# DAMSELFLIES (ZYGOPTERA)





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#### MARSH DARTS (FAMILY: COENAGRIONIDAE)

Marsh darts are slender and small damselflies with varied colouration. These non-iridescent damselflies rest with wings closed over their body. The wings are transparent and rounded at the tip. The long and slender abdomen is slightly longer than the hind wing. Some of the smallest damselflies like the Golden Dartlet (Ischnura aurora) is from this family. Marsh Darts are found throughout the world. World over, this family is represented by about 1147 species. Within Indian limits, 65 species are known and in peninsular India 25 species are recorded. The marsh darts breed in a variety of aquatic habitats like ponds, marshes, streams and rivers. Though most of the species are closely associated with aquatic habitats, some species like the Common Marsh Dart



Golden Dartlets mating

(Ceriagrion coromandelianum) can be found far away from any aquatic habitat.



Golden Dartlet- male

#### 35. Pigmy Dartlet (Agriocnemis pygmaea)

**Size**: *Male*: *Abdomen*: 16-17mm, *Hindwing:* 9.5-10mm. *Female*: *Abdomen*: 18 mm, *Hindwing*: 11-12 mm.

Description: A small apple green damselfly with black thoracic stripes orange coloured termianl abdominal segments. *Male*: **Eves**:Black above, pale apple green below. Thorax: Black above with pale apple green stripes on sides. The pale green colour along the sides fades yellow below. Upper side of posterior lateral side has small black spot.



Male Pigmy Darlet



Female Pigmy Dartlet (Red form)

<u>Legs:</u> Yellow, outer surface of femora black. <u>Wings</u>: Transparent. <u>Wing spot</u>: Pale yellow in forewings and black in hind wings. <u>Abdomen</u>: Broadly black above. Segment 1-6 with ground colour pale apple green. Terminal segments brick red. **Female**: Shows range of colour variations, some even resemble the males. In red form (Photo) the head, thorax and abdomen are dark brick red in colour. Thorax has a broad, dorsal black band. **Habits and Habitat**: Common in marshes, ponds, and sea shore. Darts among vegetation and flies very close to the ground. **Breeding**: In marshes and ponds. **Flight Season:** Very common during October-January. **Distribution**: Throughout the Oriental, Australian regions and Pacific islands.

#### 36. Orange-tailed Marsh Dart (Ceriagrion cerinorubellum)

Size: *Male*: *Abdomen*: 31-33mm, *Hindwing:* 20-21mm. *Female*: *Abdomen*: 31-35mm, *Hindwing*: 20-21mm.

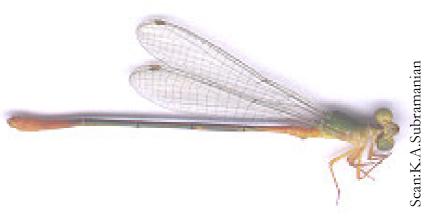
medium sized pale green damselfly with orange coloured segments at the base and end of the abdomen. Male: **Eves**: Dark olivaceous above, pale green below. Thorax: Green above fading to blue on the sides and yellow below. Legs: Yellow, with short black spines. Wings: Transparent. Wing Amber spot: coloured. Abdomen:

Multicoloured.

Description: A



Female Orange-tailed Marsh Dart



Male Orange-tailed Marsh Dart

Segments 1-2 and 7-10 brick red. Central segments (3-7) blue grey with dorsal black band. *Female*: Very similar to the male, however, the red abdominal segments 7-10 are much duller. **Habits and Habitat**: Common on the banks of ponds, rivers and canals. Sits on dry twigs and vegetation over water. **Breeding:** Breeds in marshy banks of rivers, canals and ponds. **Flight season:** October-January. **Distribution**: Throughout the Oriental region.

#### 37. Coromandel Marsh Dart (Ceriagrion coromandelianum)

Size: Male: Abdomen: 28-30mm, Hindwing: 18-20 mm. Female: Abdomen: 29-

32 mm, Hindwing: 20mm

Description: medium sized pale green damselfly with bright yellow (male) or green tail plae (female). Male: **Eyes:** Olivaceous above,pale greenish yellow below. *Thorax*: Olive green above merging to yellow on sides.



Coromandel Marsh Dart-male

Underside is white. Legs: Yellow with black spines. Wings: Transparent. Wing spot: Golden yellow. Abdomen: Uniform yellow. Female: <u>Thorax</u>: Golden brown. **Abdomen**: Uniformly olivaceous with an ochrous or golden brown tint on the dorsal side. Habits and Habitat: Common along the banks of ponds, rivers and canals. Also found frequently far away from water bodies. **Breeding:** Shallow water bodies with profuse growth of grass and other aquatic plants. Flight season: Throughout the year. **Distribution**: Throughout the Oriental region.



Coromandel Marsh Darts mating (male above and female below)

#### 38. Rusty Marsh Dart (Ceriagrion olivaceum)

**Size**: *Male*: *Abdomen*: 34-38mm, *Hindwing*: 22-23mm. *Female*: *Abdomen*: 33-35mm, *Hindwing*: 22mm.

Description: medium sized pale or brown green damselfly with rusty tail. *Male*: *Eyes*: Olivaceous brown. **Thorax**: Upper side pale olivaceous, paler on the sides and beneath. Legs: Yellow with black Wings: spines. Transparent. Wing **spot**: Pale brown. Abdomen: Uniform olivaceous brown, fading to yellowish beneath. Female: Very similar to the male.The race found in the Western Ghats



Rusty Marsh Dart



Rusty Marsh Dart (Western Ghats race)

(C.o.aurantiacum) has a reddish brown abdomen. **Habits and Habitat**: Very common among vegetation along the banks of streams. **Breeding:** Shaded streams. **Flight season**: September-December. **Distribution**: Western Ghats, North-east India and West Bengal.

#### 39. Golden Dartlet (Ischnura aurora)

Size: Male: Abdomen: 16-20mm, Hindwing: 10-20mm. Female: Abdomen: 18-

20mm, Hindwing: 14-15mm

Description: A small apple green damselfly with black thoracic stripes and blue tipped yellow tail. *Male: Eyes:* Black

Male: Eyes: Black half moon like cap above, olive green to dark olive below, which fade to pale olive beneath. Two azure blue spots are present behind the Thorax: eys. Shinning black with two pale grass green stripes. Sides are light green and white below. *Legs*: Pale greenish white.



Golden Dartlet - male



Mite infested female Golden Dartlet

Wings: Transparent. Wing spot: The wing spots are different in fore and hindwings. It is rose-red in forewings and uniform pale grey in hindwings. Abdomen: Bright yellow. The second and seventh segments has upper narrow and broad black marks respectively. Segments 8-10 are entirely azure blue. The 10<sup>th</sup> segment has a upper black spot. Female: The female is less brightly coloured than the male. A broad black stripe runs along the upper side of abdomen. Segments 8-10 do not have azure blue markings. Habits and Habitat: Found among vegetation along the banks of ponds, rivers, canals and estuaries. Breeding: Among marshes on the banks of ponds, canals and rivers. Flight season: Throughout the year. Distribution: Oriental and Australian regions. Also found in remote oceanic islands probably carried by air currents.

#### 40. Senegal Golden Dartlet (Ischnura senegalensis)

**Size**: *Male*: Abdomen: 21-23mm, Hindwing: 13-15mm. *Female*: Abdomen:

20-24mm, Hindwing: 14-16mm

**Description:** A small pale green damselfly with black and yellow thoracic stripes. Abdomen is yellow and has basal and terminal blue Male: Eves: spots. side Upper black; underside pale green to yellow . Two bright blue spot present behind the eyes. *Thorax*: Bronze backed with pale green sides and yellow underside. Narrow stripe on sides is pale green to bright yellow bordered by



Senegal Golden Dartlets mating

a broad black band. *Legs*: Black, with yellow or pale green outer surface. The legs are covered short black spines. *Wings*: Transparent. *Wing spot*: Diamond shaped and black in forewing and dull white in the hindwing. *Abdomen*: The first segment is pale green and the second is azure blue with steel blue black on upper side. The segments 3-7 are bright yellow with black upper side. The eighth and ninth segments are azure blue with black upper side. The last segment has black upper side and yellow on sides. **Female**: Less brightly coloured than the male. The eyes and spots behind the head are paler. The thorax has pale green stripe and brown band instead of yellow stripe and black band of male. The legs and abdomen are pale brown with black stripes. The abdomen lacks blue markings found in males. **Habits and Habitat**: Very common in marshes, ponds and wet grasslands. **Breeding:** Breeds in marshes and ponds. **Flight season**: Not known. **Distribution**: Ethiopian and Oriental region. In the Western Ghats it is reported up to an altitude of 2300m ASL.

#### 41. Blue Grass Dartlet (Pseudagrion microcephalum)

Size: Male: Abdomen: 27mm, Hindwing: 17mm. Female: Abdomen: 29mm,

Hindwing: 20mm.

**Description:** A small blue damselfly with broad blue medial thoracic stripe. Male: **Eves**: Brown cap above, dark azure blue below fading to sky blue beneath. *Thorax*: Azure blue with a broad black medial stripe. A black narrow stripe each side. Wings: Transparent. **Legs**: Azure blue. Wing spot: Grey. Abdomen: Azure blue. Second Segment with a goblet shaped black mark on the upper side. Segment 3-7 has a broad black markings above. Segment 8 has a thick ring towards the end and the 9th segment is unmarked. A broad saddle-shaped black mark is



Blue Grass Dartlet



Blue Grass Dartlet dorsal view

present on the upper side of 10<sup>th</sup> segment. *Female*: *Eyes*: Pale blue beneath, olive green above. *Thorax*: Bluish green, golden orange above and azure blue on sides. *Wings*: Transparent. *Wing spot*: Pale brown. *Abdomen*: Similar to male. Segment 2 has a thick dumbbell shaped above. The segments 8 and 9 have broad black stripe above and two tongue like spots respectively. The tenth segment is unmarked. *Habits and Habitat*: A species of the plains. Found commonly among vegetation covered banks of ponds, canals and rivers. *Breeding*: Among marshy banks of ponds, canals and rivers. *Flight season*: June-November. *Distribution*: Oriental and Australian region.

#### 42. Yellow-striped Blue Dart (Pseudagrion indicum)

Size: *Male*: *Abdomen*: 34mm, *Hind wing*: 22mm. *Female*: *Abdomen*: 32mm, *Hind* 

wing: 22mm

Description: A medium sized blue damselfly with black and yellow thoracic stripes. Male: Eyes: Black above, greenish on sides and beneath. Thorax: Azure blue with broad black medial. On the sides, it is azure blue with greenish yellow stripe and a narrow



Yellow-striped Blue Dart - male

black stripe. Rest of the thorax is azure blue with two black spots towards poster end. *Wings*: Transparent. *Legs*: Pale azure blue and the outer surface of femora have a black band. *Wing spot*: Pale yellow. *Abdomen*: Azure blue. Second segment has a broad 'V' shaped mark. The segment 3-7 has a broad black stripe above. The segment 8 and 9 are azure blue, with broad apical black rings. The 10th segment is black above. Female: *Eyes*: Emerald green above with or without a small black cap. *Thorax*: Grass green above and pale yellowish green on sides. This is marked with three fine black parallel lines above and a fine black line on sides. *Wings*: Transparent. *Wing spot*: Pale brown. *Abdomen*: The segments 1-7 are similar to males. However, the 8 and 9th segments are black with a fine blue ring towards the end, and the 10th segment is black. *Habits and Habitat*: Found in pools associated with hill streams. Usually perches on dry twigs near streams. *Breeding*: Marshes associated with hill streams. *Flight season*: Throughout the year. *Distribution*: Endemic to the Western Ghats. This species is known from Chikmagalur, Kodagu (Karnataka) and Nilgiri (Tamil Nadu) districts.

#### 43. Saffron-faced Blue Dart (Pseudagrion rubriceps)

Size: *Male*: *Abdomen:* 29mm, *Hind wing*: 18-20mm. *Female*: *Abdomen*: 29mm, *Hind wing*: 21mm.

**Description:** A medium sized blue damselfly with characteristic bright orange face. