The Type-Material of North American Clearwing Moths (Lepidoptera: Sesiidae)

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SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY • NUMBER 148
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ABSTRACT

Duckworth, W. Donald, and Eichlin, Thomas D. The Type Material of North American Clearwing Moths (Lepidoptera: Sesiidae). Smithsonian Contributions to Zoology, number 148, 34 pages, 1973.—The type material of North American clearwing moths of the family Sesiidae is reviewed by bringing together all the available data for the 255 species group names applied to this fauna area. Of these 255 names, 72 required lectotype designations, 152 were described from single specimens, and the remaining 31 are lacking in sufficient data to determine the number of specimens included in the original type series. The names are arranged alphabetically by specific name preceded by the genus in which it was originally described. The following information sequence is presented for each name: original combination; reference to original description; pertinent comments from the original description concerning the number of specimens, sex, locality, collection, and source of the types; exact label data on types, their present location, and number of syntypes examined; and subsequent pertinent comments and actions.
The Type-Material of North American Clearwing Moths (Lepidoptera: Sesiidae)

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During the course of revisionary studies currently in progress on the North American clearwing moths, it became apparent that considerable confusion existed concerning the type-material for the numerous names applied to species in this family in North America, north of Mexico. The present paper is intended to rectify this situation, insofar as possible, by bringing together all the available data for the 255 species group names applied to this faunal area. Of these 255 names, 72 required lectotype designations, 152 were described from single specimens, and the remaining 31 are lacking in sufficient data to determine the number of specimens included in the original type series.

Although the North American Sesiidae (=Aegeniidae) are best known through the revisions of Beutenmuller (1901) and Engelhardt (1946), the contributor of the largest number of names in the North American fauna was Henry Edwards. It was largely due to the difficulties encountered with the 93 Edwards names that the task of locating the types and compiling the data as a separate study was undertaken by the present authors. In studying the Edwards types many discrepancies between information provided in the original descriptions and that found on the labels of specimens presumed to be a part of the original type series were encountered. Apparently, in many instances, the specimens were labeled after the descriptions were published, sometimes incorrectly, and specimens were occasionally added to the original series or deleted from it without indication on the labels. In addition, Edwards frequently erred in determination of the sex of his specimens, and information provided in the published descriptions was not included on the specimen labels. In this study information is provided for the 52 species Edwards described from unique specimens, and lectotypes are designated for the remaining 41 species.

Through the acquisition of the Barnes collection, which included all the North American Heterocera specimens except the Sphingidae from the Oberthur collection through purchase, most of the sesiid types of Boisduval are located in the National Museum of Natural History, Smithsonian Institution. Lacking information to the contrary, these specimens have been considered holotypes in this study.

Thaddeus William Harris described 11 species of sesiids in the mid-nineteenth century. The type-material was deposited in the collection of the Boston Society of Natural History where, fortunately, they were examined by Engelhardt prior to the publication of his revision. Ultimately, the collections of the Boston Society were transferred to the Museum of Comparative Zoology, Harvard.
University, but not before there was considerable loss and damage through lack of curatorial attention. The Harris types were not found in the collections of the Museum of Comparative Zoology nor was there any indication that they had been received; thus, they must be presumed destroyed or lost prior to the transfer. Of the 11 names, 10 represent well-known species, most of which are of economic importance. Engelhardt (1946) covered the names in his revision and, consequently, there is no uncertainty concerning their application.

For various reasons 38 types could not be located. A number of these, such as the Harris types mentioned above, are assumed lost or destroyed and are so indicated. The types of a number of species described by various European authors were treated by Naumann (1971), and we have followed his treatment in these instances. In a number of cases the types are listed as unknown, which simply means that we were unable to locate the specimens or any indication concerning their past or present deposition. It is possible some of these may be uncovered as a result of this publication; others undoubtedly no longer exist.

Neotypes have not been designated in the present study for types which are presumed lost or destroyed in keeping with the provisions of the International Code of Zoological Nomenclature, Article 75 (a), which limits such designations to those instances "necessary in the interests of stability of nomenclature." In the North American sesiid the identities of all the entities for which the types are thought to be lost or destroyed are clearly established and do not qualify under the "exceptional circumstances" defined by the Code.

The distribution of the 255 North American sesiid types along with the institutional abbreviations used in the text are as follows: National Museum of Natural History, Smithsonian Institution (NMNH), 107; American Museum of Natural History (AMNH), 83; British Museum (Natural History) (BMNH), 15; Academy of Natural Sciences, Philadelphia (ANSP), 1; Michigan State University (MSU), 8; Museum of Comparative Zoology, Harvard University (MCZ), 2; Field Museum of Natural History (FMNH), 1; and 38 either lost, destroyed, or unknown.

The format followed in this study is essentially that used by Todd (1968). The names are arranged alphabetically by specific name preceded by the genus in which it was originally described. The following information sequence is presented for each name: original combination; reference to original description; pertinent comments from the original description concerning the number of specimens, sex, locality, collection, and source of the types; exact label data on types, their present location, and number of syntypes examined; and subsequent pertinent comments and actions.

The authors wish to acknowledge with gratitude the cooperation and aid of the following individuals and institutions who, through their support and assistance, have contributed to the present study: Dr. Fredrick H. Rindge, American Museum of Natural History; Drs. David C. Rentz and Wayne W. Moss, Academy of Natural Sciences, Philadelphia; Mr. Michael Prokop, Field Museum of Natural History; Dr. Roland L. Fischer, Michigan State University; Dr. Klaus Sattler, British Museum (Natural History), and Dr. John M. Burns, Museum of Comparative Zoology. Special thanks are extended to our colleagues Dr. E. L. Todd, Systematic Entomology Laboratory, I.B.I.I. Institute, U.S. Department of Agriculture, and Dr. J. F. Gates Clarke, Department of Entomology, National Museum of Natural History, the former for advice and suggestions and the latter for advice and for examining types in our behalf at the British Museum.

The authors also wish to acknowledge the assistance of Mrs. Vera Milbank, Museum Technician, for bibliographic aid and Mr. Tim Friedlander, Undergraduate Research Fellow, for numerous support activities related to the project.

1. *Trochilium acericohim* Germadius, 1874:57

"Last June my attention was drawn to numerous castings, similar to those of the peach tree borer (*Trochilium exitiosum* Say) projecting from the trunk of the soft maple trees surrounding our university yard."

**Type:** Unknown.

**Discussion:** The "university yard" mentioned in the original description refers to the campus of the University of Illinois, Champaign, Illinois. Both males and females were described without mention of where the types were deposited.
2. *Trochilium acerni* Clemens, 1860:14
   “The larva bores the trunk of the maple.”
   **Type:** Lost (Engelhardt, 1946).
   **Discussion:** There is one specimen in the type collection of the Academy of Natural Science, Philadelphia, which may be the type specimen for this species; however, it lacks data for confirmation. The species is very common in collections and the species concept is well established, creating no difficulty in application of the name.

3. *Sylvora acerni* race *buscki* Engelhardt, 1946:79
   “Types.—U.S.N.M. No. 56836, Male, from Gainesville, Fla.”
   **Discussion:** Engelhardt labeled only one male specimen “Type,” but labeled an “allotype” female and the remainder of the type series as “Paratype.” The specimen labeled “Type” must therefore be the holotype, and the type-locality is Newtown, L.I., New York.

4. *Synanthedon acerrubri* Engelhardt, 1925a:64
   **Holotype:** Male, in the NMNH: “Synanthedon acerrubri G. P. Engelhardt, δ, Type”; “Coll., G. P. Engelhardt”; “Newtown, L.I., VII.18.07.”
   **Discussion:** Engelhardt labeled only one male specimen “Type,” but labeled an “allotype” female and the remainder of the type series as “Paratype.” The specimen labeled “Type” must therefore be the holotype, and the type-locality is Newtown, L.I., New York.

   “1 δ. San Rafael, Calif. (H. E.) On Achillea millefolia. L.”
   **Holotype:** Male, in the AMNH: “Pyrrhotaenia achillae Hy. Edw., Type”; “781”; “California”; “No. 15977, Collection Hy. Edw.”

   “1 δ. Texas (J. Boll).”
   **Holotype:** Male, in the AMNH: “Sciapteron admirandus Hy. Edw., Type”; “Texas”; “No. 15802, Collection Hy. Edw.”

   “Exp. δ 8 mm. φ 10 mm.”
   “Types. Coll. Prof. C. V. Riley.”
   **Syntypes Examined:** 2 (both in the NMNH): (1) “Aegeria aemula Hy. Edw., δ, Type”; “U.S.N.M. Type No. 346”; “Collection of C. V. Riley”; “3157, May 24, 83”; “Sesia scitula Harr., δ” (male). (2) “Aegeria aemula Hy. Edw., φ, Type”; “U.S.N.M. Type No. 346”; “Collection of C. V. Riley”; “3157, May 22, 83”; “scitula scitula Harr., δ” (male, abdomen missing).
   **Discussion:** Due to the better condition of the first syntype listed above, the male syntype in the NMNH dated “May 24, 83” has been selected, labeled, and is presently designated as the lectotype.

   “1 δ. Nevada. (Morrison).”
   “Type. Coll. F. Tepper.”
   **Holotype:** Female, in MSU: “Aegeria albicornis Hy. Edw., Type”; “Nevada.”
   **Discussion:** As was noted by Engelhardt (1946), the type specimen is a female, not a male as in Edwards’s description.

   “Habitat: Kerrville, Texas, October, 1916.”
   “Type, male, allotype, female, and two paratypes, females, William Barnes Collection. . . .”
   **Holotype:** Male, in NMNH: “Synanthedon albociliata Engelhardt δ, Type”; “Kerrville, Texas, X.1916”; “δ genitalia on slide, AB, Jan., 17, 1999” (right wings also on genitalia slide).

    “Type.—U.S.N.M. No. 56842, male. Also female allotype and 5 male and 3 female paratypes in the United States National Museum. From Chickasaw, Ala.”
    **Holotype:** Male, in the NMNH: “Conopia alleri Engelh., δ”; “USNM Type No. 56842, alleri Engelh.”; “Coll., G. P. Engelhardt”; “Chickasaw, Ala., IX.13.31”; “Fig.”

    “1 δ. Douglas Co., Kansas, 900 feet, Prof. Snow.”
    **Holotype:** Unknown.

    “Type.—U.S.N.M., No. 56843. From Victoria, Tex.”
    “Remarks.—Described from male type, female allotype, 3 male and 3 female paratypes from the type locality; 4 male and 10 female paratypes from San Antonio, Tex.”
13. Pyrrhotaenia animosa Hy. Edwards, 1883:156

SYNTYPES EXAMINED: 2 (both in NMNH): (1) "Pyrrhotaenia animosa Hy. Ed., ♂, Type"; "Typicum specimen"; "TYPE"; "Arizona" (male). (2) "Pyrrhotaenia animosa Hy. Edw., ♀, Type"; "Typicum specimen"; "TYPE"; "Arizona" (female).

DISCUSSION: The other four specimens supposed to be in the type series were not found. The male syntype in the NMNH is in good condition and has been selected, labeled, and designated as the lectotype.

14. Sesia anthracipennis Boisduval, 1874:392
"Elle se trouve en Géorgia où, selon Abbot, elle vivra dans une espèce de Salix. Nous l'avons recue de John Leconte."


15. Carmenta apache Engelhardt, 1946:54
"Types.—U.S.N.M. No. 56830, female."

REMARKS.—Described from three specimens, a perfect female and two imperfect males, the latter not designated as paratypes, in all probability representing the same species, but without knowledge of the food plant and habits the evidence is not conclusive. The three specimens are from Prescott, Ariz., the males collected by H. Dyar, August 20, 1917, and the female from the Barnes collection, dated July 1–7.

HOLOTYPE: Female, in NMNH: "Conopia apache Engel. ♂"; "Fig."; "Type No., U.S.N.M."; "Barnes Coll."; "Prescott, Ariz."; "July, 1–7."

16. Sphinx apiformis Clerck, 1759: pl. 9, fig. 2
TYPE: Lost (Naumann, 1971).

DISCUSSION: The original description is based on a figure. Apparently the location of the specimen or series from which the drawing was made is unknown and may in fact be lost or destroyed. The species was redescribed by Linnaeus in 1761, and according to Naumann (1971), there is a syntype in the Linnean Society London labeled "apiformis" in Linne's own handwriting.

17. Sesia arctica Beutenmuller, 1900:208
"Habitat.—Kodiak, Alaska, July 20th, 1899."

"Type.—One male, No. 5175, Coll. U. S. Nat. Mus.; collected by Mr. Trevor Kincaid. . . ."

HOLOTYPE: Male, in the NMNH: "Sesia arctica Beut., Type, ♂"; "U. S. N. M. Type No. 5175"; "♂ genitalia on slide, AB, Dec. 2, 1938."

