

GENERIC SYNONYMY (LEPID., PHALÆNIDÆ)

BY WILLIAM BARNES AND F. H. BENJAMIN

Decatur, Illinois

TRICHOCOSMIA Grt.

Type *Trichocosmia inornata* Grt.1883, Grote, Can. Ent., XV, 6, *inornata* sole species and therefore type.1895, Grote, Abh. Nat. Ver. Bremen, XIV, 92, type designated *inornata*.1910, Hampson, Cat. Lep. Phal. B. M., IX, 153, type designated *inornata*.

1921, Barnes and Lindsey, Psyche, XXVIII, 159, subfamily Mominæ.

NAMANGANA Staud.

Type *Namangana cretacea* Staud.1888, Staudinger, Stett. Ent. Zeit., p. 28, *cretacea* sole species and therefore type.1909, Hampson, Cat. Lep. Phal. B. M., VIII, 544, type designated *cretacea*.¹

PARAMIANA B. and Benj.

Type *Hadena lætabilis* Sm.1924, Barnes and Benjamin, Contrib., V, (3), 154, type designated *lætabilis*.

AMIANA Dyar

Type *Amiana niama* Dyar1904, Dyar, Proc. Ent. Soc. Wash., VI, 104, *niama* sole species and designated type.1924, Barnes and Benjamin, Contrib., V, (3), 154, type designated *niama*.

We have, 1924, called attention to the fact that *niama* Dyar is an Erastriid and erected the genus *Paramiana* to hold *lætabilis* and a few other species.

Hampson's drawing of *cretacea* Staud., type of *Namangana*, showed such a different habitus from North American species of "Acronyctinæ" (Apatelinæ), and appeared so similar to some Hadeninæ that we were suspicious, and wrote our good

¹ We have already called attention to the fact that *Eupolia* Sm., type *licentiosa* Sm., sunk to *Namagana* by Hampson, has hairy eyes; *licentiosa* being a synonym of *dentatella* Grt., type of *Trichopolia* Grt., *Eupolia* falls before *Trichopolia*: (see 1923, Bull. B'klyn Ent. Soc., XVIII, 123).

friend Professor M. Draudt to see if he could obtain a specimen for us. The Palearctic species placed in *Namangana* are rare, but Professor Draudt, through the courtesy of Doctor Bang-Haas, was able to loan us cotypes of *cretacea* and *accurata* from the Staudinger collection.

We find that both of these species have hairy eyes and would fall between *Nephelistis* and *Odontestra* in Hampson's keys (1905, Cat. Lep. Phal. B. M., V, 5). The genus *Namangana* is, in reality, very close to *Scotogramma*, but with the habitus of a lightly built *Trichoclea*.² We have been unable to find dorsal tuftings on the abdomen of any species of the *submarina* (genotype) group of *Scotogramma* except the tuft on the basal segment, but our specimens are all slightly rubbed and fresh material may furnish a tufting character to differentiate *Scotogramma* and *Namangana*. Temporarily the more hairy eyes, presence of some lashes from behind the eyes, heavier build, and, in the typical group, the more hairy vestiture of the thorax will serve to separate *Scotogramma* from *Namangana*. The hair on the eyes of the Palearctic *Namangana* species is difficult to see, being much the same as in "*Polia*" *alfkenii* Grt., a species originally described as a *Perigea* (naked eyes) and subsequently twice redescribed by Smith, once as having naked eyes (*Perigea latens*) and subsequently as possessing hairy eyes (*Tæniocampa occlunia*).³

Trichocosmia Grt. was described as possessing hairy eyes. Grote, 1895, placed the genus next to *Trichoclea*. Hampson, 1910, overlooked the hair on the eyes and placed the genus in the "Acronyctinæ" (Apatelinæ). Barnes and Lindsey, 1921, saw the hair on the eyes and placed the genus in the "Mominæ." The genus is extremely close to *Namangana* and belongs in the Hadeninæ. The eyes are hairy, the hair sparse, fine, and rather difficult to see. Vein 5 of the hind wing is scarcely more than a fold, and rather strongly bent at the base for a

² The name *Barathra* Hbn. should probably be used instead of *Trichoclea* Grt. In place of *Barathra* of authors, *Mamestra* Ochs., type *brassicæ* L., designated by Duponchel, 1829, Lep. Fr., VII, (2), 71, can be used.

