

An annotated checklist of Ecuadorian Pieridae

(Lepidoptera, Pieridae)

by

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Abstract: An account of 134 Pierid taxa occurring in Ecuador is presented. Data are from 12 years field experience in the country and from Museums specimens. Some new species records are added to Ecuadorian fauna and it is presumed that at least a 10% more of new records will be obtained in the near future.

Ecuadorian Pieridae, although in the past many taxa were described from this country, are far from being thoroughly known.

One of the most prolific author was HEWITSON (1852–1877; 1869–1870; 1870; 1877) who described many species from the collections made by BUCKLEY and SIMONS. Some of the "Ecuador" citations by HEWITSON are pointed out more precisely by the same author (HEWITSON, 1870) in his index to the list of species collected by BUCKLEY in remote areas uneasily reached even to-day (VANE-WRIGHT, 1991).

An important contribution on Lepidoptera of Ecuador is given by DOGGIN (1887–1896) who described and listed many new species collected by Gaujin in the Loja area, where typical amazonian and páramo species are included. GODMAN & SALVIN (1891) listed a few species of Pieridae collected by WHYMPER (1892) mainly in the highlands, and WEYMER (1890) reported on the trip of STÜBEL and described some species. The paper by CAMPOS (1927), now largely out of date, often gives ambiguous data for many species.

For Pieridae the subfamily arrangement of KLOTS (1933) and for Dismorphiinae the revisions of LAMAS (1979) and LLORENTE (1984) are mainly followed.

Amongst Pierinae, some species especially in the genera *Ascia* and *Phoebis* are migrants. Other species in the genera *Ascia*, *Melete* and *Perrhybris* are experimentally unpalatable to birds (CHAI, 1986). Most of the females of *Perrhybris* are undoubtedly aposematic and probably in a muellerian ring with Ithomiids, Heliconiids etc. The many species in the intriguing genus *Catantix* were extensively worked out (LATHY & ROSENBERG, 1912; RÖBER, 1908–1910, 1924; BROWN, 1939; BROWN & GABRIEL, 1939; BROWN & GOODSON, 1940; BROWN et al., 1940; REISSINGER, 1972; ROBERT, 1987) but unfortunately very few attention was paid to preimaginal stages and bionomics. This group of butterflies shows a striking convergence in variability, colouration, and behaviour, also of the larvae, with the indo-australian genus *Delias* and the afrotropical *Mylothris*.

Leptophobia species, a group of mainly montane taxa, show a great deal of variability in Ecuador, and the true biological status of some taxa is still obscure. The species of the genus *Eurema* share a variety of habitats, some are migratory and polyphenic.

Under each major taxon, within square brackets, is pointed out the reference to the papers which are mainly followed. Each species is cited under the actual combination, authorship, date, type-locality, which is that reported in the original description or after selection of the

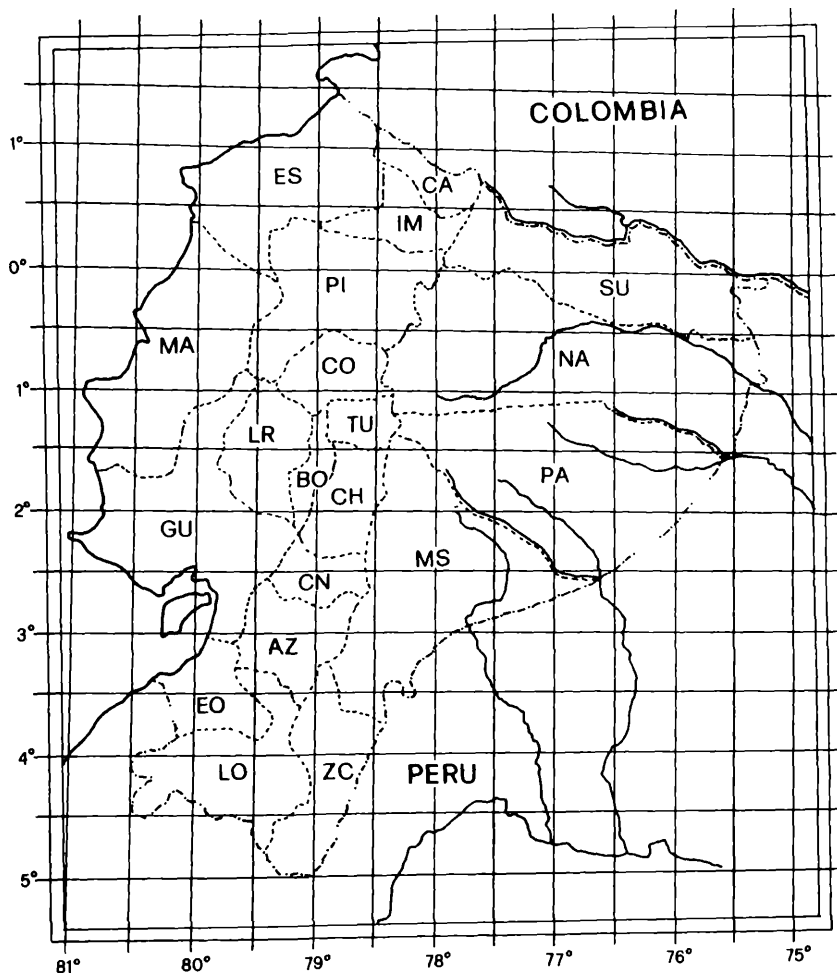


Fig. 1 Map of Ecuador with provinces.

lectotype. Informations on type (s) or data extracted from various sources are also given. Synonymy is cited especially for nominal taxa whose type locality is Ecuador. The distribution of the species is arranged mainly with the political provinces of Ecuador from north to south.

For more details on ecuadorian localities, as well as geography and ecology see ACOSTA-SOLIS (1977), BROWN (1941), BROWN (1979), PAYNTER & TRAYLOR (1977), RACHELI & PARISET (1992).

Where appropriate, brief notes on synonymy, typical specimens, distribution, ecological notes, and abundance of single species are given. However, many type localities are wrong or vague, such as "Canelos", "Coca", "Amazons", for species which are now known to have their range only in altitudes. For completeness, in the text are reported also the localities found at the BMNH, although mostly incorrect.

The commonness and rarity of the various species as pointed out in the text depend on the personal observations over the years. It is obvious that seasonality and collecting in climatically unbalanced years can deeply influence the abundance of species and individuals.

Species or subspecies which are reported from nearby areas are also included in the list for future research.

This is the second contribution to the knowledge of Papilionoidea of Ecuador. See for more details the Papilionidae part (RACHELI & PARISET, 1992).

Abbreviations

Carchi (CA); Imbabura (IM); Esmeraldas (ES); Sucumbios (SU); Pichincha (PI); Napo (NA); Cotopaxi (CO); Manabi (MA); Los Rios (LR); Bolivar (BO); Chimborazo (CH); Tungurahua (TU); Pastaza (PA); Guayas (GU); Cañar (CN); Morona Santiago (MS); Azuay (AZ); El Oro (EO); Loja (LO); Zamora Chinchipe (ZC).

FW(s) = Forewing(s); HW(s) = Hindwing(s); HT = Holotype; ST(s) = Syntype(s); LT = Lectotype; PT(s) = Paratype(s); TL = Type locality; ISS = Incorrect subsequent spelling; ssp. = subspecies.

BMNH = National Museum of Natural History, London.

ZMB = Zoologisches Museum der Humboldt Universität, Berlin.

MNHW = Naturhistorisches Museum, Wien

Systematic list

Pieridae

Dismorphiinae

[LAMAS, 1979; LLORENTE, 1984]

Pseudopieris nehemia BOISDUVAL, 1836. TL S. Brasil.

Remarks: A widespread but uncommon species apparently only from the east whose populations are currently treated as ssp. *aequatorialis* FELDER & FELDER, 1861 (TL Ecuador) which some author treats as a full species.

Distribution: Misahualli (NA); Rio Topo (TU); La Julita (TU); Baños (TU); Sta Inez (TU); Canelos (NA); El Rosario (TU); Alpayacu (PA); Gualaquiza (MS); Loja (LO); Zamora (ZC).

Pseudopieris viridula FELDER & FELDER, 1861. TL Bogotà.

Remarks: An uncommon species apparently restricted mainly to south eastern areas.

Distribution: La Julita (TU); Partidero (PA); 30 km S of Mendez (MS); Loja (LO); El Monje (LO); Zamora (ZC).

Enantia melite JOHANSSON, 1763. TL Amer. mer.

Remarks: A very variable and uncommon species in premontane forests. The populations from Pastaza valley are pinkish with faint black designs. Yellow populations occur on the east side similar to *E. m. citrinella*. According to LLORENTE (1984) the *jethys*-complex may represent more than one species and *E. citrinella* might be a separate species. Populations with small individuals, pinkish with heavy black designs occur in the west from Pichincha to El Oro.

Distribution: rio Taguaza (PI); Santo Domingo (PI); Misahualli (NA); Sta Inez (TU); Machay (TU). La Jullita (TU); Rio Margajitas (TU); Las Estancias 1400 m (TU); Topo (TU); Chimbo (CH); Balzapamba (BO); Zamora (ZC); Quebrada Matadero, 1000 m, road Macarà-Catacocha, ca 20 km N Macarà (LO); Quebrada La Chorrera 1000–1200 m, road Zaruma-San Pedro (LO).

Enantia licinia CRAMER, [1777]. TL Surinam.

Remarks: A common species, the ssp. *galanthis* FELDER & FELDER, 1861 (TL Not stated [?upper Amazonas]) occurs in Oriente. Perhaps the western populations, which have smaller size and a white dot on the black apical patch of the FWs, constitute a new subspecies.

Distribution: Paramba (IM); Pisotanti (PI); rio La Chima (BO); Chimbo (CH); Napo (NA); Archidona (NA); Coca (NA); Pununo (NA); Rio Llandia (NA); Rio Latas (NA); Las Estancias 1400 m (TU); Misahualli (NA); Rotuno (TU); Sarayacu (PA); Mendez 30 km S, 700–900m (MS); Zamora (ZC); Loja (LO); Santa Ana, San Pedro 1130 m (LO).

Lieinix nemesis LATREILLE, [1813]. TL "Amerique centrale" [Bolivia].

Remarks: Uncommon but widespread in Oriente, usually above 1000 m. Rare in the western side. The populations are referable to the nominate subspecies.

Distribution: Baños (TU); Rio Cristal, 2000 m (TU); Machay (TU); Nanegalito (PI) 1600 m; El Reventador, 1750 m (SU); Rio Sardinas, 1500 m (NA); Jorge (CH); Rio Verde (TU); Topo (TU); La Victoria (PA); Zamora (ZC).

Patia orise BOISDUVAL, 1836. TL Cayenne dans l'Oyapock.

Remarks: A very uncommon amazonian species. The populations of Ecuador can be referred to ssp. *denigrata* ROSENBERG & Talbot, 1914 (TL Upper Amazon, Peru, Bolivia, Ecuador).

Distribution: Tena (NA).

Patia cordillera FELDER & FELDER, 1862. TL "Nova Granada Bogotà ... Muzo"

Remarks: This is the western vicariant of *P. orise*, and it is known only from HEWITSON's specimens. Apparently it was not collected anymore, except one female specimen in coll. Miguel Moreno, Quito. The description of ssp. *larunda* HEWITSON, 1869 (TL Pisagua [Los Rios, Ecuador]) matches with the specimens of *P. cordillera* as figured in D'ABRERA (1981).

Patia rhetes HEWITSON, 1857 TL Columbia.

Remarks: A very rare species known only from the east; not recorded recently. Ecuadorian populations known as ssp. *hewitsoni* KIRBY, 1881 (TL Ecuador, Chiriquinda [Chiquinda]).

Dismorphia laja CRAMER, [1779]. TL Surinam.

Remarks: This amazonian species has been reported from Ecuador by HEWITSON (1869) but perhaps confused with the very similar *D. tapajona*. Not recorded in recent times.

Dismorphia amphiona CRAMER, [1779]. TL Suriname.

= *amphione* auctorum.

Remarks: A rather common species especially in the west at altitudes between 700–1500 m. These populations are currently treated as ssp. *discrepans* BUTLER, 1896 (TL "New Granada") but they differ for the extension of the orange and yellow spots and for the reduction of the yellow apical spots on the FWs, totally absent in the females. It is a very scarce species on the east side, populations superficially similar to ssp. *rhomboidea* BUTLER, 1896. (LT male, Nauta [BAUMANN & REISSINGER, 1969]). Distribution: Paramba (IM); Esmeraldas (ES); Tonchigue (ES); Alluriquin (PI); Santo Domingo (PI); Pisotanti (PI); Quevedo (LR); Sta Ana Maria (LR); Hda Ave Maria (LR); rio La Chima (BO); rio Las Juntas (BO); Palmar (GU); Balzapamba (CH); Rio Latas (NA); Cururai (NA); Canelos (PA); Macas (MS); Chimos (?); Arenillas (EO); Zaruma (EO).

Dismorphia zaela HEWITSON, 1858. TL New Granada.

= *abilene* HEWITSON, 1870. TL Ecuador. Nom. nov. pro *Leptalis teresa* female.

