

DESCRIPTION OF A NEW SPECIES OF *ANEPID* HAMPSON FROM THE SIERRA NEVADA OF CALIFORNIA (NOCTUIDAE)

JOHN S. BUCKETT

University of California, Davis, California

WILLIAM R. BAUER

711 Boyer Circle, Davis, California

In recent years the authors have obtained a series of a new noctuid which belongs in the genus *Anepia* Hampson, close to *amabilis* (Barnes and McDunnough). At first, only a few specimens were at hand, and it was difficult to be sure of the specific integrity of the new species. As more material became available, it was apparent that there were two species involved, and with further study, the distinctness became more obvious.

The genus *Anepia* as presently recognized, is composed of seven North American species, including *plumasata* herein described as new. *A. amabilis* was described from Loma Linda, San Bernardino County, California, and this species seems to inhabit areas from sea level up to over 1,000 feet elevation. *A. plumasata*, on the other hand, inhabits more mountainous areas from 1,000 to over 8,000 feet elevation, and is more northerly in distribution.

A. amabilis is well described by Barnes and McDunnough (1918), including a photograph (plate 16, figure 4). Draudt (*In* Seitz, 1923) depicts *A. amabilis* in color (plate 17, row k), but this illustration is inaccurate in color, as it is much too yellowish brown.

***Anepia plumasata* Buckett and Bauer, new species**

Holotype male: Ground color bluish grey, due to whitish scaling over darker background. *Head* with vertex clothed with spatulate and flattened hairs, basally brownish, apically white tipped; frons appearing brownish, clothed with spatulate hairs, flattened hairs, simple hairs; palpi brown with scattering of white scales, elongate brownish simple hairs protruding ventrally; antennae with scape clothed in whitish spatulate scales, basally with flagellar segments slightly cleft, medially with each segment truncate ventrally, medial ciliations as long as width of flagellar shaft, lessening in length apically. *Thorax* dorsally with collar clothed basally in greyish hairs and scales; medially with an indistinct, broad black band, preapically greyish, apically white tipped; disc clothed in simple and spatulate hairs, basally greyish, apically white tipped; tegulae clothed as in disc, except spatulate hairs represented by spatulate scales; ventrally clothed in whitish or ash-grey, simple hairs, appearing peppered; tarsal segments black, with white annuli apically; tarsal claws (or ungues) serrate ventrally. *Forewings* dorsally with basal half line slightly out-curved, basally black, apically whitish; transverse anterior area of ground color, heavily overlain with white scales; transverse anterior line slightly outcurved, undulating from costa to inner margin, geminate, basally whitish, terminally black; median area black preceding orbicular and including claviform, remainder of median

