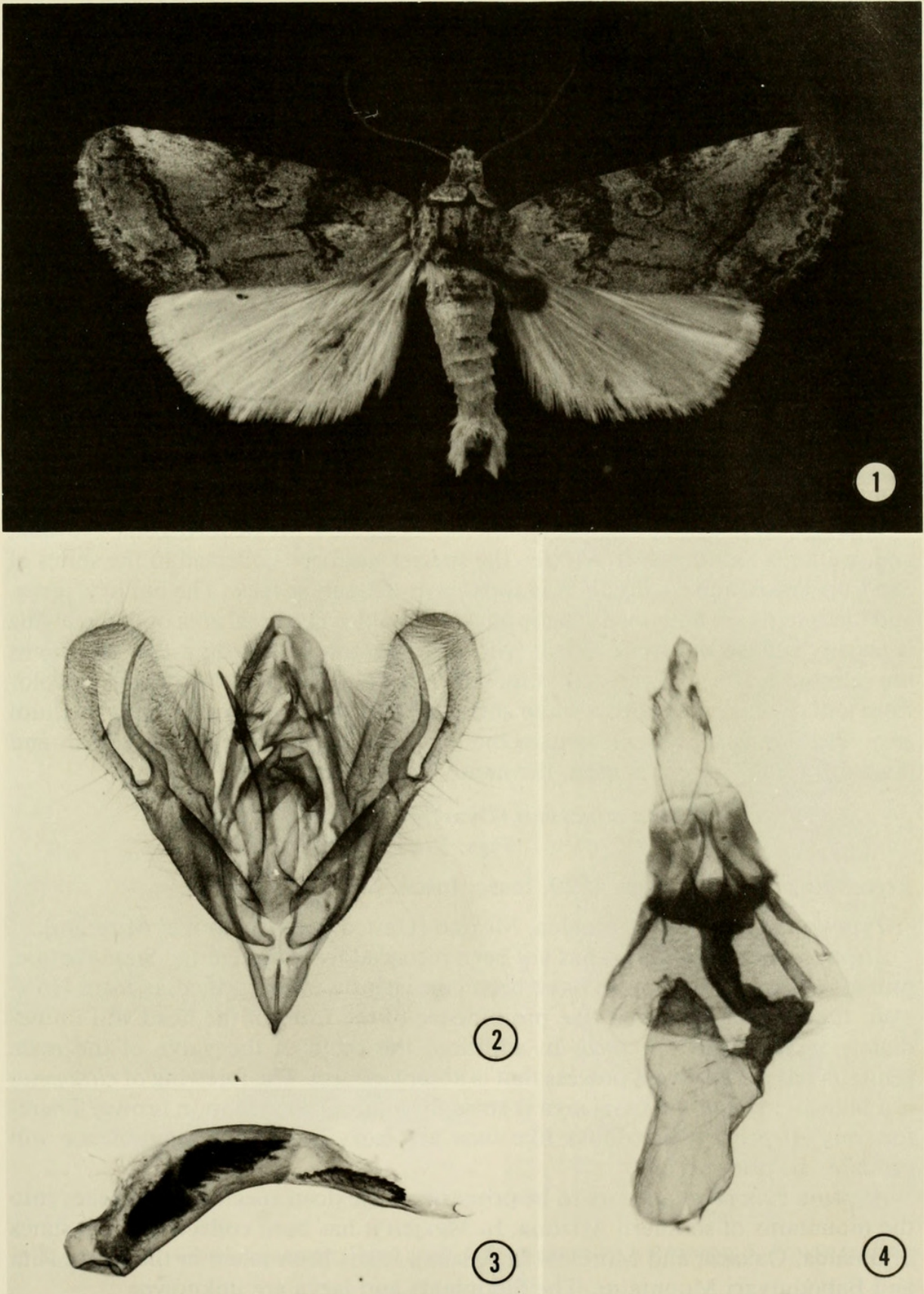
Aleptina inca Dyar

Figs. 1–4

Aleptina inca Dyar, 1902, Can. Entomol. 34: 105.

Type-locality: "So. Arizona" [United States National Museum].