18. Sesia arizonae Beutenmuller, 1898:240
"1 ♂, Summit of Mt. Union, 9,000 feet, Arizona, July 3, 1887, flying about scrub oak (G. D. Hulst). Coll. Hy. Edwards."

"1 ♂, Texas, Col. U. S. Nat. Mus."

SYNTYPES EXAMINED: 2 (1 in AMNH, 1 in NMNH): (1) "Sesia arizonae Beut., ♂, Type"; "Ariz."; "Summit of Mt. Union, about scrub oak, July 3, 87, alt. 9000 ft."; "No. 15871, Collection Hy. Edwards"; "Genitalia mounted on slide No. 0010" (female in AMNH). (2) "Sesia arizonae Beut., ♂, Type"; "U.S.N.M. Type No. 4355"; "Tex."; "TDE Slide No. 76033" (female in NMNH).

DISCUSSION: The female syntype in the NMNH is not conspecific with the female syntype in the AMNH, based particularly on the genitalia. The NMNH syntype is conspecific with refugens Hy. Edwards. Therefore, the female syntype in the AMNH has been selected, labeled, and designated as the lectotype.

"Habitat.—Pinal Mts., Arizona."

"Described from a single female. Type: collection Dr. William Barnes."

HOLOTYPE: Female, in the NMNH: "Gaea arizonensis Beutm., Type, ♂"; "TYPE" "Pinal Mts., Ariz."


21. Sesia asilipennis Boisduval, 1829:496
“3a. Sa chenille, 3b. Sa crysalide.—Hab. l’Amérique septentrionale.”

22. Aegeria aureola Hy. Edwards, 1881:194
“1 ¥. Nevada. (Morrison.)”

23. Aegeria aureopurpura Hy. Edwards, 1880:72
“Expanse, 0.60 inch. Texas, J. Boll.”
Holoptye: Female, in the MCZ: “Aegeria (?) aureopurpura Hy. Edw., (Type)”; “Dallas, Tex., Bull”; “Type 928.”

24. Synanthedon auritincta Engelhardt, 1925c:216
“Habitat: Baboquivari Mts., Pima Co., Arizona, August 1–15, 1923 and 1924. O. C. Poling, collector. Described from eleven specimens, two males and nine females, kindly submitted for determination by Dr. Barnes and Mr. Benjamin.”
“Type, female; allotype, male, and six paratypes, females, William Barnes Collection; one paratype, male and two paratypes, females, Geo. P. Engelhardt Collection at the Brooklyn Museum.”

“Type.—U.S.N.M. No. 56892.”
“Remarks.—Represented only by the types; the male holoptye captured inside a window, Biological Department, University of Texas, Austin, Tex., November 4, 1922 (H. B. Park), and the female allotype collected at Ephraim, Sanpete County, Utah, September 29, 1929 (H. B. Park).”

Discussion: There is a discrepancy as to the date given in the publication and the date on the label. There is little doubt that the male in the NMNH is the actual type specimen, and an error in transcribing the date must have occurred at some point.

26. Alcatheo autumnalis Engelhardt, 1946:105
“Type.—U.S.N.M. No. 56840. From San Antonio, Tex.”
“Remarks.—Described from the male type and 31 male and 27 female paratypes all from San Antonio, Tex.”

27. Melittia barnesi Dalla Torre, 1925:138, new name pro M. superba B. & L., 1922
Holoptye: Ipso facto type of superba B. & L.

28. Aegeria bassiformis Walker, 1856:39
Holoptye: Male, in the BMNH: “64, Aegeria bassiformis”; “46.110, U.S.”; “Type.”

29. Melittia beckeri Druce, 1892:276
“Expanse 1½ inch.”
“Hab. Mexico, near Durango city (Becker).”

30. Pyrrhothaenia behrensii Hy. Edwards, 1882c:123
“2 ¥ Soda Springs, Shasta Co., Calif. (J. Behrens).”
Discussion: The first male syntype in the AMNH listed above has been selected, labeled, and designated as the lectotype.
31. Albuna beutenmulleri Skinner, 1903:126
“♀ . . . Described from one specimen taken at Stockton, Utah, May 24, 1902, by Mr. Thomas Spalding.”

**HOLOTYPE:** Female, in the Academy of Natural Sciences of Philadelphia; “A. beutenmulleri Skinner, TYPE”; “Stockton, Utah, V.24.02, T. Spalding”; “Type No. 7077, Albuna beutenmulleri Henry Skinner.”

32. Sesia bibionipennis Boisduval, 1869:64


**DISCUSSION:** Engelhardt (1946) states, “The specific name bibionipennis Boisduval, 1869, has not been used in earlier check lists because of insufficient description and the supposed loss of the type. This type, however, has been found in a part of the Oberthur Collection, acquired by William Barnes, and is now at the United States National Museum.”

33. Aegeria bolli Hy. Edwards, 1881:191

“1 ♂. Texas. (J. Boll.)”

**HOLOTYPE:** Male, in the NMNH: “Aegeria bolli Hy. Edw., Type”; “TYPE”; “Typicum specimen”; “Tex.” “bolli, Type HE, ♂ genitalia on slide, AB, Jan. 10, 1937.”

34. Aegeria bolsteri Hy. Edwards, 1883:155

“1 ♂. N. Illinois. Collected by my friend, Mr. A. Bolter, to whom I dedicate the species. Type Coll. Hy. Edwards.”

**HOLOTYPE:** Female, in the AMNH: “Aegeria bolsteri Hy. Edw., Type”; “N. Ill.” “No. 15894, Collection, Hy. Edw.”

**DISCUSSION:** The type is a female and not a male as indicated by Edwards in the original description, an error he has made more than once.

35. Tarsa bombyciformis Walker, 1856:61

“♂ . . .”

**HOLOTYPE:** Male, in the BMNH: “Tarsa bombyciformis Wlk. Type, ♂”; “♂, Tarsa bombyciformis”; “Type”; “F3/13.”

36. Pensteonia brevifolia Engelhardt, 1946:21

“Type.—U.S.N.M. No. 56825. Holotype male and allotype female; one male and one female para-types. Collected in the Green Horn Mountains, Calif.”


37. Aegeria brunneipennis Hy. Edwards, 1881:191

“1 ♂. Georgia. (Morrison.)”

**HOLOTYPE:** Female, in MSU: “Aegeria brunneipennis Hy. Edw., Type”; “Ga.” “♂ genitalia on slide, JF. G. C., 1940.”

**DISCUSSION:** Engelhardt (1946) states, “The specific name brunneipennis Boisduval, 1869, has not been used in earlier check lists because of insufficient description and the supposed loss of the type. This type, however, has been found in a part of the Oberthur Collection, acquired by William Barnes, and is now at the United States National Museum.”

38. Sesia brunneri Busck, 1914:143


**HOLOTYPE:** Female, in the NMNH: “Sesia brunneri Busck, ♂, Type”; “U.S.N.M. Type No. 18238”; “Camas, Mont., P. ponderosa”; “on Pinus ponderosa, Camas, Mont., Josef Brunner”; “11530a” (male). (2) “Sesia brunneri Busck, ♀, Type”; “U.S.N.M. Paratype No. 18238”; “reared from cambium of P. ponderosa, Camas, Mont., J. Brunner”; “11586”; “♂ genitalia on slide, Mch. 24, 1917, H., =noaroensis Hy. Ed., H.” (male).

**DISCUSSION:** There is an additional specimen labeled “Cotype” in the NMNH with the same data as the syntypes listed above. The better of the two specimens, the male syntype in the NMNH labeled “♂ Type,” has been selected, labeled, and is designated as the lectotype.

39. Trochilium californicum Neumoegen, 1891:108

“Hab.—Central California. Type ♀, coll. B. Neumoegen.”

**HOLOTYPE:** Female, in the NMNH: “Trochilium californicum Neumoegen, Type”; “Typicum specimen”; “California.”

40. Aegeria candescens Hy. Edwards, 1882c:123


**HOLOTYPE:** Female, in the NMNH: “Aegeria candescens Hy. Edw., Type”; “♂, T. Aegeria specimen”; “Arizona.”
DISCUSSION: Note that the sex was erroneously determined in the original description.

41. Zenodoxus canescens Hy. Edwards, 1881:205
   "2 φ. Colorado. (C. V. Riley.)"
SYNTYPES EXAMINED: 1 (in AMNH); "Zenodoxus canescens Hy. Edw., Type"; "Arkansas"; "No. 15997, Collection Hy. Edwards" (male).
   
   DISCUSSION: No specimens could be found bearing Edwards's type label from Colorado. Since labeling errors have been noted on other types of his, we are assuming that the locality, Arkansas, is erroneous and that this specimen is a syntype. Also, his original description of the species is of the male and not the female as indicated. Therefore, the male syntype in the AMNH has been selected, labeled, and is presently designated as the lectotype.

42. Zenodoxus canescens race bexari Engelhardt, 1946:200
   "Type.—Male. U.S.N.M. No. 56859. From Bexar County, Tex. Described from one female and two males in imperfect condition."
   HOLOTYPE: Male, in the NMNH: "Zenodoxus bexari Engelh., δ Type"; "Bexar Co., Tex., 10.2.1930"; "H. B. Parks Collector."

43. Zenodoxus canescens race sidae Engelhardt, 1946:199
   "Type.—U.S.N.M. No. 56858. From Blythe, Riverside County, Calif. (C. Dammers)."
   HOLOTYPE: Male, in the NMNH: "USNM Type No. 56858, sidae Engelh."; " δ Coll. by C. Dammers, 2 Nov. 1936, Blythe, Riverside Co."

44. Alcathoe carolinensis Engelhardt, 1925b:156
   "Habitat. Black Mountains, N. C."
   "Foodplant. Collected by William Beutenmuller on Clematis flowers in midsummer."
   "Types. Holotype male, American Museum of Natural History."
   "Described from a unique specimen kindly loaned by Mr. Frank E. Watson, of the American Museum of Natural History."
   
   DISCUSSION: Engelhardt (1946) says, "The type of carolinensis lacks antennae and the long anal appendage of the male. Reexamination shows it not to be a male, as described, but a female with a short antennal stub which is orange, characteristic of that sex." Our examination revealed that the specimen is undoubtedly a male as originally described, based on cilia on the antennal stub and the presence of a short portion of the male anal appendage and an examination of the genitalia externally.

45. Sesia castaneae Busck, 1913:102
   "Type: U. S. Nat. Mus. No. 15505."
   "Bred from the trunks of chestnut by Mr. F. C. Craighead."
   "The adults emerged April 12, and May 21, 1912."
   HOLOTYPE: Female, in the NMNH: "sesia castaneae Busck, "Type"; U.S.N.M. Type No. 15505; "Lynchburg, Va., on chestnut, bred, May 21, 1912"; "9718, Hopk. U.S."

46. Aegeria caudata Harris, 1839:311
   "Harb. inhabits the stems of our indigenous currant, Ribes Floridum." (Described both the male and the female.)
   TYPES: Apparently lost or destroyed.
   DISCUSSION: Refer to the pertinent statement in the "Introduction."

47. Alcathoe caudata race annetella Engelhardt, 1946:103
   "Type.—Male. U.S.N.M. No. 56838, male."
   "Remarks.—Represented in the United States National Museum by the type, one male and two female paratypes collected and reared on Clematis vines in the garden of Annette E. Braun, Cincinnati, Ohio, July 1, 1916."
   HOLOTYPE: Male, in the NMNH: "Alcathoe caudata race annetella Engelh., Type"; "Cincinnati, O., Annette F. Braun, VII. 1. 16."

48. Alcathoe caudatum ab. walkeri Neumoeugen, 1894:331
   "Type δ coll. B. Neumoeugen. Obs. also coll. Doll and Walker."
   "Mr. I. V. D. Walker, of Jamaica, L. I., to whom I dedicate this splendid aberration, was the first one to discover it about a year ago."
   HOLOTYPE: Male, in the NMNH: "Alcathoe caudatum ab. walkeri Neumoeugen, δ Type"; "TYPE"; "Jamaica, L. I.–U.S."; "Typicum specimen."

49. Trochilium ceto Westwood, 1848:62, pl. 30: fig. 6
“Observations.—This species was communicated to me by H. G. Harrington, Esq., as a native of India. It is, I believe however (on the authority of specimens in the British Museum), a native of North America.”

TYPE: Unknown (possibly in the BMNH).

DISCUSSION: Our search of the BMNH did not uncover the type of this species.

50. Sphecia championi Druce, 1883:29

“Hab. Guatemala, near the city (Champion).”

“A male and female of this fine species were taken in copula by Mr. Champion on Psidium guava.”


DISCUSSION: Since it is our policy to select the male whenever possible, the male syntype in the BMNH has been selected, labeled, and is designated as the lectotype.

51. Sesia chrysidipennis Boisduval, 1869:64

“Elle a le port de notre Chrysidiformis.”

“Prise sur les fleurs a Los Angelos.”


