

HESPERIOIDEA: HESPERIIDAE Latreille, 1809

(skippers)

Range: cosmopolitan, but not occurring in New Zealand; about 3500 species; one family, divided into six subfamilies, three of which are represented in the Sulawesi Region.

Foodplants: a wide variety of angiosperms.

Key works: Evans (1949), Corbet & Pendlebury (1992), Common & Waterhouse (1981), Ackery (1989), Maruyama (1991), de Jong & Treadaway (1993c), Bridges (1994), Ackery *et al.* (1999), Braby (2000).

COELIADINAE Evans, 1937 (= Rhopalocamptinae Evans, 1934; unnecessary replacement name: ICZN 1999 Art. 40; Lamas *et al.*, in press).

(awls and awlets, policemen—Pl. 1, figs 1–4)

Range: palaeotropics; a small group of about 80 species, often crepuscular in habit, included in about seven genera—five of which occur in Sulawesi.

Foodplants: Asclepiadaceae, Araliaceae, Barringtoniaceae, Bignoniaceae, Combretaceae, Conneraceae, Corynocarpaceae, Euphorbiaceae, Fabaceae, Geraniaceae, Icacinaceae, Malpighiaceae, Malvaceae, Menispermaceae, Moraceae, Myristicaceae, Myrsinaceae, Nyctaginaceae, Oleaceae, Rubiaceae, Sabiaceae, Solanaceae, ?Zingiberaceae.

Key works: as family.

BURARA Swinhoe, [1893]

(awls and awlets—Pl. 1, fig. 1)

Range (1+2+5+6+7): Sri Lanka, India and China to Malay Peninsula, Greater and Lesser Sunda Islands, Philippines and Sulawesi Region. Sixteen species formerly included in *Bibasis* (de Jong & Treadaway, 1993c; Tsukiyama, 1985). Apart from morphological characteristics, they differ from *Bibasis* in being crepuscular (Maruyama, 1991). Chiba (1995, 1997) divided the genus in two species groups, the smaller one continental, the larger one, with 12 species, with a wider distribution, up to 6 of which occur on Sulawesi.

Foodplants: Araliaceae, Combretaceae, Malpighiaceae, Myristicaceae, Myrsinaceae, ?Zingiberaceae.

Key works: Evans (1949), Tsukiyama (1985), Maruyama, (1991), de Jong & Treadaway (1993a).

B. oedipodea Swainson, 1820

(Branded Orange Awlet)

Range (1+2+6+7): Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Philippines, Sulawesi Region.

Foodplants: *Combretum* (Combretaceae); *Hiptage* (Malpighiaceae).

****B. oedipodea excellens*** Hopffer, 1874

Range: Sulawesi (N, C, S), Kep. Sula (Mangole).

B. tuckeri Elwes & Edwards, 1897

(Tucker's Awlet)

Note: Evans (1949) mentioned only two specimens, one from Burma, the other from W Malaysia. Maruyama (1991) recorded the species also from S Thailand, Sumatra and N Borneo. Igarashi & Fukuda (2000) give the distribution as mentioned below.

Range (1+2+6+7): Sri Lanka, N India to Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Mindanao, Sulawesi, Kep. Banggai and Kep. Sula.

Foodplants: *Hiptage* (Malpighiaceae) (Robinson *et al.*, 2001). Igarashi & Fukuda (2000) describe and illustrate the larva and pupa from the Cameron Highlands, Malay Peninsula. The small tree on which the mature larva was found had already been defoliated and the tree died before it could be identified.

****B. phul*** Mabille, 1876

(Mabille's Awlet)

Range (E): Sulawesi (N, C, S).

Note: Tsukiyama (1985) includes *phul* in a largely unresolved group of six species, including *gomata*. Old records for the Philippines should be discounted (see de Jong & Treadaway, 1993c).

****B. imperialis*** Plötz, 1886

(Imperial Awlet)

Range (R): Sulawesi Region.

****B. imperialis imperialis*** Plötz, 1886

Range: Sulawesi (N, C, S).

**B. imperialis veteratrix* Detani, 1983

Range: Kep. Banggai (Peleng).

**B. aphrodite* Fruhstorfer, 1905

(Aphrodite's Awlet—Pl. 1, fig. 1)

Range (R): Sulawesi (C, S), Kep. Banggai (Peleng), Kep. Sula (Mangole).

Note: the status of this taxon, often treated as a subspecies of *B. harisa* Moore, is discussed by de Jong & Treadaway (1993a).

B. gomata Moore, 1865

(Pale Green Awlet)

Range (1+2+6+7): India, China, Indo-China, Thailand, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Philippines, Sulawesi Region.

Note: although originally included by Evans (1949) in the *harisa*-group, according to Tsukiyama (1985) the relationships of *gomata* within *Bibasis* (now *Burara*) remain unresolved.

Foodplants: *Schefflera* (= *Heptapleurum*); *Trevesia* (Araliaceae); *Horsfieldia* (Myristicaceae); *Embelia* (Myrsinaceae). The early stages have been illustrated by Johnston & Johnston (1980) and Igarashi & Fukuda (2000).

**B. gomata radiosa* Plötz, 1885

Range: Sulawesi (N, S, C), Bangka, ?Kep. Banggai.

BIBASIS Moore, 1881

(awls and awlets)

Range (1+2+5+6+7): Sri Lanka, India, China and Japan to Malay Peninsula, Greater and Lesser Sunda Islands, Philippines and Sulawesi Region. Unlike *Burara*, the species of this genus are diurnal. The genus comprises three species formerly recognised by Tsukiyama (1985) as one of the species groups of *Bibasis*. Two of them occur in the Sulawesi Region.

Note: Bridges (1994) listed six species for *Bibasis*, one of which, *owstoni*, belongs to *Burara*, while two of the others (*mahinta* Moore, 1874, and *nestor* Möschler, 1878) are generally considered subspecies of *iluska*.

Foodplants: Combretaceae, Malpighiaceae, Nyctaginaceae, Rubiaceae.

Key works: Evans (1949), Tsukiyama (1985), de Jong & Treadaway (1993a), Maruyama (1991).

B. iluska Hewitson, 1867

Range (5+6): Assam, Indo-China, Java, Lesser Sunda Islands, Sulawesi Region.

**B. iluska iluska* Hewitson, 1867

Range: Sulawesi (N, C, S), Kalao.

Foodplants: *Hiptage* (Malpighiaceae) (Igarashi & Fukuda, 2000, who also illustrate the early stages).

Note: Tsukiyama (1985) apparently refers to this taxon under the junior name *mahintha* Moore, 1874, which represents the Assam/Burma race; the reason for abandoning the name *iluska* for the species is not clear, and *mahintha* is not adopted here. Tsukiyama (*op. cit.*) places this butterfly as the sister of the next species, *senata*, in a separate major division of the old, inclusive genus *Bibasis*. Bridges (1994) listed three subspecies of *iluska* (subspecies *mahintha*, *nestor* Möschler, 1878, and *iluska*) as separate species. According to Igarashi & Fukuda (2000) *B. iluska* (the species) is restricted to the Sulawesi Region.

B. senata Moore, 1865

(Orange Tailed Awl)

Range (1+2+5+6+7): Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi Region. The species looks superficially like a *Hasora*.

Foodplants: *Combretum* (Combretaceae); *Hiptage* (Malpighiaceae); *Pisonia* (Nyctaginaceae); *Urophyllum* (Rubiaceae). Igarashi & Fukuda (2000) illustrate the larva and pupa.

**B. senata senata* Evans, 1934

Range: Sulawesi (N, C, S), Kep. Banggai.

HASORA Moore, 1881

(awls—Pl. 1, fig. 2)

Range (W): India and China to New Hebrides and Australia. A genus of over 30 species, divided by Evans (1949) into 6 species groups, four of which (with 10 species recorded) occur in Sulawesi.

Foodplants: Fabaceae.

Key works: Evans (1949), de Jong (1982c).

****H. umbrina*** Mabille, 1891

Range (E): Sulawesi (N, S).

H. chromus Cramer, 1782

Range: from Pakistan to Australia and Fiji. Igarashi & Fukuda (2000) include Sulawesi in their distribution map. Although the species is likely to occur there, we have not seen specimens or pertinent literature references.

Foodplants: *Derris*, *Pongamia*, *Pithecelobium* (Fabaceae) (Igarashi & Fukuda, 2000, who illustrate the larva and pupa, and some foodplants).

