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

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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 (=Aegriidae) 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), 89; 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.

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1. *Trochilium acericorum* 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.”
   **Holotype:** Male, in the NMNH:
4. *Synanthedon acerrubri* Engelhardt, 1925a:64
   **Holotype:** Male, in the NMNH:
   “*Synanthedon acerrubri* G. P. Engelhardt, $, 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 $, San Rafael, Califor. (H. E.) On *Achillea millefolia*. L.”
   **Holotype:** Male, in the AMNH:
   “1 $, Texas (J. Boll).”
   **Holotype:** Male, in the AMNH:
   “*Siciapteron admirandus* Hy. Edw., $, Type”; “Texas”; “No. 15802, Collection Hy. Edw.”
   “Exp. $ 8 mm. $, 10 mm.”
   “Types. Coll. Prof. C. V. Riley.”
   **Syntypes Examined:** 2 (both in the NMNH): (1) “*Aegeria aemula* Hy. Edw., $, Type”; “U.S.N.M. Type No. 346”; “Collection of C. V. Riley”; “3157, May 24, 83”; “*Sesia scitula* Harr., $” (male). (2) “*Aegeria aemula* Hy. Edw., $, Type”; “U.S.N.M. Type No. 346”; “Collection of C. V. Riley”; “3157, May 22, 83”; “*scitula scitula* Harr., $” (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 $, 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 $, Type”; “Kerrville, Texas, X.1916”; “$ genitalia on slide, AB, Jan., 17, 1999” (right wings also on genitalia slide).
   “Type.—U.S.N.M. No. 56812, 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:
   “*Thamnosphecia alleri* Engelh., $”; “USNM Type No. 56842, alleri Engelh.”; “Coll., G. P. Engelhardt”; “Chickasaw, Ala., IX.13.31”; “Fig.”
   “1 $, 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.”
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HOLOTYPE: Male, in the NMNH: "Paranthrene ampelopsis Engelhardt, 1944, Holotype"; "U.S.N.M. Type No. 24866"; "from Cissus incisa"; "J. D. Mitchell, Collector"; "Victoria, Tex., 6-21-19"; "on Cissus incisa"; "Hunter, No. 3918."

DISCUSSION: The catalog of USNM type numbers indicates that this species was entered twice. The erroneously recorded 24866 was canceled from the catalog in February, 1944.

13. Pyrrhotaenia animosa Hy. Edwards, 1883:156


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 Géorgie où, selon Abbot, elle vir 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. 1946:54, Female"; "Fig."; "Type No., U.S.N.M."; "Barnes Coll."; "Prescott, Ariz."; "July, 1-7."

16. Sphinx apiformis Clerck, 1759: pl. 9, fig. 2

"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., 1946:54, 1900:208, Type"; "U. S. N. M. Type No. 5175"; "♂ genitalia on slide, AB, Dec. 2, 1938."

17. 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., 1946:54, 1♀, 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., 1♀, 1♀, 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.

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."

"Habitat.—Pinal Mts., Arizona."

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

HOLOTYPE: Female, in the NMNH: "Gaea arizonensis Beutm., 1♀, Type"; "Pinal Mts., Ariz."; "TYPE"; "Pinal Mts., Ariz."


21. *Sesia asilipennis* Boisduval, 1829

"3a. Sa chenille, 3b. Sa crysalide.—Hab. l'Amérique septentrionale."


22. *Aegeria aureola* Hy. Edwards, 1881:194

"1 ♀. Nevada. (Morrison.)"

**Type. Coll. E. L. Graef.**

**Holotype:** Female, in the NMNH: “*Aegeria aureola* Hy., Type”; “*Col., E. L. Graef*”; “Nev.” (abdomen missing).


"Expanse, 0.60 inch. Texas, J. Boll."

**Type. coll. Mus. Comp. Zool., Cambridge.**

**Holotype:** Female, in the MCZ: “*Aegeria (?) aureopurpura* Hy. Edw., (Type)”; “Dallas, Tex., Boll”; “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 holotype 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).”