Types.—Dyar described this species from two ♂ from Arizona and two ♀ from Texas. One of the ♀ specimens is a cotype of *Aleptina inca texana*. The two ♂ are



Figs. 1-4. 1, *Aleptina inca* Dyar adult. 2, Male genitalia. 3, Aedeagus. 4, Female genitalia.

marked "type" and "male type." The specimen marked "type" is in poor condition. The ♂ bearing the label "male type" is in good condition but is missing the right forewing. We hereby designate and have labeled as LECTOTYPE the specimen labeled "So. Arizona, Poling," "Barnes Collection," "Leptina inca Dyar male type," "Photo Noc. 481."

Aleptina inca texana Barnes and McDunnough, 1913, Contributions to the Natural History of the Lepidoptera of North America, 2(3): 115.

Type-locality: Brownsville, Texas [United States National Museum].

Aleptina inca is the only species of this genus with a large shelf-like prominence of the front. All of the other species have the front either merely swollen or with only a hint of a ridge. The male genitalia are also distinctive (Figs. 2, 3). The valve is, to a degree, membranous and the elongate clasper rests in a pocket in the valve. Within this pocket there is a small, pointed sclerotization. The outer margin of the valve lacks the sclerotized process found in *clinopetes* (Dyar). The species is superficially like *clinopetes*, but the prominence of the front or its absence will immediately separate the two species.

This species occurs throughout southern Texas, New Mexico, Arizona, Nevada, and southern California. In Mexico the species has been collected in the states of San Luis Potosi and Coahuila. It is apparently a desert species. The biology, larva, and foodplants are unknown. The species is variable. The basal area of the forewing is usually suffused to some extent with light salmon brown. In a few specimens the salmon brown spills all across the inner margin. The forewing varies in color from a dark black grey with a white suffusion near the apex to a uniform medium grey. The Texas specimens contain the highest proportion of the grey form and if a subspecific concept is used, the name *texana* is available.

***Aleptina clinopetes* (Dyar), NEW COMBINATION**

Figs. 5–8

Bryocodia clinopetes Dyar, 1920, Insec. Inscit. Menstr. 8: 192.

Type-locality: Venadio, Sinaloa, Mexico [United States National Museum].

Aleptina clinopetes (Dyar) has not been recorded from the United States before, probably because specimens have been consistently misidentified as *inca*. However, the absence of a shelf-like prominence of the front of the head will immediately separate it from *inca*. In addition, the costa of the valve of the male genitalia has a sclerotized process that is absent in *inca*. The forewing of *clinopetes* is a bluish-grey and the basal area is strongly suffused with salmon brown. Therefore any *Aleptina* which looks like *inca* but lacks the frontal prominence will probably be this species.