H. taminatus Hübner, 1818

(White-banded Awl)

Range (W): Sri Lanka, India to Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi Region, N & C Maluku, Irian Jaya (Waigeo).

Foodplants: *Dalbergia*, *Derris*, *Millettia*, *Rourea* (Fabaceae); *Terminalia* (Combretaceae). Igarashi & Fukuda (2000) illustrate foodplants and early stages.

****H. taminatus attenuata*** Staudinger, 1889

Range: Sulawesi (N, C, S), Kep. Banggai (Peleng), Kep. Sula (Sanana).

H. mixta Mabille, 1876

(Pl. 1, fig. 2)

Range (1+2+3+4+6+7): Indo-China, Thailand (Kimura 1996), Malay Peninsula, Sumatra, Java, Borneo (Maruyama, 1991), Palawan, Philippines, Sulawesi Region, N & C Maluku.

Foodplants: *Derris* (Fabaceae).

****H. mixta fenestrata*** Fruhstorfer, 1911

Range: Sulawesi (N, C), Kep. Sangihe (Sangihe, Siao), Wowoni, Kep. Banggai (Peleng), Kep. Sula (Mangole, Sanana).

H. badra Moore, 1858

(Common Awl)

Range (1+5+6+7): Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Philippines (Balabac, Calamian, Palawan: de Jong & Treadaway, 1993c; not confirmed for other Philippine islands: Treadaway, 1995), Sulawesi (S).

Foodplants: *Derris*, *Millettia*, *Pongamia* (Fabaceae). Igarashi & Fukuda (2000) illustrate foodplants, larva and pupa.

H. badra badra Moore, 1858

Range: as for species except Sri Lanka.

****H. sakit*** Maruyama & Uehara, 1992

Note: Fujioka *et al.* (1997) synonymized this taxon with *H. quadripunctata*. Maruyama (2000) defends its specific status and illustrates the holotype.

Range (E): Sulawesi (N, C).

H. quadripunctata Mabille, 1876

Range (2+3+6+7): Malay Peninsula, Sumatra, Java, Borneo, Philippines (but not Palawan), Sulawesi, N Maluku (Halmahera, Bacan).

****H. quadripunctata celebica*** Staudinger, 1889

Range: Sulawesi (N, C, S), Kep. Banggai (Peleng).

Note: de Jong & Treadaway (1993c) list only N Sulawesi. Maruyama (2000) illustrates the lectotype.

H. vitta Butler, 1870

(Plain Banded Awl)

Range (1+2+7): India, China, Indo-China, Malay Peninsula, Sumatra, Borneo, Palawan, Philippines, Sulawesi Region, Irian Jaya (Evans, 1949), but not listed for Papua New Guinea by Parsons (1999).

Foodplants: *Derris*, *Millettia*, *Phaseolodes*, *Pongamia*, *Spatholobus* (Fabaceae). Johnston & Johnston (1980) illustrate the pupa.

****H. vitta sula*** Evans, 1932

Range: Sulawesi (N, C), Kep. Banggai (Peleng), Kep. Sula (Sanana).

H. moestissima Mabille, 1876

Range (2+4): Philippines, Sulawesi (N, C, S), Kep. Banggai, central Maluku (Saparua: de Jong, 1982c), ?Aru (de Jong, 1982c).

Note: Evans (1934) separated the single known specimen from the Aru Islands as ssp. *unica*, but he did not trust the locality. Previous records for Palawan apparently relate to *H. caeruleostriata* de Jong, 1982, which originally was described as a subspecies of *H. moestissima*.

H. khoda Mabille, 1876

(Large Banded Awl)

Range (W): Assam, Indo-China, Malay Peninsula, Sumatra (de Jong, 1982c), Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi Region, N & C Maluku, New Guinea region, Solomon Islands, New Caledonia, Lifu, Australia.

Foodplants: *Millettia* (Fabaceae); in Australia also found on introduced *Wisteria* (Fabaceae) (Braby, 2000).

****H. khoda burgeri*** Ribbe, 1889

Range: Sulawesi (N, C, S), Kep. Talaud, Kep. Sangihe (Siao), Kep. Banggai (Peleng; Nieuwenhuis, 1946), Tukangbesi (Kaledupa).

H. leucospila Mabille, 1891

(Violet Awl)

Range (1+2+4+6+7): Indo-China, Thailand, Sumatra, Java, Borneo, Palawan (Treadaway, 1995), Philippines, Sulawesi (N, C), Maluku (Ambon).

H. leucospila leucospila Mabille, 1891

Range: as for species except Maluku.

BADAMIA Moore, 1881

(awls—Pl. 1, fig. 3)

Range (W): Sri Lanka, Pakistan, India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi Region, N & C Maluku, New Guinea region, Solomon Islands, Pacific islands, Australia. A genus containing two species, one widespread including Sulawesi and the Pacific, the other restricted to the Pacific.

Foodplants: Bignoniaceae, Combretaceae, Fabaceae, Malpighiaceae, ?Moraceae, Oleaceae.

Key works: Evans (1949).

B. exclamatoris Fabricius, 1775

(Brown Awl—Pl. 1, fig. 3)

Range (W): as for genus, including Sulawesi (N, C, S), Kep. Tukangbesi (Tomea), Salayar, Kep. Banggai (Peleng).

Foodplants: *Bignonia* (Bignoniaceae), *Anogeissus*, *Combretum*, *Terminalia* (Combretaceae); *Pongamia* (Fabaceae); *Hiptage*, *Rhyssopteryx*, *Tristellateia* (Malpighiaceae); ?*Ficus* (Moraceae); *Chionanthus*, *Linociera* (Oleaceae); ?*Bambusa* (Poaceae). Igarashi & Fukuda (1997a) illustrate larva and pupa.

CHOASPES Moore, 1881

(awlkings—Pl. 1, fig. 4)

Range (1+2+3+4+6+7): Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Philippines, Sulawesi, N & C Maluku, New Guinea. Evans (1949) recognised six species but, on the basis of immature stages Igarashi (1992) and Igarashi & Fukuda (1997a) convincingly demonstrated that there were more. Depending on the taxonomic rank attached to apparently monophyletic but allopatric island forms, 7-11 species can be distinguished. Whatever scheme is applied, only two have been found on Sulawesi.

Foodplants: Combretaceae, Icacinaceae, Menispermaceae, Sabiaceae, Sapindaceae.

Key works: Evans (1949), Chiba (1988), Igarashi (1992), Tsukiyama (1992), Chiba (1992), de Jong & Treadaway (1993a,c), Igarashi & Fukuda (1997a).

C. plateni Staudinger, 1888

(Pl. 1, fig. 4)

Range (1+2+6+7): Assam to Sundaland, Philippines and Sulawesi (Evans, 1949; de Jong & Treadaway, 1993c).

Note: This is the conventional interpretation, in accordance with Maruyama (1991), Corbet & Pendlebury (1992) and de Jong & Treadaway (1993a, c). The species defined in this way is based on an apparently autapomorphic secondary sexual character. It can be divided into a number of allopatric forms, some of which Chiba (1992) and Tsukiyama (1992) recognise as distinct species (see also de Jong & Treadaway, 1993c: 19). According to these authors *C. plateni* is a species restricted to Sulawesi.

**C. plateni plateni* Staudinger, 1888

Foodplants: *Meliosma* (Meliosmaceae); *Pometia* (Sapindaceae) (recorded by Igarashi & Fukuda, 1997a, who also illustrate larva and pupa).

Range: Sulawesi (N, C, S).

C. hemixanthus Rothschild & Jordan, 1903

(Hooked Awlking)

Range (3): Sulawesi, Halmahera, New Guinea (Igarashi & Fukuda, 1997a). Each island has its own subspecies.

Note: Evans (1949), Chiba (1992) and Tsukiyama (1992) agree in the occurrence of a subspecies of this species, *furcatus* Evans, 1932, in the Asian continent (Nepal to Indo-China and S China, with unconfirmed and improbable occurrence on Palawan), thus making the species highly disjunct. Igarashi & Fukuda (1997a) consider *furcatus* a distinct species on the basis of differences in the immature stages. From a biogeographical point of view the opinion of the last authors seems most likely. Without presenting new evidence, Parsons (1999) suggests that the continental *furcatus* as well as the three island subspecies could be four different species. We follow Igarashi & Fukuda (1997a).

Foodplants: *Rhyticaryum* (Icacinaceae); *Meliosma* (Meliosmaceae); *Pycnarrhena* (Menispermaceae); *Sabia* (Sabiaceae). Igarashi & Fukuda (1997a) illustrate larva and pupa.