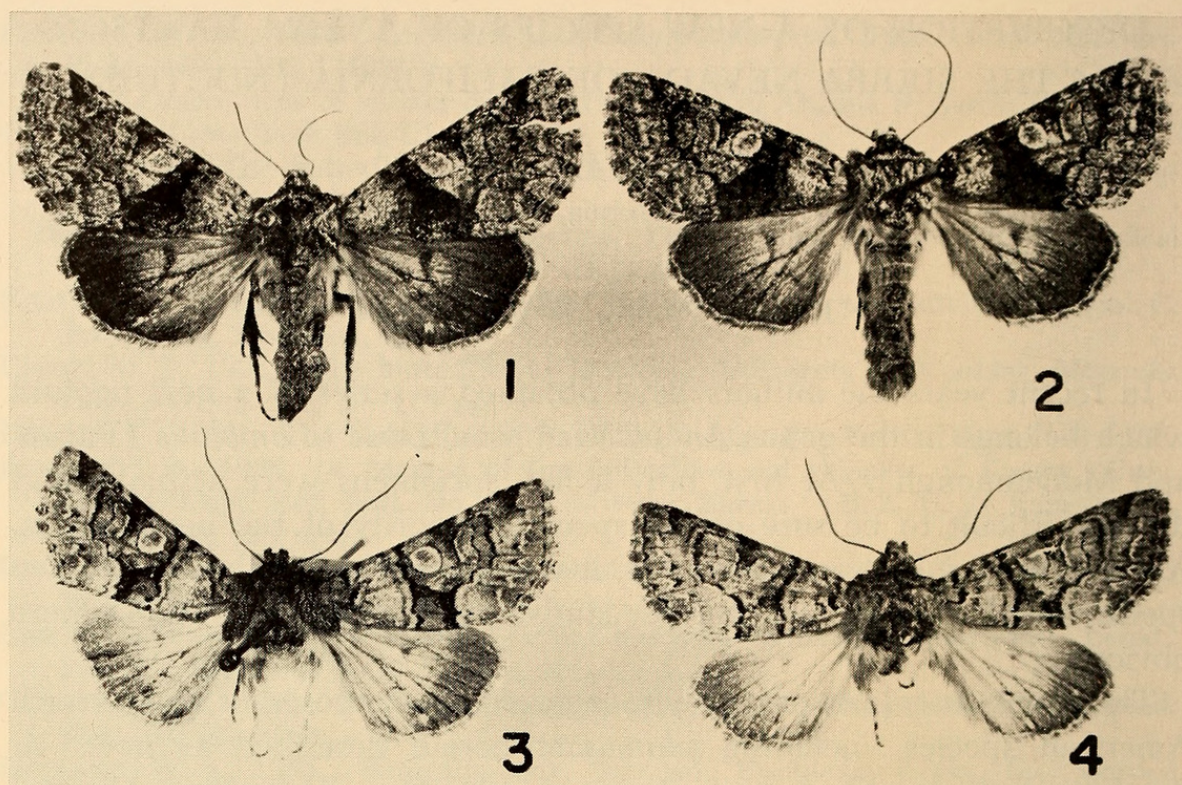
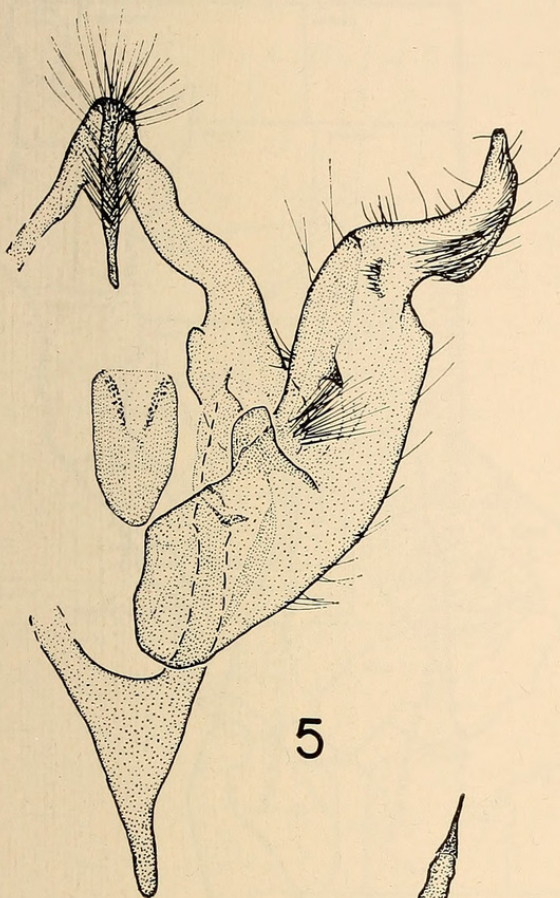


Fig. 1. *Anepia plumasata* Buckett and Bauer, allotype female. Johnsville, Plumas Co., Calif., 18 June 1963. Fig. 2. *A. plumasata*, Holotype male. Same locality, 18 June 1946. Fig. 3. *A. amabilis* (Barnes and McDunnough), male. Del Mar, San Diego Co., Calif. 7 May 1943. Fig. 4. *A. amabilis*, female. Ojai, Ventura Co., Calif., 10 April 1955.

