

A CHECK LIST OF THE ITHOMIIDÆ.
I. TRIBES TITHOREINI AND MELINÆINI

by RICHARD M. FOX

For the benefit of those working casually with the ithomines, the major classification is here summarized, along with the first installment of a check list of species and subspecies. Major classification of this family of butterflies was detailed in Part I of my monograph (1956), as was the tribe Tithoreini. Some emendations and additions have been recorded (1960a). The tribe Melinæini was discussed in Part II (1960b). For generic synonymy, see Fox 1940 and d'Almeida 1942; the presentation of the ithomines in "Seitz" by HAENSCH (1909) is replete with blunders in usage of generic names, in assignment of species to genera and in specific identification.

FAMILY ITHOMIIDÆ REUTER

These insects are not especially close to the Danaidæ, but show many morphologic affinities with the primitive Satyridæ and to the main stem of the Nymphalidæ. There are two subfamilies.

SUBFAMILY TELLERVINÆ FRUHSTORFER

The sole genus, *Tellervo* Kirby, is found in the insular tropical belt from Cape York, Australia, north through New Guinea, and from Celebes to the Solomon group. All material examined belongs to the strongly polytypic *T. zoilus*.

SUBFAMILY ITHOMIINÆ KIRBY

The many species all are Neotropic. Males may be recognized at once by the presence of the "hair pencil", a tuft of long scales placed longitudinally along and over the radius of the hind wing. The many genera fall into eight series, designated as tribes.

- (1) Tribe TITHOREINI Fox, 1940, comprising the genera *Roswellia*, *Athesis*, *Patricia*, *Eutresis*, *Olyras*, *Athyrtis*, *Tithorea* and *Elzunia*.
- (2) Tribe MELINÆINI Clark, 1948, with the single genus *Melinæa*.
- (3) Tribe MECHANITINI Fox, 1956, including *Xanthocleis*, *Mechanitis*, *Sais* and *Scada*.

(4) Tribe NAPEOGENINI Fox, 1956, comprising *Hyaliris*, *Hypothyris*, *Rhodussa*, *Napeogenes* and *Garsauritis*.

(5) Tribe ITHOMIINI Zerny & Baier, 1936, with *Ithomia*, *Pagyris*, *Miraleria* and *Placidula*.

(6) Tribe OLERIINI Fox, 1940, including *Hyposcada*, *Oleria*, *Æria* and a manuscript genus (Fox & Forbes).

(7) Tribe DIRCENNINI d'Almeida, 1941, comprising *Callithomia*, *Dircenna*, *Velamysta*, *Ceratinia*, *Hyalenna*, *Episcada* and *Pteronymia*.

(8) Tribe GODYRIDINI d'Almeida, 1941 (= *Thyridini* d'Almeida, 1941), with *Thyridia*, *Epityches*, *Godyris*, *Dygoris*, *Pseudoscada*, *Hymenitis* (or *Greta*), *Hypoleria*, *McClungia*, *Hypomenitis*, *Veladyris* and *Heterosais*.

The tribes are listed above in general phylogenetic sequence, and the same is true of the sequence of genera within each tribe. A linear presentation is not the best way to illustrate phylogeny, as we all know. In any event, this is the sequence in which I propose treating the family in subsequent parts of the monograph.

In the following list, absolute synonyms are not especially marked, but biological synonyms such as aberrants, populational variants are indicated as "ab."