**C. hemixanthus wallacei* Tsukiyama & Chiba, 1991

Range: Sulawesi (C).

PYRGINAE Burmeister, 1878

(flats, angles, elfs, grizzled skippers—Pl. 1, figs 5–13)

Range: cosmopolitan, about 1200 species in total; in Old World about 300 species in 40 genera; eight of these genera occur in Sulawesi.

Foodplants: dicotyledons (with rare exceptions).

Key works: Evans (1949), Corbet & Pendlebury (1992), Common & Waterhouse (1981), Bridges (1994), Ackery *et al.* (1999)

CELAENORRHINUS Hübner, 1819

(flats, sprites—Pl. 1, figs 5, 6)

Range (W): pantropical, but not extending to New Guinea or Australia. Of the approximately 90 species, more than 30 occur in the Oriental region, including four on Sulawesi (mainly in the south).

Foodplants: Acanthaceae, Fabaceae, Gesneriaceae, Oleaceae, Verbenaceae.

Key works: Evans (1949), de Jong (1982a).

C. ficulnea Hewitson, 1868

(Velvet Flat—Pl. 1, fig. 5)

Range (1+3+4+7): Indo-China, Malay Peninsula, Sumatra, Borneo, Palawan (Treadaway, 1995), Sulawesi, Buru, northern Maluku.

Foodplants: *Didissandra* (Gesneriaceae) (Igarashi & Fukuda, 2000, who also illustrate the foodplant, larva and pupa).

f. tola Hewitson, 1878

Range: Sulawesi (N, S), Maluku (Ternate).

C. ruficornis Mabille, 1878

(Tamil Spotted Flat)

Range (6): India, Java, Sulawesi Region.

Foodplants: *Phaulopsis*, *Strobilanthes* (Acanthaceae). Igarashi & Fukuda (2000) illustrate foodplant, larva and pupa.

**C. ruficornis area* Plötz, 1885 (= *Celaenorrhinus chamunda subconcolor* Röber, 1940; see Evans, 1957: 749, as “*subcincolor*”)

Range: Sulawesi (S), Kep. Banggai (Peleng).

C. asmara Butler, 1879

(White-banded Flat—Pl. 1, fig. 6)

Range (1+6+7): Assam, Indo-China, Thailand, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Sulawesi.
Foodplants: *Gendarussa* (Acanthaceae) (Igarashi & Fukuda, 2000); *Jasminum* (Oleaceae) (Maruyama, 1991; Igarashi & Fukuda, 2000). The old record of *Clerodendrum* (Verbenaceae) (Piepers & Snellen, 1910) needs confirmation.

C. asmara palajava Staudinger, 1889

Range: Borneo, Palawan, Sulawesi (S).

C. dhanada Moore, 1865

(Himalayan Yellow-banded Flat)

Range (5+6+7): India, Indo-China, Sumatra, Borneo, Java, Bali, Lombok, Sulawesi.

Foodplants: *Phaulopsis* (Acanthaceae) (Igarashi & Fukuda, 2000, who illustrate foodplant, larva and pupa).

***C. dhanada snelleni** Fruhstorfer, 1909

Range: Sulawesi (S).

ODINA Mabilie, 1891

(flats—Pl. 1, fig. 7)

Range (1+2+7): Sikkim, Assam, Burma, Indo-China, Malay Peninsula, Sumatra, Borneo, Palawan, Philippines (including Luzon and Mindanao: de Jong & Treadaway, 1993c; Tsukiyama & Chiba, 1994; Treadaway, 1995), Sulawesi Region. Evans (1949) recognized two species, one of which was split into three allopatric species by Tsukiyama & Chiba (1994). The latter authors are followed here.

Key works: Evans (1949), Tsukiyama & Chiba (1994).

***O. chrysomelaena** Mabilie, 1891

(Polygon Flat—Pl. 1, fig. 7)

Range (R): Sulawesi (N, C, S), Kep. Sula (Sanana).

PSEUDOCOLADENIA Shirôzu & Saigusa, 1962

(pied flats—Pl. 1, fig. 8)

Range (5+6+7): India, China, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Sulawesi (monobasic).

Note: Shimonoya & Murayama (1976) described a second species (*pinsbukana*) in the genus, but it belongs to *Coladenia* (de Jong, 1996).

Foodplants: Amaranthaceae (*Achyranthes*, *Cyathula*). The record of *Mimosa* (Mimosaceae) (Fleming, 1983) needs confirmation.

Key works: Shirôzu & Saigusa (1962), Corbet & Pendlebury (1992).

P. dan Fabricius, 1787

(Fulvous Pied Flat—Pl. 1, fig. 8)

Range (5+6+7): as genus.

Foodplants: as genus. Igarashi & Fukuda (2000) illustrate foodplants and early stages.

P. dan eacus Latreille, 1823

Range: Java, Lesser Sunda Islands, Sulawesi (S).

COLADENIA Moore, 1881

(pied flats—Pl. 1, fig. 9)

Range (1+2+5+6+7): Sri Lanka, India and China to Java, Lesser Sunda Islands, Philippines and Sulawesi. About 15 species, only one of which occurs in the Sulawesi Region.

Foodplants: Euphorbiaceae, Fabaceae, Rosaceae, Rutaceae, Sapindaceae, Tiliaceae.

Key works: Evans (1949), Corbet & Pendlebury (1992), de Jong & Treadaway (1992b), de Jong (1996).

***C. kehelatha** Hewitson, 1878

(Pl. 1, fig. 9)

Range (R): Sulawesi (N, C, S), Kep. Sula (Mangole, Sanana).

GEROSIS Mabilie, 1903

(white, or yellow-breasted flats—Pl. 1, fig. 10)

Range (1+2+6+7): eastern Palaearctic (China), India, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Palawan (Treadaway, 1995), Philippines, Sulawesi Region. Six species, of which only one, an endemic, occurs in Sulawesi.

Foodplants: Fabaceae (*Abrus*, *Dalbergia*).

Key works: Evans (1949), Corbet & Pendlebury (1992).

**G. celebica* Felder & Felder, 1867

(Pl. 1, fig. 10)

Range (R): Sulawesi Region.

**G. celebica celebica* Felder & Felder, 1867

Range: Sulawesi (N, C, S), Bangka, Kep. Banggai.

**G. celebica sulina* Evans, 1932

Range: Kep. Sula (Mangole, Sanana), Butung, Kep. Tukangbesi (Kaledupa, Tomea).

TAGIADES Hübner, 1819

(snow or clouded flats—Pl. 1, fig. 11)

Range (W): palaeotropics. About 16 species in total, of which the dozen or so occurring in the Indo-Australian region can be divided into two species groups, both represented on Sulawesi by single species.

Foodplants: Convolvulaceae, Dioscoreaceae, ?Poaceae, Roxburghiaceae, Smilacaceae, ?Tiliaceae.

Key works: Evans (1949).

T. japetus Stoll, 1781

(Common Snow Flat, or Black and White Flat)

Range (W): Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi Region, N & C Maluku, New Guinea region, Solomon Islands, Australia.

Foodplants: *Ipomoea* (Convolvulaceae); *Dioscorea* (Dioscoreaceae); *Shorea* (Dipterocarpaceae); *Smilax* (Smilacaceae); ?*Zea* (Poaceae); Roxburghiaceae. Igarashi & Fukuda (1997a) illustrate larva and pupa.

**T. japetus prasnaja* Fruhstorfer, 1910

Range: Sulawesi (N, C, S), Kep. Banggai (Peleng), Salayar.

**T. japetus obscurata* Staudinger, 1859

Range: Kep. Sangihe.

**T. japetus navus* Fruhstorfer, 1910

Range: Kep. Sula (Mangole, Sanana), Kep. Tukangbesi (Kaledupa).

T. trebellius Hopffer, 1874

(Pl. 1, fig. 11)

Range (1+2+3+4+5+7): Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi Region, N & C Maluku (Maruyama, 1991), New Guinea, Solomon Islands.

Foodplants: *Dioscorea* (Dioscoreaceae). Igarashi & Fukuda (1997a) illustrate larva and pupa.

T. trebellius trebellius Hopffer, 1874

Range: Sulawesi (N, C, S), Kep. Banggai (Peleng), Lesser Sunda Islands (Leti).

**T. trebellius mitra* Mabille, 1895

Range: Kep. Sula (Mangole, Sanana).

**T. trebellius sem* Mabille, 1883

Range: Kep. Talaud, Kep. Sangihe.