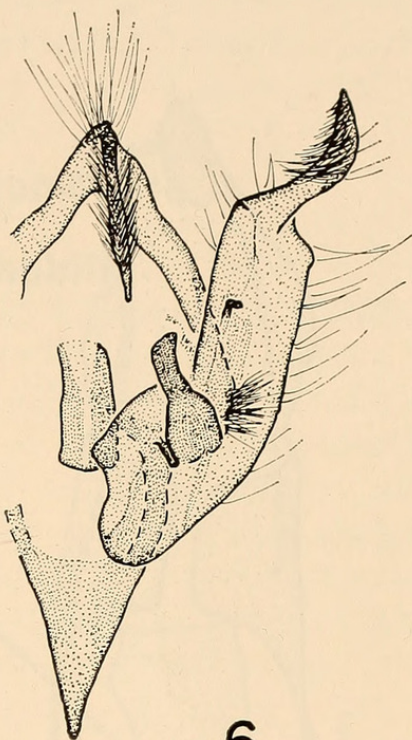
area of ground color; claviform large, from half-way to completely across median area, not easily discernable because of darker scales surrounding it; orbicular thinly outlined in brownish-black, externally whitish, centrally filled with ground color; reniform erect, rectangular, colored as in orbicular; transverse-posterior line evenly curved outwardly around reniform, appearing geminate toward inner margin, basally black, terminally white; sub terminal area of ground color, veins faintly outlined in black; sub terminal line a black wedge on costa, thence disjunct, remainder white; terminal line faintly represented by black lunules between veins; fringes checkered with alternating whitish and bluish-grey checks; ventral surface brownish-black; reniform weakly represented in black; transverse-anterior line broad, represented in black; terminal area heavily irrorated with white scales; fringes as in dorsal surface. *Hindwings* dorsally deep smokey fuscous, lighter basally; discal lunule represented in dark brown; fringes tricolored, basally ochreous, medially dark-brown, apically whitish; ventral surface charcoal with irroration of white scales; discal lunule present as black dot; exterior line black; area extending from exterior line just proximally to fringes darker than ground color of wing; fringes as in dorsal surface.

Greatest expanse of forewing 15 mm. Genitalia as in figs. 5 and 7.

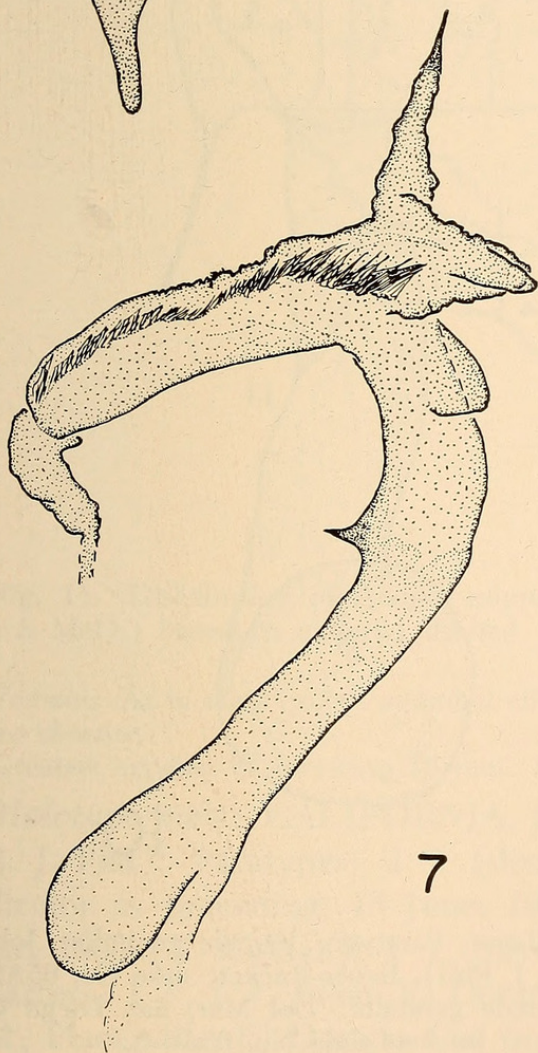
Fig. 5. *Anepia plumasata* Buckett and Bauer, paratype. Male genitalia, aedeagus removed. Same locality as in fig. 1, 6 July 1962. Bauer-Buckett slide No. 65A6-7. Fig. 6. *A. amabilis* (B. & McD.). Male genitalia aedeagus removed. Data same as fig. 3, Bauer-Buckett slide No. 65A6-5. Fig. 7. *A. plumasata*, paratype male aedeagus. Data same as in fig. 5. Fig. 8. *A. amabilis*, male aedeagus. Data same as in fig. 6.