52. Ramosia chrysidipennis race wallowa Engelhardt, 1946:30

“Type.—U.S.N.M. No. 56826. Holotype male, allotype female, six male and four female paratypes. Collected in the ‘Elk Mountains, Oregon.’”

HOLOTYPE: Male, in the NMNH: “Chamaesphecia tacoma race wallowa $g$ Engell.”; “USNM Type No. 56826, wallowa Engelh.”; “Fig.”; “Elk Horn Mts., 5000 ft, E. Ore., VII.31.1938.”

53. Penstemonia clarkei Engelhardt, 1946:18

“Type.—U.S.N.M. No. 56823. Collected at The Dalles, Oreg. Holotype male, allotype female, and 12 paratypes.”

54. Pyrrhotaenia cocinea Beutenmuller, 1898:241

“1 $g$, Albuquerque, New Mexico. (Cockerell.)

HOLOTYPE: Female, in the NMNH: “Pyrrhotaenia cocinea Beut., Type”; “U.S.N.M. Type No. 4556”; “Ck11. 3206, Albuquerque.”

55. Pyrrhotaenia coloradensis Beutenmuller, 1893:25


HOLOTYPE: Male, in the AMNH; “Pyrrhotaenia coloradensis Beut., Type”; “At Bigeolvia flowers, Sept., Custer Co., Colo.”; “No. 15987, Collection Hy. Edwards.”

DISCUSSION: Note,—the sex is male and not female as indicated in the description.

56. Albuna coloradensis Hy. Edwards, 1881:189

“1 $g$, Colorado. (H. K. Morrison.)


HOLOTYPE: Female, in the AMNH; “Albuna coloradensis Hy. Ed., Type”; “Colorado”; “No. 15860, Collection Hy. Edw.”

57. Podosesia comes Heinrich, 1920:79

“Habitat.—Brush Corral, Arizona. (Edmonston and Hofer.)”

“Food Plant—Quercus, species. Two moths (male and female) reared under Hopk. U.S. No. 12182a, from the woody Cynipid galls on white oak . . .”

“Type.—Cat. No. 21814, U.S.N.M.”


58. Aegeria consimilis Hy. Edwards, 1881:194

“1 $g$, Dorchester, Mass. (P. S. Sprague)”


59. Aegeria corni Hy. Edwards, 1881:190
"1 ♂. On Cornus sericea L. Purgatory Swamp, Mass."
Holotype: Male, in the AMNH: "Aegeria corni Hy. Ed., Type"; "Purgatory Swamp, Massachusetts"; "No. 15924, Collection, Hy. Edw."

60. Aegeria corusca Hy. Edwards, 1881:193
"1 ♂. Texas. (Belfrage.)"

61. Sphinx crabroniformis Denis & Schiffermuller, 1775:305
Types: Destroyed (Naumann, 1971).

62. Aegeria cucurbitae Harris, 1828:33
"The above brief description will serve to identify the female, and the specific name will indicate the genus of plants on which the larva feeds."
Type: Apparently lost or destroyed.
Discussion: Refer to the pertinent statement in the "Introduction."

63. Sphinx culiciformis Linnaeus, 1758:493
"Habitat in Europa."
Types: Lost (Naumann, 1971, "befinden sich nicht in der Linne' schen Sammlung, Linnean Society, London").

64. Sesia culiciformis var. americana Beutenmuller, 1896:136
"Habitat: Nevada and British Columbia."
"This form was first recorded by me as occurring in this country from a specimen in the collection of Mr. Charles Palm, from the Cascade Mountains, British Columbia."

65. Sciapteron cupressi Hy. Edwards, 1881:183
"1 ♂. Colorado. (I. Doll.)"
"Type. Coll. B. Neumoegen."
Holotype: Female, in the NMNH: "Sciapteron cupressi Hy. Edw., Type"; "Typicum specimen"; "Col."; "Genitalia Slide, By T. D. Eichlin, USNM 75799."
Discussion: The supposed male could not be found in the AMNH. Engelhardt (1946) writes, "Type.—Male. In the American Museum of Natural History. Female allotype in United States National Museum." Under "Remarks" he states, "The male type is in fine condition and well illustrated by Beutenmuller; the allotype is a dwarfed, imperfect specimen." Apparently, the male in the AMNH to which Engelhardt refers as the type is a specimen from Arizona and therefore cannot be the type. Edwards must have described the female, since he made no mention of the very obvious sexual character, the "hair pencils" of the anal tuft, which are unique to the males. He simply states, "Caudal tuft, dull orange." Because the Neumoegen material is in the NMNH, the specimen described was a female and not a male as originally indicated, and the only specimen labeled type is the female in the NMNH, the latter is considered to be the holotype.

66. Penstemonia dammersi Engelhardt, 1946:19
"Type.—U.S.N.M. No. 56824. Holotype male, allotype female, and 20 paratypes. Collected on Mount Wilson, Calif."
Holotype: Male, in the NMNH: "Conopia dammersi Engelm., ♂"; "U.S.N.M. Type No. 56824, dammersi Engelm."; "Fig."; "Reared from Penstemon"; "Mt. Wilson, Calif., 6000 ft., 9–IX–36, G. P. Engelhardt."

67. Aegeria deceptiva Beutenmuller, 1894:93
"Type: One male, from Colorado, Coll. Am.
Mus. Nat. Hist. Collected and presented by Mr. David Bruce.

**HOLOTYPE:** Male, in the AMNH: "*Aegeria decepiva* Beut., Type"; "Colo., Bruce"; "No. 15877, Collection Hy. Edwards."

68. *Aegeria decipiens* Hy. Edwards, 1881:197

1. $\delta$, Colorado. (Morrison.)

**HOLOTYPE:** Male, in the AMNH: "*Aegeria decepiva* Beut., Type"; "Colo.; Bruce"; "No. 15940, Collection Hy. Edwards."


1. $\delta$, Montana Terr. H. K. Morrison.

**SYNTHETYPES EXAMINED:** 3 (all in AMNH): (1) "*Albuna denotata* Hy. Edw., $\delta$, Type"; "Mont."; "No. 15780, Collection Hy. Edw." (female). (2) "*Albuna denotata* Hy. Edw., $\delta$, Type"; "Mont."; "No. 15781, Collection Hy. Edw." (female).

**DISCUSSION:** Engelhardt (1946) referred to the male type in the AMNH, and to avoid future confusion, the male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

70. *Trochilium denudatum* Harris, 1839:310

"Expands from one inch and a quarter to more than one inch and a half."

**TYPES:** Apparently lost or destroyed.

**DISCUSSION:** Refer to the pertinent statement in the "Introduction."

71. *Sciapteron dollii* Neumoegen, 1894:330

"Hab.—Vicinity of New York City. Types $\delta$ and $\varphi$ coll. B. Neumoegen. Obs. also coll. J. Doll.

**SYNTHETYPES EXAMINED:** 3 (all NMNH): (1) "*Sciapteron dollii* Neum., $\delta$, Type"; "Type"; "Typicum specimen"; "N.Y." (The abdomen of a female has been glued on.) (2) "*Sciapteron dollii* Neum., $\varphi$, Type"; "Typicum specimen"; "N.Y." (The abdomen is missing.) (3) "*Sciapteron dollii* Neum., $\varphi$, Type"; "Typicum specimen"; "N.Y." (The abdomen is missing.)

**DISCUSSION:** Engelhardt (1946) states, "Type.—Male. In the United States National Museum." He did not refer to the male specimen as a lectotype, so to avoid possible confusion in the future, the male syntype in the NMNH has been selected, labeled, and is designated as the lectotype.

72. *Sciapteron dollii* var. *castaneum* Beutenmuller, 1897:213


**SYNTHETYPES EXAMINED:** 3 (2 in AMNH, 1 in NMNH): (1) "*Sciapteron dollii* var. *castaneum* Beut., Type"; "Kentucky"; "No. 15778, Collection Hy. Edwards" (male, AMNH). (2) "No. 15778, Collection Hy. Edwards" (male, AMNH). (3) "*Sciapteron dollii* var. *castaneum* Beut., $\varphi$, Type"; "*Sciapteron castaneum* Hy. Ed., Type"; "Tex."; "Typicum specimen" (female, NMNH). 

**DISCUSSION:** Since Beutenmuller lists the female from Texas first, and the specimen is in good condition, the female syntype from the NMNH has been selected, labeled, and is designated as the lectotype.

73. *Paranthrene dollii* form *fasciventris* Engelhardt, 1946:142

"Type.—U.S.N.M. No. 56845."

"Described from male type, female allotype, four male and three female paratypes from Chicago (May and June), and three male and three female paratypes from Cicero, Ill."

**HOLOTYPE:** Male, in the NMNH: "*Paranthrene dollii* Neum., sub-species *fasciventris*, $\delta$ Holotype"; "Coll. G. P. Engelhardt"; "Fig."; "Chicago, Ill., VI–12–1920, Cicero, A. Kwiat., ex Poplar."

74. *Aegeria edwardsii* Beutenmuller, 1894:92


**HOLOTYPE:** Female, in the AMNH: "*Aegeria edwardsii* Beut., $\varphi$, Type"; "Colo., Bruce"; "No. 15940, Collection Hy. Edw."

75. *Pyrrhotaenia elda* Hy. Edwards, 1885:49

"P. Elda . . . is described from 2 $\varphi$ taken in Siskiyou Co, California, by Mr. James Behrens."


**DISCUSSION:** The first female syntype listed above from the AMNH with a type label has been selected, labeled, and is designated as the lectotype.
76. Aegeria emphytiformis Walker, 1856:43
   "a, b. United States. Presented by E. Doubleday, Esq."
   
   Syntypes Examined: 1 (in BMNH): "Aegeria emphytiformis, Type, δ"; "46.110, U.S."; "Type" (male).
   
   
   Discussion: No other syntypes could be found, and it is impossible to determine if one of the above listed cotypes is the other syntype mentioned in the original description. The male syntype in the BMNH has been selected, labeled, and is designated as the lectotype.

77. Pyrrhotaenia eremocarpi Hy. Edwards, 1881:203
   "1 $ . Sier. Nevada, Calif. (T. L. Mead.)."
   

78. Aegeria eupatori Hy. Edwards, 1881:195
   "2 $ . Long Island, N.Y. In stems of Eupatorium purpureum L. Mr. S. L. Elliot."
   
   
   Discussion: The female syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

79. Aegeria exitiosa Say, 1823:216
   (James Worth forwarded the specimens to Say for description. Say described the male and female, pupa, and egg, but gave no clues as to the disposition of the types.)
   
   Types: Lost (Engelhardt, 1946).

80. Sanninoidea exitiosa var. edwardsii Beutenmuller, 1899b:160
   "I herewith propose the varietal name edwardsii for the female which has both the fourth and fifth segments banded with orange, and the space between the inner veins wholly or partly scaled with blue-black."
   
   
   Discussion: Beutenmuller mentions that he reared the specimens but does not state how many represented the type series. The female syntype labeled "type" in the AMNH has been selected, labeled, and is designated as the lectotype.

81. Aegeria exitiosa var. fitchii Hy. Edwards, 1882a:55
   "I apply this name to the form of the $ . . . ."
   "In roots of wild cherry. Tallahassee, Florida. (A. Koebele.) W. Virginia. (T. L. Mead.)."
   
   
   Discussion: No specimens from West Virginia could be located that could be considered as part of the original series. The female syntype from the AMNH has been selected, labeled, and is designated as the lectotype.

82. Sannina exitiosa var. luminosa Neumoegen, 1894:331
   "Types (males), coll. B. Neumoegen. Obs. also coll. J. Doll."
   
   Syntypes Examined: 2 (both in NMNH): (1) "Sannina exitiosa var. luminosa Neumoegen, $ Type"; "TYPE"; "Glendale, L. I., VI.21"; "Typicum specimen" (male). (2) "Sannina exitiosa var. luminosa Neumoegen, $ Type"; "TYPE"; "Glendale, L. I., VI.5"; "Typicum specimen" (male).
   
   Discussion: The first male syntype listed from the NMNH and dated VI.21 is in better condition and has been selected, labeled, and is designated as the lectotype.

83. Synanthedon fatifera Hodges, 1962:139
   
   Holotype: Male, in the NMNH: "R. W. Hodges, HOLOTYPE, Synanthedon fatifera"; "Vi-

84. Paranthrene fenestratus Barnes and Lindsey, 1922:122


**HOLOTYPE:** Female, in the NMNH: "Memythrus fenestratus B. & L., Holotype ♂"; "Fig."; "Chiricahu Mts., Ariz., Cochise Co."; "June 8-15."

85. Sesia flavipes Hulst, 1881:76

"Two specimens, ♂ and ♀, taken on different days, each at rest on blackberry leaves, late in September, in Brooklyn, N.Y."

**SYNTYPES EXAMINED:** 2 (both in AMNH): (1) "Bembecia flavipes Hulst, Type"; "No. 15815, Collection Hy. Edwards" (male). (2) "Bembecia flavipes Hulst, Type"; "No. 15816, Collection Hy. Edwards" (female).