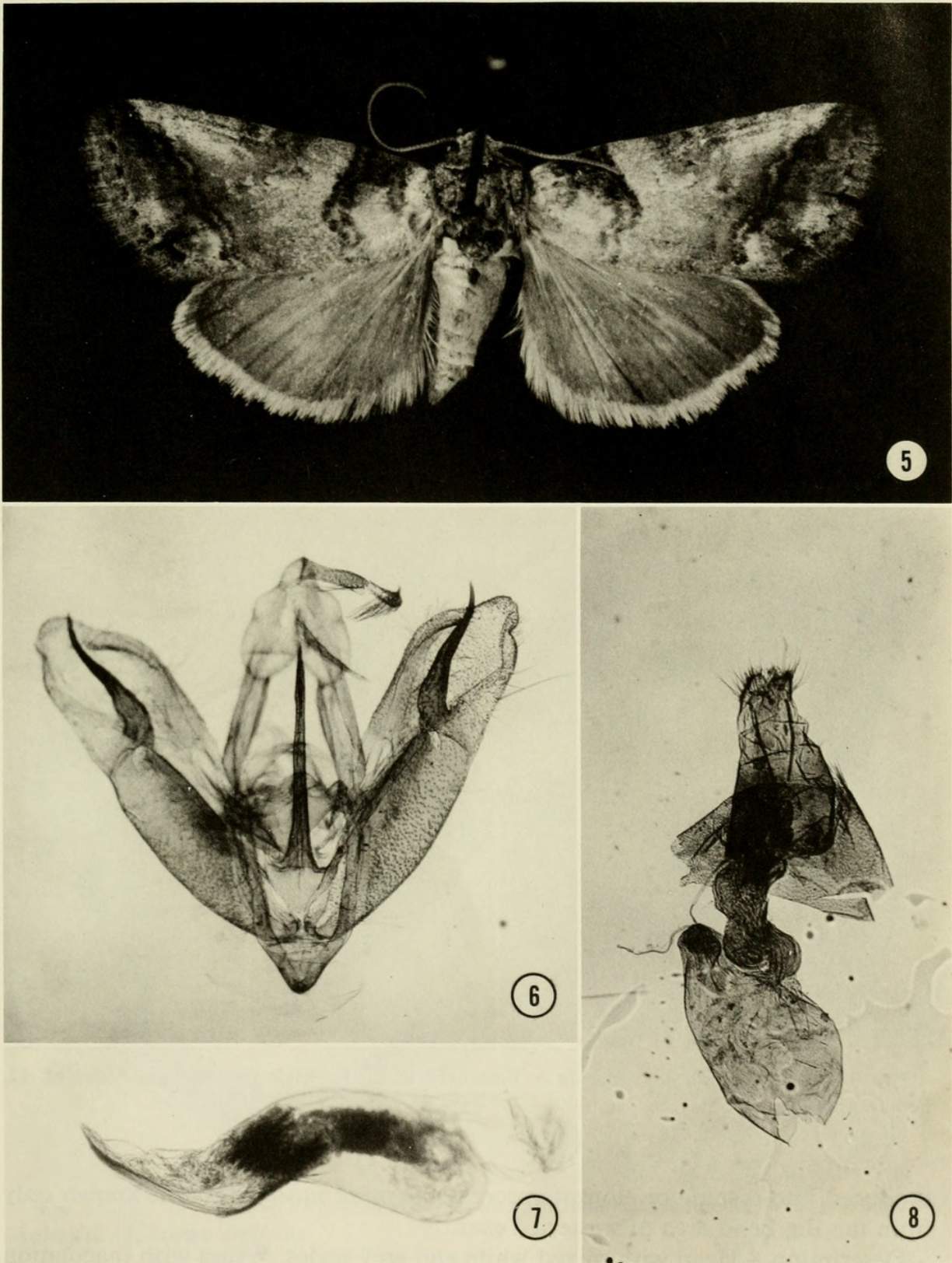
Aleptina clinopetes appears to be primarily a Mexican species that reaches into the mountains of southern Arizona. In Mexico it has been collected in the states of Sinaloa, Oaxaca, and Morelos. In Arizona it has been taken in the Santa Rita and Baboquivari Mountains. The foodplants and larva are unknown.