**Holotype:** Male, in the NMNH: “USNM Type No. 56882, austini Engelh.”; “austini, ♀ genitalia on slide, AB, Jan. 22, 1940”; “Fig.”; “*Chamaesphcia austini* Engelh. ♂”; “*Chamaesphcia giliae austini* Engelh. ♂”; “GPEngelhardt Coll.”; “H. B. Parks, Jr., Collector”; “Austin, Tex., 11–9–32.”

**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.


"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.”

**Holotype:** Male in NMNH; “*Alcathoe autumnalis* Engelh. ♂, Type”; “Coll. G. P. Engelhardt”; “San Antonio, Tex., X.20.1930.”

27. *Melittia barnesi* Dalla Torre, 1925:138, new name pro *M. superba* B. & L., 1922

**Holotype:** Ipso facto type of *superba* B. & L.

28. *Aegeria bassiformis* Walker, 1856:39


**Holotype:** 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)."

**Holotype:** Male, in the BMNH: “B.C.A. Lep. Het. Beckeri Druce”; “Near Durango city, Mexico, Becker”; “Godman-Salvin Coll. 97.–52”; “Type, Sp. figured”; “Type.”


"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."

   "1 ♂ . Texas. (J. Boll.)"
   "Type. Coll. B. Neumoegen."

   **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 bolteri* 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 bolteri 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.

   "Male."
   "♂ . . . ?"

   **Holotype:** Male, in the BMNH: "*Tarsa bombyciformis* Wlk. Type, ♂"; "1., *Tarsa bombyciformis*"; "Type"; "F3/13."

   "♂ . . . U.S.N.M. No. 56825. Holotype male and allotype female; one male and one female paratypes. Collected in the Green Horn Mountains, Calif."


   "1 ♂ . Georgia. (Morrison.)"
   "Type. Coll. F. Tepper."

   **Holotype:** Female, in MSU: "*Aegeria brunneipennis* Hy. Edw., Type"; "Ga."; "F. T." (abdomen missing)."
DISCUSSION: Note that the sex was erroneously determined in the original description.

41. Zenodoxus canescens Hy. Edwards, 1881:205

"2 ♀. Colorado. (C. V. Riley)"


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 Engel., 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 Engel."; "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

"Larva 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.—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 Engel., Type"; "Cincinnati, O., Annette F. Braun, VII. 1. 16."

48. Alcathoe caudatum ab. walkeri Neumoegen, 1894:331

"Type & coll. B. Neumoegen. 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 Neumoegen, δ 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*.”


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 ♂ Engelh.”; “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.”

**Holotype:** Male, in the NMNH: “Penstemonia clarkei Engelh., ♂”; “U.S.N.M. Type No. 56823, clarkei Engelh”; “Fig.”; “Reared from *Penstemon richardsoni*”; “The Dalles, Ore., E 5–VIII–38, G. P. Engelhardt.”

54. *Pyrrhotaenia coccinea* Beutenmuller, 1898:241

“1 ♀, Albuquerque, New Mexico. (Cockerell.) Type, Coll. U. S. Nat. Mus.”

**Holotype:** Female, in the NMNH: “Pyrrhotaenia coccinea 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 Bigelovia 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 ♀. Colorado. (H. K. Morrison.)”

**Type.** Coll. Hy. Edwards.”

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

57. *Podoseia 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.”


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

59. *Aegeria corni* Hy. Edwards, 1881:190

"1 ♂. On *Cornus sericea* L. Purgatory Swamp, Mass."

**Type.** Coll. Hy. Edwards.

**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.)"

**Type.** Col. Hy. Edwards.

**Holotype:** Male, in the AMNH: "*Aegeria corusca* Hy. Ed., Type"; "Tex."; "No. 15928, Collection, Hy. Edw."

61. *Sphinx crabroniformis* Denis & Schiffmuller, 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, "befindet sich nicht in der Linne' schen Sammlung, Linnean Society, London").

64. *Sesia culiciformis* var. *americana* Beutenmuller, 1894:93

"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."