ODONTOPTILUM de Nicéville, 1890

(angles—Pl. 1, fig. 12)

Range (1+2+5+6+7): Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, western Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi. A small group of three species, only one of which occurs in Sulawesi; of the other two, one occurs in Sundaland, while the other is restricted to the Philippines.

Foodplants: Bombacaceae, Malvaceae, Sapindaceae, Tiliaceae.

Key works: Evans (1949).

O. angulatum Felder, 1862

(chestnut angle—Pl. 1, fig. 12)

Range (2+5+6+7): as genus, except not recorded from Palawan (Treadaway, 1995).

Foodplants: *Ceiba*, *Eriodendron* (Bombacaceae); *Hibiscus*, *Urena* (Malvaceae); *Allophylus* (Sapindaceae); *Grewia*, *Microcos* (Tiliaceae). Igarashi & Fukuda (1997a) illustrate all life stages. Bascombe *et al.* (1999) illustrate the pupa.

**O. angulatum helias* Felder & Felder, 1867

Range: Sulawesi (N, C, S).

CAPRONA Wallengren, 1857

(angles, ragged skippers—Pl. 1, fig. 13)

Range (5+6): Africa, Sri Lanka, India, China, Indo-China, Java, Lesser Sunda Islands, Sulawesi. Six species; of the three Oriental Region species, the two not found in Sulawesi are restricted to the Asian mainland and Sri Lanka. The genus has not been recorded from the Malay Peninsula, Sumatra, Borneo or the Philippines.

Foodplants: Sterculiaceae, Tiliaceae, Urticaceae.

Key works: Evans (1949).

C. agama Moore, 1858

(Spotted Golden Angle—Pl. 1, fig. 13)

Range (5+6): India, Indo-China, Java, Lesser Sunda Islands, Sulawesi (S).

Foodplants: *Microcos* (Tiliaceae); *Laportea* (Urticaceae). Igarashi & Fukuda (2000) illustrate a foodplant and the larva and pupa.

C. agama agama Moore, 1858

Range: as for species, except Lesser Sunda Islands.

HESPERIINAE Latreille, 1809

(bobs, redevs, darters, swifts and skippers—Pl. 2)

Range: cosmopolitan, about 2000 species in total; about 300 in the Oriental and Australian regions, included in over 50 genera, of which about 24 occur in the Sulawesi Region.

Foodplants: monocotyledons (with rare exceptions—probably only *Cupitha* Moore, *Udaspes* Moore and *Zographetus* Watson amongst Asian genera: Corbet & Pendlebury, 1992; T. Larsen, pers. comm.).

Key works: Evans (1949), Common & Waterhouse (1981), Corbet & Pendlebury (1992), Bridges (1994), Ackery *et al.* (1999).

HALPE Moore, 1878

(aces—Pl. 2, fig. 1)

Range (1+2+6+7): Sri Lanka, India, China, Indo-China, Malay Peninsula, Sumatra, Java, Bali, Borneo, Palawan, Philippines, Sulawesi. A genus of some 35 Oriental species; the Sulawesi Region, with three endemic species, represents its eastern limit.

Foodplants: Poaceae.

Key works: Evans (1949), Bedford Russell (1984), Maruyama (1989), Tsukiyama & Chiba (1991), de Jong & Treadaway (1993d).

**H. beturia* Hewitson, 1868

(Pl. 2, fig. 1)

Range (R): Sulawesi (N, S), Kep. Banggai (Peleng).

Note: formerly treated as conspecific with the Philippine species *H. sulphurifera* Herrich-Schäffer, 1869, *beturia* is now considered to be distinct (de Jong & Treadaway, 1993d).

**H. damar* Bedford Russell, 1984

Range (E): Sulawesi.

**H. damar damar* Bedford Russell, 1984

Range: Sulawesi (C—Mt Tambusisi).

**H. damar tsukadai* Maruyama, 1989

Range: Sulawesi (C—50 km northeast of Palopo).

**H. albicilia* Tsukiyama & Chiba, 1991

Range (E): Sulawesi (C).

PSOLOS Staudinger, 1889

(coons—Pl. 2, fig. 2)

Range (1+2+6+7): India, Indo-China, Malay Peninsula, Sumatra, Java, Bali, Borneo, Palawan, Philippines, Sulawesi Region (monobasic).
Foodplants: ?Araceae, Marantaceae.
Key works: Evans (1949).

P. fuligo Mabille, 1876

(The Coon—Pl. 2, fig. 2)

Range (1+2+6+7): as genus.

Foodplants: *Donax*, *Stachyphrynium* (Marantaceae). According to Igarashi & Fukuda (2000), who illustrate foodplant, larva and pupa, the old record of Araceae needs confirmation.

* ***P. fuligo fuscula*** Snellen, 1878

Range: Sulawesi (N, S), Kep. Banggai (Peleng).

ANCISTROIDES Butler, 1874

(demons—Pl. 2, fig. 3)

Range (1+2+6+7): India, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Philippines, Sulawesi, ?N Maluku. A small group of six species.

Foodplants: Zingiberaceae.

Key works: Evans (1949).

* ***A. longicornis*** Butler, 1874

(Longhorn Demon—Pl. 2, fig. 3)

Range (E): "Timor" (?Ternate, ?Sulawesi), Sulawesi (N).

Note: Butler, in his original description, gives "Timor Wallace" as the type information, and "Timor" is repeated by Evans (1949). However, the single type specimen in the BMNH collection is clearly labelled Ternate (*Wallace*); it appears indistinguishable from material from northern Sulawesi, and it seems quite likely that Butler's type did not even come from the Moluccas, but is a mislabelled Wallace specimen from Minahassa (part of Wallace's Malay Archipelago material does appear to be mislabelled).

NOTOCRYPTA de Nicéville, 1889

(banded demons—Pl. 2, fig. 4)

Range (W): eastern Palearctic (China), Oriental and Australian regions, from Sri Lanka to Australia and Fiji. About a dozen species, two of which extend to China, and another to Australia; Sulawesi has representatives of two of the species widely distributed in the Orient.

Foodplants: Costaceae, Marantaceae, Musaceae, Zingiberaceae.

Key works: Evans (1949), Corbet & Pendlebury (1992).

N. paralysos Wood-Mason & de Nicéville, 1881

(Banded Demon—Pl. 2, fig. 4)

Range (1+2+4+5+6+7): Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi Region, Maluku.

Foodplants: *Curcuma*, *Zingiber* (Zingiberaceae).

N. paralysos yaya Fruhstorfer, 1911

Range: Sulawesi (N, C, S), Kep. Talaud, Kep. Sangihe, Kep. Banggai (Peleng), Kep. Sula (Mangole), Maluku (Saparua).

N. feisthamelii Boisduval, 1832

(Spotted Demon)

Range (W): China, India, Indo-China, Malay Peninsula, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi, northern and central Maluku.

Foodplants: *Costus* (Costaceae); *Maranta* (Marantaceae); *Musa* (Musaceae); *Amomum*, *Curcuma*, *Elettaria*, *Hedychium*, *Zingiber* (Zingiberaceae).

* ***N. feisthamelii celebensis*** Staudinger, 1889

Range: Sulawesi (N, S).

CUPITHA Moore, 1884

(wax darts—Pl. 2, fig. 5)

Range (1+6+7): India, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Balabac, Palawan (Treadaway, 1995), Sulawesi Region (monobasic).

Foodplants: Boraginaceae, Combretaceae.

Key works: Evans (1949).

C. *purreea* Moore, 1877

(Wax Dart—Pl. 2, fig. 5)

Range (1+6+7): as genus, including Sulawesi (N, C, S), Kep. Sula (Mangole)

Foodplants: *Ehretia* (Boraginaceae) ; *Combretum*, *Terminalia* (Combretaceae).

ZOGRAPHETUS Watson, 1893

(flitters—Pl. 2, fig. 6)

Range (1+2+5+6+7): northern India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi. A heterogeneous group of about eight Oriental species, two of which occur in Sulawesi; apparently very rare.

Foodplants: Fabaceae, Gnetaceae, Poaceae, Sterculiaceae. The widely differing foodplants may reflect the morphological heterogeneity of the genus.

Key works: Evans (1949).

Z. *rama* Mabille, 1877

Range (2): Indo-China, Malay Peninsula, Sumatra, Philippines (Mindoro, Leyte, Samar: Treadaway, 1995), Sulawesi (N).