Remarks: Perhaps conspecific with the mesoamerican *D. eunoe*, although LAMAS (1979) separates the two species. It is very uncommon on both sides of the Andes above 1000 m. The nominate subspecies occurs in the west but one specimen from Las Pampas is referable to ssp. *ines* RÖBER, 1909 (TL "Ecuador" [Tungurahua, Santa Inès [see LAMAS, 1993]) to which eastern populations may be referred.

Distribution: Las Pampas (PI); Baeza 2100 m (NA); Sta Inez (TU); rio Margajitas 1400 m (TU); Rio Zuñag 1300 m (TU); Rio Tigre 1200 m (TU); Jorge (CH); Balzapamba (BO); Macas (Mc); Zamora (ZC).

Dismorphia crisia DRURY, [1782]. TL "Brazil"

Remarks: It is very rare on both slopes, although recent specimens have been found in the east, where it occurs in differentiated populations. Reported perhaps as *critomedia* HBN. by DOGNIN (1891) for Loja.

Distribution: Rio Margajitas 1200 m (TU); Cumanda 800 m (MS); Santa Clara (PA) 1000 m; Mera 1000 m (PA); Topo 1200 m (TU); Chimbo (CH); Macará-Catacocha 1100 m (LO); Zamora (ZC).

Dismorphia lewyi LUCAS, 1852. TL Colombia, Bogotá.

Remarks: A rather common species in Oriente, the females are variable for the amount of black on the HWs. The populations are usually referred to as ssp. *leonora* HEWITSON 1869 (TL Ecuador [Rio Topo]). Apparently it has not been collected anymore on the western side.

Dismorphia macasana STRAND, 1912 (TL Macas HT female) is a female morph.

Distribution: "Balzapamba" (CH); Chaco, Rio Oyacachi 1000 m (SU); Rio Quijos (SU); Sarayacu (NA); Santa Barbara (NA); Rio Oritoyacu 2200 m (NA); Canelos (PA); Las Estancias 1300 m (PA) El Rosario (TU); Rio Tigre (TU); Machay (TU); Rio Blanco 1700 m (TU); Rio Topo 1200 m (TU); Macas (MS).

Dismorphia lycosura HEWITSON, 1860. TL Peru.

Remarks: A rare species, no recent ecuadorian specimen is known. The ssp. *ecuadorensis* NIEPELT, 1914 (TL "Orient Ecuador") is very similar to the nominate subspecies.

At rio Huambo, Amazonas, north Peru, the specimens are slightly darker and the females are yellow spotted on the underside of the HWs. This population can be referred to *schausii* DOGNIN, 1891 (TL "Environs Loja") which is considered a species of its own by BAUMANN & REISSINGER (1969).

Distribution: Zamora (ZC); Loja (LO).

Dismorphia niepelti WEYMER, 1909. TL [LT female: Ecuador. Ob. Pastazza in coll. BMNH (BAUMANN & REISSINGER, 1969)].

Remarks: According to ROBERT (comm. pers.) it is a good species but only a few specimens are known from Ecuador, Rio Llandia and Peru, Chanchamayo. The species is characterised by yellow spots at the base of the HWs and it could be only a yellow mutation. The specimens figured in D'ABRERA (1981) are referable to the ssp. *stammi* BAUMANN & REISSINGER (1969) from Peru.

Distribution: rio Llandia (NA).

Dismorphia lygdamis HEWITSON, 1869. TL Ecuador [HT] [St Inez].

Remarks: A scarce and localized species, apparently reported only from the upper Pastaza valley.

Distribution: El Rosario (TU); Sta Inez (TU); Rio Zuñag 1300 m (TU).

Dismorphia lua HEWITSON, 1869. TL Ecuador, [Sarayacu].

Remarks: This is a very rare species inhabiting the cloud forests, although the type locality is from low altitudes. Few recent specimens have been collected in the Pastaza valley and in mountainous areas in Napo and Sucumbios. HEWITSON (1869) claimed this species should be related to *D. nemesis*, but it is superficially more similar to *D. medora*, and for the shape of the FWs to *D. laia*.

Distribution: El Reventador 1750 m (SU); Rio Jondachi 1500 m (NA); Topo (TU); Rio Zuñag (TU); Sta Inez (TU); La Jullita (TU); Canelos (PA); Rio Huamayacu 1200 m (PA); Zumba (ZC).

Dismorphia hyposticta FELDER & FELDER, 1861. TL Venezuela, Caracas; Nova Granada.

Remarks: A very rare species known only on a few specimens from eastern Ecuador. These populations are different from those occurring in northern neotropics and perhaps constitute a new subspecies.

Distribution: Machay (TU); Rio Blanco 1600 m (TU); Rio Quijos 1400 m (SU); Loja (LO); San Francesco (LO); Zamora (ZC).

Dismorphia mirandola HEWITSON 1876. TL Ecuador.

= *discoloria* WEYMER, 1890. TL Colombia [Colombia, Valle del Cauca, Villa Elvira, 1800 m (LT, LAMAS, 1993)].

= *discolora* D'ABRERA, 1981. ISS.

Remarks: This species is widespread in Colombia but not reported recently from Ecuador.

Dismorphia arcadia FELDER & FELDER, 1862. TL "Cordillerae Bogotanae"

Remarks: Uncommon on both slopes of the Cordillera, recent specimens collected in cloud forests between 2000–2400 m. The western populations with whitish maculation are currently known as ssp. *hippotas* HEWITSON, 1875 (TL Ecuador [?Granadillas (MS)]), but the whereabouts of the type-locality is uncertain. On the eastern side the yellow spotted *Dismorphia idonia* HEWITSON, 1869 (TL Ecuador [Rio Topo]; = *lucilla* BUTLER, 1899. TL Ecuador) was claimed by the author to be similar to *D. arcadia* but with the underside very different, i. e. "Anterior wing as above, except that it is pale grey-brown and has the apex ochreous-yellow. Posterior wing clouded ochreous-yellow with the band as above but very indistinct" This description matches with that of *D. arcadia*. Only the examination of the relevant types should settle the matter.

Distribution: Baños (TU); El Rosario (TU); Rio Pastaza (TU); Calupiña (CO); Rio Topo (TU); Cordillera Huacamayo 2000 m (NA); Rio Oritoyacu 2200 m (NA); Baeza (NA).

Dismorphia medorilla HEWITSON, 1877 TL Ecuador [Jima].

Remarks: A full species according to BAUMANN & REISSINGER (1969) occurring also in Peru and Bolivia. The FWs are similar to those of *D. medora*, while the HWs to those of *D. teresa*. No recent ecuadorian specimen is reported.

Dismorphia medora DOUBLEDAY, 1844. TL New Granada [LT male, LAMAS (1979)].

= *D. casta* KOLLAR, [1849]. TL Nova Granada.

Remarks: A rather common and widespread species found on both slopes of the Andes with different populations from those of Colombia.

Distribution: Tandapi (PI); Nanegalito (PI); Las Pampas (PI); Chigla 1900 m (TU); Rio Blanco 1600–2200 m (TU); Rio Topo (TU); San Francisco (TU); Angus = rio Angas (CN); Jorge (CH); Chimbo (CH); ?Rio Latas (NA); Zamora (ZC).

Dismorphia teresa HEWITSON, 1869. TL Ecuador [Rio Topo].

= *praxidice* HEWITSON, 1870. TL Granadillas.

Remarks: Uncommon in premontane and montane forests from 1000 to 2200 m.

Distribution: Chaco, Rio Oyacachi 1600 m (SU); Rio Oritoyacu 2200 m (NA); Machay (TU); Sta Inez (TU); Baños (TU); Sarayacu (PA); Granadillas (MS); Chiquinda (= Chiguinda) (MS); Zamora (ZC).

Dismorphia lelex HEWITSON, 1869. TL Rio Topo.

Remarks: A scarce species on both slopes of the Andes. Very similar to *D. zathoe*. Western populations similar to ssp. *werneri* HERING, 1926 (TL Colombia, S. Francisco-Mocoa) and it is figured in D'ABRERA (1981) as ssp. ?.

Distribution: Tandapi 1700 m (PI); Rio Malo 1200 m, Lago Agrio (SU). Chimbo (CH); Balzapamba (BO); Zamora (ZC).

Dismorphia zathoe HEWITSON, 1858. TL New Granada.

Remarks: An uncommon species apparently distributed in the west and south of the country only. The populations are referable to ssp. *othoe* HEWITSON, 1867 (TL New Granada).

Distribution: Paramba (IM); Tinalandia (PI); Balzapamba (BO); Chimbo (CH); Jorge (CH); Zaruma (EO).

Dismorphia lysis HEWITSON, 1869. TL Ecuador [Sta Ines].

Remarks: A rather common species found from 500 to 2200 m in Oriente.

Distribution: Cosanga 2000 m (NA); Oritoyacu; 2200 m (NA); rio Arajuno (NA); Hacienda Santa Lucia (TU); Rio Zuñag 1300 m (TU); La Julita 1200 m (TU); Sta Inez (TU); Topo (TU); Apayacu (PA); Sarayacu (PA); Rosario (MS); Zamora (ZC).

Dismorphia thermesia GODART, 1819. TL Brasil.

Remarks: A rare species, only a few specimens known from the east and south. This species occurs also in NE Peru (Rio Huambo) and it may represent a new subspecies. Reported also from Loja by DOGNIN (1891).

Distribution: Puyo (PA); Rio Margajitas 1800 m (TU); Granadillas (Gualaquiza) (MS); 30 km S Mendez (MS); Loja (LO); Zamora (ZC).

Dismorphia (Moschoneura) pinthaeus LINNAEUS, 1767. TL [Guiana].

Remarks: Uncommon on both slopes, with very differentiated populations. Those from the east can be treated as ssp. *ela* HEWITSON 1877 (TL Jima). Those from the west could represent a new subspecies.

Distribution: Monte Nuevo (PI); El Reventador (SU); Apuya (NA); Zamora (ZC).

Dismorphia (Moschoneura) ithomia HEWITSON 1867. TL "Ecuador"

Remarks: Uncommon, but probably more abundant at low altitudes; *theaphina* BUTLER, 1899 (TL Ecuador) is a morph.

Distribution: Nushiño (PA); Sarayacu (PA); Canelos (NA); Tzatzayacu 6 km NE 750 m (NA); Archidona (NA).

Dismorphia (Moschoneura) theucharila DOUBLEDAY, 1848. TL Venezuela.

= *theucarilla* auctorum

Remarks: An uncommon species distributed especially in the west as ssp. *avonia* HEWITSON, 1867 (TL "Quito" [= *leuconia* BUTLER, 1899. TL Ecuador; = *limonea* BUTLER, 1899. TL Ecuador; = *pallida* RÖBER, 1909 TL Paramba und Chimbo [LT Chimbo (LAMAS, 1993)]. A white morph was described as *ithomiella* RÖBER, 1909 (TL Balzapamba). Some females are very similar to *xanthone* RÖBER, 1924 (TL not stated), this name is currently applied for the western colombian populations.

In the east it is very uncommon and not unlike from ssp. *melanoe* BATES, 1861 (TL Upper Amazons, St. Paulo [de Olivença]; = *melanoides* RÖBER, 1909. TL Ecuador, Coca).

Distribution: Tonchigue (ES); rio Toachi (PI); Pisotanti (PI); Alluriquin (PI); Chimbo (CH); La Chima (BO); Balzapamba (BO); Zamora (ZC).

Pierinae

Hesperocharis marchalii GUÉRIN, 1844. TL Colombia.

Remarks: A locally common species in premontane forests. Populations from central Ecuador can be referable to ssp. *masonia* FRUHSTORFER, 1908 (TL Ecuador, Sta Inez Mirador; Sta Inez Rosario [Type Peru]). It is reported from north Peru, Piura by LAMAS (1977) as ssp. *coloe* FRUHSTORFER, 1908 (TL Peru, Pozuzo; Bolivien, Coroico). To this ssp. populations from south Ecuador may be referred.

Distribution: Paramba (IM); Nanegal (PI) (GODMAN & SALVIN, 1891); Ambato (TU); Topo (TU); rio Pastaza (TU); Santa Inez (TU); Baños (TU); La Victoria (TU); rio Engaño (TU); Rio Zuñag (TU); El Rosario (TU); 30 km S of Mendez (MS); Loja (LO).

Hesperocharis nereina HOPFFER, 1874. TL Chanchamayo.

Remarks: Apparently restricted in a few localities of eastern Ecuador where it is rare in forested environments over 800 m.

Distribution: Ambato (TU); Rio Estancias 1400 m (TU); ?rio Latas (NA); Loja (LO); San Francisco (LO).

Hesperocharis nera HEWITSON, 1852. TL Quito [error].

Remarks: Scarce and localized on both sides of the Andes. Populations from the Napo area were named *flaveola* FRUHSTORFER, 1908 (TL Ecuador, Napo) but the name is infrasubspecific.

Distribution: Paramba (IM); Rio Blanco (TU); Rio Oyacachi (SU); Las Minas (NA); Misahualli (NA); rio Umbuni (NA); rio Pununo (NA); Napo (NA); rio Latas (NA).

Hesperocharis hirlanda STOLL, [1790]. TL "Bengale" [error].

Remarks: Common and widespread apparently only on the eastern side at low altitudes. Ecuadorian populations currently known as ssp. *apicalis* FRUHSTORFER, 1907 (TL Ecuador, Rio Napo).

Distribution: rio Latas (NA); Tarapoa 500 m (NA); Misahualli (NA); Apuya (NA); rio Arajuno (NA); Cururai (PA); Macas (MS).

Mathania aureomaculata DOGNIN, 1888. TL Loja.

Remarks: The relationships among the few described species of the genus *Mathania* are still fluid. The nominal taxon *gaujoni* DOGNIN, 1887 (TL Loja, S. Francisco [Rio Numbala according to GABRIEL, (1932)]) seems that it has not been collected since the time of the description. *M. aureomaculata* is a species known so far only from the xeric environments of the Loja area.

Distribution: Loja (LO); road Loja-Zamora 2000–2500 m (LO).

Pereute callinice FELDER & FELDER, 1861. TL Venezuela.

Remarks: This species is very scarce on the eastern side. Southern populations were described as ssp. *numbalensis* JOICEY & TALBOT 1928 (TL South Ecuador, Numbala River). Other than the locality Topo reported by WEYMER (1890), we know the species only from the north of the country.

Distribution: Rio Numbala (ZC); Rio Oritoyacu 2200 m (SU).

Pereute callinira STAUDINGER, 1884. TL Chanchamayo & Colombia.

= *P. c. ecuadorensis* JOICEY & TALBOT, 1928. TL South Ecuador, Loja.

Remarks: A scarce species apparently restricted to the south of the country usually above 1000 m.

Distribution: El Monje (LO); Loja (LO); 30 km S Mendez (MS); Zamora (ZC); Zamora, 3 km E, 1200 m (ZC).

Pereute leucodrosime KOLLAR, [1849]. TL "Nova Granada ad Pacho"

Remarks: Widely distributed on both slopes above 800 m as ssp. *beryllina* FRUHSTORFER, 1907 (TL Ecuador). Western populations perhaps a new ssp.

Distribution: La Union, 1300 m (PI); Nanegalito 1600 m (PI); Rio Toachi (PI); Palo Quemado (CO); La Victoria (TU); Rio Pastaza (TU); El Rosario (TU); Rio Topo (TU); Rio Estancias 1200 m (TU); San José (TU); La Julita 1200 m (TU); Santa Inez (TU); Santa Rosa de Quijos 1700 m (NA); Alpayacu (PA); Sarayacu (PA).

Pereute charops BOISDUVAL, 1836. TL Mexico.

Remarks: Apparently scarce and localized in eastern countries. The populations are known as ssp. *peruviana* HOPFFER, 1879 (TL Chanchamayo).

Distribution: Talag 700 m (NA); Rio Chapayma, Macas (MS); 30 km S Mendez 700–900 m (MS).

Pereute telthusa HEWITSON 1860. TL Peru, (Upper Amazon).

Remarks: Apparently unrecorded from Ecuador but it was figured by SMART (1976). It might occur in the SE, being it known from north eastern Peru.

Charonias eurytele HEWITSON, 1852. TL Quito.

Remarks: Seasonally and locally common in the east especially during December and January. The occurrence in the west side is doubtful. The ssp. *aurantiaca* FRUHSTORFER, 1915 (TL "Ecuador" [pacific side?]) according to the description is smaller than *eurytele*, the spot on the apex of the cell and the postcellular stripes reddish instead of yellow. The unique specimen examined from the west does not fit this description and probably *aurantiaca* was described on eastern specimens.

Distribution: Sarayacu (PA); Archidona (NA); rio Latas (NA); ?Alluriquin (PI).

Archonias tereas GODART, 1819. TL Brésil.

Remarks: A common species in the west, more localized and scarce in the east. It is interesting to note that the western populations show a striking resemblance with the females of *Parides* species, whilst those from the east share more or less the range of *Parides erithalion lacydes* whose females have white spots such as those of *A. tereas archidona*. The white and red spotted morphs occur together in some places in the Napo region between 700 and 1500 m. Some specimens are also intermediate with *A. negrina*.

The following subspecies or forms have been described:

rosacea BUTLER, 1873. TL Quito (= *regillus* FRUHSTORFER, 1907 TL Ecuador [Balzapamba]).

Distribution: Angamarca (CO); La Chima (BO); Zaruma (EO); Quevedo (LR); Santa Ana Maria (LR); Balzapamba (BO); Santo Domingo (PI); rio Taguaza 620 m (PI); Pisotanti (PI); La Union 1300 m (PI); ?Rio Pastaza; ?Canelos.

archidona FRUHSTORFER, 1907. TL Archidona. Infrasubspecific.

Distribution: Ashpiyacu (PA); Alpayacu (PA); Rio Pastaza (TU); Macas (MS); Abitagua (TU); Topo 1200 m (TU); La Julita (TU); Rio Pumayacu (NA); rio Pimpilala 800 m (NA).
rubrosparsa STICHEL, 1908. TL Macas. This is an extreme melanic red form.
Distribution: Alpayacu (PA); Pastaza (TU); Ashpiyacu (PA).

Archonias negrina FELDER & FELDER, 1862. TL Not stated [Upper Rio Negro].

Remarks: The nomenclature of this widespread species is rather difficult and it was discussed at length by BAUMANN & REISSINGER (1969). According to these authors *phaloreia* is conspecific with *negrina* and *bellona*. This latter, which incidentally is a primary homonym and replaced by *erycinia* CRAMER, [1777], is a species of its own.

To *A. negrina* should be referred ssp. *cutila* which is a synonym of *phaloreia*. This latter name and *hyrneto* are synonyms, too.

In Ecuador seems that there is only one species, i. e. *A. negrina*. The species is locally common, preferably below 800 m, females scarcer than the males. It is not unlike that *A. tereas* and *A. negrina* are conspecific being only populations of one wide ranging polytypic species. In fact, *P. tereas archidona* and *P. negrina* are parapatric at the ecotonal area between rainforest and premontane forest in the belt at 800–1000 m on the east side. There are some specimens along the Pastaza valley which show intermediate features between the two extremes, in the same way as *Heliconius erato* and *H. melpomene* do.

The south ecuadorian populations are similar to ssp. *phaloreia* FRUHSTORFER, 1907 (TL Pozuzo [Lectotype f BAUMANN & REISSINGER (1969)]). Central Ecuador populations should be referred to *negrina* (= *bellona cutila* FRUHSTORFER, 1907. TL Sarayacu und Archidona).

Distribution: Rio Napo (NA); Canelos (NA); Curarai (NA); Rio Anzu (NA); Talag 700 m (NA); Pununo (NA); Shinguipino (NA); Rio Latas (NA); Achpiyacu (PA); Rio Numbala (ZC); Loja (LO); 30 km S of Mendez (MS).

Leodonta

[ROBERT, 1987].

Leodonta zenobia FELDER & FELDER, [1865]. TL Nova Grenada; Bogotá.

= *L. dysoni* ?subsp. D'ABRERA (1981: 144, figs. 7–8, ♂ ♀).

Remarks: This taxon was figured by D'ABRERA (1981) as *L. dysoni* and according to ROBERT (1987) it is conspecific with *L. zenobia*. This species is distributed in the east and south of the country with whitish populations, while in the NW they are yellow. Both constitute perhaps new subspecies.

Distribution: Otavalo-Apuela 2200 m (IM); Ambato (TU); El Rosario (TU); Pastaza (TU); Topo (TU); Gualaceo-Limon 2100–2400 m (MS); Loja-Zamora 1200 m (LO); Zamora (ZC).

Leodonta zenobina HOPFFER, 1869. TL Peru, Chanchamayo.

Remarks: A small species similar to *L. zenobia* but with white bands larger and confluent. Not uncommon above 1400 m in montane forests. The ecuadorian populations should represent a new ssp.

Distribution: El Chaco 1400 m (SU). Rio Oyacachi 1700 m (SU); Rio Oritoyacu 2200 m (NA); Rio Sardinas 1400 m (NA); Lligua Alta 2300 m (TU).

Leodonta chiriquensis STAUDINGER, [1884]. TL Costa Rica und Panama (Chiriqui).

Remarks: Perhaps *L. chiriquensis* is conspecific with *Leodonta tellane* HEWITSON, 1860 (TL New Grenada; = *Leodonta intermedia* RÖBER, 1909 TL Cauca). It is distributed on both slopes of the Andes. Eastern populations known as ssp. *tingomariae* BAUMANN & REISSINGER, 1969. (TL Peru, Tingo Maria). The western populations characterised by individuals of very small size.

A quite distinctive taxon from south Ecuador with large white internervular fringes on the HWs might represent a new subspecies.

Distribution: Nanegalito 1600 m (PI); SE Reventador 1200–1300 m (SU); Rio Zuñag (TU); Rio Tigre 1200 m (TU); La Julita 1200 m (TU); Alamor-Celica 1800 m (LO); 20 km N Macará, quebrada Matadero 1100 m (LO).

Leodonta tagaste FELDER & FELDER 1859. TL Peru

Remarks: An easily identifiable species not uncommon above 1500 m.

Distribution: El Placer 1900 m (CO); El Rosario (TU); Pastaza (TU); Gualaceo-Limon 2100–2400 m (MS); Rio Zapala 1800 m (CO–NA); Zamora (ZC); Loja (LO); Loja-Zamora 2400–2700 m (LO).

Catasticta

[REISSINGER, 1972; ROBERT, 1987; LAMAS, 1993, 1995]

Catasticta is indeed taxonomically one of the most difficult groups in the Neotropics.

The arrangement of RÖBER (1908–1910, 1924), and D'ABRERA (1981), partly settled by the paper of REISSINGER (1972), and the very useful amendments by ROBERT (1987), confuse the matter. The myriad of names applied to species, subspecies, forms, and varieties did tangle the thread so as it is difficult to see its end. It is only to note that REISSINGER (1972) recognizes 157 species in 5 subgenera.

Except from a few easily identifiable species, there are some groups where the relationships as biological species, as well as the females, are unknown. It is not unusual to find in the Andes populations with phenotypically similar specimens separated by gaps of over 1000 kms. It will be wise for the moment to treat all the doubtful taxa as biogeographical units with different degrees of overlapping distribution.

Recently, LAMAS (1993, 1995) has selected many lectotypes of *Catasticta* giving a sound nomenclatorial basis for its revision. With the still scanty data available from the cloud forest up to the limit of the tree-line, we tried to arrange all the "named species" from Ecuador and specimens recently collected. Thirty three species are here reported but many new species records are likely to be added especially from the Loja area, or in other remote spots along the Ecuadorian-Colombian border.

Catasticta flisa HERRICH-SCHÄFFER, 1852. TL [West] Mexico

Remarks: A common and widespread species, easily identifiable. Eastern ecuadorian populations may be classified as ssp. *dilutior* AVINOFF, 1926 TL Chaochi, Colombia (= *alcyone* REISSINGER, 1972. TL Tungurahua, Chigla 1600 m, **syn. nov.**). There are no sufficient characters so as to discriminate between *dilutior* and *alcyone*, and therefore this latter is synonymized. The populations from the neighbourhood of Quito may be distinct. Preimaginal stages described by SCHULTZE-RHONHOFF (1935).

Distribution:

Imbabura: Río Taguando, N. Ibarra, 1650 m; Ibarra, Chota, Hazienda Piman, 2180–2400 m.
Pichincha: Calacali, 1900 m; Quito, 3200–4000 m; Guayllabamba 2150 m; San Rafael, Quito 2700 m.

Sucumbios: Río Oyacachi, Chaco, 1500–1800 m.

Napo: Laguna de San Marcos E. Slope, V. Cayambe, 3800 m; "Sadzayacu"; Papallacta, 4000 m; Tena, 700 m; Río Quijos, 1400 m; Las Palmas, 1300 m; Río Sardinas, 1400 m; Baeza, 2000 m; Baeza, Río Machangara, 2000–2100 m; Río Uagrayaco, 2000 m; Río Chaupihurco, Baeza, 2200 m; Cosanga, Via Baeza-Cotundo, 2200 m; Oritoyaco; Cotundo 1600 m.

Tungurahua: Environs D'Ambato; Baños 1800 m; Chigla, 1600 m; Lomas, nr. Baños, 2000 m; Guamba, Arenal, Río Verde Bellavista, 2000–2200 m; Río Blanco, 1800 m; Abitagua; Runtun, 2200 m; Salto, 2000 m; Sirguelar, 1900 m; Ulva, 1900 m; San Josè, 1800 m; Buenos Aires, 1800 m; Arrayan; El Rosario, Río Pastaza, 4900 ft; Santa Inez; Río Topo; Otavalo, N. Perucho 2000 m.

Zamora-Chinche: Río Esperanza, 1700 m; Zamora, 3–4000 ft. Loja: Villonaco, 3600 m.

Catasticta sisamnus FABRICIUS, 1793. TL Not stated [Colombia or Panama].

Remarks: It is a common species and probably the most euzonal species of *Catasticta*, with an altitudinal range from 300 to 3000 m. It is found also in second growth plant communities. The eastern ecuadorian populations referable to ssp. *telasco* LUCAS, 1852 (TL Cuzco).

Distribution:

Pichincha: Santo Domingo, 400 m.

Sucumbios: Lumbaquí, 850 m.

Napo: Río Napo, 1200 m; Puerto Francisco de Orellana (= Coca) 280 m; Río Pumayacó 700 m; Río Sindi, 800 m; Río Latas, 500–600 m; Jatunyacu, 700 m; Cosanga, 1800 m; Río Angoha, 1400 m.