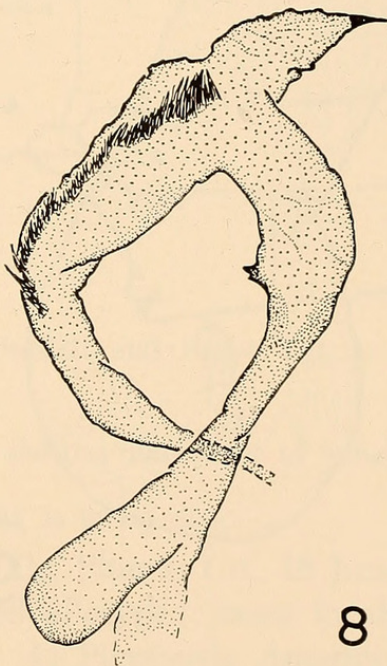
5



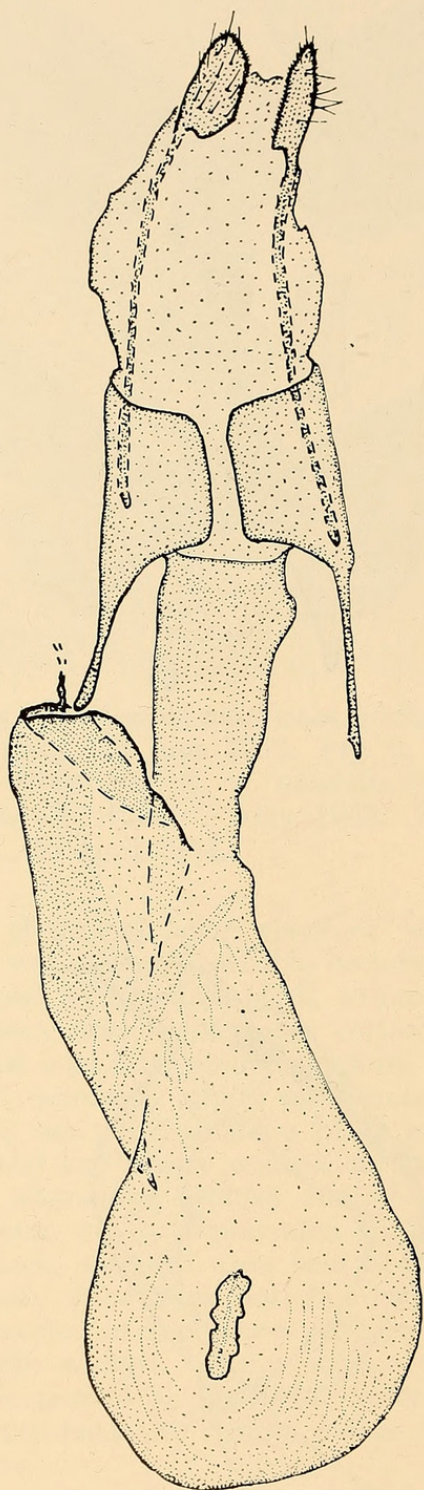
6



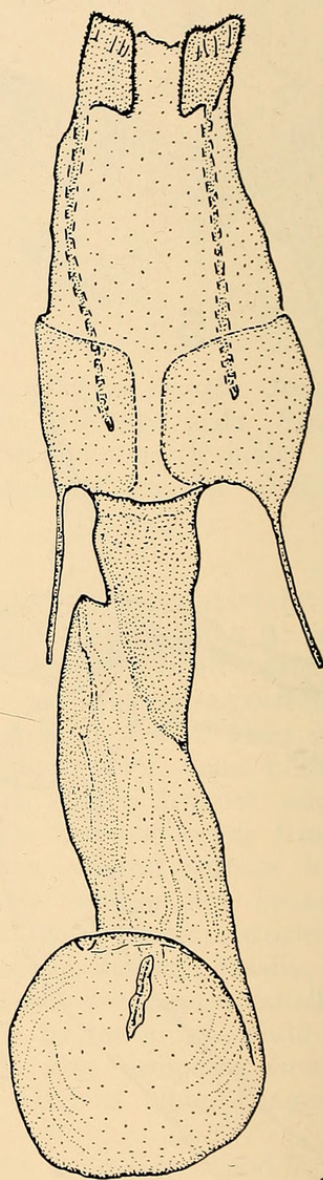
7



8



9



10

Fig. 9. *Anepia plumasata* Buckett and Bauer, Paratype. Female genitalia. Johnsville, Plumas Co., Calif. 25 June 1962 (H. J. Pini), Bauer-Buckett slide No. 65A6-8.