**Syntypes Examined:** 4 (all in AMNH): (1) "*Sesia culiciformis* var. *americana* Beut., Type"; "Nev."; "No. 15986, Collection Hy. Edwards" (male). (2) "*Sesia culiciformis* var. *americana* Beut., Type"; "Nev."; "No. 15987, Collection Hy. Edwards" (female). (3) "*Sesia culiciformis* var. *americana* Beut., Type"; "Nev."; "No. 15998, Collection Hy. Edwards" (female). (4) "*Sesia culiciformis* var. *americana* Beut., Type"; "Nev."; "No. 15999, Collection Hy. Edwards" (female).

**Discussion:** There is no indication from the original description as to how many specimens were in the type series. The above listed syntypes were the only specimens bearing the "type" label that could be found and are considered here as part of the type series of Beutenmuller. The male syn-type in the AMNH has been selected, labeled, and is designated as the lectotype.


"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.


"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* Eng.," ♂; "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 decipiens Hy. Ed., $\delta$. Type"; "Col."; "No. 15945, Collection Hy. Edw."

69. **Albuna denotata** Hy. Edwards, 1882a:55

"1 $\delta$ 2 $\varphi$. Montana Terr. H. K. Morrison."


**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. **Trichilium denudatum** Harris, 1889:310

"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. **Schiapteron dollii** Neumoegen, 1894:830

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

**Syntypes Examined:** 3 (All NMNH): (1) "Schiapteron dollii Neum., $\delta$ Type"; "TYPE"; "Typicum specimen"; "N.Y." (The abdomen of a female has been glued on.) (2) "Schiapteron dollii Neumoegen, $\varphi$ Type"; "TYPE"; "Typicum specimen"; "N.Y." (The abdomen is missing.) (3) "Schiapteron dollii Neumoegen, $\varphi$ Type"; "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. **Schiapteron dollii var. castaneum** Beutenmuller, 1897:213


**Syntypes Examined:** 3 (2 in AMNH, 1 in NMNH): (1) "Schiapteron dollii var. castaneum Beut., Type"; "Kentucky"; "No. 15778, Collection Hy. Edwards" (male, AMNH). (2) "No. 15778, Collection Hy. Edwards" (male, AMNH). (3) "Schiapteron dollii var. castaneum Beut., $\varphi$ Type"; "Schiapteron 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.
66. Aegeria emphytiformis Walker, 1856:43
   "a, b. United States. Presented by E. Doubleday, Esq."

SYNTYPES EXAMINED: 1 (in BMNH): "Aegeria emphytiformis, Type, ♂"; "46.110, U.S."; "72, Aegeria emphytiformis"; "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

78. Aegeria eupatori Hy. Edwards, 1881:195

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


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 Hult., Type”; “No. 15815, Collection Hy. Edwards” (male). (2) “Bembecia flavipes Hult., 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 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)”


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

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

“Type.—U.S.N.M. No. 56848. From Chicago, Ill.”

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


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."

97. Aegeria giliae Hy. Edwards, 1881:200
   "1 9, Colorado. (Morrison)"
   **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 9. 2 9. 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 graef Hy. Edw., Type"; "F. T."; "Nevada" (female, MSU). (2) "Sciapteron graeﬁ Hy. Edw., Type"; "Nevada" (female, MSU). (3) "Sciapteron graei 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, De- catur, Illinois."
    **Holotype:** Female, in the NMNH: "Sanninoidea graeﬁ var. Barnsii Beut., 9 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., 9 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: "Compositicola helenis Engelh. s 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."

105. Pyrrhotaenia helianthi Hy. Edwards, 1881:203
    **Syntypes Examined:** 1 (in MSU): "Pyrrhotaenia helianthi Hy. Edw."; "Nevada"; "F. T." (female).
    **Discussion:** Only the one specimen in the MSU
Collection could be found from Nevada. Beutemuller (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.