***Aleptina junctimacula* A. Blanchard, NEW SPECIES**

Figs. 9–12

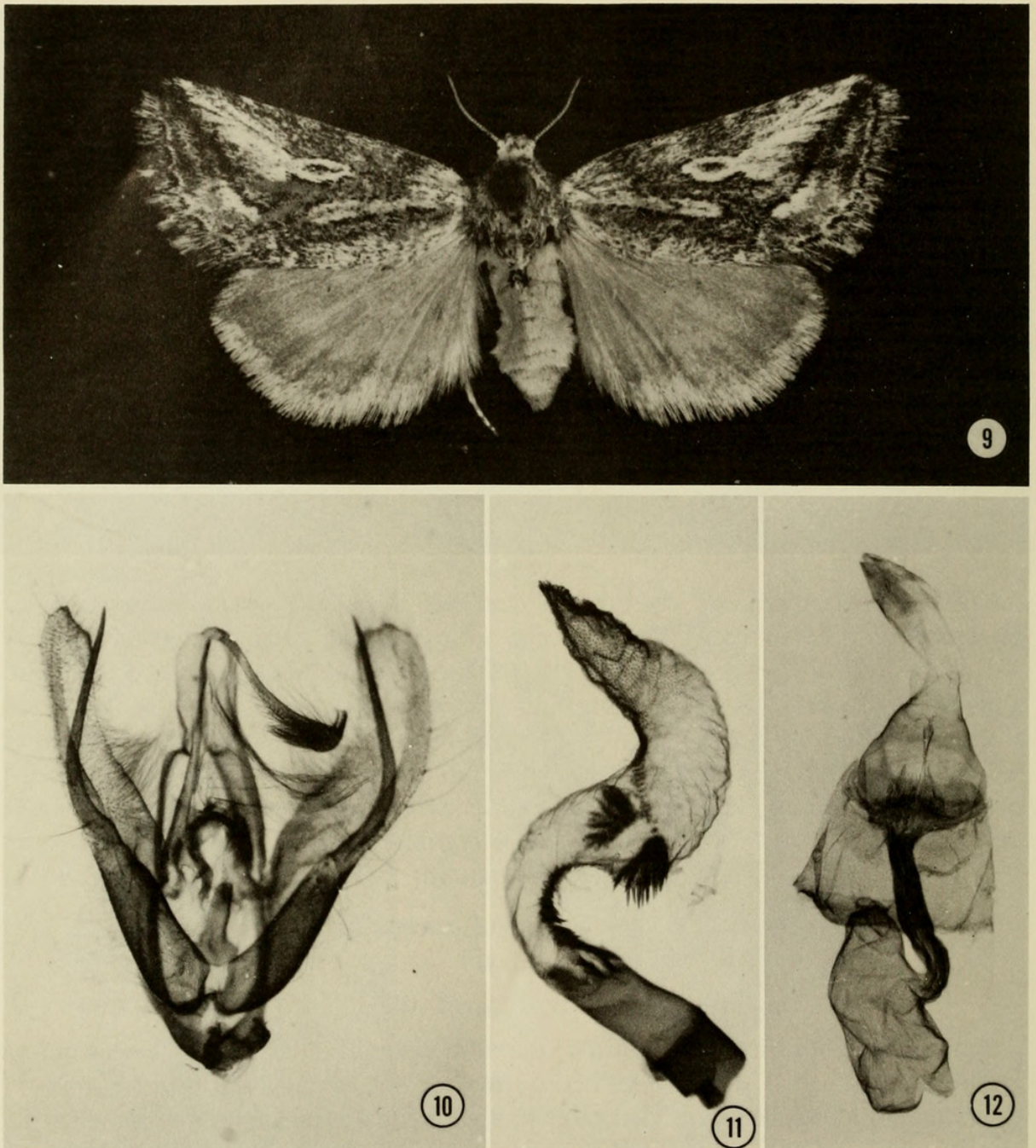
Aleptina junctimacula A. Blanchard, new species.

Type-locality: Dugout Wells, Big Bend National Park, Texas [United States National Museum].



Figs. 5-8. 5, *Aleptina clinopetes* (Dyar) adult. 6, Male genitalia. 7, Aedeagus. 8, Female genitalia.