TRIBE TITHOREINI FOX

1. Genus *Roswellia* Fox, 1948.
 - 1.1a *Roswellia acrisione acrisione* (Hewitson), 1869. Eastern Ecuador and northernmost Peru.
 - 1.1b *Roswellia acrisione deflavata* (Niepelt), 1928. Rio Caqueta in Amazonian Colombia.
2. Genus *Athesis* Doubleday, 1847.
 - 2.1a *Athesis clearista clearista* Doubleday & Hewitson, 1847. Northern Venezuela.
 - 2.1b *Athesis clearista colombiensis* Kaye, 1918. (= *bassleri* Fox, 1941.) Colombia.
 - 2.1c *Athesis clearista vitrala* Kaye, 1918. Eastern Ecuador into Northern Peru.
3. Genus *Eutresis* Doubleday, 1847.
 - 3.1 *Eutresis dilucida* Staudinger, 1885. (= *pethoë* Gillott, 1925.) High tropical forests in Costa Rica.
 - 3.2a *Eutresis hypereia theope* Godman & Salvin, 1877. Costa Rica.

- 3.2b *Eutresis hypereia hypereia* Doubleday & Hewitson, 1852. Venezuela and Amazonian Colombia.
- 3.2c *Eutresis hypereia hyspa* Godman & Salvin, 1879. (= *antioquiensis* Staudinger, 1885.) Rio Cauca valley of Colombia and western Ecuador.
- 3.2d *Eutresis hypereia banosana* Fox, 1956. Eastern Ecuador and upper Rio Putumayo in Colombia.
- 3.2e *Eutresis hypereia imitatrix* Staudinger, 1876. Northern Bolivia to central and eastern Peru.
- 4. Genus *Patricia* Fox, 1940.
 - 4.1a *Patricia deryllidas deryllidas* (Hewitson), 1877. Eastern Ecuador and northernmost Peru.
 - 4.1b *Patricia deryllidas hazelea* Fox, 1956. Eastern Ecuador.
 - 4.2 *Patricia oligyrtis* (Hewitson), 1877. Eastern Ecuador into northernmost Peru.
 - 4.3a *Patricia demylus demylus* (Godman & Salvin), 1879. (= *hewitsonii* Srnka, 1885.) Eastern Ecuador.
 - 4.3b *Patricia demylus gemellus* Fox, 1960. Bolivia.
- 5. Genus *Olyras* Doubleday, 1847.
 - 5.1a *Olyras crathis staudingeri* Godman & Salvin, 1897. Costa Rica.
 - 5.1b *Olyras crathis montagui* Butler, 1870. Rio Putumayo south through eastern Ecuador into northern Peru.
 - 5.1c *Olyras crathis crathis* Doubleday & Hewitson, 1847. Northern Venezuela.
 - 5.1d *Olyras crathis sticheli* Haensch, 1905. Rio Ucayali, Peru.
 - 5.1e *Olyras crathis weeksi* Fox, 1956. Ecuador, probably western.
 - 5.2 *Olyras theon* Bates, 1866. Mexico, Guatemala, Honduras.
 - 5.3a *Olyras insignis insignis* Salvin, 1869. Costa Rica and Panama.
 - 5.3b *Olyras insignis præstans* Godman & Salvin, 1897. Amazonian Colombia.
 - 5.3c *Olyras insignis translucens* Hewitson, 1872. Western Ecuador.
- 6. Genus *Athyrtis* Felder & Felder, 1862.
 - 6.1a *Athyrtis mechanitis mechanitis* Felder & Felder, 1862. (= *distincta* Haensch, 1905, ab.) Amazonian Colombia, higher altitudes.
 - 6.1b *Athyrtis mechanitis oberthuri* Srnka, 1885. (= *similis* Tessimann, 1928, ab.) Rio Pachitea, in east central Peru.
 - 6.1c *Athyrtis mechanitis salvini* Srnka, 1884. (= *amanga* Haensch, 1909, ab.) Bolivia, Peru and the Rio Jurua valley of Brazil.