**DISCUSSION:** The male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

86. Melittia flavitibia Walker, 1856:67, new name pro Trochilium tibiale Harris, 1839

**TYPE:** Ipso facto type of tibiale Harris.

87. Pyrrhotaenia floridensis Grote, 1875:174

"♂ . . . The antennae are heavy, lengthily pilose, brush-like" (indicates that it was a ♂ specimen). "Enterprise, Fla., May 29."

**HOLOTYPE:** Male, in the AMNH: "Pyrrhotaenia floridensis Grote, Type"; "Enterprise, Fla., May 29"; "No. 15967, Collection Hy. Edwards."

88. Sesia florissantella Cockerell, 1908:330

"Hab.—Florissant, Colorado, June 25, 1908, in a very dry place (Cockerell)" (describes a male specimen).

**HOLOTYPE:** Male, in the NMNH: "Sesia florissantella Ckll., Type"; "Florissant, Colo., June 25"; "♂ genitalia on slide, AB, Aug. 29.39."

89. Pyrrhotaenia fragariae Hy. Edwards, 1881:202

"1 ♂ 1 ♀, Colorado. (Morrison)"

**TYPES:** Apparently lost or destroyed.

**DISCUSSION:** Refer to the pertinent statement in the "Introduction."

90. Sesia fragariae var. semipraestans Cockerell, 1908:329

"♀ . . .

"Hab.—Florissant, Colorado, prox. 8,000 ft., June 21, 1908, flying rapidly over very dry and barren ground (Cockerell)."

**HOLOTYPE:** Female, in the NMNH: "Sesia fragariae v. semipraestans Ckll., TYPE"; "Florissant, Colo., June 21, 1908 (Ckll.)."

91. Carmenta fraxini Hy. Edwards, 1881:185

"♀ . Washington, D. C. (C. V. Riley.)"

**HOLOTYPE:** Could not be located.

**DISCUSSION:** The following specimen was examined from the AMNH: "Carmenta fraxini Hy. Edw., ♂, Type"; "Harmonia morrisonii Hy. Edw., ♀"; "Missouri." The specimen is a male and not a female as labeled. It is doubtful that this specimen is the holotype.

92. Trochilium fraxini Lugger, 1891:109

"Length of body 15 mm. Exp. of wings 30 mm" (apparently describing a single specimen).

**HOLOTYPE:** Unknown.

93. Albuna fraxini form vitriosa Engelhardt, 1946:169

"♂ . . . U.S.N.M. No. 56848. From Chicago, Ill."

**Remarks:** Described from male type, female allotype, . . .; all in the United States National Museum.

**HOLOTYPE:** Male in NMNH; "Memythrus fraxini vitriosa Engelhardt ♂ Holotype"; "Coll. G. P. Engelhardt"; "Chicago, Ill., VII.14.1921."

94. Aegeria fulvipes Harris, 1839:312

"Expands thirteen lines."

**TYPES:** Apparently lost or destroyed.

**DISCUSSION:** Refer to the pertinent statement in the "Introduction."

95. Trochilium gallivorum Westwood, 1854:757

"On looking at some galls on the American Quercus palustris, then recently received from North America . . ."

"It measures 8 lines in expanse of the fore wings, and 5 lines in the length of the body."

**TYPE:** Unknown.
96. *Aegeria geliformis* Walker, 1856:46
   "Male."
   **Holotype:** Male, in the BMNH: "*Aegeria geliformis*, Type, 3"; "79, *Aegeria Geliformis*"; "46.110, U.S."; "Type."

   "1♀, Colorado. (Morrison.)"
   **Type. Coll. Hy. Edwards.**
   **Holotype:** Female, in the AMNH: "*Aegeria giliae* Hy. Ed., Type"; "Colorado"; "No. 15879, Collection, Hy. Edw.

98. *Carmenta giliae* race *woodgatei* Engelhardt, 1946:61
   "Type.—U.S.N.M. No. 56833, male. Collected at Fort Wingate, N. Mex."
   **Holotype:** Male, in the NMNH: "USNM Type No. 56833, *woodgatei* Engelh."; "*giliae*"; "mimuli, Comp. with Type Coll. Hy Edw."; "Fort Wingate, New Mex."; "Aug. 1-7."

   "Secondaries dull orange . . ." (This indicates that the specimen being described is a female, since the secondaries of the male are mostly hyaline.) "I first took this remarkable insect in San Leandro, Cal., in 1872."
   **Holotype:** Female, in the AMNH: "*Melittia gloriosa* Hy. Ed., Type"; "5040 Califor."; "No. 15773. Collection, Hy. Edw."

100. *Sciapteron graefi* Hy. Edwards, 1881:183
    "1♂, 2♀. Nevada (Morrison.)"
    "Type. Coll. E. L. Graef, from whom I have received many courtesies, and to whom I dedicate this singular species."
    **Syntypes Examined:** 3 (2 in MSU, 1 in NMNH):
    (1) "*Sciapteron graefi* Hy. Edw., Type"; "F. T."; "Nevada" (female, MSU).
    (2) "*Sciapteron graefi* Hy. Edw., Type"; "Nevada" (female, MSU).
    (3) "*Sciapteron graefi* Hy. Edw., Type"; "TYPE"; "Col., E. L. Graef."; "Nev." (female, NMNH).
    **Discussion:** Though a male labeled type was not found, we believe the above three syntypes represent the type series in the original description, since Edwards often misidentified the sex of his specimens. The female specimen mentioned by Engelhardt (1946) as being in the AMNH could not be found and is assumed to be one of the two syntypes at MSU listed above. The female syntype in the NMNH, because it alone has the E. L. Graef collection label, has been selected, labeled, and is designated as the lectotype.

101. *Sanninoidea graefi* var. *barnesii* Beutenmuller, 1901:272
   "Habitat.—Colorado."
   "Type: One female. Coll. Dr. W. Barnes, Decatur, Illinois."
   **Holotype:** Female, in the NMNH: "*Sanninoidea graefii* var. *Barnsii Beut., ♀ Type"; "Barnes Collection"; "2 Clear Creek Canon, Colo."

102. *Trochilium grande* Strecker, 1881:156
    "... expanding 1¼ inches."
    "Hab. Texas."
    **Holotype:** Female, FMNH: "*Trochilium grande* Streck."; "Texas"; "Orig. Type"; "J. Boll."

103. *Melittia grandis* var. *hermosa* Engelhardt, 1946:186
    "Type.—U.S.N.M. No. 56853, female. Described from two females from Arizona."
    **Holotype:** Female, in the NMNH: "*Melittia grandis* var. *hermosa* Engelh., ♀ Type"; "Arizona"; "U.S.N.M. Type."

104. *Carmenta helenis* Engelhardt, 1946:50
    "Type.—U.S.N.M. No. 56828, male. Collected at Earl Grey, Saskatchewan. Also allotype female, one male paratype, and one female paratype. In the United States National Museum."
    **Holotype:** Male, in NMNH: "*Compositcillo helenis* Engelh. ♂"; "holotype"; "USNM Type No. 56828, helenis Engelh."; "GPEngelhardt Coll."; "Earl Grey, Sask., 4.VII.1926, J. D. Ritchie"; "♂ genitalia on slide 75966, T. D. Eichlin."

    "♂. 1♀. Virginia City, Nevada. (H. E.) On Helianthus, sp."
    **Syntypes Examined:** 1 (in MSU); "*Pyrrhotaenia helianthi* Hy. Edw."; "Nevada"; "F. T." (female).
    **Other Material Examined:** 2 (in AMNH):
    **Discussion:** Only the one specimen in the MSU..."
Collection could be found from Nevada. Beutenmuller (1893) mentions the female labeled type in the Edwards Collection but stated that it could not be a type since it is from Soda Springs, California. It is possible that Edwards decided to make the latter specimen the type subsequent to writing the description. The female syntype from MSU has been selected, labeled, and is designated as the lectotype.


"2 ♂ 1 ♀. Nevada. On *Hemizonia luzulifolia*."


**SYNTAXES EXAMINED:** 2 (1 in AMNH, 1 in NMNH): (1) "Nevada"; "No. 15920, Collection Hy. Edw." (female, AMNH). (2) "Aegeria Hemizoniae Hy. Ed., ♀ Type"; "rutilans Hy. Edw., Comp. with Type Coll. Hy. Edw., W. B."; "Typicum specimen"; "Nevada" (head and abdomen missing, NMNH).

**DISCUSSION:** A female with a type label is in the AMNH, but it is from California and cannot be part of the type series. The female syntype in the NMNH is in such poor condition that consequently the female syntype in the AMNH has been selected, labeled, and is designated as the lectotype. The two males mentioned in the original description were not found.


"Type.—U.S.N.M. No. 56822. Holotype male, allotype female, two male and three female para- types. Collected in San Bernardino County, Calif."

**HOLOTYPE:** Male, in the NMNH; "Penstemoni hennei Engelh., ♀′"; "USNM Type No. 56851, hirsuta Engelh."; "Fig."; "for illustration"; "Davis Mts., Tex., 5000 ft, X.17 1928, O. C. Poling."

111. *Trochilium hospes* Walsh, 1866:270

"One ♀, bred June 2 from the Coleopterous Pseudogall S. inornata n. sp.; ♂ unknown."

**TYPE:** Unknown.

112. *Sesia hylaeiformis* Laspeyres, 1801:14

"Habitat in Germaniae australis hortis, rarius. A Dno Hubner Augusta Vindelicorum ad me missa. Larva uncialis, solitaria, albida, subpubescens, capite fuscescente. Habitat in Rubi Idaei ramulis."

**TYPES:** Lost (Naumann, 1971).

113. *Aegeria hylotomiformis* Walker, 1856:43

"Female."


**HOLOTYPE:** Female, in the BMNH; "Aegeria hylotomiformis Wkr., Type ♀′"; "73. Aegeria Hylotomiformis."; "♀′′"; "♀′′1"; "Nova Scotia, Redman."


"2 ♀. West Virginia. T. L. Mead."


**SYNTAXES EXAMINED:** 1 (in AMNH): "Aegeria hyperici Hy. Edw., Type"; "West Virginia"; "No. 15865, Collection Hy. Edw." (male).

**DISCUSSION:** Only one of the syntypes could be found. The above male syntype in the AMNH has been selected, labeled, and is designated as the lectotype. The sex was erroneously recorded as female by Edwards.
"1 ♀. Pennsylvania."
*Type. Col. B. Neumoegen.*
**Holotype:** Female, in the NMNH: "Aegeria imitata* Hy. Ed., Type"; "Type"; "Typicum specimen."  
**Discussion:** The type is a female and not a male as indicated in the original description.

"1 ♀. Colorado. (Morrison)"
**Holotype:** Female, in the AMNH: "Aegeria imperfecta* Hy. Ed., Type"; "Colorado"; "No. 15945, Collection Hy. Edw."  
**Discussion:** Note that the sex was misidentified by Edwards in the original description.

**Syntypes Examined:** 1 (in the NMNH): "Aegeria impropria* Hy. Edw., , Type"; "TYPE"; "Typicum Specimen"; "B. N."; "Was. T." (female, abdomen fell off while handling and was placed in gelatin capsul).  
**Discussion:** The two male specimens mentioned in the description could not be found, so the female in the NMNH has been selected, labeled, and is designated as the lectotype.

"1 ♀. Long Island, N.Y. (S. L. Elliot)"
*Type. Coll. S. L. Elliot.*
**Holotype:** Female, in the AMNH: "Aegeria infirma* Hy. Edw., ♀, Type"; "TYPE"; "Typicum Specimen"; "B. N."; "Was. T." (female, abdomen fell off while handling and was placed in gelatin capsul).  
**Discussion:** The type is a female, not a male as indicated in the description.

"White Mts. N. H. (Morrison) Andover, Mass. (F. G. Sanborn)."
**Syntypes Examined:** 2 (1 in AMNH, 1 in MSU): (1) "Aegeria inusitata* Hy. Edw., ♀, Type"; "Andover, Mass., F. G. Sanborn"; "No. 16013, Collection Hy. Edw." (female, AMNH). (2) "Aegeria inusitata* Hy. Edw. ♀, Type"; "W. Mts., N. H." (female, MSU).  
**Discussion:** Engelhardt writes, "Type of *Aegeria inusitata*, female, in the American Museum of Natural History." The sex was incorrectly determined by Edwards as a male. To avoid possible confusion in the future, the female syntype in the AMNH has been selected, labeled and is designated as the lectotype.