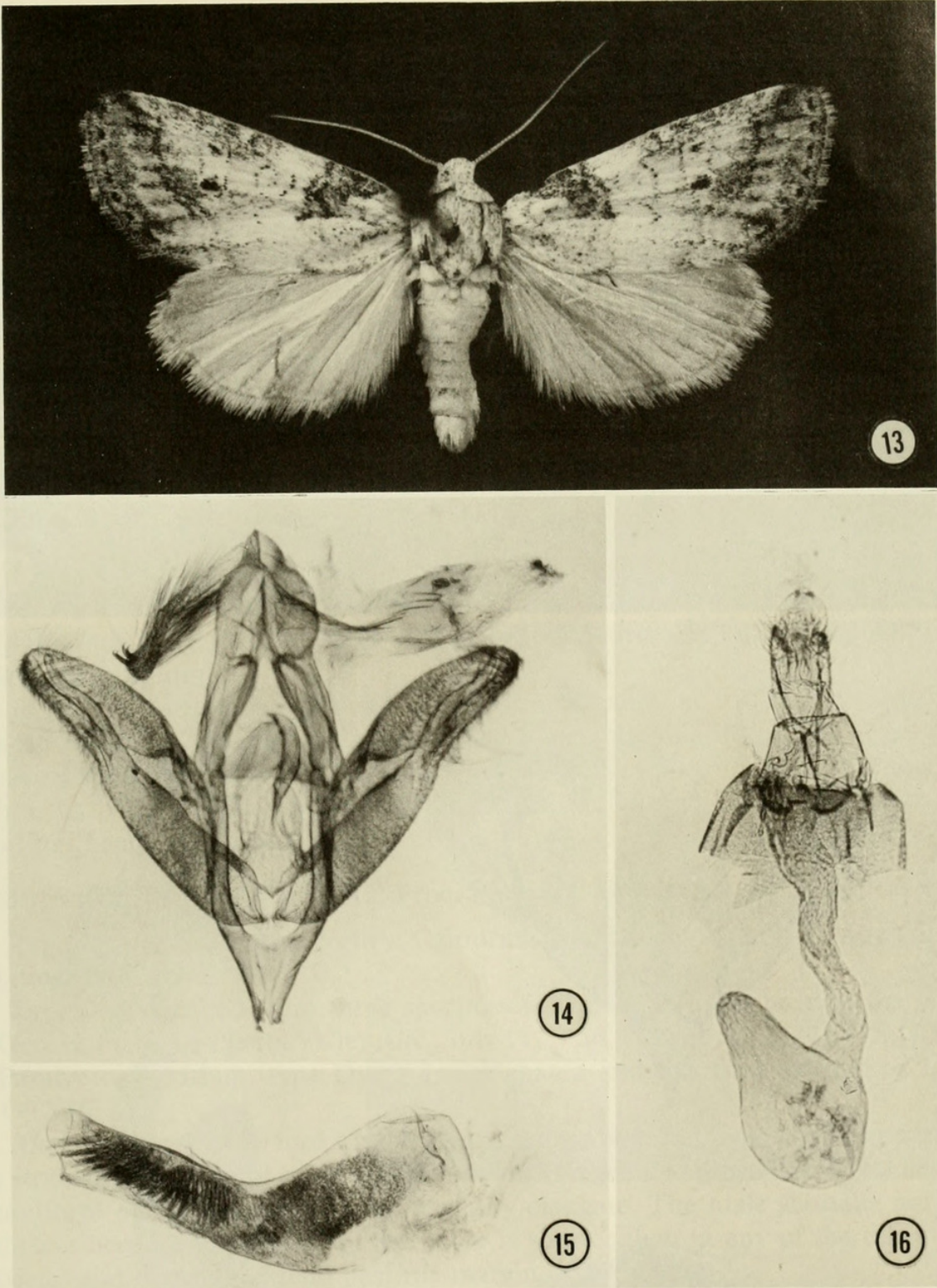
This new species is to be credited to Blanchard only. *Aleptina junctimacula* is characterized by the elongate orbicular and claviform of the forewing. The orbicular is laterally elongate, running into and fusing with the reniform. The claviform appears to run all the way into the base of the wing. The hindwing is tinged with brown. This species is the only species in the genus in which the juxta is not



Figs. 9–12. 9, *Aleptina junctimacula* A. Blanchard, adult. 10, Male genitalia. 11, Aedeagus. 12, Female genitalia.