³ The hair on the eyes also overlooked by Hampson, l. c., p. 546, the species being listed as section 2 of *Namangana*. While *alfkenii* agrees with *cretacea* in that the eyes are less hairy than normal for the subfamily Hadeninæ, the pectinate male antennæ, lashes from behind the eyes, the relatively smooth frons, and the obsolescent clypeal plate prohibit its placement in the same genus as *cretacea*.

member of the Hadeninæ, this latter character presumably the reason for prior placement in the "Mominæ." But the obsolescent nature of vein 5 of the hind wing prohibits placement in the "Mominæ" (Pantheinæ). The Pantheinæ are typical quadrifids with strong and tubular vein 5, of a Bombycid habitus, and with a smooth frons.⁴

Namangana and *Trichocosmia* differ in their genotypes by the following characters:

Namangana; clypeal plate strongly produced, vein 5 of hind wing rather close to 4, for a member of the Hadeninæ, nearly parallel with it, and not bent at base.

Trichocosmia; clypeal plate rather weak but present; vein 5 of hind wing scarcely more than a fold and strongly bent at base for a member of the Hadeninæ. We suggest following Grote, 1895, and placing the genus after *Trichoclea*.

For the North American species now placed in *Namangana* we erect the following genus:

Draudtia B. and Benj., gen. nov.

Type *Namangana revellata* B. and Benj.

Eyes naked. Tibiæ unarmed. Proboscis fully developed. Palpi upturned, the second joint reaching to about the middle of the frons and moderately scaled in front, the third joint moderate and porrect. Frons very slightly roughened and without prominence. Eyes large, rounded. Antennæ of male typically ciliated, beaded, sometimes serrate.⁵ Head and thorax clothed chiefly with scales, the pro- and metathorax with spreading crests. Abdomen with dorsal crest at base only. Fore wing; veins 3 and 5 from near angle of cell; 6 from upper angle; 9 from 10 anastomosing with 8 to form the areole; 11 from cell. Hind wing; veins 3, 4 from angle of cell; 5 obsolescent from about one-third below middle of discocellulars; 6, 7 typically from upper angle; 8 anastomosing with the cell near base only.

⁴ The North American species of *Raphia* fall into the Pantheinæ. The type of *Raphia* Hbn. is *Noctua hybris* Hbn., designated by Grote, 1874, Bull. Buff. Soc. Nat. Sci., II, 6. The hair on the eyes of our North American forms is difficult to see, as the individual hairs are very short. They can, however, be seen with a high-powered binocular microscope. We have, so far, been unable to examine the genotype of *Raphia* to see if it possesses hairy eyes. If *hybris* and *frater* are congeneric, *Certila* Wlk., type *fluxuosa* Wlk. and *Saligena* Wlk., type *personata* Wlk., will be synonyms of *Raphia*.

⁵ Hampson places "*Xanthoptera*" *pectinicornis* Hamp., an Indian species with strongly bipectinate male antennæ, in *Namangana*; but he also places in *Namangana*, *licentiosa* Sm. and *alfkenii* Grt., the only other species of his *Namangana* supposed to have pectinate antennæ. We have shown that both of these latter belong in the Hadeninæ, and suspect that *pectinicornis* will not be congeneric with *revellata*.

A number of different groups are represented within the genus, and it is probable that some of these will ultimately obtain generic names.

CEA Grt.

Type *Cea immacula* Grt.

1883, Grote, Pap. III, 78, *immacula* sole species and therefore type.

1895, Grote, Abh. Nat. Ver. Bremen, XIV, 93, type designated *immaculata*!

1910, Hampson, Cat. Lep. Phal. B. M., IX, 280, type designated *immacula*.

Proboscis present, functional, rather weak; palpi short, the second joint somewhat upcurved and with little hair, the third joint porrect; frons with a strong corneous prominence, somewhat variable individually, in general somewhat heart-shaped with the point of the heart toward the vertex of the head, with an additional corneous central papilla; clypeal plate rather large; eyes moderate, rounded, unlashd, hairy, the hairs rather sparse and not easily seen; antennæ of male ciliated; thorax clothed with scales mixed with a few hairs and hair-like scales, appearing uncrested, the prothoracic crest practically obsolete, the metathoracic crest obsolescent; tibiæ moderately fringed with hair, unarmed; tarsi normally spined; abdomen with neither crests nor hair tuftings, the basal hairs scattered. Fore wing with the apex rounded, the termen evenly curved and not crenulate; veins 3 and 5 from near angle of cell; 6 from slightly below upper angle; 9 from 10, anastomosing with 8 to form the areole; 11 from cell. Hind wing with veins 3, 4 from near angle of cell; 5 obsolescent from somewhat below middle of discocellulars and rather strongly bent basally for a trifold; 6, 7 from upper angle, sometimes connate, often stalked; 8 anastomosing with cell near base only.