Cotopaxi: Via Salcedo-Napo, Río Mulatos, 2900 m.

Pastaza: Mera, 1200 m; Puyo 1000 m; Alpayacu; Huagrayacu, 900 m; Río Anzu 800–1200 m; Río Llandia, 900 m.

Tungurahua: Río Pastaza; Abitagua; Río Blanco, 2200 m; Topo, 1200 m.

Morona-Santiago: Macas; 30 Km S Mendez 700–800 m.

Catasticta hegemon GODMAN & SALVIN, 1889.

Remarks: A taxon with clear affinities with *C. sisamnus* and with a vicariant distribution in the arid environments of the west and south of the country, whose populations are considered as ssp. *tatae* BROWN & GABRIEL, 1939 (TL Alamor, [Loja], Ecuador).

Distribution:

Chimborazo: Huigra.

El Oro: Rd Zaruma-San Pedro, qda La Chorrera 1100–1200 m. Zamora-Chinche: Zamora 3–4000 ft.; Zumbi, 700 m; Yantzatza, 1000–1200 m.

Loja: Environs de Loja; Sebollal [= Cebollal, Loja]; 20 km N Macarà, qda Matadero 1100 m.

Catasticta prioneris HOPFFER, 1874. TL Chanchamayo.

Remarks: A very uncommon species but widely distributed especially along the Pastaza valley. These populations very similar to *C. hegemon helle* RÖBER, 1924 (TL Colombia, Cauca Tal). A phenotype similar to *Catasticta notha* LUCAS, 1852 (TL Venezuela) is apparently

restricted to the Loja area, rio Numbala, and known on the basis of only 3 male specimens in the BMNH, classified by F. M. BROWN as *C. prioneris* f. *caucana*.

Distribution: El Reventador 1750 m (SU); Cordillera de Huacamayo 2000 m (NA); Cosanga 1800 m (NA); La Merced de Jondachi 1250 m (NA); "Sarayacu" (PA); Vizcaya 2200 m (TU); Rio Engaño 1300 m (TU); Rio Blanco 2200 m (TU); Rio Negro 1200 m (TU); San Joaquin (TU); Rio Estancias 1400 m (TU); Abitagua (TU); Rio Topo (TU); Rio Huamayaco 1400 m (PA); Alpayacu (PA); Rio Kalaglas 1300 m (MS); Macas (MS); Rio Numbala (LO); env. Loja (LO); Zamora (ZC); Rio Palanda (ZC).

Catasticta corcyra FELDER & FELDER, 1859. TL "Venezuela". [Bolivia].

Remarks: An uncommon species, currently known as ssp. *staudingeri* BUTLER, 1896 (TL "E. Peru" [Ecuador]), in central and south Ecuador.

Distribution: env. d'Ambato (TU); Rio Blanco 1600–1800 m (TU); Baños (TU); San Francisco 1300 m (TU); Santa Inez 1500 m (TU); Rio Upano (MS); Chinchin 1400 m (TU); Rio Mulatos 2800 m (CO); road Cuenca-Mendez 1600 m (MS); Macas (MS); Rio Esperanza 1700 m (ZC); Rio Las Dantas 1800 m (ZC); San Francisco, 1500 m (LO); Loja (LO).

Catasticta eurigania HEWITSON, 1870. TL Ecuador [St Inez].

Remarks: Uncommon, populations from the eastern part of the Andes referable to the nominate subspecies, those from the south similar to ssp. *straminea* BUTLER, 1896 (TL Not stated. 2 STs "Ecuador" [Peru, Chanchamayo]) for the reduction of the apical white spots but not for the yellow colour. Females similar to males but white instead of yellowish.

Distribution: Rio Huamauyaco 1200 m (NA–PA); La Julita 1200 m (TU); Rio Margajitas 1200 m (TU); Alpayacu 1200 m (TU); Rio Topo 1200 m (TU); Abitagua (TU); Santa Inez (TU); Rio Estancias 1400 m (TU); Rio Blanco 2800 m (TU); Rio Engaño 1200 m (TU); Rio Negro, Cuenca-Mendez 1000–1200 m (MS); Rio Kalaglas 1300 m (MS); Zamora 3–4000 ft (ZC).

Catasticta (Archonoia) ctemene HEWITSON, 1869. TL Rio Ashpiyaco (= Rio Allpiyacu, Pastaza, Mera; see BROWN, 1941).

Remarks: This species, probably conspecific with *C. hebra* LUCAS, 1852 (TL Colombia), is widely distributed, although it is not abundant anywhere, from 1000 to 2400 m. Usually it is bound up with lower montane forests to montane forests but also with patches of forests within xerophitic areas. Females, very rare, have red spots on the FWs and are aposematic. Distribution: "Quito" (PI); "San Joaquin" (NA); Topo (TU); San Francisco (TU); env. d'Ambato (TU); Santa Inez (TU); Baños (TU); El Rosario (TU); Rio Verde (TU); Rio Huamauyaco 1200 m (TU); "Sarayacu" (PA); Rio Pastaza (PA); Macas (MS); Zamora (ZC); Guayquichuma 2200–2400 m (LO).

Catasticta (Archonoia) teutamis HEWITSON, 1860. TL Peru (Upper Amazon).

Remarks: The ecuadorian populations are currently treated as ssp. *epimene* HEWITSON, 1870 (TL [Ecuador] St Joaquin) which is distinguished by the black pattern entering into the cell of the FWs. The species is not common and found sparingly at altitudes between 1500–2000 m. Females, which are very rare, show a black and red pattern very similar to that of *Actinote* species flying together.

Distribution: Baeza (NA); Yungilla 1600 m (TU); Pastaza 1500 m (TU); Rio Topo (TU); "Sarayacu" (PA); Alpayacu (PA).

Catasticta (Archonoia) pharnakia FRUHSTORFER, 1907 TL Peru, Pozuzo.

Remarks: This is a rare western amazonian species which shows a remarkable sexual dimorphism, the red females mimetic with *Actinote* species. It was reported by STICHEL (1914) from Macas. A single specimen is known in coll. ROBERT from the Mendez area at middle altitude, which has reduced white spots on the FWs.

Distribution: 30 km S of Mendez 700–900 m (MS).

Catasticta reducta BUTLER, 1896. TL Ecuador.

= *Catasticta chelidonis* f. *aequatorialis* RÖBER, 1908. TL Ecuador. [LT male, see LAMAS (1993)].

Remarks: A fairly common species between 1200 and 1500 m. According to REISSINGER (1972) *aequatorialis* is a synonym of *C. reducta* BUTLER, 1896. Southern populations referable to ssp. *butleri* BROWN & GABRIEL, 1939 (TL N Peru, W slopes of Andes).

Distribution: El Rosario 1400 m (TU); Rio Topo 1200 m (TU); Baños (TU); Rio Huamauyaco 1200 m (TU); "Canelos" (PA); Achpiyacu (= Alpayacu) (PA); Pastaza (PA); Rio Numbala (LO); San Francisco (LO); Loja (LO).

Catasticta radiata KOLLAR, 1850. TL Venezuela.

Remarks: This species is not common and it has been recently collected only along the upper Pastaza valley in lower montane forests. Ecuadorian populations differ sensibly from those of Venezuela and Colombia, especially on the dark suffusion of black scales on the yellowish background.

Distribution: Santa Inez (TU); El Rosario (TU); Pastaza (TU); Rio Estancia (TU); San Francisco 1250 m (TU); Gualaquiza (MS); Rio Esperanza 1800 m (ZC).

Catasticta frontina BROWN, 1939. TL Colombia, Antioquia, Frontino.

= *Catasticta joiceyi* REISSINGER, 1972. TL Colombia, Cali, 1000 m. syn. nov.

Remarks: An uncommon and variable species with different groups of populations on the eastern side of the country. We consider for the time being under the name *frontina* the populations from north and central Ecuador, although they are different from those of Colombia and, generally, from those of SE Ecuador. The colombian populations known as *joiceyi* are not distinguishable from *frontina*, and therefore *joiceyi* is herewith synonymized. The relevant types have been examined.

In the ecuadorian populations the whitish postdiscal spots on the upperside of the HWs are clearly arrow-shaped. The few females examined from Sucumbios and Napo show a large whitish patch on the upperside of the wings and a distinct row of arrow-shaped spots on the HWs. On the underside of both sexes there is a contrasting and vivid yellow colouration. The populations from the Loja area were described by BROWN (1939) under *C. frontina*. Only 1 PT coll. MAASSEN, sine data, in ZMB, 1 ♂ env. Loja, 1 ♂ Gualaquiza, ex serie tipica of *C. frontina*, and one female from Loja, all in BMNH, are available. They show the submarginal spots on the upperside of HWs and on the underside of FWs faintly arrow-shaped.

Distribution: Rio Azuela, Reventador (SU); La Bonita, Rio Dantina 1600 m (SU); Cosanga 1850 m (NA); Cordillera Huacamayo 2400 m (NA); Rio Tigre 1200 m (PA); Gualaquiza (MS); Loja (LO); Zamora, Rio Esperanza (ZC).

Catasticta philone FELDER & FELDER, [1865]. TL [Nova Granada: Bogotá].

Remarks: This species is distributed from Colombia to central Peru. In Ecuador it is uncommon, with different populations, known as ssp. *ecuadora* BROWN, 1939 (TL Rio Blanco) in Tungurahua, and a new ssp. in Rio Oyacachi. Females of *ecuadora* are unknown.

Distribution: Rio Oyacachi (SU); Rio Blanco (TU); San José 1800 m (TU); La Esperanza 1700 m (TU).

Catasticta sp.

Remarks: We list provisionally this taxon specimens figured as *C. aureomaculata* by D'ABREIRA (1981).

The two specimens in BMNH as reported by ROBERT (1987) may constitute a new species ranging from south Ecuador to central Peru. A long series of specimens from Rodriguez de Mendoza, north Peru and Acomayo, central Peru, suggest the opinion of ROBERT.

Distribution: 1 ♂, Rivière Numbala; 1 ♂ Loja, San Francisco in BMNH.

Catasticta rileyi BROWN & GABRIEL, 1939. TL Chachapoyas, Amazonas, Peru.

Remarks: This species is apparently restricted from south Ecuador to central Peru. Ecuadorian populations show a reduction of the light spots both on upper and underside and the colour yellowish, not whitish as in the nominate subspecies. On the underside of the HWs the pattern of the submarginal band is irregular. Only a few specimens are known from Ecuador.

Distribution: Gualaceo 2100–2400 m (AZ); Loja-Zamora 1600–1700 m (LO).

Catasticta pastaza BROWN, 1939. TL Rio Blanco.

C. philone ecuadora form *pastaza* BROWN, 1939. Unavailable.

= *Catasticta philoscia* f. *ferra* BROWN & GABRIEL, 1939. TL Ambato [see REISSINGER (1972)].

Catasticta pastaza REISSINGER, 1972

Remarks: We retain provisionally this ecuadorian taxon under this name although it may be linked with *C. aureomaculata* LATHY & ROSENBERG, 1912. The name *pastaza* was originally described as an infrasubspecific form. Therefore the name is unavailable and it should be credited to REISSINGER (1972), or *ferra* would have to be upgraded.

This species is fairly common along creeks in montane forests. Populations from Loja and north Peru are similar to *pastaza* but the upperside is slightly darker and the orange colouration is missing.

Distribution: Rio Angoha 1700 m (CO); Rio Zapala 1500 m (CO); Santa Inez (TU); Rio Topo (TU); Ambato (TU); Rio Blanco 1700 m (TU); Ulba-Vizcaya, Rio Leon 1700 m (TU); Santa Ana 2000 m (TU); "Sarayacu" (PA); Loja (LO).

Catasticta incerta DOGNIN, 1888. TL Zamora.

= *C. vapina* BUTLER, 1897. TL Ecuador.

Remarks: The systematics of the *philais*, *pinava*, *philoscia* and *modesta* complexes is very fluid and probably only two species will eventually turn out to be, with a number of very differentiated and convergent populations from Venezuela to Bolivia.

C. incerta is similar to *C. pinava* DOUBLEDAY, 1847 (TL Bolivia) and *C. modesta* LUCAS, 1852 (TL Peru, Cuzco) but recognizable for the heavy black chevron on the upperside of the HWs and the contrasted design on the underside. Populations from south Ecuador are charac-

terized by the scales on the upperside distinctly orange and not brownish as in the populations from Tungurahua; the submarginal spots of FWs are yellow and not white. In Tungurahua, the specimens show the submarginal spots of the HWs which are separated from the discal band.

The type of *C. vapina* labeled "Ecuador" (HT male, in BMNH) belongs to the southern populations and it is a synonym of *C. incerta* RÖBER, 1924. The type of *Catasticta scurra* reported as from upper Amazons, bears the label "Peru" (LT selected by LAMAS (1993) doubtfully from Alto Rio Amazonas) and probably represents the populations of central Peru. Recently, LAMAS (1995) has selected the LT of *C. philothina* RÖBER, 1924 (TL Loja, alrededores de Loja) and this name was sunk into synonymy with *C. philais* FELDER & FELDER, 1865. *C. incerta* is widespread and sometimes common especially along the Pastaza valley.