120. *Sesia ithacae* Beutenmuller, 1897:215
**Syntypes Examined:** 2 (both in AMNH): (1) "Sesia ithacae* Beut., ♂, Type"; "Ithaca, N.Y., 26 July"; "No. 16755, Collection, Hy. Edwards" (male, lacks a head and most legs). (2) "Sesia ithacae* Beut., ♀, Type"; "Ithaca, N.Y., 23 June 87"; "No. 16755, Collection, Hy. Edwards" (female, lacks head, mesothorax and wing, which may be in the pinning box with the specimen).  
**Discussion:** The better of the two syntypes is the male. Therefore, the male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

121. *Aegeria koebelei* Hy. Edwards, 1881:196
"1 ♂. Tallahassee, Florida. (A. Koebele.)"
**Holotype:** Male, in the AMNH: "Aegeria koebelei* Hy. Edw., Type"; "No. 15932, Collection Hy. Edw."  
**Discussion:** The above specimen lacks a locality label and appears to be very similar to a species known only from western Canada.

122. *Melittia Hndseyi* Barnes and Benjamin, 1925:14, new name pro *M. superba* B. & L., 1922
*Holotype:* Ipso facto type of *superba* B. & L.

123. *Grotea longipes* Moschler, 1876:313
"Flugelspannung 33 mm. Vorderflugelbreite 3.5 mm. Vereinigte Staaten."
*Type: Probably lost (Naumann, 1971).*

"Length of body 20 mm. Exp. of wings 35 mm" (apparently describing a single specimen).  
**Holotype:** Female, in the AMNH: "Trochilium luggeri* Hy. Edw., Type"; "July 6/90"; "No. 15791, Collection Hy. Edw."
DISCUSSION: This description was part of an article by Otto Lugger concerning lepidopterous borers in trees near St. Anthony Park, Minnesota, which is the type-locality for this species.

   "2 ♀ 1 ♂. Marin & Mendocino Cos., Calif. (H.E. and O. Baron.)"
   "Type Coll. Hy. Edwards."

   **DISCUSSION:** It is our opinion that the above specimens represent the original type species even though the last two lack type labels and none is a female. Edwards often misidentified the sex. The first male syntype listed above from the AMNH has been selected, labeled, and is designated as the lectotype.

126. *Trochilium lustrans* Grote, 1880:213
   "Dayton, O., Mr. G. R. Pilate."
   **HOLOTYPE:** Female, in the AMNH: "*Trochilium lustrans* Grote, Type”; “Ohio, Pilate”; "No. 15897, Collection Hy. Edwards.”

127. *Zenodoxus maculipes* Grote and Robinson, 1868:184
   "Habitat.—Texas. (Belfrage)."
   "Two specimens offer no perceptible difference except that of size . . . " (mentions both sexes, presumably had one of each sex on hand).
   **SYNTYPES EXAMINED:** 1 (in AMNH): "*Zenodoxus maculipes* G. & R., Type 2/”; "Tex."; "No. 15998, Collection Hy. Edwards” (male).

   **DISCUSSION:** An additional female from the MCZ was seen having the following labels: "*Zenodoxus maculipes* G. & R.”; “Dallas, Tex., Boll”; "Type 929.” It was collected by Boll instead of Belfrage, as in the original description, and therefore cannot be considered as a syntype. The male syntype from the AMNH listed above as Type 2/ has been selected, labeled, and is designated as the lectotype.

   "3 ♀ 2 ♂. On *Madaria elegans* Don. Saucelito, Calif., (H. E.)"
   **SYNTYPES EXAMINED:** 3 (2 in AMNH, 1 in NMNH): (1) "*Aegeria madariae* Hy. Ed., Type”; “Saucelito, California”; "No. 15953, Collection Hy. Edw.” (female, AMNH). (2) "Saucelito, California”; "No. 15954, Collection Hy. Edw.” (female, AMNH). (3) "*Aegeria madariae* Hy. Edw., Type”; “TYPE”; “*Aegeria madariae* Hy. Edw., Type”; “Typicum specimen”; “Saucelito, California” (female, NMNH, abdomen glued on).

   **DISCUSSION:** Two males from the original series could not be found. Since the abdomen was glued on, the male syntype in the NMNH leaves some doubt as to its correct association. The female syntype in the AMNH labeled "Type" has been selected, labeled, and is designated as the lectotype.

129. *Melittia magnifica* Beutenmuller, 1899a:151
   "Habitat: Austin, Texas."
   "Described from one female, collected by Mr. Joseph Mattes."
   **HOLOTYPE:** Female, in the AMNH: "*Melittia magnifica* Beuter., Type”; “Austin, Tex.”

130. *Trochilium marginatum* Harris, 1839:309
   "This insect was taken in New-Hampshire, and presented to me by the Rev. L. W. Leonard."
   **TYPE:** Apparently lost or destroyed.

   **DISCUSSION:** Refer to the pertinent statement in the "Introduction."

131. *Bembecia marginata* var. *albicoma* Hulst, 1883:9
   "This variety I would call *Bembecia Albicoma*. Of it I took 2 ♀ and 1 ♂, in Brooklyn, N.Y."
   **SYNTYPES EXAMINED:** 2 (both in AMNH): (1) "*Bembecia marginata* var. *albicoma* Hulst, Type”; "No. 15789, Collection Hy. Edwards”; "A.M.N.H. Type No." (male). (2) "*Bembecia marginata* var. *albicoma* Hulst, Type”; "L. I.”; "Collection, G. D. Hulst” (female).

   **DISCUSSION:** The second syntype listed above has more accurate labeling; therefore, the female syntype from the AMNH has been selected, labeled, and is designated as the lectotype.

132. *Sesia marica* Beutenmuller, 1899c:254
   "Habitat: Punta Gorda, Florida."
   "Described from a perfect male collected by Mrs. A. T. Slosson."
   **HOLOTYPE:** Male, in AMNH: "*Sesia marica* Beut., ♀, Type”; “Florida.”
133. *Sesia mariona* Beutenmuller, 1901:308
“Habitat.—Trimble and Pagossa Springs, and Durango, Colorado, July 6th, 19th and 30th, 1899.”
“Described from three females.”

**SYNTHYPES EXAMINED:** 3 (2 in NMNH, 1 in AMNH): (1) “*Sesia mariona* Beuten., 9, Type”; “Fig.”; “Trimble Spgs., Col., 6/19/99” (female, NMNH). (2) “*Sesia mariona* Beuten., 9, Type”; “Pagossa Spgs., Col., 6/30/99” (female, NMNH). (3) “*Sesia mariona* Beuten., 9, Type”; “Durango, Col., 6/6/99” (female, AMNH).

**DISCUSSION:** The female syntype in the NMNH from Trimbel Spgs., Col. has been selected, labeled, and is designated as the lectotype, because it best represents the species as described originally.

“3 9. Lake Tahoe, Califor. (T. L. Mead)”


**DISCUSSION:** The third male of the type series could not be found. The first male syntype in the AMNH having the handwritten type label has been selected, labeled; and is designated as the lectotype.

135. *Sesia mellinipennis* Boisduval, 1836: pl. 14; fig. 12
“Amerique septentrionale.”

**TYPES:** Apparently lost or destroyed.

**DISCUSSION:** Engelhardt (1946) states, “*R. mellinipennis*, two males, lost but figured by Boisduval.” We were unable to find any of the types and therefore assume they are lost.

136. *Zenodoxus mexicanus* Beutenmuller, 1897:216
“Habitat: New Mexico. One male, No. 16756, Coll. A. M. N. H. Received from Prof. J. B. Smith.”

**HOLOTYPE:** Male, in the AMNH: “*Zenodoxus mexicanus* Beut., Type”; “Collection, G. D. Hults”; “No. 16756, Collection, Hy. Edwards”; “N. Mex.”

**DISCUSSION:** Also examined were the following specimens from the Tepper-Morrison Collection at MSU: 2 9, W. Mts., F. T.; 1 9, Anticosti. Another 9 in the AMNH from Colorado is No. 15841 in the Hy. Edwards Collection. These specimens are probably part of the original type series but lack Edwards’ “type” labels. Apparently, Edwards in several instances labeled the type series of various species subse-
quent to writing the description; thus, all specimens of a series were not always labeled as a type, or specimens not in the series from which the description was written were later affixed with a type label. Engelhardt (1946) simply states, “Type.—Female. In the American Museum of Natural History.” Since most of the Edwards types are in the AMNH, the female syntype from Colorado in the AMNH with Collection No. 15840 has been selected, labeled, and is designated as the lectotype.

142. Harmonia morrisoni Hy. Edwards, 1882a:55

“1 ♂, Montana Terr. Mr. H. K. Morrison, to whom I have much pleasure in dedicating the species.”


Holotype: Male, in the AMNH: “Harmonia morrisoni Hy. Edw., Type”; “Mont.”; “No. 15805, Collection Hy. Edw.”

143. Aegeria morula Hy. Edwards, 1881:196

“1 ♂. Texas. (J. Boll.)”

Type. Coll. B. Neumoegen.

Holotype: Male, in the NMNH: “Aegeria morula Hy. Edw., Type”; “Typicum specimen”; “Tex.”

144. Euhagena nebraskae Hy. Edwards, 1881:181

“1 ♂. Nebraska. (Mr. Austin).”

Type. Coll. Cambridge Museum.

Holotype: Male, in the MCZ: “Euhagena nebraskae Hy. Edw., Type”; “Nebraska, Austin”; “Type 930.”

Discussion: The type is in very bad condition, having come off the verdigris coated pin and been broken in several pieces in transit. What was left has been placed in a gelatin capsule.

145. Euhagena nebraskae form intensa Engelhardt, 1946:172

“Type.—U.S.N.M. No. 56850, female.”

Remarks.—For this unique and strikingly colored example, I am indebted to my good friend C. M. Dammers, of Riverside, Calif., who collected the specimens in the mountains at Barnwell, San Bernardino County, on October 12, 1936.”


146. Aegeria neglecta Hy. Edwards, 1881:197

“1 ♂. Olympia, Washington Terr. (H. E.)”


Discussion: The type is a female and not a male as indicated in the original description.

147. Euhagena nebraskae form mormoni Engelhardt, 1946:171

“Type.—U.S.N.M. No. 56849.”

Remarks.—Only two male examples of this striking form of nebraskae are known. They are labeled ‘Logan, Utah, September 20, 1923, W. W. Henderson, collector’.


“1 ♂. 1 ♀. Texas. (J. Boll.)”

Types. Coll. B. Neumoegen.


Discussion: There is another male in the AMNH labeled “Tex.”; “No. 15946, Collection Hy. Edw.”, but lacks a type label as does the second syntype listed above. The first syntype listed above is a male and not a female as indicated on the label, and since it is the only specimen found labeled “Type,” this male syntype in the NMNH has been selected, labeled, and is designated as the lectotype.

149. Sesia nigella Hulst, 1881:75

“Two specimens, ♂ and ♀, taken in coitu on a leaf of the swamp button-bush near Fairport, Western New York. The ♀, which was soon after by accident lost . . .”

Syntypes Examined: 1 (in the AMNH): “Sesia nigella Hulst, Type”; “No. 15983, Collection Hy. Edwards” (male).

Discussion: Since Hulst states that the female was lost, the male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.
150. *Carmenta nigra* Beutenmuller, 1894:96
"Type: One female from Utah. Coll. Chas. Palm."

**Holotype:** Female, in the AMNH: "*Carmenta nigra* Beut., ♀, Type"; "Utah"; "No. 15984, Collection, Hy. Edwards."

151. *Sesia nomadaepennis* Boisduval, 1869:63
"Trouvé sur les fleurs."

**Holotype:** Male, in the NMNH: "Type, *S. nomadaepennis* Bdv., a/c Hofer"; "Sesia nomadaepennis, S. Cal."; "Oberthur Collection"; "j'ai envoyé en Jly 1882 la peinture a M. Edwards, Ch. Ob."; "Albuna pyramidalis var. montana Hy. Edw. ♀"; "Typicum Specimen"; "Ex. Musaeo, Dris Boisduval."

152. *Aegeria novaroensis* Hy. Edwards, 1881:199

"1 ♀. Novaro, Mendocino Co., Cal. J. Behrens."

**Types. Coll. Hy. Edwards.**

**Syntypes Examined:** 2 (both in AMNH): (1) "*Aegeria novaroensis* Behrens, ♀ Type"; "Soda Springs, California"; "No. 15888, Collection Hy. Edw." (female). (2) "*Aegeria novaroensis* Behrens, ♀, Type"; "Novarro, June, 76"; "No. 15889, Collection Hy. Edw." (female).

**Discussion:** The first syntype was erroneously determined as a male in the original description. Because the second specimen has the date of capture, this female syntype from Novarro in the AMNH has been selected, labeled, and is designated as the lectotype.

153. *Aegeria odyneripennis* Walker, 1856:42
"Female."


**Types. Coll. Hy. Edwards.**

**Syntypes Examined:** 4 (all in BMNH): (1) "*Aegeria odyneripennis*; "R": "N. Scotia, Redman"; "Type" (female). (2) "R": "N. Scotia, Redman" (female). (3) "R": "N. Scotia, Redman" (female). (4) "N. Scotia" (male).

**Discussion:** Due to the more complete labeling, the first female syntype in the BMNH listed above has been selected, labeled, and is designated as the lectotype.