The genus belongs in the Hadeninæ. Hampson, 1910, did not have a specimen of *immacula* before him, and drew his generic description from *cirphidia* and *leucanidia*. Consequently his description is considerably in error.

By Hampson's key to the Hadeninæ, 1905, Cat. Lep. Phal. B. M., V, 5, *Cea* would key to "*Meliana*." ⁶ McDunnough, 1916, Ent. News, XXVII, 396, has already shown that *Meliana* Curtis is a *nom. nov.* for *Melia* Curtis nec Bilb., with *sociella*, a Galleriid Pyralid, as type, and suggests the use of *Neleucania* Sm. for the genus.

⁶ The difference between a "rounded prominence" and a "truncate conical prominence" in Hampson's key to the Hadeninæ is evanescent. If *Cea* is keyed as having a "truncate conical prominence" it falls entirely outside the key because of lack of abdominal tuftings.

Neleucania, however, is a member of the *Heliophila* (or *Leucania*) group of genera. Its comparatively smooth frons is merely somewhat rounded out.

Cea belongs close to *Trichocosmia* and we would place it just before the latter.

OMMATOSTOLA Grt.

Type *Ommatostola lintneri* Grt.

1873, Grote, Bull. Buff. Soc. Nat. Sci., I, 112, *lintneri* sole species and therefore type.

1910, Hampson, Cat. Lep. Phal. B. M., IX, 339, type designated *lintneri*.

Proboscis fully developed; palpi obliquely upturned, the second joint not reaching the middle of the frons, the third joint porrect; frons somewhat roughened but not greatly rounded out; eyes large, round, ciliated from behind only, hairy, the hair obsolescent and difficult to see; antennæ of male beaded and ciliated; thorax clothed with hair intermixed with flattened hair and a few narrow bifurcate scales, crests obsolescent, practically obsolete; tibiæ fringed with hair; first abdominal segment with some hair dorso-laterally, abdomen otherwise rather smoothly scaled and without crests. Fore wing with the apex rounded, the termen obliquely curved and not crenulate; veins 3 and 5 from near angle of cell; 6 from upper angle; 9 from 10 anastomosing with the stalk of 7 and 8 to form the areole; 11 from cell. Hind wing with veins 3, 4 from angle of cell; 5 obsolescent from about one-third below middle of discocellulars; 6 and 7 from upper angle, variable individually, either connate or stalked; 8 anastomosing with cell near base only.

Hampson, 1910, has made a number of errors in the generic description. The genus belongs in the Hadeninæ, and is close to *Faronta* Sm. (type *aleada* Sm.), but differs in the more normal wing shape, somewhat longer palpi, possession of rough hair on the basal abdominal segment, the thoracic vestiture without broad scales, and the obsolescent nature of the hair on the eyes.

Buchholzia B. and Benj., gen. nov.⁷

Type *Arsilonche colorada* Sm.

Proboscis fully developed; palpi upturned, the second joint reaching the frons and moderately fringed with hair, the third joint

⁷ Named in honor of our good friend Mr. Otto Buchholz. Messrs. Buchholz and Lemmer have, in a most unselfish manner and with no thought of any personal gain whatsoever, donated to the Barnes collection large quantities of valuable material and have thereby greatly assisted us.

porrect; vertex with a strong band of hair-like scales between and ventrad of the antennal sockets; frons with a rounded roughened prominence covered with scales, the central scales usually lost due to rubbing, the clypeal plate small; eyes large, round, ciliated from behind, hairy, the hair obsolescent and difficult to see; antennæ of male ciliated; thorax clothed with hair and hair-like scales, the pro- and metathorax with small spreading crests; tibiæ unarmed, moderately fringed with hair; abdomen with some rough hair at the base, especially laterally, dorsally tending to form an obsolescent crest on the first segment. Fore wing with the apex somewhat produced and acute, the termen evenly curved and hardly crenulate; veins 3 and 5 from near angle of cell; 6 from upper angle; radial veins variable individually, 9 from 10 anastomosing with 8 to form the areole, or 9 from 10 anastomosing with the stalk of 7 and 8 to form the areole; 11 from cell. Hind wing with veins 3, 4 from angle of cell; 5 obsolescent from about one-third below middle of discocellulars; 6 and 7 shortly stalked from upper angle (in all available material, probably a character subject to individual variation); 8 anastomosing with the cell near base only.