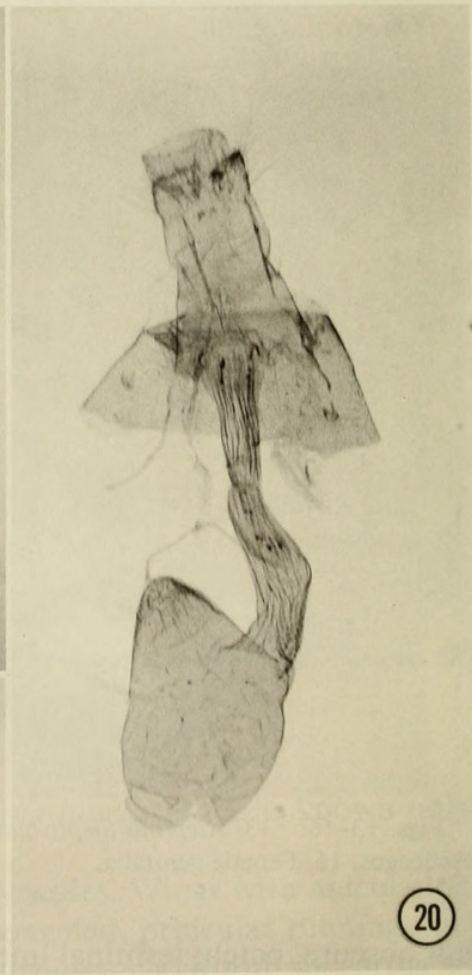
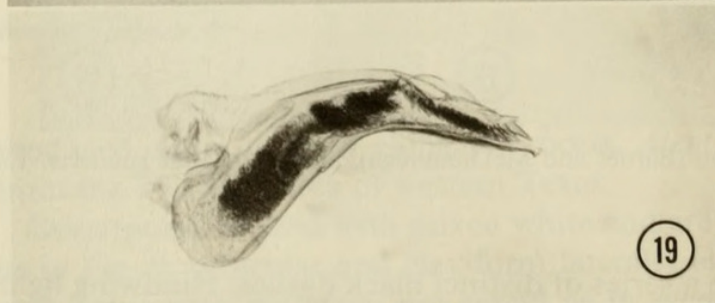
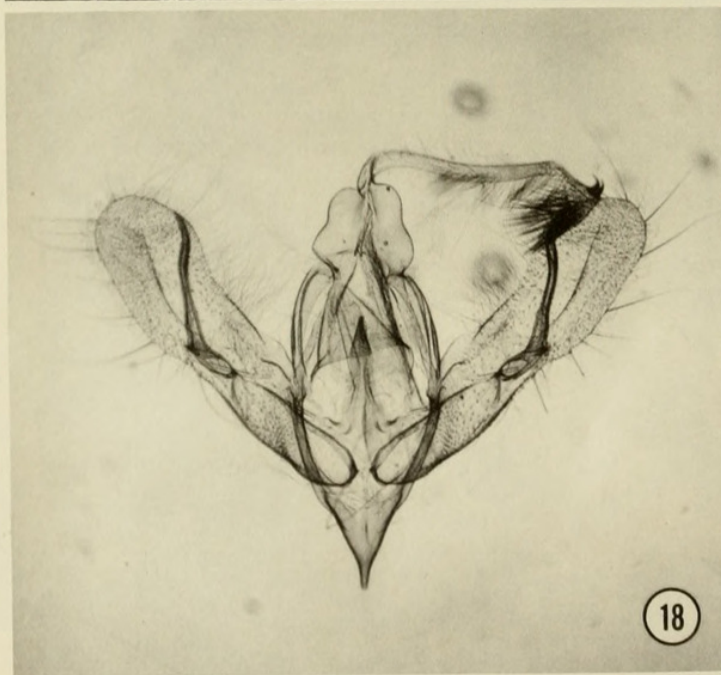
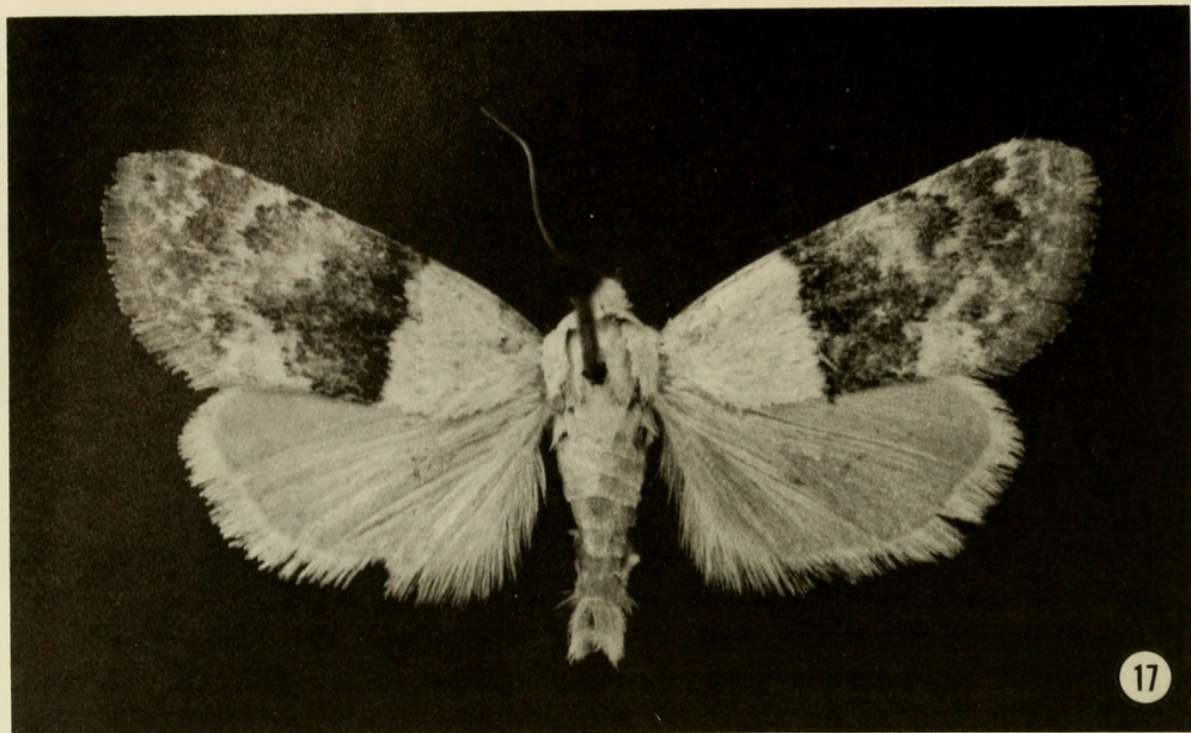
produced into a spine or elongate process. *Aleptina junctimacula* is known only from the Big Bend area of western Texas.