7. Genus *Tithorea* Doubleday, 1847. (= *Hirsutis* Haensch, 1909.)
- 7.1a *Tithorea tarricina duenna* Bates, 1864. Mexico, Guatemala, Honduras.
- 7.1b *Tithorea tarricina pinthias* Godman & Salvin, 1878. (= *monosticta* Godman & Salvin, 1897, ab.) Guatemala, Honduras, Costa Rica, Panama.
- 7.1c *Tithorea tarricina tarricina* Hewitson, 1857. (= *hecalesina* Felder & Felder, 1865, ab. = *parola* Godman & Salvin, 1898, ab., = *obscurata* Haensch, 1909, ab.) Colombia.
- 7.1d *Tithorea tarricina bonita* Haensch, 1903. (= *macasica* Niepelt, 1915, ab.) Eastern Ecuador to Department of San Martin, Peru.
- 7.1e *Tithorea tarricina tagarma* Hewitson, 1874. (= *anachoreta* Thieme, 1902, ab.) Chanchamayo of Peru.
- 7.2a *Tithorea harmonia salvadoris* Staudinger, 1885. Mexico, San Salvador and Guatemala.
- 7.2b *Tithorea harmonia hippothous* Godman & Salvin, 1879. Honduras.
- 7.2c *Tithorea harmonia helicaon* Godman & Salvin, 1879. Costa Rica.
- 7.2d *Tithorea harmonia irene* (Drury), 1782. (= *umbratilis* Bates, 1866.) Panama.
- 7.2e *Tithorea harmonia furia* Staudinger, 1884. Venezuela and northern Colombia.
- 7.2f *Tithorea harmonia furina* Godman & Salvin, 1898. (= *flacilla* Godman & Salvin, 1898, ab.) Rio Putumayo north through central and southern Colombia and along the Cordillera Merida of Venezuela.
- 7.2g *Tithorea harmonia deltana* Fox, 1956. Orinoca delta, Venezuela.
- 7.2h *Tithorea harmonia megara* (Latreille), 1819. (= *flavescens* Kirby, 1887.) Trinidad.
- 7.2i *Tithorea harmonia harmonia* (Cramer), 1777. (? = *mopsa* Linné, 1767, = *mopsa* Fabricius, 1781, ? not Linné.) Venezuelan Guiana, British, French and Dutch Guiana, Para west in the Amazon and its northerly tributaries.
- 7.2j *Tithorea harmonia cuparina* Bates, 1862. Rio Cupari, Brazil.
- 7.2k *Tithorea harmonia manabiana* Fox, 1956. Western Ecuador.
- 7.2l *Tithorea harmonia hermius* Godman & Salvin, 1898. (= *hermina* Haensch, 1903, ab., = *napona* Haensch, 1909, ab.) Eastern Ecuador and southwestern Peru.

- 7.2m *Tithorea harmonia martina* Fox, 1956. Department of San Martin, Peru.
- 7.2n *Tithorea harmonia egaensis* Butler, 1873. Middle Rio Marañon and Rio Huallaga, Peru.
- 7.2o *Tithorea harmonia neitha* Hopffer, 1874. (= *melanina* Haensch, 1905, ab., = *brunnea* Haensch, 1905, ab.) Chanchamayo region of Peru, Rio Jurua in Brazil.
- 7.2p *Tithorea harmonia pseudonyma* Staudinger, 1894. (= *assimilis* Haensch, 1905, ab., = *lateflava* Haensch, 1909, ab., = *mira* Neustetter, 1929, ab.) Southern Peru, northern and eastern Bolivia, Mato Grosso of Brazil, Paraguayan Chaco.
- 7.2q *Tithorea harmonia pseudethra* Butler, 1873. Southeastern Paraguay, Minas Gerais and Sao Paulo, Brazil.
- 7.2r *Tithorea harmonia caissara* Zikan, 1941. Sierra da Contareira, Brazil.
8. Genus *Elzunia* Bryk, 1937.
- 8.1a *Elzunia humboldtii humboldtii* (Latreille), 1811. (= *flavomaculata* Staudinger, 1885, ab.) Northern and central Colombia.
- 8.1b *Elzunia humboldtii albomaculata* (Haensch), 1903. (= *coxei* Fox, 1941.) Eastern Ecuador.
- 8.1c *Elzunia humboldtii judsoni* Fox, 1956. Southern Colombia.
- 8.2a *Elzunia cassandrina cassandrina* (Srnka), 1885. Southern Colombia through eastern Ecuador into northern Peru.
- 8.2b *Elzunia cassandrina microguttata* (Röber). 1927. Northern Colombia.
- 8.3a *Elzunia bonplandii bonplandii* (Guérin), 1841. Eastern cordillaras of Colombia.
- 8.3b *Elzunia bonplandii descandollesi* (Staudinger), 1885. (= *latreillei* Staudinger, 1885, ab.) Cauca valley, Colombia.
- 8.4 *Elzunia tamasea* (Hewitson), 1873. (= *lugubris* Haensch, 1909, ab.)
- 8.5 *Elzunia atahualpa* Fox, 1956. "Northeastern Peru; Bassler", probably Rio Putumayo, Colombia.
- 8.6a *Elzunia regalis regalis* (Stichel), 1903. (= *faba* Weymer, 1909.) Colombia. "Muzo" and "Bogota" are the only localities on specimens seen and probably represent the places where the material was purchased; the insects themselves may have come from anywhere within several hundreds of miles of these towns.