Foodplants: *Gnetum* (Gnetaceae) (Igarashi & Fukuda, 2000, who also illustrate foodplant, larva and pupa).

Z. *abima* Hewitson, 1877

(Pl. 2, fig. 6)

Range (1): Palawan (Treadaway, 1995), Sulawesi (N, C, S).

Foodplants: *Pterospermum* (Sterculiaceae) (Igarashi & Fukuda, 2000, who also illustrate foodplant, larva and pupa).

PLASTINGIA Butler, 1870

(lancers—Plate 2, fig. 7)

Range (1+2+6+7): northern India, Indo-China, Malay Peninsula, Sumatra, Java, Bali, Borneo, Palawan, Philippines, Sulawesi Region. Eliot (*in* Corbet & Pendlebury, 1978), in proposing the new genera *Xanthoneura*, *Salanoemia*, *Pyroneura* and *Pemara*, reduced *Plastingia* to a group of six Oriental species, three of which are endemic to the Sulawesi Region.

Foodplants: Arecaceae.

Key works: Evans (1949), Corbet & Pendlebury (1992).

P. *mangola Evans, 1949

Range (R): Sulawesi (S), Kep. Sula (Mangole, Sanana).

P. *tessellata Hewitson, 1866

(Straw Spotted Lancer—Pl. 2, fig. 7)

Range (R): Sulawesi Region.

Foodplants: possibly *Arenga* (Arecaceae), like the related *P. naga* de Nicéville (Assam through Sundaland to Philippines). Igarashi & Fukuda (2000) illustrate larva and pupa.

P. *tessellata tessellata Hewitson, 1866

Range: Sulawesi (N, C, S), Bangka, Kep. Banggai, Kep. Sula (Mangole, Sanana).

P. *tessellata tessa Evans, 1949

Range: Kep. Sangihe.

P. *flavescens Felder, 1867

Range (E): Sulawesi (N, C, S).

LOTONGUS Distant, 1886

(palmers—Pl. 2, fig. 8)

Range (1+2+6+7): northern India, China, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Philippines, Sulawesi Region. A small group of three species, one of which extends to Sulawesi.

Foodplants: Areaceae.

Key works: Evans (1949), Eliot (*in* Corbet & Pendlebury, 1978).

L. calathus Hewitson, 1876

(White-tipped Palmer—Pl. 2, fig. 8)

Range (1+2+6+7): Burma, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Philippines (Basilan: Treadaway, 1995; Mindanao: Treadaway, *in litt.*), Sulawesi Region.

Foodplants: *Calamus*, *Cocos*, *Daemonoropsia*, *Trachycarpus* (Areaceae); remarkably, the larvae have been found in Malaysia in apparently mutual association with *Dolichoderus* ants (Igarashi & Fukuda, 1997a, who also illustrate all life stages).

****L. calathus taprobanus*** Plötz, 1885

Range: Sulawesi (N, C, S), Kep. Banggai.

GANGARA Moore, 1881

(redeyes—Pl. 2, fig. 9)

Range (1+2+6+7): Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Bali, Borneo, Palawan, Philippines, Sulawesi. A small group of four large skippers, one of which is distributed throughout the generic range, doubtfully including Sulawesi, and another is a Sulawesi endemic.

Foodplants: Areaceae, Musaceae.

Key works: Evans (1949), de Jong (1992).

G. thyrasis Fabricius, 1775

(Giant Redeye—Pl. 2, fig. 9)

Range: as genus, except only uncertainly recorded from Sulawesi. The record is based on two males in BMNH from "Celebes", reported by Evans (1949)—but this requires confirmation before being accepted as genuine.

Foodplants: *Arenga*, *Calamus*, *Caryota*, *Cocos*, *Eugeissona*, *Korthalsia*, *Licuala*, *Livistona*, *Metroxylon*, *Nypa*, *Phoenix*, *Roystonea*, *Trachycarpus* (Areaceae); *Musa* (Musaceae); *Philydrum* (Philydraceae). Igarashi & Fukuda (2000) illustrate the larva and pupa; the larva is decorated with waxy filaments

****G. tumpa*** de Jong, 1992

Range (E): Sulawesi (N).

ERIONOTA Mabille, 1878

(redeyes, banana skippers—Pl. 2, fig. 10)

Range (1+2+3+5+6+7): northern India, southern China, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi Region, N Maluku; *E. thrax thrax*, a banana pest, has extended to Mauritius (since 1970), Guam (since 1956), Saipan (1960s), Hawaii (since 1973), and Papua New Guinea (since 1986: see Waterhouse & Norris, 1989). A group of seven large skippers of mainly Oriental distribution, three of which (including one endemic) are found on Sulawesi.

Foodplants: Areaceae, Musaceae, Zingiberaceae.

Key works: Evans (1949), de Jong & Treadaway (1992a).

E. thrax Linnaeus, 1767

(Banana Skipper, or Palm Redeye)

Range (1+2+3+5+6+7): as genus, including Sulawesi (N, C, S), Kep. Sangihe, Kep. Banggai (Peleng) and Kep. Sula; not recorded from central Maluku.

Foodplants: *Arenga*, *Calamus*, *Cocos*, *Elaeis*, *Licuala*, *Metroxylon*, *Nypa*, *Rhapis* (Areaceae); *Australimusa*, *Eumusa*, *Musa* (Musaceae); *Chrysopogon*, *Saccharum* (Poaceae); *Ravenala* (Strelitziaceae); *Curcuma* (Zingiberaceae). Igarashi & Fukuda (2000) illustrate the early stages.

E. thrax thrax Linnaeus, 1767

Range: as species except some parts of Philippines (see Treadaway, 1995), Kep. Sula and Maluku.

E. thrax hasdrubal Fruhstorfer, 1910

Range: Kep. Sula (Mangole, Sanana), N Maluku, New Guinea (Parsons, 1999).

E. hiraca Moore, 1881

(Pl. 2, fig. 10)

Range (1+2+6+7): Sikkim, Assam, Indo-China, Malay Peninsula, Nias, Java, Borneo, Palawan (Treadaway, 1995), Philippines (Luzon, Mindoro, Polillo, Ticao, Leyte, Samar, Mindanao: Treadaway, 1995), Sulawesi Region.

Note: until recently this species has been known as *E. acroleuca* Wood-Mason & de Nicéville, 1881 (see de Jong & Treadaway, 1992a).

Foodplants: *Elaeis* (Arecaceae).

**E. hiraca sakita* Ribbe, 1895

Range: Sulawesi (N, C, S), Bangka, Kep. Banggai (Peleng), Kep. Sula (Mangole).

**E. tribus* Evans, 1941

Range (E): Sulawesi (N, C, S).

**ILMA* Swinhoe, 1905

(Pl. 2, fig. 11)

Range (E): Sulawesi (N, C, S) (monobasic).

Key works: Evans (1949).

**I. irvina* Plötz, 1886

(Pl. 2, fig. 11)

Range (E): as genus.

MATAPA Moore, 1881

(branded reeyes—Pl. 2, fig. 12)

Range (1+2+5+6+7): India, southern China, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda islands, Borneo, Palawan, Philippines, Sulawesi Region. A genus of eight or nine Oriental species, two of which occur on Sulawesi.

Foodplants: Poaceae.

Key works: Evans (1949), de Jong (1983, 1987).

**M. celsina* Felder & Felder, 1867

(Pl. 2, fig. 12)

Range (R): Sulawesi (N, C, S), Kep. Banggai.

M. intermedia de Jong, 1983

Range (2): Philippines (Samar: Treadaway, 1995), Sulawesi.

**M. intermedia intermedia* de Jong, 1983

Range: Sulawesi (N).

ACERBAS de Nicéville, 1895

(wights—Pl. 2, fig. 13)

Range (2+6+7): Burma, Malay Peninsula, Sumatra, Java, Borneo, Philippines, Sulawesi, and Kep. Banggai (Detani, 1983). A small group of seven or eight Oriental skippers, three of which are Sulawesi endemics (but see also Chiba, 1989).

Foodplants: Arecaceae (Igarashi & Fukuda, 2000).

Key works: Evans (1949), de Jong (1982b), Bedford Russell (1984).

**A. azona* Hewitson, 1866

(Pl. 2, fig. 13)

Range (R): Sulawesi (S), ?Kep. Banggai (Peleng; Detani, 1983).

**A. latefascia* de Jong, 1982

Range (E): Sulawesi (N).

Note: this and the next species belong to the *A. duris* complex, known from Pulo Laut (S. Borneo), Philippines and Sulawesi. Chiba (1989) suggested that *A. latefascia* and *A. suttoni* may prove to be synonymous. This could be correct, but more material is needed to take a final decision.

**A. suttoni* Bedford Russell, 1984

Range (E): Sulawesi (C).

Note: Chiba (1989) describes and illustrates the female.

PIRDANA Distant, 1886

(green palmers—Pl. 2, fig. 14)

Range (1+2+6+7): Sikkim, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Philippines (Luzon, Samar, Mindanao; Treadaway, 1995) and Sulawesi. A small Oriental group of four or five species, one of which is endemic to Sulawesi.

Foodplants: Liliaceae (*Cordyline*, *Dracaena*, *Peliosanthes*).

Key works: Evans (1949), de Jong & Treadaway (1993b), Chiba & Tsukiyama (1993, 1994).

***P. ismene** Felder & Felder, 1867

(Pl. 2, fig. 14).

Range (E): Sulawesi (N).

Note: this taxon was raised to species rank by de Jong & Treadaway (1993b), from *P. hyela*.

TARACTROCERA Butler, 1870

(grass darts—Pl. 2, fig. 15)

Range (1+2+5+6+7): eastern Palaearctic, Oriental and Australian regions. Sixteen species occurring from Sri Lanka and China to the Philippines, Lesser Sunda Islands, New Guinea, Australia and Tasmania. There do not seem to be any reliable records for the Moluccas. The seven Australian and New Guinea species on one hand, and the Oriental species on the other, although almost completely separated geographically, are both paraphyletic groups. The three Sulawesi species all belong to the 'Oriental series' (de Jong, in press b, c).

Foodplants: Poaceae.

Key works: Evans (1949), de Jong (1991; in press b).

T. ardonia Hewitson, 1868

Range (7): Malay Peninsula, Sumatra, Borneo, Sulawesi Region.

***T. ardonia ardonia** Hewitson, 1868

Range: Sulawesi (S), Kep. Sangihe, Salayar.

T. luzonensis Staudinger, 1889 (= *ziclea* Plötz, 1884, *sensu auctt.*)

(Veined Grass Dart)

Range (1+2+7): Burma, Malay Peninsula, Sumatra, Borneo, Palawan, Philippines (Treadaway, 1995), Sulawesi Region.

Note: until the publication of de Jong (1991), this taxon was usually referred to by the name *T. ziclea* Plötz, 1884.

***T. luzonensis dongala** Evans, 1932

Range: Sulawesi (N, C), Kep. Banggai (Peleng), Kep. Sula.

***T. luzonensis bessa** Evans, 1949

Range: Salayar, Kep. Tukangbesi (Kaledupa), Tanahjampea.

T. nigrolimbata Snellen, 1876 (= *aliena* Plötz, 1883)

(Yellow Grass Dart—Pl. 2, fig. 15)

Range (5+6): Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Sulawesi.

Note: this species was formerly known as *T. aliena* Plötz, 1883 (see de Jong, 1991).

T. nigrolimbata talantus Plötz, 1885

Range: Lesser Sunda Islands, Sulawesi (S).

ORIENS Evans, 1932

(dartlets—Pl. 2, fig. 16)

Range (1+2+5+6+7): Sri Lanka, India, southern China, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi, Fiji and Samoa. Seven of the eight species have essentially Oriental distributions (including the single Sulawesi endemic), but the eighth is a disjunct Pacific species (Fiji and Samoa, Australia).

Foodplants: Poaceae.

Key works: Evans (1949).

***O. alfurus** Plötz, 1885

(Pl. 2, fig. 16)

Range (E): Sulawesi (N, S).

POTANTHUS Scudder, 1872

(darts—Pl. 2, fig. 17)

Range (W): eastern Palaearctic and Oriental regions to Maluku and Waigeo (Maruyama, 1991), but unconfirmed for mainland New Guinea (Parsons, 1999). About 30 species, four of which occur in Sulawesi.

Note: this genus is much in need of revision.

Foodplants: Poaceae. Records of other families need confirmation.

Key works: Evans (1949).

P. omaha Edwards, 1863

(The Lesser Dart)

Range (2+5+7): Indo-China, Malay Peninsula, Sumatra, Lesser Sunda Islands, Borneo, Philippines (Mindanao, Tawitawi: Treadaway, 1995), Sulawesi.

***P. omaha nita** Evans, 1934

Range: Sulawesi (S).

P. fettingi Möschler, 1878

(Pl. 2, fig. 17)

Range (3+4+5+6+7): Sumatra, Java, Bali, Lombok, Borneo, Philippines (Luzon: de Jong & Treadaway, 1993c), Sulawesi Region, northern and central Maluku, Waigeo.

Note: this species was formerly known as *P. taxilus* Mabilite, [1879]— see Maruyama (1991).

***P. fettingi nikaja** Fruhstorfer, 1911

Range: Sulawesi (N, S), Kep. Talaud, Kep. Sangihe (Siao), Kep. Banggai, Kep. Sula (Sanana), Kep. Tukangbesi (Kaledupa, Tomea), Tanahjampea, Kalao.

P. pava Fruhstorfer, 1911

Range (2): India, China, Indo-China, Malay Peninsula, Philippines, Sulawesi.

***P. pava lesbia** Evans, 1934

Range: Philippines (Luzon, Mindoro, Polillo, Dinagat, Sibuyan, Mindanao, but excluding Palawan: Treadaway, 1995), Sulawesi (C).

P. hetaerus Mabilite, 1883

Range (2): Philippines (Treadaway, 1995), Sulawesi (see de Jong & Treadaway, 1993c).

***P. hetaerus dina** Evans, 1934

Range: Sulawesi (S).

TELICOTA Moore, 1881

(darters—Pl. 2, fig. 18)

Range (W): eastern Palaearctic, Oriental and Australian regions. At least 35 species, with highest diversity in New Guinea; three species occur in Sulawesi.

Foodplants: Arecaceae, Flagellariaceae, Poaceae.

Key works: Evans (1949), Parsons (1986, 1999).

T. colon Fabricius, 1775

(Pale Darter)

Range (1+2+3+4+5+6): Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Palawan, Philippines, Sulawesi Region, N & C Maluku, New Guinea, Pacific islands, Australia. Maruyama (1991) notes the lack of any record for Borneo.

Foodplants: *Chrysopogon*, *Imperata*, *Microstegium*, *Miscanthus*, *Ophiurus*, *Oryza*, *Phragmites*, *Pennisetum*, *Saccharum*, *Setaria*, *Zizania* (Poaceae). Igarashi & Fukuda (2000) illustrate larva and pupa.

T. colon vaja Corbet, 1942

Range: Sumatra, Java, Lesser Sunda Islands, Palawan, Philippines, Sulawesi (N, C, S), Kep. Sangihe, Kep. Banggai.

T. colon argeus Plötz, 1883

Range: Tanahjampea, eastern Lesser Sunda Islands, Australia.

T. ohara Plötz, 1883

(Dark Darter)

Range (W): Assam, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi, N & C Maluku, New Guinea.

Foodplants: *Oryza*, *Setaria* (Poaceae).

****T. ohara rahula*** Fruhstorfer, 1911

Range: Sulawesi (S).

T. ternatensis Swinhoe, 1907

(Pl. 2, fig. 18)

Range (3+4): Sulawesi Region, N & C Maluku, New Guinea region, Solomon Islands.

****T. ternatensis testa*** Evans, 1934

Range: Sulawesi (N, C, S), Kep. Banggai.

****T. ternatensis ranga*** Evans, 1949

Range: Kep. Talaud, Kep. Sangihe (Sangihe, Siao). Evans (1949) recorded 2 males and one female from "Salayer"; probably, the specimens are mislabelled, or else they represent a parallel development.

****T. ternatensis sula*** Evans, 1949

Range: Kep. Sula (Mangole, Sanana).

CEPHRENES Waterhouse & Lyell, 1914

(palm darts—Pl. 2, fig. 19)

Range (W): Oriental and Australian regions, from north-eastern India to Solomon Islands and Australia. Of the eight species, all but one have eastern distributions. One of the two *Cephrenes* found on Sulawesi represents the western species.

Foodplants: Arecaceae.

Key works: Evans (1949), Parsons (1999), Braby (2000).

C. acalle Hopffer, 1874

(Plain Palm Dart)

Range (1+2+6+7): India, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Palawan, Philippines, Sulawesi.