Distribution: Cuyuja, 8 km S 2150–2250 m (NA); ?Mera (PA); Santa Ana 1200 m (TU); Baños (TU); Yungilla 1600 m (TU); San Francisco 1300 m (TU); Rio Blanco 1600–2000 m (TU); Gualaquiza (MS); Rio Paute, 15 km Amaluza 1800 m (AZ); Gualaceo-Limon 2100–2400 m (AZ); Loja-Zamora 1600–2600 m (LO); Loja (LO); Zamora (ZC).

C. seitzii LATHY & ROSENBERG, 1912. TL Guabinas, Rio Cauca, W Colombia.

= *C. seitzii zana* BROWN, 1939. TL Fusagasuga, Colombia. [partim].

Remarks: REISSINGER (1972) described *C. blanca* (TL Ecuador, Tungurahua, Rio Pastaza-Region, Rio Blanco 1600 m) as a good species, which is here downgraded to a ssp. of *C. seitzii* as suggested by ROBERT (1987). It is local and very uncommon in the Pastaza valley. It is superficially similar to *C. philodora* but it is distinguished by the more produced apex of the FWs.

This species is locally common only along the Pastaza valley, at the locality Rio Blanco where most of the specimens referred to by BROWN (1939), under *zana*, and by REISSINGER (1972) have been collected. It is very similar with *C. philodora* with which is syntopic in the Rio Blanco area. It differs on its average smaller size, the yellow marginal spots of the wings, and the yellow colouration which is more extended on the upperside.

Distribution: Ambato (TU); Baños (TU); Rio Blanco 1600 m (TU); Rio Estancias 1400 m (TU); San Joaquin 1700 m (TU); Yanayacu 1700 m (TU); Yungilla 1600 m (TU); San Francisco (TU).

Catasticta philodora BROWN, 1939. TL Rio Blanco, 2000 m.

Remarks: The nominate subspecies is restricted along the eastern part of the country, the populations from the north similar to *Catasticta affinis* RÖBER, 1909 (TL W Colombia, Magdal.), this name will take precedence if they are conspecific. In the south the ssp. *zamora* REISSINGER, 1972 (TL Loja, Zamora 1800 m) is similar to *C. philodora* but the wings are straighter and duller yellow.

In the western side, apparently scarce and localized in the montane forests, ssp. *maja* REISSINGER, 1972 (TL Pichincha, Calacali, 1900 m) (**stat. rev.**). Tentatively a female is related to this species. It is white with large marginal black band with minute white dots on the FWs. The same band on the HWs shows a series of arrow-shaped spots.

Apparently it is endemic to Ecuador, widespread but uncommon above 1500 m. It might turn to be as a ssp. of *C. troezene* or of *C. watkinsi*.

Distribution: Tulcàn 3800 m (CA); Tandapi (PI) 1700 m; Calacali (PI) 1900 m; La Virgen de La Merced 2000 m (PI); Rio Pilatòn 1500 m (PI); Camino La Bonita, Sebundo 2600 m (SU); Rio Azuela, El Reventador 1600 m (SU); Baeza, Rio Uagrayacu 2000 m (NA); Yungilla 1600 m

(TU); Rio Blanco 1700 m (TU); Rio Verde (TU); Pastaza (PA); Rio Angoha, Zapala 1700 m (CO); 15 km Amaluza, Guarumales 1800 m (AZ); Loja-Zamora road 1800–2000 m (ZC).

Catasticta leucophaea LATHY & ROSENBERG, 1912. TL Uruhuasi, S. Peru.

Remarks: An uncommon species restricted to the south of the country, easily identifiable for the grey-bluish colour of the designs. Ecuadorian populations known as ssp. *lathyi* JOICEY & TALBOT [1918] (TL Ecuador. [HT Loja, GABRIEL (1932)]), which is distinguished by the greater extension of yellow colour into the cell of the underside of the FWs.

Distribution: Gualaceo 2100–2400 m (AZ); Gualaquiza (MS); San Francisco (LO); Loja (LO); Rio Palanda (ZC); Loja-Zamora 1800–2200 m (ZC).

Catasticta colla DOUBLEDAY, 1847. TL Bolivia.

Remarks: *C. colla*, *C. chelidonis* and *C. amba* constitute a group of entities probably conspecific and reported in the literature under a variety of combinations. At least two very similar species occur in the Neotropics, i. e. *C. colla* and *C. susiana*, which are identifiable in many localities, especially having at disposal the females. The females of *C. susiana* have on the upperside of the HWs premarginal round spots, which may be also absent, while these spots in *C. colla* are always arrow-shaped. The ssp. *amba* BROWN, GABRIEL & GOODSON, 1940 (TL Ambato) is widely distributed but scarce on the eastern side between 1400 to 2600 m. Northern populations represent perhaps a new ssp. while those from the south, known as ssp. *loja* REISSINGER, 1972 (TL Loja, Zamora 1800 m), are scarcely different from *amba*.

Erroneously figured as female of *C. plesseni* and female of *C. susiana* (D'ABRERA, 1981; ROBERT, 1987). *C. colla* is always very scarce and localized.

Distribution: La Bonita-Alegria (SU); Sebundoi 2600 m (SU); El Chaco 1400 m (SU); Oritoyacu 2200 m (NA); Rio Cristal (TU) 1600 m; Rio Blanco (TU); Gualaceo-Limon 2100–2400 m (AZ); Loja-Zamora 1800–2200 m (ZC); Guarumales 1800 m (AZ); Loja (LO).

Catasticta susiana HOPFFER, 1874. TL Peru [Ecuador].

= *C. colla plesseni* RÖBER, 1908. TL [Ecuador, Tungurahua], Baños. (LT LAMAS, 1993)

Remarks: The type of *C. susiana* in ZMB bears the doubtful label “?Peru” In fact, the populations from Peru are different from the type and the nominate subspecies should be restricted to Ecuador. *C. susiana* is much commoner than *C. colla* and widespread along the eastern Cordillera from 1500 to 2700 m.

Distribution: “Balzapamba” (BO); Topo (TU); Ambato (TU); Santa Inez (TU); El Rosario (TU); Rio Blanco (TU); “Sarayacu” (PA); Angamarca (CO); Gualaquiza (MS); Rio Angoha 1700–1800 m (CO); Amaluza, Guarumales 1800 m (AZ). Loja (LO); road Loja-Zamora 1800–2700 m (LO); Rio Numbala (LO); El Monje (LO); San Francisco (LO); Zamora (ZC).

Catasticta sp.

Remarks: This is a very rare taxon which may deserve specific status, restricted to the south of the country. The few specimens examined show a resemblance with *C. discalba* with which is sympatric. The designs are greyish with large submarginal round spots on the upperside of both wings. On the underside of the FWs, the submarginal spots are minute and punctiform if compared with those of *C. discalba* which are arrow-shaped. Also the yellow stripes are less developed than those of *C. discalba*.

Distribution: Road Loja-Zamora 1600–1700 m (ZC); Zamora, Rio Las Dantas, 1800 m (ZC).

Catasticta discalba BROWN & GABRIEL, 1939. TL Loja.

Remarks: This is an endemic species apparently very rare restricted to south Ecuador and known from the two typical specimens and two males recently collected in coll. ROBERT. It might be related to *C. anaitis*.

Distribution: San Francisco (LO); Loja (LO); Loja-Zamora 1600–1700 m (LO).

Catasticta anaitis HEWITSON, 1869. TL Rio Topo.

Remarks: An easily identifiable species, uncommon but widespread in the east between 1000 to 2200 m. Females very rare and without the greyish suffusion on the upperside of the wings.

Distribution: "Aguano" (NA); Baeza 2200 m (NA); Rio Estancias 1400 m (TU); Abitagua 1100 m (TU); Santa Inez (TU); Topo (TU); S. Francisco (TU); El Rosario (TU); Alpayacu (PA); Pastaza (PA).

Catasticta (Hesperochoia) poujadei DOGNIN, 1887 TL Loja.

Remarks: A quite distinctive species whose range is from south Ecuador to Bolivia. In Ecuador it is restricted to the south of the country. There are no recent ecuadorian records, but it has been collected in north Peru at Rodriguez de Mendoza. *Catasticta clara* RÖBER, 1909, described from Ecuador but in reality from Peru, Pasco, Huancabamba (LAMAS, 1993), is scarcely different from the nominate subspecies.

Distribution: Loja (LO); San Francisco (LO); Zamora (ZC).

Catasticta (Hesperochoia) truncata LATHY & ROSENBERG, 1912. TL Venezuela, Merida.

Remarks: This taxon, known only from the south of Ecuador so far, might be conspecific with *C. cora* LUCAS, 1852 (TL Perú, environs de Cuzco). The name *xanthotaenia* RÖBER, 1924 (TL Ecuador) is applied to the ecuadorian populations. Probably this species was reported from Loja by DOGNIN (1894) as *C. chrysolopha* KOLLAR, 1850 (TL Venezuela) but this latter was not collected in Ecuador anymore.

Distribution: El Monje (LO); Loja 2500 m (LO); Zamora (ZC).

Catasticta (Hesperochoia) tomyris FELDER & FELDER, [1865]. TL Nova Granada: Bogotá.

Remarks: An uncommon species probably conspecific with *C. toca* DOUBLEDAY, 1847 (TL Bolivia), as it was reported by DOGNIN (1891) for the Loja area. Southern ecuadorian populations are similar to ssp. *subtomyris* REISSINGER, 1972 (TL Rodriguez de Mendoza, N. Peru). Those from central Andes are characterized by the reduction of the submarginal spots on the FWs and the whitish colour of the HWs.

Distribution: Rio Oyacachi 1600 m (SU); Rio Topo 1300 m (TU); Ambato (TU); Rio Verde 1600 m (TU); Santa Inez (TU); El Rosario (TU); Pastaza (PA); Loja (LO); S. Francisco (LO).

Catasticta (Hesperochoia) apaturina BUTLER, 1901. TL Ecuador, [Cotopaxi], Angamarca.

Remarks: Uncommon but widespread together with *C. tomyris*. The populations from the Pastaza valley similar to ssp. *subturlina* REISSINGER, 1972 (TL Colombia, Muzo).

Distribution: Rio Azuela 1600 m (SU); Topo (TU); Ambato (TU); Santa Inez (TU); San Francisco (TU); Loja (LO); San Francisco 1500 m (LO); Zamora (ZC).

Catasticta (Leodontoia) semiramis LUCAS, 1852. TL Colombia.

Remarks: A very rare species syntopic in Ecuador with *C. uricoecheae*, *C. albofasciata* and *C. soccorensis*. It is found at high elevations in the interandine valleys especially in the "ceja de la selva", at the margin of Elfin forests. Populations referable to ssp. *palla* BROWN, 1939 (TL Popayán, Cauca, Colombia; = *Catasticta (Leodontoia) hammurabi* REISSINGER, 1972. TL Cotopaxi, Rio Mulatos 2800 m) (**syn. nov.**). The few specimens examined from south-east Ecuador are somewhat different for the shape of wings and for the colouration which is more brownish.

Distribution: Quebrada La Fama 2300 m (SU); Ambato (TU); Rio Mulatos 2800–3000 m (CO); Gualaceo 3000 m (AZ); Gualaquiza (MS).

Catasticta (Leodontoia) soccorensis FASSL, 1915 (TL Colombia, Socorroberges in der Columbischen West-Cordillere 4000 m).

Remarks: Too few specimens of this species are known to have a definitive idea of its variation. It occurs in the eastern high valleys of Cotopaxi together with other species of *Leodontoia*.

Specimens figured as this species by D'ABRERA (1981) are indeed *C. semiramis* as it was pointed out by ROBERT (1987).

Distribution: Rio Mulatos 2800–3000 m (CO).

Catasticta (Leodontoia) cinerea BUTLER, 1897. TL "Ecuador" [South Peru].

= *C. cora* RÖBER, 1909 nec LUCAS, 1852.

Remarks: The type-locality of *C. cinerea* claimed to be Ecuador is apparently erroneous and should be restricted to South Peru. It is an uncommon species distributed from Colombia to Bolivia and in Ecuador it has recently been collected only in the upper Pastaza valley where it is extremely localized. Only 6 males and 2 female are known. Males superficially similar to those of *C. semiramis* but with wider greyish designs on the upperside of the wings and the submarginal spots of the HWs sagittate and longer. Females with bright discal red markings and submarginal yellow spots.

Distribution: San Antonio 1900 m (TU); Ambato (TU); "Canelos" (PA), female in MNHW; Loja (LO).

Catasticta (Leodontoia) uricoecheae FELDER & FELDER, 1861. TL Colombia, Nova Granada, Bogotá.

Remarks: This is a rare species in Ecuador, less scarce in Colombia, localized in altitudes, and recently found in isolated localities with grassy pastures surrounded with *Eucalyptus* trees in Pichincha, and on the eastern part of the páramo in Cotopaxi. Ecuadorian populations are currently treated as ssp. *tricolor* BUTLER, 1897 (TL Ecuador [1 male ST in BMNH]), characterized by brilliant lemon yellow spots on the FWs. Populations from Pichincha show a black suffusion of scales over the yellow spots. It is not known with certainty the whereabouts of the type of *vulnerata* BUTLER, 1897 (TL Ecuador), which shows on the upperside of FWs a red base, discal and submarginal spots yellow as well as that in the cell. Specimens from Loja match with the type, and therefore Loja is restricted as TL of *C. vulnerata*.