Fig. 10. *A. amabilis* (B. & McD.), female genitalia. Del Mar, San Diego Co., Calif. 28 May 1956 (J. A. Comstock), Bauer-Buckett slide No. 65A6-6.

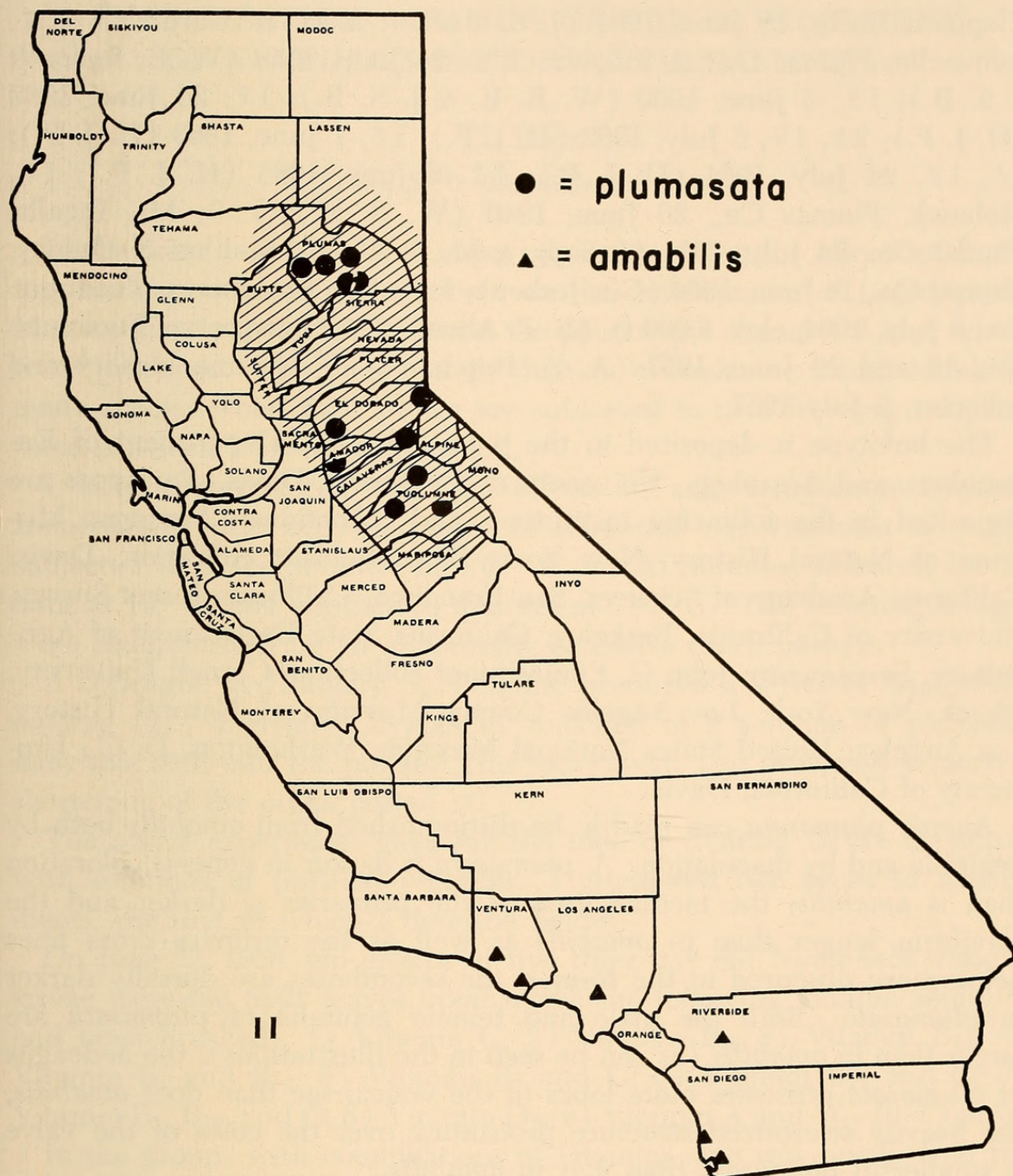


Fig. 11. Distribution of *Anepia plumasata* Buckett and Bauer and *A. amabilis* (B. & McD.) based on material studied.