This is in reality the genus *Cea* of Hampson, but not of Grote. The genus belongs in the Hadeninæ, and is close to *Faronta* Sm. The obsolescent nature of the hair on the eyes will immediately separate this genus from its allies in the *Neleucania-Faronta* group except from the genus *Ommatostola*. In wing-shape and hair on the eyes it resembles the latter. *Buchholzia* has the frons heavily rounded out and clothed with closely appressed scales; *Ommatostola* has the frons much less rounded out, smoother, and covered with a dense vestiture of hair, hair-like scales, and scales.

Lemmeria B. and Benj., nom. nov.⁸

Type *Anchocelis digitalis* Grt.

‡ *Brachycosmia* Hamps. (nec. Butler)

Type *Anchocelis digitalis* Grt.

1906, Hampson, Cat. Lep. Phal. B. M., VI, 496, *digitalis* sole species and designated type.

Proboscis aborted, small. Palpi obliquely upcurved, and fringed with long hair in front. Frons strongly produced into a crescent-shaped prominence the ventral edge of which is defined by a strong ridge, clypeal plate not visible. Eyes small, reniform, strongly lashed, naked. Antennæ of male beaded and ciliated. Head and thorax clothed with hair and hair-like bifurcate scales, the prothorax with more or less of a triangular crest, probably movable, differing

⁸ Named in honor of our good friend Mr. Frederick Lemmer.

individually (metathorax too rubbed in six examples before the authors to tell the exact nature of its vestiture). Tibiæ fringed with long hair and unarmed. Tarsi rather heavily spined. Abdomen clothed with long hair as well as scales and with a dorsal tuft of hair on the first segment; elongate in female, normal in male. Fore wing; triangular, the costa nearly straight, the apex somewhat produced, the termen obliquely curved; veins 3, 5 from near angle of cell; 6 from below upper angle, 9 from 10 anastomosing with 8 to form the areole; 11 from cell. Hind wing with veins 3, 4 from angle of cell or shortly stalked; 5 little more than a fold, from slightly below middle of discocellulars, nearly parallel with 4, not bent basally; 6, 7 shortly stalked; 8 anastomosing with the cell near base only.

We have redescribed the genus because of the number of errors in Hampson's description. The name *Brachycosmia* is preoccupied by *Brachycosmia* Butler (1890, Trans. Ent. Soc., Lond., p. 680). *Noctua ambusta* D. and S. sole species and designated type. *Brachycosmia* Butl. falls to the genus Hampson (1. c., p. 493) calls *Atethmia* Hbn., and credits to the Verz. bek. Schmett., but *Atethmia* Hbn. was first published in the Zuträge as a monotypic genus with type *subusta* Hbn., so that *Atethmia* Hbn. should be used instead of *Bagisara* Wlk. in the Apatelinæ. *Tethea* Ochs., which Hampson lists "non descr. nec *Tethia*, Lam. Pisc. 1816, or *Tethya*, Oken, Spong. 1815 . . . type . . . *ambusta*," is presumably an available name, as it does not appear to be a homonym and Ochsenheimer described it by indication, viz., bibliographical references. The type of *Tethea* Ochs. appears to be *or* Fabr., designated by Curtis, 1829, a species belonging to the Thyatiridæ, not to the Phalænidæ, with no North American species now listed as congeneric. *Cirrædia* Gn., 1852, Sp. Gén., V, Noct., I, 401, p. 402, type designated *xerampelina*, is the oldest generic name we find available for *Atethmia* of Hampson and authors. *Brachycosmia* Butl. appears to be a synonym of *Cirrædia* Gn. *Eucirrædia* Grt. is based on the more crenulate outer margin of the fore wing of its genotype, *pampina*, a difference which, at this time, we do not consider of generic significance; and follow Hampson in listing it as a synonym of *Cirrædia*.