WEYMER (1890) reported *C. uricoecheae* from Guantahalò near Mt. Quilotoa 3200 m (CO), and DOGNIN (1891) from Loja. These specimens, located in BMNH and ZMB, belong to *C. tricolor* and *C. vulnerata*, respectively.

Distribution: San Juan (PI) 3200 m; Rio Mulatos 2900 m, via Salcedo-Napo (CO); Illiniza (CO) 4000 m; "Sarayacu" (PA); Env. de Loja (LO); Zamora (ZC).

Catasticta (Leodontoia) albofasciata LATHY & ROSENBERG, 1912. TL Colombia.

Remarks: A high altitude species, males distinguished from the nominate form for the reduction of the red submarginal and basal spots, and therefore ecuadorian populations were described as ssp. *rubroreducta* REISSINGER, 1972 (TL Rio Mulatos via Napo Quinto, 2900 m). Sexes similar but females with wider red colour on the upperside of the wings. Very few specimens are known from Ecuador, 10 males 4 females only, in two disjunct populations. Distribution: Troya [El Troje] 2900 m (CA); Rio Mulatos, road Salcedo- Napo 2800–2900 m (CO).

Leptophobia

[ROBERT, 1987]

The species of the genus *Leptophobia* have been commented on by ROBERT (1987). However, the real biological status of the many differentiated populations in the Neotropics and in Ecuador is still subjected to change. For instance, *L. penthica* and *L. erinna* are vicariants, *L. eleone*, *L. helena*, *L. gonzaga*, *L. ecosma* might be only morphs of two polymorphic specie.

Leptophobia eleone DOUBLEDAY, [1847]. TL Not stated [New Granada].

Remarks: Common and often abundant above 1500 m. Populations from Ecuador referable to the nominate ssp. those from the south to ssp. *latifascia* JOICEY & TALBOT, 1928 (TL Ayabaca Mts, N. Peru).

Distribution: Baeza 2000 m (NA); Rio Sardinas 1500 m (NA); Cotundo road, 1600 m (NA); Rio Blanco (TU); Topo (TU); Pimo 3200 m (CN); Pallatanga 1900 m (CH); 8 km NW Gima 2950 m (AZ); 2 km Sw Tarqui 2590 (AZ); Portete de Tarqui 2700 (AZ); Oña (AZ); Gualaceo-Limon 2100–2400 m (AZ); N San Lucas, Pichig 2650 m (AZ).

Leptophobia gonzaga FRUHSTORFER, 1908. TL Ecuador, Papalacta.

Remarks: A quite distinct taxon with a melanic appearance, females similar to the males. There is a geographic variation as far as the melanism is concerned. In Pichincha only the females are melanic, in Cotopaxi both sexes are melanic and in the Pastaza valley only the males show the melanic colouration. It could be only a morph of *L. eleone*.

Distribution: Machachi 2700 m (PI); Rio Mulatos km 60, 3600 m (CO); Rio Mulatos 2900 m (CO); Rio Galpòn 2600 m (CO); Rio Zapala 1600–1800 m (CO); 8 km NW Gima 2950 m (AZ); Gualaceo 3000 m (AZ); 13 km N Cañar 3000 m (CN); Papallacta 2800 m (NA); Rio Blanco 1700 m (TU); Gualaceo-Limon 2100–2400 m (MS); Loja (LO).

Leptophobia helena LUCAS, 1852. TL Quito.

Remarks: Locally common on both sides of the Andes usually above 1500 m up to the tree limit. The white nominate subspecies has its range in the west, while the yellow eastern and southern populations should be referred to ssp. *smithii* KIRBY 1881. TL ([Ecuador], "sulphur spring at Baños). This taxon has been figured by D'ABRERA (1981) as *L. eleone luca* (see ROBERT, 1987).

Distribution: Otavalo-Apuela road 2000 m (IM); Tandapi, rio Silanta 2600 m (PI); La Virgen 2000 m (PI); Santa Ana Maria (LR); Quevedo (LR); Huigra (CH); Pallatanga, quebrada Panza 2000 m (CH); Balzapamba (BO); El Topo (TU); Alpayacu (PA); Santa Inez (TU); Runtun 2800–3000 m (TU); Ambato (TU); Rio Blanco (TU); Rio Pastaza (TU); La Victoria (TU); El Rosario (TU); "Canelos" (PA); Gualaceo-Limon 2100–2400 m (MS); Rio Pitalò 2800–3200 m (CO); Sigchos-Isinlivi 2550 m (CO); Rio Mulatos 2700 m (CO); Papallacta 2600–3200 m (NA); rio Chalpi 2800 m (NA); Cuyuja 2150 m (NA); Pichig, N San Juan 2650 m (LO); Zamora (ZC).

Leptophobia eucosma ERSCHOFF, 1874. TL Peru.

Remarks: Similar to *L. helena* but on the FWs without black in the cell and the marginal black design not extended to the anal angle. We examined only a few specimens which are tentatively classified as this species.

Distribution: Gualaceo (AZ) 3000 m.

Leptophobia aripa BOISDUVAL, 1836. TL [Venezuela] Caracas.

Remarks: Locally common on both slopes. Eastern populations known as ssp. *deserta* FRUHSTORFER, 1908 (TL Ecuador [TALBOT, 1932]), but this name is infrasubspecific. The western populations known as ssp. *limbata* KIRBY, 1887 (TL Ecuador [HT female]).

Distribution: ?Esmeraldas (ES); Pisotanti (PI); Nanegalito (PI); Tinalandia (PI); La Union 1300 m (PI); La Virgen 2000 m (PI); Pallatanga 1840 m (CH); Latacunga (CO); El Topo (TU); Ambato (TU); Ulba-Vizcaya 2400 m (TU); Baños (TU); Rio Blanco (TU); Rio Estancias 1200 m (TU); Jondachi 1300 m (NA); 30 km S Mendes 900 m (MS); Guayquichuma 1300 m (LO); Loja (LO); Macarà 1100 m (LO).

Leptophobia eleusis LUCAS 1852. TL Colombia.

Remarks: Uncommon and localized, populations from Pastaza and Napo referable to ssp. *suadella* FELDER & FELDER, 1861 (TL Venezuela). Western populations differing in pattern.

Distribution: Tandapi (PI); Ulba-Vizcaya 2400 m (TU); Rio Blanco (TU); Jondachi 1000 m (NA); Papallacta 2800 m (NA); El Reventador 1700 m (SU); Loja (LO); 18 km E Rio Piedras, La Avanzada-Piñas road, 770 m (EO).

Leptophobia pinara FELDER & FELDER, 1865. TL Nova Granada: Bogotá.

Remarks: A rare species known on a few specimens from montane forests of north eastern Ecuador.

Distribution: Rio Oritoyacu 2200 m (SU); "Sarayacu" (PA); Archidona (NA); Baeza (NA); El Rosario (TU).

Leptophobia erinna HOPFFER, 1874. TL "Peru"

Remarks: Apparently an endemic species restricted to xerophilous environments of south Ecuador and NW Peru. Populations from Ecuador referable to *Leptophobia cinnia* FRUHSTORFER, 1908 (TL Ecuador). FRUHSTORFER (1908a) claims that it is similar to *L. helena* LUCAS but this is a totally different insect.

Distribution: "Sarayacu" (PA); Tarqui (AZ); Loja-San LUCAS 2500 m; Loja-Zamora 2000–2500 m Malacatos, quebrada Changaimine 2250 m (LO); 36 km N Loja, Gualàn 2100 m (LO); Loja (LO); El Monje (LO); Guayquichuma 2200–2400 m (LO); Zamora (ZC).

Leptophobia penthica KOLLAR, [1849]. TL Nova Granada.

Remarks: Reported by FASSL (1915) from west Colombia, and uncommon in east Ecuador above 1500 m. Populations from NW Ecuador perhaps a new subspecies.

A smaller, more blackish population of a taxon similar to *L. cinnia* characterized by the confluence of the marginal band with the discocellular bar on the FWs, is restricted in Chimborazo.

We provisionally list this population under *L. penthica* but it might be a ssp. of *L. erinna* or a new species.

Distribution: ?Pisotanti (PI); Tandapi, La Virgen 2000 m (PI); Pitalò (LR); Otavalo-Apuela 2200 m (IM); Sebundo-La Bonita 2600 m (SU); Cordillera Huacamayo 2600 m (NA); Papalacta 2600 m (NA); Rio Angoha 1700 m (CO); La Esperanza 1700 m (TU); Topo (TU); Rio Blanco (TU); Ulba 2000 m (TU); Vizcaya 2400 m (TU); Pallatanga 1900 m (CH); Pallatanga, quebrada Panza 2000 m (CH); Pallatanga, Juan de Velasco 2500 m (CH); 3 km N Pallatanga; road Riobamba–Guayaquil (CH).

Leptophobia subargentea BUTLER, 1897 TL Peru.

Remarks: Locally common on eastern valleys above 800 m. The populations are known as ssp. *pastaza* JOICEY & TALBOT, 1928 (TL Ecuador, El Topo).

Distribution: Reventador 1750 m (SU); La Victoria (TU); Alpayacu (TU); El Rosario (TU); "Nashiño" (PA); El Topo (TU); Santa Inez (TU); Ambato (TU); Rio Sardinias 1500 m (NA); Rio Jondachi 1500 m (NA); Talag 800 m (NA) Rio Llandia 1200 m (NA); 30 km S Mendez 900 m (MS).

Leptophobia philoma HEWITSON, 1870. TL Not stated [Ecuador, Limon].

Remarks: An uncommon species restricted to the south of the country. It may turn to be a ssp of *L. caesia*.

Distribution: "Sarayacu" (PA); Rio Numbala (ZC); Loja-Zamora 1600–1700 m (ZC).

Leptophobia caesia LUCAS 1852. TL Ecuador.

Remarks: In Colombia this species has its range only on the western side between 800–1400 m (FASSL, 1915; Krüger, 1921). In Ecuador it is widely distributed in the west but not particularly abundant, taken singly along paths in premontane forests. Females very scarce. The populations are variable for the amount of bluish scaling on the upperside of the wings. It is altitudinally separated from *L. penthica*.

Distribution: Las Pampas (PI); Pisotanti (PI); Toachi (PI); La Union 1300 m (PI); Santo Domingo (PI). Balzapamba (BO); Jorge (CH); "Chimborazo" (CH); ?Santa Inez (TU).

Leptophobia cinerea HEWITSON 1867. TL Ecuador.

Remarks: Widespread and locally common on the east side.

Distribution: "Balzapamba" (BO); Baños to Canelos (TU); Santa Inez (TU); Ambato (TU); Rio Verde (TU); El Topo (TU); El Rosario (TU); Alpayacu (PA); Sarayacu (PA); Macas (MS); Misahualli (NA); Pununo (NA); Aguano (NA); Curarai (NA); Rio Latas (NA); Rio Oyacachi 1600 m (NA); Loja-Zamora 1600–1700 m (LO).

Leptophobia olympia FELDER & FELDER, 1861. TL Venezuela.

Remarks: An uncommon and localized species. Southern populations referable to ssp. *potonie* BAUMANN & REISSINGER, 1969. (TL San Ramón, Peru), those from the north may constitute a new subspecies.

Distribution: Rio Malo, SE Cerro Reventador (SU); Chaco-Baeza road, Rio Sardinas 1400 m (NA); Rio Oyacachi 1600 m (NA); Loja-Zamora 1600–1700 m (ZC).

Leptophobia forsteri BAUMANN & REISSINGER, 1969. TL Peru, Tingo Maria [HT].

Remarks: The species was described on specimens from Peru, Colombia, Venezuela and Argentina but not from Ecuador. It is a large species, similar to *olympia* and *tovaria* but with an additional yellow spot on the underside of the HWs. We list this species on the basis of three specimens in coll. ROBERT.

Distribution: 30 km S Mendez (MS).

Leptophobia tovaria FELDER & FELDER, 1861. TL Neu Granada.

Remarks: A common, often abundant species on both sides of the Cordillera above 1000 m. Populations currently known as ssp. *maruga* FRUHSTORFER, 1907 (TL Ecuador) but it could be a synonym of *subflavescens* KIRBY, 1887 (TL New Granada).

Distribution: Nanegalito (PI); Tandapi 1450 m (PI); Balzapamba (BO); Chimbo (CH); El Reventador (SU); Baeza 2000 m (NA); Rio Pindoyacu 1200 m (TU) Ambato (TU); Rio Verde (TU); Rio Negro (TU); La Julita 1200 m (TU); Rio Blanco 1700 m (TU); Baños 1800 m (TU); Rio Coral 1200 m (TU); El Rosario (TU); Santa Inez (TU); Alpayacu (PA); La Victoria, Rio Pastaza (PA); Sarayacu (PA); 30 km S Mendez 900 m (MS); Loja (LO).

Tatochila mercedis ESCHSCHOLTZ, 1821. TL Chile.

Remarks: This taxon has been reported in the literature under various names. We follow SHAPIRO (1986, 1991) in considering the ecuadorian populations as *T. mercedis arctodice* STAUDINGER, 1898. Locally common above 2000 m up to 3500 m.

Reported from Loja (DOGNIN, 1891) as *xanthodice* LUCAS, 1852 (TL Peru).