"Type.—U.S.N.M. No. 56834. Described from male holotype from Durango, Colo. (Osler) . . . all in the United States National Museum."

**Holotype:** Male, in NMNH: "*Conopio ogalala* Engelh. ♀"; "USNM Type No."; "Coll. G. P. Engelhardt"; "Osler, Durango, Col."

"3 ♀. Virginia City, Nevada. (H. E.)"

"1 ♀. Colorado. (Morrison)"


**Syntypes Examined:** 2 (1 in NMNH, 1 in AMNH): (1) "*Aegeria opalescens* Hy. Edw., Type"; "TYPE"; "Typicum specimen"; "Nev." (male, NMNH). (2) "*Aegeria opalescens* Hy. Edw., Type"; "Colorado"; "No. 15834, Collection Hy. Edw." (male, AMNH).

**Discussion:** Two additional males labeled "Nevada" and "F. T." are in the collection at MSU but lack the handwritten "type" labels, as does a male in the E. L. Graef Collection at the NMNH also labeled "Nev." It is impossible to say which of these males were part of the original type series. It is probably correct to assume that the male syntype from Colorado is in fact the female eluded to in the description, the sex being incorrectly determined. The male syntype in the NMNH has been selected, labeled, and is designated as the lectotype.

156. *Pyrrhotaenia orthocarpi* Hy. Edwards, 1881:204


**Discussion:** Two additional males labeled "Nevada" were at MSU, but like the second and third syntypes listed above, all lack a type label. The first male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

157. *Sannina pacifica* Riley, 1891:393
(Described both males and females from California.)
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DISCUSSION: Since no reference was made to any one type in the original description, all of the above specimens in NMNH are treated as syntypes. The first female listed above in the NMNH has been selected, labeled, and is designated as the lectotype.

158. Trochilium pacificum Hy. Edwards, 1881:180


DISCUSSION: Engelhardt (1946) states, "Type—Female. In the United States National Museum. Remarks.—Hy. Edwards' description of Trochilium pacificum is based on a female (Washington Territory). He had two specimens, stated to be male and female, but both are females. . . ." This interpretation is probably correct; therefore, the female syntype from Washington Territory in the NMNH has been selected, labeled, and designated as the lectotype.

159. Paranthrene palmiana Dalla Torre, 1925:160, new name pro Larunda palmii Neumoegen, 1891.

LECTOTYPE: Ipso facto type of palmii Neumoegen.

160. Sesia palmii Beutenmuller, 1902:126

"Habitat.—Phoenix, Arizona."

"Described from two males. Types, Collection Am. Mus. Nat. Hist., and Charles Palm."

LECTOTYPE: Female, in the NMNH; "Sesia palmii Beutm., Type"; "U.S.N.M. Lectotype, G. P. Engelhardt"; "Type"; "Phoenix, Ariz."

DISCUSSION: Engelhardt (1946) designated the lectotype stating, "Remarks.—Beutenmuller's description of this remarkable species is not based on the male, as stated, but on the female. The identity of the very dissimilar sexes was established many years after the description of the female in 1902. Of the three known female types from the original lot collected by Kuntze at Phoenix, Ariz., one is in the collection of the United States National Museum, bearing Beutenmuller's label and designation as type. It has been made the lectotype."

161. Fatua palmii Hy. Edwards, 1887:145

"1 q. Enterprise, Florida. Taken by Mr. C. Palm, to whom I dedicate the species."

HOLOTYPE: Female, in the AMNH: "Fatua palmii Hy. Edw., Type”; "Florida”; "No. 15792, Collection Hy. Edw.

162. Larunda palmii Neumoegen, 1891:108

"Hab.—South Arizona. Types, three males and one female; coll. Charles Palm and B. Neumoegen."

SYNTPES EXAMINED: 4 (2 in AMNH, 2 in NMNH): (1) "Larunda palmii Neumoegen, $ Type"; "Ariz."

("Collection Chas. Palm") (male, AMNH). (2) "Larunda palmii Neumoegen, $, Type" (label appears to be in different handwriting than above male specimen); "Ariz."; "No. 16757, Collection Hy. Edw." (male, AMNH). (3) "Larunda palmii Neumoegen, $, Typicum specimen" (female, NMNH). (4) "TYPE"; "Typicum specimen"; "Ariz." (male, NMNH).

DISCUSSION: Engelhardt states, "Type.—Male. In the United States National Museum . . ." However, the male listed above from the NMNH is poorly labeled and does not have a handwritten type label as on the other three syntypes. Since it
is fairly certain that the first syntype listed from the Palm Collection was used in the original description, this male syntype from the AMNH has been selected, labeled, and is designated as the lectotype.

163. *Zenodoxus palmii* race *incanae* Engelhardt, 1946:198

"Type.—U.S.N.M. No. 56857. From Yuma, Ariz."

"Food plant.—*Sphaeralcea incana.*"

"Remarks.—Described from male type . . ."

**HOLOTYPE:** Male, in the NMNH: "USNM Type No. 56857, *incanae* Engelh."; "Yuma, Ariz., x pupa VI.15.35"; "root borer, *Sphaeralcea incana*"; "near *Zenodoxus palmii*, G.P.E."; "♂ genitalia on slide, AB, Nov. 23, 1935".

164. *Zenodoxus palmii* race *sphaeralceae* Engelhardt, 1946:198

"Type.—U.S.N.M. No. 56856. From Snake River, Whitman County, Wash., opposite Clarkson."

"Remarks.—Described from male type . . ."

**HOLOTYPE:** Male, in the NMNH: "USNM Type No. 56856, *sphaeralceae* Engelh."; "Snake River, Whitman Co., Wn, opp. Clarkston, E. 4-IX-37, J.F.G. Clarke"; "reared from *Sphaeralcea munroana.*"

165. *Paranthrene pepsidiformis* Hubner, 1825:32, figs. 533, 534

"Heimath: Georgien in Nordamerika."

**TYPE:** Unknown.

166. *Alcathoe pepsioides* Engelhardt, 1946:103

"Type.—Male, in the United States National Museum."

**HOLOTYPE:** Male, in the NMNH: "*Alcathoe pepsioides* Engelhardt, Holotype, ♀"; "5302, on *Clematis ligusticifolia*, Durango, Col., iss, Jun. 7.99"; "♂ genitalia on slide no. 75941, T.D. Eichlin."

167. *Alcathoe pepsioides atra* Engelhardt, 1925b: 158

"Types. Holotype male and allotype female, collection G. P. Engelhardt, Brooklyn Museum."

"Described from three specimens collected by J. Woodgate in the mountains near Jemez Springs, N.M., at altitude of 7,000 feet."

**HOLOTYPE:** Male, in the NMNH: "*Alcathoe pepsioides* subsp. *atra* Engelhardt, Holotype, ♀"; "Aug. 8, 7000"; "Jemez Sprgs., N. M., Woodgate."

168. *Alcathoe pepsioides ferrugata* Engelhardt, 1946:105

"Types.—U.S.N.M. No. 56839. From Rifle, Colo."

**HOLOTYPE:** Male, in the NMNH: "*Alcathoe pepsioides* race *ferrugata* Engelh., Type, ♀"; "Rifle, Colo., xp. VIII.28. 1927"; "Coll. G. P. Engelhardt."


"Type: Cat. No. 19223, U.S.N.M."

"Reared by Mr. Brunner from *Populus trichocarpa.*"

**HOLOTYPE:** Female, in the NMNH: "*Memythrus perlucida* Busck, ♀ Type"; "*Populus trichocarpa*"; "Missoula, Mont., J. Brunner, Colr."; "Jun. 5/14, reared"; "12539, Hopk. U.S."; "Genitalia Slide, By T. D. Eichlin, USNM 75999."

**DISCUSSION:** In addition to the female specimen labeled "Type" in the NMNH, there are two males and one female labeled "Cotype", all with Cat. No. 19223.


"♂ San. Texas. (J. Boll.)"

"Type. Coll. B. Neumoegen."

**HOLOTYPE:** Male, in the NMNH: "*Aegeria perplexa* Hy. Edw., Type"; "Typicum specimen"; "B. N."; "Tex."

171. *Apis persica* Thomas, 1824:37

"Wings violet blue."

"Abdomen blue, with one interrupted yellow band."

**TYPE:** Unknown.

**DISCUSSION:** There is no mention of the number of specimens upon which the description was written or where the series was kept, if it was kept at all. The species was reared from peach trees in Baltimore, Maryland, and the description is obviously of a female of the peach tree borer, *Saninioidea exitiosa* (Say), even though the author considered it to be a hymenopteran.

172. *Carmenta phoradendri* Engelhardt, 1946:51

"Type.—U.S.N.M. No. 56829, male. Collected at San Antonio, Tex."

**HOLOTYPE:** Male, in NMNH: "*Conopia phoradendri* Engell. ♀"; "U.S.N.M. Type No"; "Coll., G. P. Engelhardt"; "San Antonio, Tex., IV.15. 1928."
173. **Parharmonia piceae** Dyar, 1904:106

“Three specimens, Hoquiam, Wash. (H. E. Burke), bred on *Picea sitchensis*; Keyport, Wash. (C. V. Piper).”

*Type.*—No. 7837, U.S. National Museum.

*Sptive Types Examined:* 3 (all in NMNH): (1) *Parharmonia (Sesia) piceae* Dyar, Type; “U.S.N.M. Type No. 7837”; “*Picea stichensis*”; “Burke Colr., Hoquiam, Wn.”; “2454a, Hopk.U.S.” (male, abdomen has been glued on). (2) “Keyport, Wash.”; “U.S.N.M. Type No. 7837” (female, abdomen missing). (3) “Keyport, Wash.”; “U.S.N.M. Type No. 7837” (female, abdomen missing).

**Discussion:** Due to the relatively better condition of the specimen and the exactness of the label data, the male syntype in the NMNH has been selected, labeled, and is designated as the lectotype.

174. **Aegeria pictipes** Grote and Robinson, 1868: 182

“Habitat.—Atlantic District, (Penna.).”

*Types:* Lost (Engelhardt, 1946).

**Discussion:** Grote and Robinson describe both the male and female. The male is figured on pl. 2: fig. 64.

175. **Aegeria pini** Kellicott, 1881:5

“During the past summer I succeeded in getting the moth of one of them. . . .” “The moth (female) expands 1.2 inch.” “The male not seen.”

*Type:* Unknown.

**Discussion:** Engelhardt (1946) states, “Type.—Male, In the collection of D. S. Kellicott”. The type was not found.

176. **Aegeria pinorum** Behrens, 1889:163

The description appeared in an article by G. H. French, Carbondale, Illinois, in which he writes, “It comes from Monterey, in *Pinus insignis*, from which larvae have been obtained. From these larvae he bred one specimen from which the drawing was made.”

“Mr. Behrens did not state whether the specimen was a male or a female, but I think from the drawing it was a male.”

*Holotype:* Unknown.

**Discussion:** It is not clear whether Behrens or French retained the specimen, but it was probably the former since the drawing and brief description had been forwarded to French and not the specimen itself.

177. **Aegeria pleciaeformis** Walker, 1856:40

“Male.”


178. **Aegeria polistiformis** Harris, 1854:216

“The roots of cultivated grape vines in the Southeastern States have been observed, by Dr. F. J. Kron, of Albermarle, North Carolina, to be so much injured by borers as to prevent the ripening of the fruit, and finally to cause the decay and death of the vines.” “He has also favored me with samples of injured vine-roots, and specimens of the insects in all their stages, together with an account of his observations and experiments upon them.”

*Types:* Apparently lost or destroyed.

**Discussion:** Refer to the pertinent statement in the “Introduction.”

179. **Vitacea polistiformis f. huron** Engelhardt, 1946:154

“Type.—U.S.N.M. No. 56847. Described from male type from Pentwater, Mich., and female para-type from Miller, Ind.”


180. **Pyrrhotaenia polygoni** Hy. Edwards, 1881:202


*Holotype:* Female, in the AMNH: “Pyrrhotaenia polygoni Hy. Edw., Type”; “S. Miquel, California”; “No. 15970, Collection Hy. Edw.”

**Discussion:** The specimen Edwards described was a female and not a male as indicated.

181. **Zenodoxus potentillae** Hy. Edwards, 1881:205

“1 ♀ . 2 ♂. Lake Tahoe, Cal. San Rafael, Cal. (H. E.) With Z. heuchereae.”


*Holotype:* Female, in the AMNH: “Pyrrhotaenia polygoni Hy. Edw., Type”; “S. Miquel, California”; “No. 15970, Collection Hy. Edw.”

**Discussion:** The specimen Edwards described was a female and not a male as indicated.
DISCUSSION: One additional specimen in the NMNH labeled, “5051, Sierra Nev., Cal.; “No. 15994, Collection Hy. Edwards”, may be part of the material from which this species was described, but only three specimens were mentioned in the original description. The first female syntype listed above from the AMNH has been selected, labeled, and is designated as the lectotype.