Note: until recently this species was known as *C. chrysozona* Plötz, 1883, but Maruyama (1991), checking Hopffer's type of *Hesperia acalle*, found it to belong to the same taxon as *Cephrenes chrysozona lompa* Evans, 1934. The genitalia of the type of the latter were checked by de Jong (pers. obs., 2001).

Foodplants: *Calamus*, *Cocos*, *Elaeis*, *Ptychosperma*, *Roystonea* (Arecaceae). Igarashi & Fukuda (2000) illustrate larva and pupa.

****C. acalle acalle*** Hopffer, 1874 (= *lompa* Evans, 1934)

Range: Sulawesi (N, C, S).

C. augiades Felder & Felder, 1860

(Orange Palmdart—Pl. 2, fig. 19)

Range: Lesser Sunda Islands, ?Sulawesi, N & C Maluku, New Guinea region, Solomon Islands, Australia.

Foodplants: many Arecaceae: *Archontophoenix*, *Calamus*, *Carpentaria*, *Cocos*, *Elaeis* (introduced African oil palm), *Hydriastele*, *Laccospadix*, *Licula*, *Livistona*, *Ptychosperma*, *Rhopalostylus*, *Wodyetia* (many of these only known from observations in Australia, see Braby, 2000).

C. augiades augiades Felder & Felder, 1860

Range: ?Sulawesi, Ambon, Seram, Gisser. The occurrence on Sulawesi is highly uncertain. Evans (1949) mentioned three males under ssp. *augiades*, but only two specimens can be found in the collection in London (Ackery, pers. comm., 2001). One would expect the Sulawesi specimens to be most similar to ssp. *buruana* from Buru and not to ssp. *augiades* from further east. One specimen is from 'Mt. Mata, Celebes'. Evans (1949) suspects this to be Mt. Mada on Buru. The other specimen, only bearing 'Celebs' as locality could as well be mislabelled.

PRUSIANA Evans, 1937

(Pl. 2, fig. 20)

Range (1+2+3+4+7): Borneo, Palawan, Philippines, Sulawesi Region, Maluku, Kep. Kai. A small group of three Wallacean species, all found on Sulawesi, with one extending west to Palawan and east to Kep. Kai, one shared only with Borneo, and one endemic.

Key works: Evans (1949), Maruyama (1991).

P. kuehni Plötz, 1886

(Pl. 2, fig. 20)

Range (7): Borneo (Kinabalu, Kalimantan, Pulo Laut — see Maruyama, 1991), Sulawesi Region.

****P. kuehni kuehni*** Plötz, 1886

Range: Sulawesi (N, C, S), Kep. Banggai

****P. hercules*** Mabille, 1889

Range (E): Sulawesi (S).

P. prusias Felder & Felder, 1861

Range (1+2+3+4): Palawan, Philippines, Sulawesi Region, N & C Maluku.

Note: old records of *prusias* from Borneo should be discounted; they refer to *P. kuehni insularis* (see Maruyama, 1991).

P. prusias martinus Fruhstorfer, 1911

Range: Palawan, Philippines, Kep. Sangihe, ?Sulawesi (see de Jong & Treadaway, 1993c).

P. prusias prusias Felder & Felder, 1861

Range: Sulawesi (S), Kep. Banggai, Kep. Sula (Mangole, Sanana), Salayar, N & C Maluku, Teoor.

PARNARA Moore, 1881

(swifts, watchmen—Pl. 2, fig. 21)

Range (1+2+3+5+6+7): palaeotropics. A small group of nine species collectively having a very wide range, from Africa to Australia; two occur on Sulawesi.

Foodplants: Arecaceae, Poaceae.

Key works: Evans (1949), Chiba & Eliot (1991).

P. kawazoei Chiba & Eliot, 1991

(Pl. 2, fig. 21)

Range (2+7): Borneo, Philippines (Luzon, Visayan islands, Mindanao), Sulawesi.

Note: Evans (1949) recorded this species from Sulawesi under the name *P. guttata andra* Evans, which proved to be a misidentification (Chiba & Eliot, 1991).

P. bada Moore, 1878

(Ceylon Swift, Water Watchman)

Range (1+2+3+5+6+7): Sri Lanka to southern Japan, east to Lesser Sunda Islands, Philippines, N Maluku, New Guinea (Parsons, 1999) and Australia.

Foodplants: *Colocasia* (Arecaceae); *Apluda*, *Bambusa*, *Leersia*, *Miscanthus*, *Oryza*, *Saccharum*, *Zea* (Poaceae).

P. bada bada Moore, 1878

Range: Sri Lanka, India, China, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi (N, S), N Maluku (Bacan).

Note: according to Treadaway (1995) the Philippine populations are attributable to *P. bada borneana* Chiba & Eliot, 1991, but according to the authors of this name *ssp. borneana* is restricted to Borneo.

BORBO Evans, 1949

(swifts—Pl. 2, fig. 22)

Range (W): palaeotropics, with about 18 species in the Afrotropical Region (one extending into Mediterranean region) and 5 in the Indo-Australian, two of which occur in Sulawesi.

Foodplants: Poaceae.

Key works: Evans (1949).

B. cinnara Wallace, 1866

(Rice Swift)

Range (W): India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi (N, S), Kep. Sangihe, Kep. Banggai (Peleng), Kep. Sula, Maluku (no details), New Guinea region, Solomon Islands, Vanuatu, New Caledonia, Australia.

Foodplants: *Andropogon*, *Apluda*, *Axonopus*, *Brachiaria*, *Cymbopogon*, *Digitaria*, *Eulalia*, *Eleusine*, *Eragrostis*, *Imperata*, *Isachne*, *Ischaemum*, *Miscanthus*, *Oryza*, *Oplismenus*, *Panicum*, *Paspalum*, *Pennisetum*, *Rottboellia*, *Saccharum*, *Setaria*, *Spodipogon*, *Urochloa*, *Zizania* (Poaceae).

B. bevani Moore, 1878

(Bevan's Swift—Pl. 2, fig. 22)

Range (4+6): India, Burma, China, Indo-China, peninsular Thailand, Sumatra, Java, Sulawesi (S), central Maluku, Australia. Not known from Malay Peninsula (Corbet & Pendlebury, 1992).

Foodplants: *Imperata*, *Oryza*, *Paspalum*, *Saccharum* (Poaceae).

Note: Lee (1966) erected the monotypic genus *Pseudoborbo* for this species on the basis of differences in the male and female genitalia with other *Borbo* species. We do not accept this separation; a comparative study involving related genera is required to justify such an action.

PELOPIDAS Walker, 1870

(swifts, millet skippers—Pl. 2, fig. 23)

Range (W): palaeotropics, eastern Mediterranean and eastern Palearctic. The genus is distributed from Africa and Turkey to the south-west Pacific; two of the ten species occur on Sulawesi.

Foodplants: Poaceae.

Key works: Evans (1949).

P. agna Moore, 1866

(Common, or Bengal Swift—Pl. 2, fig. 23)

Range (W): Sri Lanka and Kashmir to N & C Maluku, Solomon Islands, Australia and Vanuatu.

Foodplants: *Imperata*, *Ischaemum*, *Microstegium*, *Oryza*, *Paspalum*, *Saccharum*, *Sorghum* (Poaceae).

P. agna agna Moore, 1866

Range: Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi (N, S), Kep. Talaud, Kep. Sangihe, Kep. Banggai (Peleng), Kep. Sula, Kep. Tukangbesi (Kaledupa).

P. mathias Fabricius, 1798

(Small Branded or Black Branded Swift, Lesser Millet Skipper)

Range (1+2+5+6+7): as genus, but not recorded from northern or central Maluku, and apparently absent from Australia.

Foodplants: *Andropogon*, *Cymbopogon*, *Digitaria*, *Dinochloa*, *Imperata*, *Miscanthus*, *Oryza*, *Paspalum*, *Saccharum*, *Sorghum*, *Zea* (Poaceae). Also recorded from *Caryota*, *Livistona* (Arecaceae) and *Crotolaria* (Fabaceae), but these records need confirmation.

P. mathias mathias Fabricius, 1798

Range: Africa, Sri Lanka, India, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines, Sulawesi (N, C), Kep. Banggai (Peleng), Tanahjampea, Kalao.

POLYTREMIS Mabille, 1904

(swifts—Pl. 2, fig. 24)

Range (5+6+7): India, China, Japan, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Sulawesi Region. About a dozen species, mostly Indo-Chinese in distribution, but with one ranging from India through the Malay Peninsula to the Lesser Sunda Islands and Sulawesi Region.

Foodplants: Poaceae.