106. Aegeria hemizoniae Hy. Edwards, 1881:198


D. C. (H. E.)"


SYNTYPES EXAMINED: 2 (1 in AMNH, 1 in NMNH): (1) "Nevada"; “No. 15920, Collection Hy. Edw.” (female, AMNH). (2) "Aegeria Hemi-


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.

107. Penstemonia hennei Engelhardt, 1946:16

"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-

ehemi Eng., δ”; “Fig.”; “Out 8-28-38, δ, P. Mill Cr., 38.”

108. Aegeria henshawii Hy. Edwards, 1882a:56

"1 η. Mingan Island, Labrador, Mr. S. H. Henshaw . . .”

HOLOTYPE: Female, in the AMNH: "Aegeria henshawi Hy. Ed., Type”; “Mingan Island, Lab-

rador, July 20, 1881, L. Henshaw”; “No. 15887, Collection Hy. Edw.”


"6 δ 2 η. H. E. On flowers of Heuchera rubescens Torr. Lake Tahoe, Calif."

SYNTYPES EXAMINED: 4 (3 in AMNH, 1 in NMNH): (1) "Zenodoxus heucherae Hy. Edw., Type”; “3492, Sierra Nev., Cal.”; “No. 15990, Col-

ever. Hy. Edw.” (male, AMNH). (2) “3492 Sierra

Nev., Cal.”; “No. 15991, Collection Hy. Edw.”

(male, AMNH). (3) “3492, Sierra Nev., Cal.”; “No. 15992, Collection Hy. Edw.” (male, AMNH). (4)

“3492, Sierra Nev., Cal”; “No. 15989, Collection Hy. Edw.” (male, NMNH).

DISCUSSION: Two females and two males said to be part of the type series could not be found. The first male syntype listed above from the AMNH has been selected, labeled, and is designated as the lectotype.

110. Euhagena hirsuta Engelhardt, 1946:172

"Type.—U.S.N.M. No. 56851."

"Remarks.—The male type and only exam-

ple . . .”

HOLOTYPE: Male, in the NMNH; “Euhagena

hirsuta Engel., δ”; “USNM Type No. 56851,

hirsuta Engel.”; “Fig.”; “for illustration”; “Davis

Mts., Tex., 5000 ft, X.17 1928, O. C. Poling.”

111. Trochilium hospes Walsh, 1866:270

“One δ, bred June 2 from the Coleopterous Pseudogall S. inornata n. sp.; η unknown.”

TYPE: Unknown.

112. Sesia hylaeiformis Laspeyres, 1801:14

“Habitat in Germaniae australis hortis, rarius. A Dno Hubner Augusta Vindellicorum 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 hy-

lotomiformis Wkr., Type η”; “73. Aegeria Hyloto-

miformis.”; “Type”; “31”; “Nova Scotia, Redman.”


“2 δ. West Virginia. T. L. Mead.”


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. Coll. 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 capsule).

**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 capsule).

**Discussion:** The 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.


**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:

“1 ♀. Tallahassee, Florida. (A. Koebele)”


**Holotype:** Male, in the AMNH: “*Melittia Hndseyi* B. & L., 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.

123. *Grotea longipes* Moschler, 1876:313

“Flugelspannung 33 mm. Vorderflugelbreite 3.5 mm. Vereinegte 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).


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.)"


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."

**SYNTYPES EXAMINED:** 3 (2 in NMNH, 1 in AMNH): (1) *Sesia mariona* Beuten., ♀, Type; "Trimb. Spgs., Col., 6/19/99" (female, NMNH). (2) *Sesia mariona* Beuten., ♀, Type; "Pagossa Spgs., Col., 6/30/99" (female, NMNH). (3) *Sesia mariona* Beuten., ♀, 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.


"♀. Lake Tahoe, Califor. (T. L. Mead)"


**SYNTYPES EXAMINED:** 2 (both in AMNH): (1) *Pyrrhotaenia meadii* Hy. Ed., Type; "Lake Tahoe, California"; "No. 15791, Collection Hy. Edw." (male). (2) "Lake Tahoe, California"; "No. 15791, Collection Hy. Edw." (male).