182. Sciapteron praecedens Hy. Edwards 1883:155
   HOLOTYPE: Female, in the NMNH: “Sciapteron praecedens Hy. Edw., ♀ Type”; “Type” “Typicum specimen”; “N. C.”; “Genitalia Slide, By T. D. Eichlin, USNM 75900.”

   “1 ♀. Washington Ter. (H. K. Morrison).”
   “Type, Coll. B. Neumoegen.”

   “This singular species was raised from a gall on the Mesquit. (Prosopis juliflora, D.C)”

185. Aegeria proxima Hy. Edwards, 1881:201
   “White Mts. N. H. (Morrison).”
   “Type. Coll. F. Tepper.”

186. Aegeria pyralidiformis Walker; 1856:44
   Female.”
   HOLOTYPE: Female, in the BMNH: “Aegeria pyralidiformis, Type, ♀”; “74, Aegeria pyralidiformis”; “46.110, U.S.”; “Type”; “F3/10.”

187. Carmenta pyralidiformis var. aurantis Engelhardt, 1946:47
   “Type.—U.S.N.M. No. 56827, male. Also female allotype, 32 male and 28 female paratypes. Collected at Mobile, Ala. In the United States National Museum.”

188. Aegeria pyramidalis Walker, 1856:40
   “a–e. St. Martin’s Falls, Albany River, Hudson’s Bay. Presented by Dr. Barnston” (described only the male).
   SYNTYPES EXAMINED: 1 (in BMNH): “Sesia pyramidalis, no. 229, 514 (very difficult to read, could be 915)”; “. . . . (unreadable)” “Type, ♂”; “F.317”; “Type” (male).
   DISCUSSION: One other specimen, a female, with very similar labeling was seen in the BMNH but had the label, “N. Scotia, Redman” and, therefore, could not be considered as a syntype. No other syntypes could be found, so the above mentioned male syntype in the BMNH has been selected, labeled, and is designated as the lectotype.

189. Aegeria pyri Harris, 1830:2
   “There is an insect which has lately been discovered in the trunks of the pear tree, feeding beneath the bark.”
   “Mr. Downer furnished me with some of these insects . . .”
   TYPES: Apparently lost or destroyed.
   DISCUSSION: Refer to the pertinent statement in the “Introduction.”

190. Aegeria querci Hy. Edwards, 1882a:48
   “From galls of ‘Live oak,’ Arizona.”

191. Aegeria quinque-candata Ridings, 1862:277
   “Obs. This remarkable species was captured by myself in Middletown, Frederick County, Virginia, and is now in the collection of the Entomological Society of Philadelphia.”
   (He described and figured a male specimen.)
   TYPE: Unknown.

   “1 ♂. Georgia. (Morrison).”
   “Type. Coll. F. Tepper.”
   HOLOTYPE: Female, in MSU: “Type”; “F. T.”; “Georgia.”
Discussion: Note that the sex of the type is a female and not a male as indicated erroneously by Edwards.


"1 ♂. Soda Springs, Siskiyou county, Cal. (I. Behrens.) 2 ♀. Sierra Nevada, Cal. (S. Brannan.)"


DISCUSSION: Engelhardt (1946) says, "Type.—Female. Collected in Siskiyou County, Calif. In the United States National Museum." This specimen could not be found. Also, the two females from Sierra Nevada, California, were not found. The above listed specimen labeled "Type" is thought to be the specimen from Soda Springs mentioned in the original description, but Edwards had misidentified the sex. The female syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

194. *Sesia rhododendri* Beutenmuller, 1909:82

"Habitat.—Cheltenham, Pa."

"Described from twenty-five specimens kindly sent to me by Prof. H. A. Surface, the economic zoologist of Pennsylvania."


DISCUSSION: The remaining six syntypes could not be located. Most of the specimens of the type series were not spread. The male syntype listed above as (8) from the NMNH has been selected, labeled, and is designated as the lectotype.


"Type.—U.S.N.M. No. 56837, male. Allotype female and two male and two female paratypes also in the United States National Museum."

Remarks.—Holotype, allotype, and one male and one female paratype were collected on flowers in moist meadows along a river in Clarke County, Ga., June 15, 1928 (A. Glenn Richards).


“1 ♀. Cadet, Missouri. (Prof. C. V. Riley.)”

**Holotype**: Female, in the AMNH: “*Albuna rileyana* Hy. Edw., ♀, Type”; “Cadet, Mo., Aug. 25/77”; “No. 15867, Collection Hy. Edw.”

**Discussion**: Engelhardt (1946) writes, “United States National Museum records: Cadet, Mo., female type, August 25, 1877? (Riley) . . .”. This specimen could not be found in the NMNH and probably refers to the type in the AMNH. There is a female labeled in the NMNH “. . . Type”; “Col.”, but is in fact not conspecific with *rileyana*.


“2 ♂, 3 ♀. Contra Costa County, Cal.; Virginia City, Nev.”


**Discussion**: The other male specimen mentioned in the original description could not be found. Engelhardt (1946) simply states, “Type.—Male. In the American Museum of Natural History.” To avoid any possible confusion in the future, the male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

198. *Paranthrene robiniae* form *palescens* Engelhardt, 1946:144

“Type.—U.S.N.M. No. 56846. From Palm Springs, Calif.”

“Described from female type and female paratype from the type locality.”

**Holotype**: Female, in the NMNH: “*Paranthrene robiniae palescens* Engelh., ♀”; “USNM Type No. 56846, palescens Engelh.” “Fig.”; “Palm Spg. Canyon, VI.24.1921 (?), Calif.”


“Type.—U.S.N.M. No. 56860.”

“Remarks.—Described from male holotype, female allotype, 4 male and 3 female paratypes from Davis Mountains, and one male paratype from Globe, Ariz.”


200. *Sesia rubescens* Hulst, 1881:76

“One specimen from Colorado.”

**Holotype**: Female, in the AMNH: “*Sesia rubescens* Hulst Type”; “Col.”; “No. 15856, Collection, Hy. Edwards.”

201. *Aegeria rubi* Riley, 1874:111

“Described from 6 ♂’s, 6 ♀’s, bred from *Rubus.*”


**Discussion**: The year 72 on the label of the first syntype appears at first glance to read 78, but the 8 on closer examination turns out to be a poorly written 2. The remaining syntypes were apparently labeled subsequently, and 78 was erroneously carried over. None of the syntypes are in very good shape and the best male specimen lacks label data. The first female syntype in the NMNH listed above has been selected, labeled, and is designated as the lectotype.


“Habitat. — Palmerlee, Cochise County, Ariz. August.”

“Type, one female, collection of Brooklyn Institute of Arts and Sciences, collected by Jacob Doll.”

**Holotype**: Female, in the NMNH: “*Sesia rubicincta* Beut., Type”; “TYPE”; “Type No.”; “Fig.”; “C. Shaeffer”; “Palmerly, Cochise Co., Ariz., VIII.”

203. *Aegeria rubristigma* Kellocott, 1892b:211

“One male and one female obtained.”

“Obtained from Cynips gall on twigs of *Quercus palustris*, collected by my friend, E. E. Bogue, at Sugar Grove, Ohio, and by myself at Central College, Ohio. One imago appeared June 10 and one July 15.”

**Syntypes Examined**: 1 (male, in AMNH): “*Ae-
geria rubristigma Kellicott, Type”; “Ohio”; “No. 15944, Collection Hy. Edwards.”

Discussion: Since the female of the type series could not be found, the male syntype above in the AMNH has been selected, labeled, and is designated as the lectotype.

204. Aegeria rubofascia Hy. Edwards, 1881:191

“1 ♂. Georgia. (Morrison.)”

Type. Coll. E. L. Graef.


205. Carmen ruficornis Hy. Edwards, 1881:184

“1 ♂. Georgia. (Morrison.)”

Type. Coll. E. L. Graef.


“1 ♀. Virginia City, Nevada. (H. E.)”


207. Carmen sanborni Hy. Edwards, 1881:185

“2 ♂, 1 ♀. Andover, Mass. (F. G. Sanborn.)”


Discussion: Engelhardt (1946) states, “Types.—Female. In the Boston Society of Natural History. Remarks.—The original description of sanborni, said to be based on two females and one male, applies to the female alone. It is doubtful whether Hy. Edwards had male examples of the species, as sexual dissimilarities would have made their recognition unavoidable. The types are two females.” Since the type-material from the Boston Society of Natural History has to date not been located and may be lost or destroyed, the female syntype from the AMNH has been selected, labeled, and is designated as the lectotype.

208. Aegeria sapygaeformis Walker, 1856:45-46


Holotype: Male, in the BMNH: “Aegeria sapygaeformis, Type, ♂”; “78, Aegeria sapygaeformis”; “46.110, U.S.”; “237”; “Type.”

209. Aegeria saxifragae Hy. Edwards, 1881:190

“1 ♂. Colorado. (Morrison.)”


“1 ♂. 1 ♀. Texas. (J. Boll.)”

Type. Coll. B. Neumoegen.


Discussion: The male syntype mentioned by Edwards could not be found; therefore, the female syntype in the NMNH has been selected, labeled, and is designated as the lectotype.

211. Aegeria scitula Harris, 1839:313

“Expands about eight lines.”

Types: Apparently lost or destroyed.

Discussion: Refer to the pertinent statement in the “Introduction.”

212. Sesia seminole Beutenmuller, 1899c:255

“Habitat: Lake Worth, Florida.”


Discussion: Engelhardt (1946) writes, “Male.—The unique type was figured by Beutenmuller. Through the courtesy of the American Museum of Natural History it was possible to prepare a slide of the genitalia of the type.” Undoubtedly, he refers to the male syntype listed above. However, since the specimen was not labeled holotype and was not designated as a lectotype, to avoid possible confusion in the future, the male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

"Hab.—Florida. Type ♀ coll. B. Neumoegen."

**Holoype:** Female, in the NMNH: "*Sciapteron seminole* Neumoegen, Type, ♀"; "Typicum specimen"; "Fla."

**Syntypes Examined:** 2 (1 in AMNH, 1 in the NMNH): (1) "*Sciapteron seminole* Neumoegen, Type, ♀"; "Typicum specimen"; "Fla.


"1 ♀. Nevada. (H. K. Morrison.)"

**Types. Coll. Hy. Edwards. F. Tepper.**

**Syntypes Examined:** 2 (1 in AMNH, 1 in MSU): (1) "*Aegeria senecioides* Hy. Ed., Type"; "7982"; "California"; "No. 15975, Collection Hy. Edw."; "senecioides, ♂ genitalia on slide, AB, Jan. 18, 1940." (2) "*Aegeria senecioides* Hy. Edw."; "Nevada"; "F. T." (female, MSU).

**Discussion:** Since the male syntype from AMNH has a type label and a slide prepared of the genitalia, it has been selected, labeled, and is designated as the lectotype.


"Type.—U.S.N.M. No. 56855."

"Remarks.—Described from male type, female, allotype, 5 male and 4 female paratypes from Pullman, Wash., and reared by J. F. Gates Clarke . . ."

**Holotype:** Male, in the NMNH: "*Zenodoxus sidalceae* Engelh., ♂, Type"; "5847"; "Collection, J. F. Clarke"; "reared from *Sidalcea nervata*"; "Pullman, Wa., J. F. Clarke, 29.VII.84."

218. *Sesia sigmoidea* Beutenmuller, 1897:214


**Holotype:** Female, in the AMNH: "*Sesia sigmoidea* Beut., ♀, Type"; "from Willow, Miss. C. Guild, Walpole, Mas."; "No. 15948, Collection Hy. Edwards"; "*Aegeria asiliformis* Rott.

219. *Trochilium simulans* Grote, 1881:78

"Illinois, Algonquin. Collected by Dr. Nason, June 27th." Grote: "(my type is in perfect condition).

**Holotype:** Female, in the AMNH: "*Trochilium simulans* Grote., ♂, Type"; "N. Ill."; "June 27, Algon."; "No. 15790, Collection Hy. Edwards."


"2 ♂. Kansas, Prof. Snow, to whom I regardfully dedicate this very interesting species."

**Syntypes Examined:** 1 (in the AMNH): "*Melittia snowii* Hy. Edw., Type"; "Kan., Snow"; "No. 15790, Collection Hy. Edwards" (Male).

**Discussion:** Edwards mentions two specimens in the type series, but only the above syntype could be found. Therefore, the male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

"♂. ♀. Texas (J. Boll.) (Coll. B. Neumoegen.) Kansas (H. Brous.) (Coll. C. V. Riley.)"

**Syntypes Examined:** 1 (in NMNH): "*Larunda solituda* Hy. Edw., Type"; "*Larunda solituda* Hy. Edw., Type"; "Typicum specimen"; "Texas." (male).

**Discussion:** Though at least three specimens were indicated by Edwards in his description, only one male could be found. Therefore, the male syntype in the NMNH has been selected, labeled, and is designated as the lectotype.