- 8.6b *Elzunia regalis joiceyi* (Kaye), 1918. Cauca valley, Colombia.
 8.7 *Elzunia pavonii* (Butler), 1873. Western Ecuador. The locality on the holotype, "Panama", is an error.

TRIBE MELINAEINI FOX

9. Genus *Melinæa* Hübner, 1816.
- 9.0 *Melinæa mneme* (Johansson), 1763. (= *mediatrix* Weymer, 1890, = *mauensis* Weymer, 1890, ab.) Venezuelan, British, Dutch and French Guiana, Para in Brazil and the Amazon valley as far up as Teffé, including most of the principal tributaries.
- 9.1a *Melinæa lilis flavicans* Hoffmann, 1924. Guerrero and Vera Cruz in Mexico.
- 9.1b *Melinæa lilis imitata* Bates, 1864. (= *tachypetis* Felder & Felder, 1865, = *telchinia* Boisduval, 1870.) Isthmus of Tuantepec, Mexico, to Costa Rica.
- 9.1c *Melinæa lilis parallelis* Butler, 1873. Panama and north-western Colombia.
- 9.1d *Melinæa lilis ezra* Fox, 1939. Santa Marta mountains, Colombia.
- 9.1e *Melinæa lilis lilis* Doubleday & Hewitson, 1847. Coastal hills and mountains of eastern Venezuela.
- 9.1f *Melinæa lilis sola* Kaye, 1925. (= *lateapicalis* Hall, 1935, ab., = *limitata* Hall, 1935.) Trinidad and adjacent Venezuelan coast.
- 9.1g *Melinæa lilis messatis* (Hewitson), 1855. Caribbean and Amazon drainage of central and southern Colombia.
- 9.1h *Melinæa lilis erica* Bargmann, 1929. Pacific drainage of Colombia.
- 9.1i *Melinæa lilis dodona* Hopffer, 1874. Bolivia.
- 9.2 *Melinæa ethra* (Latreille), 1820. Southeastern Brazil.
- 9.3 *Melinæa scylax* Salvin, 1871. (= *ribbei* Weymer, 1875.) Guatemala through Panama into the lower Cauca valley in Colombia.
- 9.4a *Melinæa satevis satevis* (Doubleday & Hewitson), 1847. Bolivia.
- 9.4b *Melinæa satevis crameri* Godman & Salvin, 1898. (= *mneme*, Cramer, 1779, not Johansson, = *incisa* Kaye, 1925, ab.) British and Dutch Guiana.
- 9.4c *Melinæa satevis aurantia* Forbes, 1942. Monagas, Venezuela.