**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, "Cotypes.—*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. Hulst"; "No. 16756, Collection, Hy. Edwards"; "N. Mex."

**DISCUSSION:** Also examined were the following specimens from the Tepper-Morrison Collection at MSU: 2 ♀♂, 1 ♀, W. Mts., N. H., F. T.; 1 ♀ Mt. Hood; 1 ♀, Anticosti. Another ♀ 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 specimen in the mountains at Barnwell, San Bernardino County, on October 12, 1936.”
**Holotype:** Female, in the NMNH: “Euhagena nebraskae intensa Engelh., ♀”; “U.S.N.M. Type No. 56850, E. nebraskae intensa Engel.”; “Fig.”; “♀ Coll. by C. Dammers, 12 Oct. 1936, Barnwell, S. Bernardino Co.”

146. Aegeria neglecta Hy. Edwards, 1881:197
"1 ♂. Olympia, Washington Ter. (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., ǁ, Type”; “Utah”; “No. 15934, Collection, Hy. Edwards.”

151. *Sesia nomadaepennis* Boisduval, 1869:63
   “Trouvée sur les fleurs.”


152. *Aegeria novaroensis* Hy. Edwards, 1881:199
   **SYNTYPES EXAMINED:** 2 (both in AMNH): (1) “*Aegeria novaroensis* Behrens, ǁ Type”; “Soda Springs, California”; “No. 15888, Collection Hy. Edw.” (female). (2) “*Aegeria novaroensis* Behrens, ǁ, 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
   **SYNTYPES EXAMINED:** 3 (all in BMNH): (1) “*Aegeria odyneripennis* Walker, ǁ Type”; “Pyrrhotaenia orthocarpi Hy. Edw., Type.”; “Typicum specimen”; “Nev.” (male, NMNH). (2) “*Aegeria odyneripennis* Walker, ǁ 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.

   “Type,—U.S.N.M. No. 56834. Described from male holotype from Durango, Colo. (Oslar) . . . all in the United States National Museum.”
   **HOLOTYPE:** Male, in NMNH: “*Conopia ogalala* Engelm. ǁ”; “USNM Type No.”; “Coll. G. P. Engelhardt”; “Oslar, Durango, Col.”

   “3 ǁ. Virginia City, Nevada. (H. E.)”
   “1 ǁ. 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:** The first male syntype in the AMNH has been selected, labeled, and is designated as the lectotype.

156. *Pyrrhotaenia orthocarpi* Hy. Edwards, 1881:204
   **DISCUSSION:** The female of the type series could not be found. Three additional males labeled “Nevada” are 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.)

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.


**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."


"1 $ . 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."

**SYNTYPES EXAMINED:** 4 (2 in AMNH, 2 in NMNH): (1) "*Larunda palmii* Neumoegen, $ ; Type"; "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, $ , Type"; "Typicum specimen" (female, NMNH). (4) "*Larunda palmii* Neumoegen, $ ; Type"; "Typicum specimen" (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* Engelh., 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* subspp. *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*"; "Mossula, Mont., J. Brunner, Colr."; "Jun. 5/14, reared"; "12339, 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.


"♀ . Texas. (J. Boll.)"

"Type. Coll. B. Neumoegen."

**HOLOTYPE:** Male, in the NMNH: "*Aegeria perplexa* Hy. Edw., Type"; "YPE"; "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* Engelh. ♂"; "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.

**Syntypes Examined:** 3 (all in NMNH): (1) "*Parharmonia (Sesia) piceae* Dyar, Type"; "U.S.N.M. Type No. 7837"; "*Picea sitchensis*; Burke Coir., 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."

_Type._ 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."


_Holotype._ Male, in the BMNH: "66, *Aegeria pleciaeformis*"; "N. Scotia"; "Type."

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."


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


"♀. San Miguel, Calif. (H. E.) On *Polygonum maritimum*, L."

_Type._ Coll. Hy. Edwards."

_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.


"1 ♀: 2 ♂. Lake Tahoe, Cal. San Rafael, Cal. (H. E.) With *Z. heucherae*."