"♂. 1 example. Arizona. Coll. B. Neumogen."

**Holotype:** Male, in the NMNH: "*Pyrrothotaenia subaerea* Hy. Edw., Type"; "TYPE"; "Typicum specimen"; "Arizona"; "subaerea, genitalia on slide, AB, May 24, 1939."

223. *Carmenta suffusata* Engelhardt, 1946:74

"♂ . . . 1 example. Arizona. Coll. B. Neumogen."

**Holotype:** Male, in the NMNH: "*Carmenta suffusata* Engelh., Fig."; "C. E. Hood, Collector"; "bred from root"; "emerged on 4/19"; "McAlester, Okl., 4/5" (male).

**Syntypes Examined:** 2 (both in NMNH): (1) "*Chamaesphecia suffusata* Engelh., ♂; "Fig.;"; "C. E. Hood, Collector"; "bred from root"; "emerged on 4/19"; "McAlester, Okl., 4/5" (male). (2) "*Chamaesphecia suffusata* Engelh. ♂; "C. E. Hood Collector"; "bred from root"; "emerged on 4/19"; "McAlester, Okl., 4/15"; "♂ genitalia on slide, AB, Mar. 27, 1939" (male).

**Discussion:** Engelhardt mentions three examples from three different localities. His collection at the NMNH contains three specimens, two labeled as above, and one female, his paratype from Comanche, Oklahoma. The other female paratype which he mentions from Kansas is not in the NMNH collection. Since none of the specimens were labeled type or had a USNM number, and two have the data described for the type, a lectotype should be designated. Therefore, the first syntype in the NMNH, being in the best condition, has been selected, labeled, and is designated as the lectotype.

224. *Melittia superba* Barnes and Lindsey, 1922:122

"Described from six specimens taken in Seward Co., Kansas. Holotype ♂ . . . in coll. Barnes."

**Holotype:** Male, in the NMNH: "*Melittia superba* B. & L., Holotype, ♂"; "Seward Co., Kansas."


"1 ♀. Washington Terr. (Morrison.)"

**Holotype:** Female, in the NMNH: "*Bembecia superba* Hy. Ed., Type"; "TYPE"; "Col., E. L. Graef"; "Was. T."

226. *Aegeria syringae* Harris, 1839:331

"Expands one inch and two lines. Larva lives in the trunks of *Syringa vulgaris*, the common lilac."

**Types:** Apparently lost or destroyed.

**Discussion:** Refer to the pertinent statement in the "Introduction."

227. *Sphinx tabaniformis* Rottenburg, 1775:110

**Types:** Lost (Naumann, 1971).

228. *Sesia tacoana* Beutenmuller, 1898:240


**Holotype:** Male, in the NMNH: "*Sesia tacoana* Beuten., ♂, Type"; "U.S.N.M. Type No. 4355"; "RPCurrie, Collector"; "Big Hn. Mts., Wyo., Jul. 11, 96"; "tacoma Beut., ♂ genitalia on slide, AB, Nov. 8, 1939."


**Discussion:** Only four females and no males could be found which could be associated with the type series as described. The second female syn-
type listed above from the AMNH has been selected, labeled, and is designated as the lectotype, because it has an original Hy. Edwards number on the label.


"2 ♂. Prescott, Arizona. J. Doll."

*Types, Coll. B. Neumoegen.*


**DISCUSSION:** Only one of the male syntypes could be found. The above male syntype in the NMNH has been selected, labeled, and is designated as the lectotype.


"1 ♀. Georgia, (Morrison.)" *Type. Coll. F. Tepper. to whom I regardfully dedicate this exquisite species.*

**HOLOTYPE:** Female, in MSU: "*Pyrrhotaenia tepperi* Hy. Edw., Type"; "Georgia."

**DISCUSSION:** Note that the holotype is a female, not a male as indicated by Edwards.


"2 ♀. Texas. (J. Boll.)"

*Type. Coll. B. Neumoegen."

**SYNTHYPES EXAMINED:** 2 (both in NMNH): (1) "*Pyrrhotaenia texana* Hy. Edw., Type"; "TYPE"; "Typicum specimen"; "Tex." (female). (2) "TYPE"; "Typicum specimen"; "B. N."; "Tex." (female).

**DISCUSSION:** The second syntype is badly worn and lacks the left pair of wings. The first listed female syntype in the NMNH with the Hy. Edwards type label has been selected, labeled, and is designated as the lectotype.

233. *Trochilium tibiale* Harris, 1839:309

"Found in New-Hampshire on the *Populus can- dicans*, and presented to me by Mr. Leonard."

**TYPES:** Apparently lost or destroyed.

**DISCUSSION:** Refer to the pertinent statement in the "Introduction."

234. *Aegeria tibialis* var. *anonyma* Strand, 1925:124

"♀."

**HOLOTYPE:** Unknown.

235. *Aegeria tibialis* var. *dyari* Cockerell, 1908:330

"♀."

"Hab.—Las Vegas, New Mexico, July 3, 1900 (Cockerell)."

"... my type is in the U. S. Nat. Museum."

**HOLOTYPE:** Female, in the NMNH: "*Aegeria tibialis dyari* Ckll."; "U.S.N.M. Type"; "Las Vegas, N.M., July 3, Ckll."


"Type.—U.S.N.M. No. 56852. From Adirondack Mountains."

**Remarks.—**The male and female types and allotype were collected in copulation by Howard Natman in Keene Valley, Adirondacks, N.Y., July 29, 1911.

**HOLOTYPE:** Male in NMNH: "*melanoformis* Engellh., USNM Type No. 56852"; "♀"; "used for illustration"; "*Aegeria tibialis* Harris ♂, det. G.P.E."; "G. P. Engelhardt Coll."; "Keene Valley, 29 July 1911"; "471 2 L.H."

237. *Sphinx tipuliformis* Clerck, 1759, pi. 9: figs. 1, 2

(Description consists of two drawings only. Linneaus in 1761 redescribed this species stating, "Habitat in Lucis & Hortis.")

**TYPES:** Unknown.

238. *Carmenta torrancia* Engelhardt, 1946:56


239. *Albuna torva* Hy. Edwards, 1881:189


**SYNTHYPES EXAMINED:** 1 (in the AMNH): "*Albuna torva* Hy. Edw., Type"; "Vancouver Island"; "No. 15858, Collection Hy. Edw." (female).

**DISCUSSION:** The other two females could not be located; therefore, the above female syntype in the AMNH has been selected, labeled, and is designated as the lectotype.
240. *Aegeria tricincta* Harris, 1839:310
"The sexes were captured together upon the common tansy."

**Types:** Apparently lost or destroyed.

**Discussion:** Refer to the pertinent statement in the "Introduction."

"Type.—U.S.N.M. No. 26844. Described from female from Bear Creek, Morrison County, Colo. (Oslar) . . ."

**Holotype:** Male, in the NMNH: "Paranthrene tricinctus oslari Engelh., δ"; "USNM Type No. 56844, oslari Engelh."

**Discussion:** The specimen from Bear Creek, Colorado, is a male, which was indicated on the label but erroneously referred to as a female in the description. Also, the correct number is 56844 as on the specimen label.

242. *Sannina uroceriformis* Walker, 1856:64
"-c. United States. Presented by E. Doubleday Esq." (He described both male and female, with "?" after female.)

**Syntypes Examined:** 1 (in BMNH): "Sannina uroceriformis, Type, δ"; "369"; "46.110, U.S."; "♀ of exitiosa Harris"; "Type"; "F3/14" (female).

**Discussion:** Three specimens are indicated in the original description, but only one could be located. Walker questioned himself as to whether or not he was describing the female of the species. It appears as though Walker was in reality describing the female of *uroceriformis* under the male heading. The female description is of *exitiosa* Say and not *uroceriformis*. To avoid possible future confusion, the female syntype in the BMNH has been selected, labeled, and is designated as the lectotype.

243. *Saunina uroceripennis* Boisduval, 1874:465,
new name pro *S. uroceriformis* Walker, 1856.

**Type:** Ipso facto type of *uroceriformis* Walker.

244. *Sesia utahensis* Beutenmuller, 1909:83
"Habitat.—St. George, Washington County, Utah, June."

"Described from a single female collected by Mr. Engelhardt on an expedition to Utah for the Brooklyn Institute of Arts and Sciences."

**Holotype:** Female, in the NMNH: "Sesia utahensis Beut., Type"; "TYPE"; "St. George, Wshgtn. Co., Utah, VI"; "G. P. Engelhardt Coll."

245. *Albuna vancouverensis* Hy. Edwards, 1881:188
"7 examples. ♀. Vancouver Isld. (H. E.) Colorado, (Morrison.)"


**Discussion:** Since Vancouver Island was listed first as a locality in the original description and the second listed specimen is in good condition, this male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

246. *Aegeria verecunda* Hy. Edwards, 1881:190
"1 ♀. Colorado. (Morrison.)"


**Discussion:** Engelhardt states, "Type.—Female. In the American Museum of Natural History. Remarks.—Hy. Edwards's description of *verecunda*, based on three examples, one male and two females from Colorado (Morrison), does not discriminate between the sexes, which are dissimilar. The male type, if existing, cannot be located. Two females, labeled type, are at the American Museum of Natural History." It is our opinion that the two
females listed above as syntypes are from the type series, and the male, if it exists, could not be located. The female syntype in MSU has been selected, labeled, and is designated as the lectotype, because it is in better condition.

247. *Sannina verrugo* Druce, 1884:34

"Hab. Mexico, Esperanza (Hoege)."

"Only a single example of this fine insect was sent. It is allied to *S. troceriformis*, Walk., from North America."

**Holotype:** Female, in the BMNH: "B. C. A. Lep. Het., *Sannina verrugo* Druce"; "Esperanza, Mexico, Hoege"; "Godman-Salvin, Coll. 97.–52"; "Type, Sp. figured"; "Type."


"Type.—U.S.N.M. No. 56841. From Arroyo Seco, Los Angeles, Calif."

**Holotype:** Male, in the NMNH: "Alcathoe verrugo color var. corvinus Engelh., Type, $"; "Arroyo Seco, S. Pasadena, Calif., VII.17.1931"; "Coll. G. P. Engelhardt."

249. *Trochilium vespipenne* Herrich-Schaeffer, 1854:57, Fig 217

"vespipenne H-S. f. 217.—China." (Description consists of a figure.)

**Type:** Unknown.

250. *Synanthedon viburni* Engelhardt, 1925a:65


"Types. Male and female, in the author's collection at the Brooklyn Museum, Co-type male U.S.N.M., Co-type female William Barnes Collection."


**Discussion:** Engelhardt (1946:96) states, "Type.—Male, from Woodhaven, N.Y. In the United States National Museum." The date on the specimen labeled "type" does not correspond to the dates listed in the original description, nor do any specimens in the Engelhardt Collection carry the latter dates. We are assuming that an error occurred in transposing the dates. In the 1946 revision, Engelhardt uses type, allotype, and paratype for a type series, dropping the use of male and female type and cotype. The above syntypes must have been labeled sometime after the 1925 publication. To avoid possible confusion in the future, the syntype labeled "Type" in the NMNH has been selected, labeled, and is designated as the lectotype.

251. *Albuna vitrina* Neumoegen, 1891:109

"Hab.—Ft. Calgary, N. W. Territory. Type, coll. B. Neumoegen."

**Holotype:** Male, in the NMNH; "Albuna vitrina Neumoegen, Type"; "TYPE"; "Ft. Calgary, N. W. Brit. Columbia."

**Discussion:** Note the error in recording the type-locality in Neumoegen's original description.


"1 $ . Washington Terr. (Morrison)."


**Holotype:** Male, in the AMNH: "Aegeria washingtonia Hy. Ed., Type"; "Washington, Terr."; "No. 15910, Collection Hy. Edw."


"Type.—U.S.N.M. No. 56854. From Brownsville, Tex."

"Remarks.—Described from male type, female allotype, 6 male and 5 female paratypes, reared by the late Emerson Liscum Diven . . ."

**Holotype:** Male, in the NMNH: "Zenodoxus wissadulae Engelh., $, Type"; "Wissadula lozani"; "Brownsville, Tex."; "Diven, Coir."; "reared, May 7/19"; "Diven, 41, F.H.B., rearing."


"2 $ . Indian River, Florida. Dr. Wittfeld."


**Synotypes Examined:** 2 (both in AMNH): (1) "Pyrrhotaenia wittfeldii Hy. Edw., Type"; "Indian River, Florida"; "No. 15985, Collection Hy. Edw."
Discussion: It is assumed here that Edwards erred in the determination of the sex of the types. The first female syntype in the AMNH labeled type has been selected, labeled, and is presently designated as the lectotype.

255. Sesia xiphiaeformis Boisduval, 1874:409
"Nous avons reçu cette remarquable Sesie de feu John Leconte, sans aucune indication sur la localité qu'elle habite aux États-Unis."


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