Female: As in male except antennal ciliations shorter; maculation of wings usually more obscure.

Greatest expanse of forewing 16 mm. Genitalia as in fig. 9.

Holotype male: CALIFORNIA, Johnsville, Plumas Co., 18 June, 1964. (H. J. Pini). Paratypes: 1 ♀ (designated allotype), same locality and collector as preceding, 18 June, 1963. 1 ♂, Plymouth, Amador Co., 1 June, 1963 (T. Gallian); 1 ♀, Silver Lake, Amador Co., 17 July, 1935 (Carter); 1 ♂, 1 ♀, Bijou, El Dorado Co., 25 July, 1964 (R. A. Young); 1 ♂, Placerville, El Dorado Co., 5 June, 1965 (R. A. Y.); 1 ♂, 1 mi N

Elephant Butte, 16 June, 1964 (J. S. Buckett & M. R. Gardner); 1 ♂, Johnsville, Plumas Co., as follows: 1 ♂, 24 June, 1959 (W. R. Bauer & J. S. B.); 1 ♂, 5 June, 1960 (W. R. B. & J. S. B.); 1 ♀, 25 June, 1962 (H. J. P.); 2 ♂, 1 ♀, 6 July, 1962 (H. J. P.); 1 ♂, 7 June, 1963 (H. J. P.); 1 ♂, 1 ♀, 24 July, 1964 (H. J. P.); 1 ♂, 6 June, 1965 (H. J. P.); 1 ♂, Mohawk, Plumas Co., 20 June, 1946 (W. R. B.); 1 ♀, Mt. Ingalls, Plumas Co., 24 July, 1964 (J. S. B. & M. R. G.); 1 ♀, 1 mi N Quincy, Plumas Co., 14 June, 1964 (Gus Jeskey); 1 ♂, 2 ♀, Strawberry, Tuolumne Co., 8 July, 1964, elev. 8,000 ft. (R. P. Allen); 2 ♂, Strawberry, Tuolumne Co., 19 and 20 June, 1957 (A. E. Pritchard); 1 ♂, same locality and collector, 3 July 1957.

The holotype is deposited in the type collection, Department of Entomology and Acarology, University of California, Davis. Paratypes are deposited in the following institutions and collections: American Museum of Natural History, New York; Bauer-Buckett collection, Davis; California Academy of Sciences, San Francisco; California Insect Survey, University of California, Berkeley; California State Department of Agriculture, Sacramento; John G. Franclemont collection, Cornell University, Ithaca, New York; Los Angeles County Museum of Natural History, Los Angeles; United States National Museum, Washington, D. C.; University of California, Davis.

Anepia plumasata can readily be distinguished from *amabilis* both by genitalia and by maculation. *A. plumasata* is darker in general coloration than is *amabilis*; the median area of the primaries is darker and the claviform longer than in *amabilis* as well as the ordinary cross lines being more obscured in the former; the secondaries are dorsally darker in *plumasata*. Both the male and female genitalia of *plumasata* are larger than in *amabilis* (as can be seen in the illustrations); the aedeagus of *plumasata* possesses more lobes in the vesical sac than does *amabilis*; the heavily sclerotized structure protruding over the costa of the valve is smaller in *plumasata* than it is in *amabilis*.

The genitalic illustrations were prepared by the first author with aid of a bioscope, corrections being made by use of a dissecting microscope.

We wish to extend our appreciation to all those who made material available for this project, and to Ronald C. Gardner for his assistance in preparation of the manuscript.

LITERATURE CITED

- BARNES, W. and J. McDUNNOUGH, 1918. Contributions to the Natural History of the Lepidoptera of North America, 4(2): 96, and plate 16. The Review Press, Decatur, Ill.
- DRAUDT, M., 1923. In: Seitz, The Macrolepidoptera of the World, 7: 116 and plate 17.



1967. "Description of a new species of *Anepia* Hampson from the Sierra Nevada of California (Noctuidae)." *Journal of the Lepidopterists' Society* 21, 235–240.

View This Item Online: <https://www.biodiversitylibrary.org/item/128076>

Permalink: <https://www.biodiversitylibrary.org/partpdf/81257>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In Copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.