PLATYPOLIA Grt.

Type *Pachypolia acutissima* Grt.

1895, Grote, Abh. Nat. Ver. Bremen, XIV, 82, type designated *acutissima*.

Eurotype Hamp.Type *Pachypolia acutissima* Grt.

1906, Hampson, Cat. Lep. Phal. B. M., VI, 289, type designated *acutissima*.

The name *Platypolia* Grt. appears to have been generally overlooked in the literature. *Eurotype* Hamp. is a straight synonym.

HELIODORA Neum.

Type *Heliodora magnifica* Neum.

1881, Neumoegen, Can. Ent., XXIII, 125, *magnifica* sole species and therefore type.

1895, Grote, Ent. Rec., VI, 79, preoc.

1895, Grote, Abh. Nat. Ver. Bremen, XIV, 108, preoc.

1910, Hampson, Cat. Lep. Phal. B. M., X, 675, lists preoc., *Heliodore*, Stål, Hem., 1867; type designated *costalis*, presumably for synonym *magnifica*.

Græperia Grt.Type *Heliodora magnifica* Neum.

1895, Grote, Ent. Rec., VI, 79, nom. nov. for *Heliodora* Neum. nec *Heliodore* Stål, type designated *magnifica*.

1895, Grote, Abh. Nat. Ver. Bremen, XIV, 108, type designated *magnifica*.

1910, Hampson, Cat. Lep. Phal. B. M., X, 675, type designated *costalis*, presumably for synonym *magnifica*.

Tornacontia Sm.Type *Tarache sutrix* Grt.

1900, Smith, Trans. Am. Ent. Soc., XXVII, 49, lists *sutrix* and *megocula*.

1910, Hampson, Cat. Lep. Phal. B. M., X, 675, type designated *sutrix*.

Heliodora Neum. does not appear to be a homonym, and the name should be used instead of *Græperia* Grt. *Tornacontia* Sm. may ultimately be valid generically, as its genotype, *sutrix*, differs considerably from *magnifica*.

THERASEA Grt.

Type *Tarache angustipennis* Grt.

1895, Grote, Abh. Nat. Ver. Bremen, XIV, 115, footnote, *angustipennis* sole species and designated type; p. 126, name in index without page reference.

1903, Dyar, List, p. 213.

1903, Holland, Moth Book, p. 251.

1910, Hampson, Cat. Lep. Phal. B. M., X, 702, lists non. descr., quoting p. 126 of Grote, 1895; lists preoc., *Therasia* Hutton, Moll., 1884; type designated *angustipennis*.

Conacontia Sm.

Type *Conacontia flavicosta* Sm.

1900, Smith, Trans. Am. Ent. Soc., XXVII, 49, 55, 57, 58, lists *angustipennis* and *flavicosta*.

1910, Hampson, Cat. Lep. Phal. B. M., X, 702, type designated *flavicosta*.

Therasea Grt. does not appear to be a homonym. Grote, 1895, sufficiently described the genus to render the name available. The name should be used instead of *Conacontia* Sm.

PARACRETONIA Dyar

Type *Paracretonia xithon* Dyar

1912, Dyar, Proc. Ent. Soc. Wash., XIV, 167, *xithon* sole species and therefore type.

Proboscis fully developed; palpi obliquely upturned, rather short, the second joint reaching the clypeal plate, the third moderate and reaching about the center of the frons; frons with a corneous prominence, irregular in outline, rather truncate, armed with strong, pointed granulations arranged to cover the cephalic surface of the prominence and also in a ring around its outer margin, a strong clypeal plate present; eyes large and rounded, naked, unciliated; antennæ of male (?); thorax clothed almost entirely with scales, only a slight metathoracic crest visible in specimens before the authors; tibiæ moderately fringed with hair, unarmed, the fore tibiæ somewhat shorter than normal; fore metatarsus armed with five long curved spines on outer side, otherwise the tarsal armature nearly normal; abdomen with a very slight dorsal crest on the basal segment only. Fore wing with the apex rounded, the termen slightly crenulate, otherwise evenly curved; veins 3, 5 from near angle of cell; 6 from slightly below upper angle; 9 from 10, anastomosing with 8 and 7 to form the areole (7, 8, and 9 stalked from areole) which is small; 11 from cell. Hind wing with veins 3, 4 from angle of cell; 5 strongly developed from close to the angle; 6, 7 from upper angle appearing very slightly stalked; 8 anastomosing with cell near base only.