_Type._ Coll. Hy. Edwards."

**Syntypes Examined:** 3 (all in AMNH): (1) "*Zenodoxus potentillae* Hy. Edw., Type"; "Sierra Nev., Cal."; "No. 15993, Collection Hy. Edw." (female). (2) "5051, Sierra Nev., Cal."; "No. 15996, Collection Hy. Edw." (badly damaged, sex undetermined). (3) "California"; "1278"; "No. 15995, Collection Hy. Edw." (male).
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).”

   “This singular species was raised from a gall on the Mesquit. (Prosopis juliflora, D.C)”
   **Holotype:** Male, in the AMNH: “Aegeria prosopis Hy. Ed., Type”; “from galls of Mesquit, Ft. Grant, Ariz., May.82”; “No. 15943, Collection, Hy. Edw.”

185. Aegeria proxima Hy. Edwards, 1881:201
   “White Mts. N. H. (Morrison).”
   **Type. Coll. F. Tepper.”
   **Holotype:** Female, in MSU: “Aegeria proxima Hy. Edw., Type”; “White Mts., N. H.”; “F. T.”

186. Aegeria pyralidiformis 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 pyralidalis, 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.

187. 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.”

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

190. 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.

191. Aegeria quinque-caudata 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.

189. 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.”

   **Holotype:** Male, in the NMNH: “Synanthedon pyralidiformis sub sp. aurantis Engelhardt, $ Type”; “Coll. G. P. Engelhardt”; “Mobile, Ala., IX.19.13, Dukes.”

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).

   **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.
DISCUSSION: Note that the sex of the type is a female and not a male as indicated erroneously by Edwards.


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


**SYNTYPES EXAMINED:** 1 (in AMNH): "*Albuna resplendens* Hy. Edw., Type"; "Soda Springs, California"; "No. 15872, Collection Hy. Edw."; "Genitalia mounted on slide no. 0011 T.D.E." (female).

**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)."

**HOLOTYPE:** Male, in the NMNH: "*richardsi* Engelh., θ"; "USNM Type No. 56837, richardsi Engelh."; "Coll, G. P. Engelhardt"; "Clarke Co., Georgia, Jun. 15, 1928, 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 2"; "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."

**Syntypes Examined:** 7 (all in NMNH): (1) "*Trochilium rubi* Riley"; "9589, *Trochilium rubi*, iss: Sept. 26/72"; "Type No. 344, U.S.N.M." (male). (2) "Type No. 344, U.S.N.M." (male). (3) "9589, *Trochilium rubi*, iss: Sept. 14/78" (male). (4) "9589, *Trochilium rubi*, iss: Sept. 20/78"; "Type No. 344, U.S.N.M." (female). (5) "9589, iss: Oct. 18/78" (male). (6) "9589, iss: Oct. 21/78" (male). (7) "On blackberry, Sept. 20/78" (male).

**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 rubricincta* Beut., 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-
Gerua 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. Carmenta ruficornis Hy. Edwards, 1881:184
"1 ♂. Georgia. (Morrison.)"

Type. Coll. E. L. Graef.

Holotype: Male, in the NMNH: “Carmenta ruficornis Hy. Ed.”; “Col., E. L. Graef”; “Type”; “Ga.”

“1 ♀. Virginia City, Nevada. (H. E.)"


Holotype: Female, in the AMNH: “Aegeria rutilans Hy. Edw., Type”; “No. 15933, Collection Hy. Edw.”

207. Carmenta sanborni Hy. Edwards, 1881:185
“2 ♂ 1 ♀. Andover, Mass. (F. G. Sanborn.)"

Types. Coll. B. Neumoegen.


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
“Male.”


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. Neumoogen.


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. Sesiæ 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."

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


"1 $ California. On Senecio Douglasii. D. C. (H. E.)"

"1 $ Nevada. (H. K. Morrison.)"

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

**Syntypes Examined: 2 (1 in AMNH, 1 in 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.


"8 $ 6 $. Mendicino Co., Calif. (O. Baron.)"