- 9.5a *Melinæa idæ idæ* (Felder & Felder), 1862. Panama to Peru, in and east of the Andes.
- 9.5b *Melinæa idæ vespertina* Fox, 1945. Western Ecuador.
- 9.6a *Melinæa egina egina* (Cramer), 1777. (= *ludivica* Cramer, 1779.) Venezuelan Guiana, British, Dutch and French Guiana, Para and up the Amazon valley into eastern Colombia and eastern Peru.
- 9.6b *Melinæa egina paraiya* Reakirt, 1866. Southeastern Brazil.
- 9.6c *Melinæa egina agricola* Hall, 1936. "Ega", the locality on the holotype is doubtful; probably from much further up the valley of the Amazon or its tributaries.
- 9.7 *Melinæa mnemopsis* Berg, 1897. (= *boliviana* Weymer, 1907.) Bolivia.
- 9.8a *Melinæa mælus madeira* Moulton, 1909. Rio Madeira, Brazil.
- 9.8b *Melinæa mælus purusana* Riley, 1919. (= *purusana* Aurivillius, 1929, abs. syn. and homon., = *romani* Bryk, 1937.) Lower and Middle Rio Purus, Brazil.
- 9.8c *Melinæa mælus brunnea* Riley, 1919. Upper Rio Purus, Brazil.
- 9.8d *Melinæa mælus mayi* d'Almeida, 1951. Upper Rio Juruá, Brazil.
- 9.8e *Melinæa mælus cydon* Godman & Salvin, 1879. (= *pardalis*, Druce, 1876, not Bates.) Amazon drainage in Colombia, Peru and northern Bolivia, and some of adjacent Brazil.
- 9.8f *Melinæa mælus mælus* (Hewitson), 1860. (= *pardalis* Bates, 1862.) Rio Putumayo in Colombia and Brazil, and along the Amazon nearly to the mouth.
- 9.9a *Melinæa mæonis borealis* Hall, 1935. Merida range, Venezuela.
- 9.9b *Melinæa mæonis mæonis* Hewitson, 1869. (= *strigilis* Weymer, 1890, = *æquatoriensis* d'Almeida, 1951.) Rio Ortogasa, Rio Caqueta in Amazonian Colombia, to eastern Ecuador.
- 9.9c *Melinæa mæonis zamora* Haensch, 1909. Rio Ucayali, Peru.
- 9.10a *Melinæa marsæus marsæus* (Hewitson), 1860. Obidos to Teffé, Brazil.
- 9.10b *Melinæa marsæus rileyi* Fox, 1942. (= *lucifer* Staudinger, 1885, not Bates.) Lower Rio Putumayo, northeastern Peru and on the Amazon as far as Sao Paulo de Olivença.
- 9.10c *Melinæa marsæus macaria* Godman & Salvin, 1898. Rio Caqueta and upper Rio Putumayo, Amazonian Colombia.