As Doctor Dyar's original description is rather brief, we have redescribed the genus. Taxonomically the genus is very interesting. We have no knowledge of the duplication of its

peculiar frons. The hind wing venation is typical quadrifid rather than the intermediate type common to most of the "Erastrinae" (recte Acontiinae). The tarsal armature combined with the very strong clypeal plate and general habitus recalls the Heliothids; while other habitus characters are reminiscent of that group of Apatelinae surrounding *Oxycnemis*. This, and the following new genus, have many characters in common. Tentatively we place them in the "Erastrinae." *Erastria* is a Tentamen genus, simply stolen by Ochsenheimer after his acknowledged receipt and adoption of the work, from the Geometridae. Besides its use in the Tentamen, there is a decided possibility that *Erastria* was elsewhere published by Hubner in the Geometridae before being published by Ochsenheimer in the Phalaenidae. The type genus of Acontiinae is *Acontia* Ochs., with type *solaris* D. and S. designated by Duponchel, 1829. Hampson has already rejected Acontiinae as employed in the Cat. Lep. Phal. B. M., adopting in its place "Vestermannianae," derived from *Westermannia*. If this latter is the type genus of the subfamily, which we much doubt, the name would have to be Westermanninae to comply with the International Zoological Code.

Airamia B. and Benj., gen. nov.⁹

Type *Hoplotarache albiocula* B. and McD.

Proboscis very long; palpi obliquely upturned, rather short, the second joint reaching the clypeal plate, the third short, semi-porrect, reaching about the center of the frons; frons strongly rounded out, with a truncate corneous prominence with raised rim, the prominence nearly circular in outline, the circle ventrally flattened, with an additional very strong circular truncate corneous process from the ventral edge of the prominence, a strong clypeal plate present; eyes large and rounded, naked, unciliated; antennae of male simple, clothed with very short cilia only; thorax clothed almost entirely with scales, prothoracic crest obsolescent, practically obsolete, metathoracic crest strong; tibiae moderately fringed with hair, unarmed, the fore tibiae scarcely shorter than normal; fore metatarsus armed on outer side with a long curved claw nearly the length of the second tarsal joint, and three spines the distal two of which are stronger than normal; other tarsal spines, especially those on the distal part of their respective segments, tending to be longer than normal; abdomen practically

⁹ Stem of name, an anogram, being in recognition of the efforts of the wife of the junior author to assist with catalogue work, and in other ways.

uncrested, a few scales on the basal segment tending to be arranged as an obsolescent dorsal crest. Venation as in *Paracretonia* with the exception that the areole is considerably larger.

A. albiocula is, as yet, very rare in collections. The Barnes collection possesses the female type from Olancho, Inyo County, California, figured 1918, Contrib., pl. XVII, 12. To the best of our knowledge this remained a unique until a short time ago, when Mr. Van Duzee sent other specimens taken by Mr. J. O. Martin in Silver Canyon, White Mountains, Inyo County, California. We are greatly indebted to Mr. Van Duzee for a pair of this interesting species. We understand that a couple of other specimens are in the collection of the California Academy of Sciences, these including a specimen compared with the type.

A NEW SUBSPECIES OF EUPARTHENOS NUBILIS (LEPID., PHALÆNIDÆ, CATOCALINÆ)

BY WILLIAM BARNES AND F. H. BENJAMIN

Decatur, Illinois

Euparthenos nubilis osiris Barnes and Benjamin
race nov.

Similar to *E. nubilis apache* Poling, but much paler. The orange of the upper side of the hind wing replaced by luteous. Beneath also much paler and with the normal orange tones largely replaced by pale luteous.

Type locality: Jemez Springs, New Mexico.

Number and sexes of types: Holotype ♂, 24-31 July; allotype ♀, 16-23 July.

Notes—Types in Barnes collection, which also possesses a similar pair taken by Mr. Oslar at Rio Blanco Mountain, Colorado, July.



Barnes, William and Benjamin, Foster Hendrickson. 1926. "Generic synonymy (Lepid., Phalaenidae)." *The Pan-Pacific entomologist* 3, 64–74.

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