**Syntypes Examined: 6 (4, AMNH, 2, NMNH):**


**Discussion:** Only 6 of 14 specimens mentioned by Edwards in the original description could be located. It should be noted that none of the syntypes listed above had a type label, and it is assumed that no type labels in Edwards's handwriting were made for the type series. The first male syntype listed above from the AMNH has been selected, labeled, and is designated as the lectotype.


"2 $ Texas. (J. Boll. Belfrage.)"


**Syntypes Examined: 2 (1 in the AMNH, 1 in the NMNH):**


**Discussion:** Another specimen in the NMNH labeled "...Type" cannot be part of the type series since it is from "N. C." The male syntype from the AMNH 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.34."

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.)"


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. Neumoe-
gen.

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

223. *Carmenta suffusata* Engelhardt, 1946:74

"Type.—Only three rather worn examples are at hand. The type from McAlester, Pittsburg County, Okla., is labeled 'bred from root,' April 19 (C. E. Hood). The name of the plant is lacking. The paraphyletics, two females, come from Wichita National Forest, Comanche, Okla., July 14, 1931 (R. H. Painter), and from Sharon Springs, Wallace County, Kans. (A. B. Klots)."

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 (preocc., see *M. lindseyi* B. and B.)

"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."


"♂ . Washington Terr. (Morrison.)"

"Type. Coll. E. L. Graef."

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 tacoma* Beutenmuller, 1898:240


HOLOTYPE: Male, in the NMNH: "*Sesia tacoma* Beuten., ♂ , Type"; "U.S.N.M. Type No. 4358"; "RPCurrie, Collector"; "Big Hn. Mts., Wyo., Jul. 11, 96"; "tacoma Beut., ♂ genitalia on slide, AB, Nov. 8, 1939."

"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.)"

*Types, Coll. B. Neumoegen.*

**Syntypes 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

"♀."

**Holotype:** Female, in 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* Engelh., USNM Type No. 56852"; "♀." "used for illustration"; *"Aegeria tibialis* Harris ♀, det. G.P.E."; "G. P. Engelhardt Coll."; "Keene Valley, 29 July 1911"; "47 I 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, "Habita in Lucis & Hortis.")

**Types:** Unknown.

238. *Carmenta torrancia* Engelhardt, 1946:56


**Holotype:** Female, in the NMNH: "*Chamaes- phpecia torrancia* Engelh. ♀"; "U.S.N.M. Type No. 56831, torrancia Engel.]; "Fig."; "R. H. Painter, Collector"; "Elevation 6000"; "Torrance Co., N. Mex., 28.VI.1929"; "torrancia Eng., ♀ genitalia on slide, AB, Mar. 2, 1943."

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


**Syntypes 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.

"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* Engelh., USNM Type No. 56852"; "♀." "used for illustration"; *"Aegeria tibialis* Harris ♀, det. G.P.E."; "G. P. Engelhardt Coll."; "Keene Valley, 29 July 1911"; "47 I 2. L.H."

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

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

**Types:** Unknown.
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."; "Oslar, Bear Creek, Morrison, Col."; "Coll. Engelhardt, G. P."; "for illustration"; "oslari Engelh., δ genitalia on slide, AB Jan. 12, 1937."

**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. *Saunina uroceriformis* Walker, 1856:64

"a-c. United States. Presented by E. Doubleday Esq." (He described both male and female, with "?" after female.)

**Syntypes Examined:** 1 (in BMNH): "*Saunina 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 ♂, 2 ♀. 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. urocerciformis*, 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."

248. *Alcathoe verrugo corvinus* Engelhardt, 1946:

"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:

"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.


**Holotype:** Male, in the AMNH: "*Aegeria washingtonia* Hy. Edw., 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, Colr."; "reared, May 7/19"; "Diven, 41, F.H.B., rearing."

254. *Pyrrhotaenia wittfeldii* Hy. Edwards, 1883:

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


**Syntypes 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 Sesia de feu John Leconte, sans aucune indication sur la localité qu'elle habite aux États-Unis.


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