- 9.10d *Melinæa marsæus clara* Rosenberg & Talbot, 1914. Southern Peru to San Antonio on the Rio Madeira in Brazil.
- 9.11a *Melinæa phasiana manga* Haensch, 1909. Teffé, Brazil.
- 9.11b *Melinæa phasiana phasiana* Butler, 1870. (= *divisa* Staudinger, 1885, = *acræna* d'Almeida, 1951.) Rio Ucayali, Urubamba in Peru and Rio Jurua in Brazil.
- 9.12a *Melinæa mænius mænius* (Hewitson), 1860. Obidos to Teffé on the Amazon.
- 9.12b *Melinæa mænius hicetas* Godman & Salvin, 1879. Rio Napo in Ecuador to the Marañon and Ucayali in Peru.
- 9.12c *Melinæa mænius cocana* Haensch, 1903. Rio Caqueta in Colombia to northeastern Peru. Possibly only an aberration.
- 9.12d *Melinæa mænius tarapotensis* Haensch, 1909. Tarapoto and Huayabamba, Peru.
- 9.12e *Melinæa mænius juruænsis* d'Almeida, 1943. Rio Jurua, Brazil.
- 9.12f *Melinæa mænius pothete* d'Almeida, 1945. Matto Grosso, Brazil.
- 9.13a *Melinæa menophilus menophilus* (Hewitson), 1855. (= *ishka* Butler, 1870, = *flavosignata* Staudinger, 1885, ab., = *hicetas*, Staudinger, 1885, not Godman & Salvin, = *egesta* Godman & Salvin, 1898, ab.) Amazonian Colombia, some of eastern Ecuador, northern and central Peru.
- 9.13b *Melinæa menophilus zaneka* Butler, 1870. (= *dora* Streker, 1876, = *maculosa* Haensch, 1903, ab., = *discurrens* Haensch, 1909, ab.) Eastern Ecuador in Napo-Pastaza and Santiago-Zamora areas, where *M. m. menophilus* is not found.
- 9.13c *Melinæa menophilus orestes* Salvin, 1871. (= *chincha* Druce, 1876. = *magnifica* Haensch, 1905, ab.) Central Peru, Rio Jurua, upper Rio Madeira and upper Rio Purus in Brazil.
- 9.14a *Melinæa mothone messenina* Felder & Felder, 1865. Upper Rio Negro in Brazil, perhaps into Amazonian Colombia.
- 9.14b *Melinæa mothone mothone* (Hewitson), 1869. (= *cydippe* Salvin, 1871.) Rio Putumayo in Colombia through eastern Ecuador and central Peru to Bolivia.
- 9.15a *Melinæa comma isocomma* Forbes, 1948. Upper Rio Negro, Rio Caqueta in Colombia.
- 9.15b *Melinæa comma simulator* Fox, 1960. Napo-Pastaza district, eastern Ecuador.
- 9.15c *Melinæa comma comma* Forbes, 1927. Chanchamayo, Peru.
- 9.16a *Melinæa thera thera* Felder & Felder, 1865. Itabapoana, Rio, Brazil.

- 9.16b *Melinæa thera eratothenes* Hall, 1935. French Guiana.
 9.17a *Melinæa lucifer lucifer* Bates, 1862. Sao Paulo de Olivença, Brazil.
 9.17b *Melinæa lucifer lutzi* Fox, 1942. Upper Rio Marañon, Peru.
 9.17c *Melinæa lucifer eryx* d'Almeida, 1951. Upper Rio Jurua, Brazil.

References Cited

- d'Almeida, R. F., 1942. Alguns tipos de generos da ordem Lepidoptera. 1a nota: Rhopalocera, fam. Mechanitididæ. *Papeis avulsos, Dept. Zool., São Paulo, Brasil* 2: 179-196.
 Fox, R. M., 1940. A generic review of the Ithomiinæ. *Trans. American ent. soc.* 66: 161-207, 4 pls.
, 1956. A monograph of the Ithomiidæ (Lepidoptera), Part I. *Bull. American mus. nat. hist.* 111: 1-76, 75 text fig., 9 pls. [With keys and bibliography.]
, 1960a. A postscript on the ithomine tribe Tithoreini. *Journ. New York ent. soc.* 68: 152-156, 1 fig. [Reorganizes synonymy of *Patricia*, gives a revised key; adds one subspecies of *Tithorea harmonia*.]
, 1960b. A monograph of the Ithomiidæ (Lepidoptera), Part II. *Trans. American ent. soc.* 86: 109-171, 28 text figs., 4 pls. [With keys and bibliography.]
 Haensch, R., 1909. Familie: Danaidæ. In A. Seitz, *Grossschmetterlinge der Erde*, Stuttgart. Vol. 5: 113-171, pls. 31-41.

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The stylized Lepidoptera on the covers of volumes 14 and 15 were drawn by WILLIAM VARS, of the Department of Zoology of Yale University.