Description.—Head with mixed white and grey scales. Wings with maculation as in Fig. 9; orbicular and claviform laterally elongated, orbicular running into and fusing with reniform, not round as in *aleptivoides*; claviform appearing to run all the way to base of wing; overall coloration of forewing grey with a very slight violet tint; claviform, orbicular, and reniform white, orbicular with a dark grey central spot; antemedial line absent or obscure; postmedial line a thin black line running as in Fig. 9; lower two-thirds of subterminal area with a dull black,



Figs. 13-16. 13, *Aleptina aleptivoides* (Barnes and McDunnough), adult. 14, Male genitalia. 15, Aedeagus. 16, Female genitalia.

but obscure, patch; terminal line a series of distinct black dashes. Hindwing light brown. Prothoracic and mesothoracic tibiae and femora covered with mixed white and grey scales; tarsal segments vaguely banded with white and grey; metathoracic femur and tibia all white. Abdomen with tuft of grey scales on first abdominal segment. Male genitalia as in Figs. 10, 11; juxta not produced into a spine as in



Figs. 17-20. 17, *Aleptina semiatra* (Smith), adult. 18, Male genitalia. 19, Aedeagus. 20, Female genitalia.

other four species; claspers of valves extending beyond margins of valve, not shortened as in *aleptivoides*. Female genitalia as in Fig. 12.

Types.—Holotype: ♂, Big Bend National Park, Dugout Wells, Texas, 29-VIII-1965, A & M. E. Blanchard, male genitalia on slide AB 1100, in the United States National Museum. Paratypes: 1 ♂ and 6 ♀ from the type locality and collectors, 4-VI-73, 13-IX-71, 9-VIII-64, 27-VIII-65, in the collection of A. Blanchard; 1 ♂, Shafter, Presidio County, Texas, 9-IX-69, A & M. E. Blanchard, in the United States National Museum; 1 ♂, Chihuahuan Desert, near Nugent Mountain, Big Bend National Park, Texas, A & M. E. Blanchard, 17-IX-71, in the collection of A. Blanchard; 1 ♂, Nugent Mountain, Chisos Mountains, Brewster Co., Texas, D.C. Ferguson, 6-VI-73, in the United States National Museum.