Distribution: Cumbe 2980 m (AZ); Tarqui 2700 m (AZ); Ingapirca 3130 m (CN); Isinivi 3000 m (CO); Riobamba (CH); El Rosario (TU); Tungurahua (TU); Pillaro 2900 m (TU); Pelileo 2600 m (TU); San Javier 2000 m (TU); Pichig, San Lucas 2850 m (LO).

Tatochila sagittata RÖBER, 1908. TL Huancabamba, 3000 m.

= *joergenseni* RÖBER, 1924. TL Ecuador (Bauras [= Baños]).

Remarks: Common in interandean valleys above 2500 m. LAMAS (1977) reports the species from Piura as a form of *T. demodice* BLANCHARD, 1852 (TL Chile).

Distribution: Otavalo 3000 m (IM); La Virgen 3000 m (PI); Illiniza (PI); Chimborazo (CH); N Pallatanga 2000 m (CH); "Sarayacu" (PA); Baños (TU); Ambato (TU); Papallacta 3000 m (NA); Zamora (ZC).

Itaballia demophile LINNAEUS, 1767

Remarks: Locally common in the east as ssp. *minthe* FRUHSTORFER, 1907 (TL Ecuador, Sarayacu, Coca).

Distribution: Las Minas (NA); Pununo (NA); Curarai (PA); Coca (NA); Misahualli (NA); Shushufindi 400 m (NA); Dureño 150 m (NA); Sarayacu (PA).

Itaballia marana DOUBLEDAY, 1844. TL Guayaquil.

Remarks: This species is seasonally common in the west especially at low altitudes. Records from the east should be confirmed. Reported from N Peru, Tumbes by LAMAS (1979a).

Distribution: Tonchigue (ES); Pisotanti (PI); "Ambato" (TU); "Valley of Chimborazo" (CH); Chimbo (CH); Huigra (CH); Latacunga (CO); Sarayacu (PA); Balzapamba (BO); Santa Ana Maria (LR); Quevedo (LR); Loja (LO); Guayquichuma 1200–1500 m (LO).

Itaballia pandosia HEWITSON, 1853. TL Venezuela.

Remarks: It is a rare and localized species in the east as ssp. *pisonis* HEWITSON, 1861 [TL New Granada (Amazon and Bogotá)]. Reported by FASSL (1915) from west Colombia, it may occur in the north west of the country.

Distribution: Sarayacu (PA); Misahualli, Las Minas (NA).

Pieriballia viardi BOISDUVAL, 1836. TL Mexique.

= *Pieriballia mandela* FELDER & FELDER, 1861. TL Venezuela.

Remarks: The populations of this very variable species are scattered in Ecuador and are referable to ssp. *cocana* FRUHSTORFER, 1907 (TL Coca, Rio Napo), which is scarcely if not, differentiated from *xanthomelas* RÖBER, 1908 [TL Ecuador (Coca)], and *P. viardi apicalis* BUTLER, 1898 [TL Peru, Nauta, see LAMAS (1993)]. This latter name should take precedence over *cocana*.

Distribution: Lower Napo (NA); Coca, Berna (NA); Nashiño (NA); Curarai (NA); Misahualli (NA); Pununo (NA); rio Umbuni (NA); rio Latas (NA); Las Minas (NA).

Pieriballia tithoreoides BUTLER, 1898. TL Ecuador.

Remarks: The western vicariant of *P. viardi* and perhaps conspecific. The southern populations are referable to ssp. *decorata* JOICEY & TALBOT, 1928 (TL [Peru] W. slopes of the Andes [HT, GABRIEL, 1932]). It is reported also from north Peru, Piura (LAMAS, 1979a).

Distribution: Rio Toachi 900 m (PI); Alluriquin (PI); San Pablo 560 m (PI); Pisotanti (PI); Quevedo (LR); Santa Ana Maria (LR); Balzapamba (BO); 7 km E Catamayo, quebrada Pitayo 1600–1700 m (LO); 20 km N Macarà, quebrada Matadero (LO).

Perrybrhis pamela CRAMER, 1782. TL Suriname.

= *pyrrha* FABRICIUS, 1793. TL Surinam. Primary homonym.

Remarks: Locally common. Populations from the south-west can be referred to ssp. *bertha* LAMAS, 1981 (TL Peru, Tumbes, Matapalo, La Totorá, 100 m). In the east, populations are currently known as ssp. *glessaria* FRUHSTORFER, 1907 (TL Ecuador, Coca, Berna).

Distribution: Arenillas (GU); Quevedo (LR); Santa Ana Maria (LR); Coca, Berna (NA); Misahualli (NA); Cotapino 620 m (NA); Shinguipino (NA); Rio Santa Rosa 90 m, 4 km E La Avanzada (LO).

Perrybrhis lorena HEWITSON, 1852. TL Quito.

Remarks: Widespread and moderately common, females very rare. The nominate subspecies is from north and central eastern Ecuador. The southern populations are referable to ssp. *jumena* FRUHSTORFER, 1907 (TL Ecuador).

Distribution: Rio Umbuni (NA); Curarai (NA); Coca (NA); Sarayacu (PA); El Rosario (TU); 30 km S Mendez 700–900 m (MS); El Monje (LO); Loja (LO); Zamora (ZC).

Perrhybris lypera KOLLAR, [1849]. TL Nova Granada.

Remarks: Seasonally common in west Ecuador, females very rare. The variability of the populations is still approximately studied but females (only white morphs known from Ecuador) may be mimics of *Heliconius cydno*, *H. atthis*, *H. sapho*. Mimetic females reported also from west Colombia by Bryk (1929). The populations are known as ssp. *paravicinii* FRUHSTORFER, 1907 (TL Balzapamba).

Distribution: Tinalandia (PI); Alluriquin (PI); Pisotanti (PI); Santo Domingo (PI); Rio Toachi 900 m (PI); Balzapamba (BO); Quevedo (LR).

Melete lycimnia CRAMER, [1777]. TL Surinam.

M. lycimnia aelia f. *nazona* FRUHSTORFER, 1908. TL Napo.
= *nazona* RÖBER, 1909. TL Rio Napo.

M. lycimnia aelia f. *pistoria* FRUHSTORFER, 1908. TL Napo.
= *pistoria* RÖBER, 1909. TL Rio Napo.

= *M. peruviana* LUCAS, 1852. TL Cuzco.

?= *Daptonoura latilimbata* BUTLER, 1896. TL Ecuador.

semiobscurata WEYMER, [1914]. TL Macas.

asta FRUHSTORFER, 1908. TL Columbien. Infrasubspecific.

Remarks: A very variable species with several named forms, and the synonymy above is only provisional. The ecuadorian populations may be distinguished as ssp. *aelia* FELDER & FELDER, 1861 (TL Ecuador, Neu Granada). It is locally common.

Distribution: Misahualli (NA); Latas (NA); Pano (NA); Zarzayacu (NA); Pumayacu 700 m (NA); Shushufindi (NA); Talag (NA); Archidona (NA); Curarai (NA); Napo (NA); El Rosario (TU); Pastaza (PA); Alpayacu (PA); Zamora (ZC).

Melete leucadia FELDER & FELDER, 1862. TL Upper Rio Negro.

ssp. *palaestra* HOPFFER, 1874. TL Peru [Chanchamayo].

?= *equadorica* STRAND, [1916]. TL Ecuador, Sarayaku (as *ecuadorensis* in BMNH).

Remarks: A scarce species known from a few specimens collected in Napo and Pastaza. It is not known if the populations are referable to *palaestra* or to *equadorica*.

Distribution: Rio Napo (NA); Curarai (NA); Rio Latas (NA); El Rosario (TU); Pastaza (PA); Sarayacu (PA).

Melete leucanthe FELDER & FELDER, 1861. TL Nova Granada in provincia Bogotà prope Muzo.

= *M. peruviana* auctorum nec LUCAS, 1852.

= *M. inaequalis* var. BUTLER, 1896. TL E Peru.

= *M. peruviana regnidas* FRUHSTORFER, 1908. TL Ecuador.

Remarks: This species was once known as *Melete peruviana* LUCAS, now considered as a synonym of *M. lycimnia* (see LAMAS, 1990). It is widely distributed. Ecuadorian populations scarcely differ from the nominate subspecies.

Distribution: Archidona (NA); Ambato (TU); El Rosario (TU); Pastaza (TU); Sarayacu (PA); Alpayacu (PA); Gualaquiza (MS); 30 km S Mendez (MS); Cuenca (AZ); Rio Numbala (ZC); Loja (LO).

Melete laria FELDER & FELDER, 1867 TL Colombia.

Remarks: We list this species which may occur in the south east of the country, having been collected in north Peru, Amazonas, Rodriguez de Mendoza.

Ascia sincera WEYMER, 1890. TL Guayaquil und Rio Daule (Ecuador).

Remarks: The relationships among *A. sevata* FELDER & FELDER, 1861 (TL Venezuela), *A. buniae* HÜBNER, 1819 (TL Brasil) and *A. imperator* KIRBY, 1881 (TL [Ecuador], "river bank Copataza") (?= *A. ausia*) are not clear. It seems that these taxa, together with *tiburtia* FRUHS-TORFER, 1908 (TL Guatemala) have a clinal variation. *A. sincera* corresponds to large specimens distributed in Esmeraldas at Tonchigue and San Mateo but it may occur in other areas of the west side.

Distribution: Esmeraldas (ES); Tonchigue (ES); San Mateo (ES).

Ascia monuste LINNAEUS, 1764. TL "Barbaria" [Surinam].

Remarks: This migratory species is scarce in Ecuador and apparently restricted on the western side only. Populations with specimens of small size referable to ssp. *suasa* BOISDUVAL, 1836 (TL Chili).

Distribution: Tinalandia (PI); Yaguarcocha (IM); ?W Otavalo 3100 m (IM); Manta (MA); Santa Ana-san Pedro 1130 m (LO); San Isidro, W Loja (LO); Loja (LO).

Appias drusilla CRAMER, [1777]. TL "Batavia" [error].

Remarks: Widely distributed but not abundant. The males of the western populations are white and with no apical black border. They can be distinguished as ssp. *tenuis* LAMAS, 1981 (TL Tumbes, Matapalo, La Totorá m 100).

Distribution: Pununo (NA); Shushufindi (NA); Misahualli (NA); Curarai (NA); Topo (TU); Pas-taza (TU); Pisotanti (PI); rio La Chima (BO); Las Juntas (BO); Quevedo (LR); Arenillas (EO); Loja (LO).

Coliadinae

Colias dimera DOUBLEDAY, 1847 TL New Granada.

= *erythrogrammus* KOLLAR, [1849]. TL Nova Granada

Remarks: A common species widely distributed from 2500 up to 4000 m in the interandean valleys. Females polymorphic.

Distribution: Otavalo (IM); Laguna San Pablo (IM); Hacienda Zuleta (?); Quito (PI); Pifo, 15 km SE 3600 m (PI); Machachi (PI); Pululagua 2500 m (PI); Salcedo road-Km 20–25, 2900–3400 m (CO); road Sigchos-Isinlivi 2550 m (CO); Rio Sardinas (NA); N Guamote 3300 m (CH); Runtun 2600–3000 m (TU); Ambato (TU); La Moya 2100 m (TU); Minzas 2500 m (TU); Cuyuyá 2200 m (NA); Ingapirca 3170 m (CN); Gun 2800 m (CN); Chunchi 2800 m (CN) Tarqui 2630 m (AZ); Sigsig, Gima 2950 m (AZ); Loja (LO).

Colias euxanthe FELDER & FELDER, [1865]. TL Peru.

Remarks: It is uncommon with scattered populations in the interandean valleys. The taxon *alticola* GODMAN & SALVIN, 1891 (TL "Pichincha, Tortorillas, Chimborazo; Cayambe; Chimborazo west side; Antisana west side") is doubtfully considered as a ssp. of *euxanthe* by DESCIMON (1986). It has been reported by DOGNIN (1891) for Loja and from Piura by LAMAS (1979a).

Probably the southern populations belong to ssp. *stuebeli* REISSINGER, 1972 (TL NW Peru, Cajamarca, Cutervo) but no recent specimen is available from this area.

Distribution: NW Chimborazo 3800–3900 m (CH); Chicopamba, Sigchos 3380 m (CO).

Colias lesbia FABRICIUS, 1775. TL Patagoniae littoribus.

Remarks: According to REISSINGER (1972a) *C. dinora* KIRBY, 1881 (TL Chimborazo) is a female of *C. lesbia*. Subsequently Berger (1983) considers the type-locality of *dinora* doubtful and, with an awkward nomenclatural sequence, replaces the name *puna* FRUHSTORFER, 1907 (TL Peru, Puno) considered a synonym of *C. euxanthe*, with the description of ssp. *meieri* to designate the populations of *C. lesbia* from Ibarra and Baños. The real status of *C. lesbia* is still under investigation. It is possible that *C. lesbia* and *C. euxanthe* behave as semispecies (DESCIMON, 1986).

Distribution: Otavalo (IM); Machachi (PI); Pifo 15 km SE 3600 m (PI); Chillo (PI); San Javier 2000 m (TU); Ambato (TU); Cuenca (AZ); Sigchos (CO) 2800 m; Tarqui 2700 m (AZ); Gun 2800 m (CN); Chunchi 2800 m (CN); Loja (LO); Loja, Malacatos (LO) 2250 m; Pichig (LO) 2850 m.