Key works: Evans (1949).

P. lubricans Herrich-Schäffer, 1869

(Contiguous Swift—Pl. 2, fig. 24)

Range (5+6+7): from India to Sulawesi, as indicated under the genus.

Foodplants: *Imperata*, *Microstegium*, *Miscanthus* (Poaceae). Igarashi & Fukuda (2000) illustrate larva and pupa.

P. lubricans lubricans Herrich-Schäffer, 1869

Range: India, Indo-China, Malay Peninsula, Sumatra, Java, Borneo, Philippines (Sulu archipelago: see de Jong & Treadaway, 1993c, Treadaway, 1995), Sulawesi (N, C, S), Kep. Sangihe, Kep. Banggai (Peleng), Kep. Sula.

CALTORIS Swinhoe, 1893

(swifts—Pl. 2, fig. 25)

Range (W): eastern Palearctic, Oriental and Australian regions, from India and China to Solomon Islands. A genus of about 18 species, four of which occur in the Sulawesi Region.

Foodplants: Poaceae (*Bambusa*, *Imperata*).

Key works: Evans (1949).

C. bromus Leech, 1894

Range (1+2+5+6+7): India, China, Taiwan, Okinawa, Indo-China, Malay Peninsula, Sumatra, Java, Lesser Sunda Islands, Borneo, Palawan, Philippines (Visayan islands, Mindanao: Treadaway, 1995), Sulawesi (S).
Foodplants: *Bambusa* (Poaceae).

C. bromus bromus Leech, 1894

Range: as species, excluding Taiwan and Okinawa.

C. philippina Herrich-Schäffer, 1869

(Philippine Swift)

Range (1+2+3+4): Sri Lanka, India, Malay Peninsula, Nias, Palawan, Philippines, Sulawesi Region, N & C Maluku, New Guinea region, Solomon Islands.

C. philippina philippina Herrich-Schäffer, 1869

Range: Sri Lanka, India, Malay Peninsula, Nias, Palawan, Philippines, Sulawesi (N, S), Kep. Talaud, Kep. Sangihe, Kep. Sula (Mangole, Sanana).

C. mehavagga Fruhstorfer, 1911

(Pl. 2, fig. 25)

Range (4): Sulawesi (C, S), Kep. Sula (Mangole), Maluku (Buru).

****C. beraka*** Plötz, 1885

Range (R): Sulawesi (C, S), Kep. Sangihe, Kep. Sula (Sanana).

SKIPPER RANGES (Excuse non-standard typography - but all double checked against latest list above!!!!)

(E)

- *B. phul Mabilie, 1876
- *H. umbrina Mabilie, 1891
- *H. sakit Maruyama & Uehara, 1992
- *H. damar Bedford Russell, 1984
- *H. albicilia Tsukiyama & Chiba, 1991
- *A. longicornis Butler, 1874
- *P. mangola Evans, 1949
- *P. tessellata Hewitson, 1866
- *G. tumpa de Jong, 1992
- *E. tribus Evans, 1941
- *ILMA Swinhoe, 1905
- *I. irvina Plötz, 1886
- *A. latefascia de Jong, 1982
- *A. suttoni Bedford Russell, 1984
- *P. ismene Felder & Felder, 1867
- *alfurus Plötz, 1885
- *hercules Mabilie, 1889

(R)

- *B. imperialis Plötz, 1886
- *B. aphrodite Fruhstorfer, 1905
- *O. chrysomelaena Mabilie, 1891
- *C. kehelatha Hewitson, 1878
- *G. celebica Felder & Felder, 1867
- *H. beturia Hewitson, 1868
- *P. flavescens Felder, 1867
- *M. celsina Felder & Felder, 1867
- *A. azona Hewitson, 1866
- *beraka Plötz, 1885

(L)

(P)

(1)

Z. abima Hewitson, 1877

(2)

Z. rama Mabilie, 1877
M. intermedia de Jong, 1983
pava Fruhstorfer, 1911
hetaerus Mabilie, 1883

(3)

C. hemixanthus Rothschild & Jordan, 1903

(4)

mehavagga Fruhstorfer, 1911

(5)

(6)

C. ruficornis Mabilie, 1878

(7)

ardonia Hewitson, 1868
kuehni Plötz, 1886

(1+2)

(1+3)

(2+4)

H. moestissima Mabilie, 1876

(2+7)

kawazoei Chiba & Eliot, 1991

(3+4)

ternatensis Swinhoe, 1907

(4+5)

(4+6)

bevani Moore, 1878

(5+6)

B. iluska Hewitson, 1867
CAPRONA Wallengren, 1857
C. agama Moore, 1858
T. nigrolimbata Snellen, 1876

(6+7)

(1+2+3)

(1+2+4)

(1+2+7)

H. vitta Butler, 1870
ODINA Mabilie, 1891
T. luzonensis Staudinger, 1889

(1+3+4)

(1+6+7)

C. asmara Butler, 1879
CUPITHA Moore, 1884
C. pureea Moore, 1877

(2+3+4)

(2+4+7)

(2+5+7)

omaha Edwards, 1863

(2+6+7)

ACERBAS de Nicéville, 1895

(3+4+5)

augiades Felder & Felder, 1860

(3+4+7)

(3+6+7)

(4+6+7)

(5+6+7)

C. dhanada Moore, 1865
PSEUDOCOLADENIA Shirôzu &
Saigusa, 1962
P. dan Fabricius, 1787
POLYTREMIS Mabilie, 1904
lubricans Herrich-Schäffer, 1869

(1+2+3+4)

prusias Felder & Felder, 1861
philippina Herrich-Schäffer, 1869

(1+2+3+7)

(1+2+6+7)

B. oedipodea Swainson, 1820
B. gomata Moore, 1865
C. plateni Staudinger, 1888
GEROSIS Mabilie, 1903
HALPE Moore, 1878
PSOLOS Staudinger, 1889
P. fuligo Mabilie, 1876
ANCISTROIDES Butler, 1874
PLASTINGIA Butler, 1870
LOTONGUS Distant, 1886
L. calathus Hewitson, 1876
GANGARA Moore, 1881
E. hiraca Moore, 1881
PIRDANA Distant, 1886 [CHECK]
acalle Hopffer, 1874

(1+3+4+7)

C. ficulnea Hewitson, 1868

(1+5+6+7)

H. badra Moore, 1858

(2+3+6+7)

H. quadripunctata Mabilie, 1876

(2+5+6+7)

O. angulatum Felder, 1862

(1+2+3+4+7)

PRUSIANA Evans, 1937

(1+2+3+6+7)

(1+2+4+6+7)

H. leucospila Mabilie, 1891

(1+2+5+6+7)

BURARA Swinhoe, [1893]
BIBASIS Moore, 1881

B. sena Moore, 1865

COLADENIA Moore, 1881

ODONTOPTILUM de Nicéville, 1890

ZOGRAPHETUS Watson, 1893

MATAPA Moore, 1881

TARACTROCERA Butler, 1870

ORIENS Evans, 1932

mathias Fabricius, 1798

bromus Leech, 1894

(2+3+4+6+7)

(2+4+5+6+7)

(3+4+5+6+7)

fettingi Möschler, 1878

(1+2+3+4+5+6)

colon Fabricius, 1775

(1+2+3+4+5+7)

T. trebellius Hopffer, 1874

(1+2+3+4+6+7)

H. mixta Mabilie, 1876

CHOASPES Moore, 1881

(1+2+3+5+6+7)

ERIONOTA Mabilie, 1878

E. thrax Linnaeus, 1767

PARNARA Moore, 1881

bada Moore, 1878

(1+2+4+5+6+7)

N. paralyos Wood-Mason & de Nicéville,
1881

(1+3+4+5+6+7)

(2+3+4+5+6+7)

(W)

HASORA Moore, 1881

H. taminatus Hübner, 1818

H. khoda Mabilie, 1876

BADAMIA Moore, 1881

B. exclamationis Fabricius, 1775

CELAENORRHINUS Hübner, 1819

TAGIADES Hübner, 1819

T. japetus Stoll, 1781

NOTOCRYPTA de Nicéville, 1889

N. feisthamelii Boisduval, 1832

POTANTHUS Scudder, 1872

TELICOTA Moore, 1881

ohara Plötz, 1883

CEPHRENES Waterhouse & Lyell, 1914

BORBO Evans, 1949

cinnara Wallace, 1866

PELOPIDAS Walker, 1870

agna Moore, 1866

CALTORIS Swinhoe, 1893