This species is known only from the Big Bend Region of Texas. The larva and its foodplants are unknown. The species has an uncanny resemblance to the species of the genus *Oxycnemis*.

***Aleptina aleptivoides* (Barnes and McDunnough) NEW COMBINATION**

Figs. 13–16

Phyllophila aleptivoides Barnes and McDunnough, 1912, Can. Entomol. 44: 217.

Type-locality: La Puerta Valley, San Diego County, California [United States National Museum].

Types.—This species was described from one ♂ and one ♀. The ♂ is in the San Diego Museum and the ♀ is in the United States National Museum. The ♀ type bearing the labels “Geo. H. Field, La Puerto Valley, Cal., July 11,” “Photograph pl. 5, fig. 14,” “*Phyllophila aleptivoides* B & McD, type female” is designated and has been labeled as LECTOTYPE.

Paracretonia xithon Dyar, 1912, Proc. Entomol. Soc. Wash. 14: 167.

Type-locality: La Puerta Valley, California [San Diego County], [United States National Museum].

Types.—Described from three specimens. The ♀ specimen bearing the labels “Geo. H. Field, La Puerta Valley, Cal., July 11,” “56,” “Type no. 15112 U.S.N.M.,” “*Paracretonia xithon*, type Dyar” is designated and has been labeled as LECTOTYPE.

Aleptina aleptivoides looks most like *junctimacula*, but even that comparison is strained. The general color of the forewing is a grizzled grey. The orbicular and claviform of the forewing are not laterally elongate. The male genitalia are distinctive because the clasper of the valve is shorter than in any of the other four species and does not extend past the margin of the valve.

This species has been collected in southern California, western Arizona, and southern Arizona. The larva and its foodplants are unknown.

***Aleptina semiatra* (Smith) NEW COMBINATION**

Figs. 17–20

Acontia semiatra Smith, 1902, J. N. Y. Entomol. Soc. 10: 52.

Type-locality. Quartzite, Yuma Co., Arizona [American Museum of Natural History].

Types.—This species was described from one ♂ and three ♀. The lectotype was designated by Todd, 1982, U.S.D.A. Tech. Bull. 1645, p. 193.

This species is unmistakable and superficially is totally unlike the rest of the genus. The forewing is dirty white with a dull grey median area. The subterminal area is also generally suffused with dull grey.

The species is fairly common in the Mohave Desert region of southern California and western Arizona. The larva and its foodplants are unknown.

PROC. ENTOMOL. SOC. WASH.

86(4), 1984, p. 960

NOTE

Editha magnifica (Perty) in Venezuela
(Hymenoptera: Sphecidae: Nyssoninae)

Editha magnifica (Perty) is probably the largest (length 40 mm or more) member of the tribe Bembecini and, although described 150 years ago, is still poorly known. This handsome wasp was previously recorded only from Brazil (Bohart & Menke, 1976, Sphecids of the World), and all collections were made south of the Amazon River. Therefore, the discovery of *magnifica* in Venezuela, some 1500 airmiles to the north, is significant. I have examined two females belonging to two different Venezuelan institutions. The records are as follows: *Anzoategui*: Aragua dist., El Chaparro, XII-20-74 (Universidad del Zulia, Maracaibo); *Yaracuy*: Chivacoa, Centrale Matilde, IX-12-72 (Universidad Centro Occidental Lisandro Alvarado, Barquisimeto). Both specimens are identical in yellow abdominal markings with Brazilian females. I would like to thank Edmundo Rubio, Maracaibo, and Enrique Yustiz, Barquisimeto, for permitting me to examine wasps in their institutions.

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Todd, Edward L., Blanchard, André., and Poole, Robert W. 1984. "A revision of the genus *Aleptina* (Lepidoptera: Noctuidae)." *Proceedings of the Entomological Society of Washington* 86, 951–960.

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