Zerene cesonia STOLL, [1790]. TL "Georgia"

Remarks: Common in the interandean valleys. Southern populations referable to ssp. *limonella* LAMAS, 1981 (TL Peru, Lima, Surco 2200 m).

Distribution: Imantag (IM); Otavalo (IM); Tandapi 1800 m (PI); Quito (PI); Chimbo (CH); Huigra (CH); Baños (TU); Ulva 2200 m (TU) Yataqui 2400 m (TU); El Rosario (TU); Isinlivi (CO) 2500–3000 m; Portovelo 800 m (EO); Santa Ana-San Pedro 1130 m (LO); Catamayo 1800 m (LO); Guayquichuma 1700 m (LO); Loja (LO)

Phoebis sennae LINNAEUS, 1758. TL "Habitat in Cassia Americes"

Remarks: A moderately common and widespread species in scattered populations. LAMAS (1976) points out that only ssp. *marcellina* CRAMER, 1777 (TL Surinam) occurs in south America.

Distribution: Rio Negro 1300 m (TU); Topo (TU); La Avanzada 50 m (EO); Santa Ana, San Pedro (LO) 1150 m; quebrada La Chorrera, Zaruma-San Pedro 1100–1200 m (LO); Rio Leon, Oña 1840 m (AZ); Vilcabamba 1800 m (LO).

Phoebis bourkei DIXEY, 1933. TL Coast region, Ecuador.

= *tatei* BROWN, 1933. TL Ecuador, Guayaquil. According to LAMAS (1976).

Remarks: Apparently the range of this species is limited to xerophilous habitat in the south west of the country. Reported by LAMAS (1976, 1979a) from Peru, Tumbes to Cajamarca.

Distribution: Arenillas 150 m (EO); Santa Rosa (EO).

Phoebis argante FABRICIUS, 1775. TL Brasilia.

Remarks: It is widely distributed in western countries but of scarce occurrence. Eastern records are doubtful. We can consider the western populations as ssp. *chinchita* LAMAS, 1976 (TL Peru, Lima, Cieneguilla).

Distribution: Tonchigue (ES); Nanegal (PI); Pisotanti (PI); Guayaquil (GU); Rio Daule (GU); "Rio Latas" (NA); Santa Ana, San Pedro 1150 m (LO).

Phoebis agarithe BOISDUVAL, 1836. TL Mexique.

Remarks: This migratory species is very rare or at least scarcely observed in Ecuador. Only some specimens were found in Pichincha, although it may occur in the south of the country having been reported from Tumbes (LAMAS, 1976, 1979a), whose populations were later described as ssp. *tumbesina* LAMAS, 1981 (TL Tumbes, Matapalo, La Totorá 100 m).

Distribution: Santo Domingo (PI).

Phoebis neocypris HÜBNER, 1823. TL Not stated.

Remarks: Moderately common on both slopes. According to LAMAS (1976) the nominal taxon *urina* FELDER & FELDER, 1861 (TL Venezuela, Cordillerae bogotanae) is conspecific with *P. neocypris*. A female form *impurpurissata* NIEPELT, 1914 (TL Ecuador, Los Llanos) was described from the west side.

Distribution: Nanegal (PI); Talag (NA); Misahualli (NA); 30 km S Mendez (MS); Río Negro (TÚ); Loja (LO).

Phoebis philea JOHANSSON, 1763. TL "Indiis" [Surinam].

Remarks: Widely distributed in eastern countries. Western records are doubtful (W of Quito WEYMER, 1890), but it may be more widespread in the south, having been reported from Tumbes by LAMAS (1976, 1979a).

Distribution: Río Pumayacu 700 m (NA); Topo (TU); Tzatzayacu (NA); Santa Ana, San Pedro 1150 m (LO).

Phoebis trite LINNAEUS, 1758. TL "In Calidioribus regionis".

Remarks: Moderately common on the amazonian side.

Distribution: Río Latas (NA); Misahualli (NA); Jatun Sacha (NA); Venecia (NA); Pununo (NA); Talag (NA); Macas MS); Loja (LO).

Anteos clorinde GODART, [1824]. TL Brésil.

Remarks: Although this species is widely distributed in the Neotropics and it was reported from Loja (DOGNIN, 1887) as *G. gueneeana*, and from Guayaquil and Río Daule (WEYMER, 1890), there are no recent specimens from Ecuador. It is reported by LAMAS (1976) from north Peru, Cajamarca.

Aphrissa statira CRAMER, [1777]. TL "Coté de Coromandel & à Tranquebar"

Remarks: Common, often abundant at puddling, on the amazonian side.

Distribution: Río Latas (NA); Misahualli (NA); Jatun Sacha (NA); Venecia (NA); Pununo (NA); Talag (NA); Tzatzayacu (NA); Macas MS); Loja (LO).

Aphrissa boisduvalii FELDER & FELDER, 1861. TL Nova Granada in provincia Bogotá prope Muzo.

Remarks: The western vicariant of *A. statira*. Uncommon in scattered populations.

Distribution: Tonchigue (ES); Balao Chico, 60 km S Guayaquil (GU); Loja (LO).

Leucidia brephos HÜBNER, [1816]. TL "Gegend von Rio Janeiro"

Remarks: Seasonally and locally common on the east side.

Distribution: Atahualpa (NA); Misahualli (NA); Tzatzayacu (NA); Pununo (NA); Las Minas (NA).

Eurema दौरa GODART, 1819. TL Amérique septentrionale [Virginia].

Remarks: Common and widespread on the west side, highly polyphenic. Populations similar to ssp. *phoenicia* FELDER & FELDER, 1865 (TL Nova Granada, Bogotá).

Distribution: Rio Mira 1000 m (IM); Alluriquin 820 m (PI); Chimbo (CH); Zaruma (EO); Rio Calera, Piñas-Zaruma 650 m (EO); San Antonio (MA); Amaluza (ZC); Santa Ana, San Pedro (LO) 1130 m; Loja (LO).

Eurema elathea CRAMER, [1777]. TL "Virginia [Haiti].

Remarks: Seasonally common on the western side in xerophilous environments. Populations from central Ecuador referable to ssp. *ella* RÖBER, 1909 (TL Ecuador [occidental, see LAMAS (1993)]. Those from the south are different and probably related to the peruvian populations distributed from Lambayeque to Lima (LAMAS, 1977b, 1981).

Distribution: road Manta-Quevedo 150 m (MA); Santa Ana, San Pedro (LO) 1130 m; La Toma-Catamayo 1600 m (LO); Sta Ana, Portovelo-San Pedro 1300 m (LO); 3 km E San Pedro 1800 m (LO); Catamayo 1700 m (LO).

Eurema nigrocincta DOGNIN 1889. TL Loja.

Remarks: A species restricted to xerothermic environments of south Ecuador and Peru. Seasonally common and with a different degree of melanism according to the season. Reported from Tumbes to Lima (LAMAS 1977).

Distribution: Rio Leon, Oña (AZ) 1840 m; Zamora (ZC); Catamayo 2000 m (LO); quebrada del Pitayo, 7 km E Catamayo 1600–1700 m (LO); Vilcabamba-Yangana 1850 m (LO); San Pedro (LO) 1800 m; Loja (LO).

Eurema albula CRAMER, [1775]. TL Suriname.

REMARKS A common species on the west side of the country. Populations from south west referable to ssp. *tatora* LAMAS, 1981 (TL Peru, Tumbes, El Salto, sea level) with wide black margins.

Distribution: Esmeraldas (ES); Chimbo (CH); rio La Chima (BO); Zaruma (EO); Santa Ana Maria (LR); Quevedo (LR); Guayaquil (GU); Misahualli (NA); rio Latas (NA); Talag (NA); Las Minas (NA); Guayquichuma 1200 m (LO); quebrada Dulce, Celica-Alamor 1150 m (LO); Santa Ana, San Pedro 1130 m (LO).

Eurema phiale CRAMER [1775]. TL Suriname.

Remarks: This species is reported from Peru, Piura to Lambayeque (LAMAS, 1977b) and it may occur in the south.

Eurema (Pyrisitia) proterpia FABRICIUS 1775. TL Jamaica.

watsonia KLOTS, 1923. TL Ecuador.

= *gundlachia morleyi* COXEY, 1932. TL Ecuador.

Remarks: A common, polyphenic species distributed on the west side. Eastern localities must be confirmed. LAMAS (1976) reports the two females (*morleyi* and *watsonia*) flying together in north Peru and they are considered seasonal forms.

Distribution: Apuela 1500 m (IM); Alluriquin 820 m (PI); Tinalandia (PI); Pisotanti (PI); "Canelos" (PA); rio La Chima (BO); Balzabamba (BO); Chimbo (CH); 3 km N Pallatanga 1840 m (CH); Rio Pilalò 1260 m (CO); Chonana (GU); Arenillas (EO); Zamora (ZC); Loja (LO); Santa Ana, San Pedro 1130 m (LO).

Eurema (Pyrisitia) leuce BOISDUVAL 1836. TL "Missions de l'Uruguay, au Brésil"

Remarks: Common on both slopes.

Distribution: Tonchigue (ES); Chone (MA); Palmar (GU); Pisotanti (PI); Quevedo (LR); Santa Ana Maria (LR); Canelos (PA); Santa Ines (TU); 30 km S Mendez (MS); Loja (LO); La Toma, W Loja 1500 m (LO).

Eurema (Pyrisitia) nise CRAMER [1775]. TL Jamaica.

Remarks: Common on the western and south sides. Populations known as ssp. *sulla* WEYMER, 1890 (TL Pululagua 2000 m) which perhaps is a seasonal form, characterized by the reduction of the marginal black designs.

Distribution: Guayaquil (GU); Paramba (IM); Arenillas (EO); Quito; Huigra (CH); Zamora (ZC); Oña (AZ); Rio Leon, Oña 1840 m (AZ). Celica-Alamor 1150 m (LO); Catamayo 1700 m (LO); San Pedro (LO) 1800 m; Loja (LO); Macarà-Catacocha 1100 m (LO).

Eurema (Pyrisitia) venusta BOISDUVAL, 1836. TL Jamaica.

Remarks: Widespread and seasonally abundant. Ecuadorian populations referable to ssp. *aequatorialis* FELDER & FELDER, 1861 (TL Ecuador).

Distribution: Chillo (PI); Santa Ines (TU); "Canelos" (PA); Lumbaqui (SU); 30 km S Mendez (MS); Loja (LO).

Eurema (Sphaenogona) ecuadora HEWITSON, 1869. TL Island of Puna.

Remarks: A south western species, related to *E. mexicana*, with sexual dimorphism. Not common in xerophilous environments. Reported from Guayaquil and Rio Daule (WEYMER, 1890) and, in Peru, from Tumbes to La Libertad (LAMAS, 1977b).

Distribution: Santa Ana, San Pedro (LO) 1130 m; Macarà-Catacocha 1100 m (LO); Catamayo 1700 m (LO) Loja (LO); Zamora (ZC).

Eurema (Sphaenogona) salome FELDER & FELDER, 1861. TL Ecuador.

Remarks: Seasonally common in dry subdesertic areas in the interandine valleys.

Distribution: Rio Chota 1800 m (IM); Azcazubi-Pifo 2600 m (PI); Chillo (PI); Pululagua 2000 m (PI); Santa Isabel-Pasaje 2000 m (AZ); Celica 2000 m (LO); Loja; El Monje (LO).

Eurema (Sphaenogona) fabiola FELDER & FELDER, 1861. TL Venezuela

Remarks: Tentatively we report under this species, specimens referable to *fabiola* which D'ABRERA (1981) considers conspecific with *E. salome*. Locally common in scattered populations on the east above 700 m.

Distribution: Topo (TU); rio Latas (NA); 30 km S Mendez (MS).

Eurema (Sphaenogona) xanthochlora KOLLAR, [1849]. TL Nova Granada.

Remarks: Widely distributed and common. Eastern ecuadorian populations referable to ssp. *ectriva* BUTLER, 1873 (TL Archidona). Southern populations with a distinct pattern probably related to polyphenism.

Distribution: Esmeraldas (ES); Tandapi (PI); Chimbo (CH); Ambato (TU); Santa Inez (TU); Baños (TU); Topo (TU); Archidona (NA); Rio Quijos 2600 m (NA); Alpayacu (PA); quebrada Dulce, Celica-Alamor 1150 m (LO); Parque Podocarpus 1200 m (LO).

Eurema (Sphaenogona) arbela GEYER, [1832] TL "Java"

Remarks: The ssp. *ruizana* was described by LAMAS (1981) on specimens from north Peru, rio Utcubamba, 20 km N Pedro Ruiz Gallo 1200 m. The species may occur in the extreme south of the country.

Eurema (Sphaenogona) reticulata BUTLER, 1871. TL Archidona.

= *marmorata* DOGNIN, 1888. TL Rivière Numbala.

Remarks: Uncommon, usually above 1000 m, but widespread. Western populations different and perhaps related to *Eurema xystra* D'ALMEIDA, 1936 (TL Quito). Reported in Peru, from Tumbes to Lima (LAMAS, 1977b)

Distribution: El Reventador (SU); Rio Oyacachi 1600 m (NA); Cosanga 2200 m (NA); "Aguano" (NA); Huacamayo 1800 m (NA); "Sarayacu" (PA); Topo (TU); Baños (TU); Rio Toachi, Sigchos-Isinlivi 2250 m (CO); Numbala (ZC); Loja (LO).

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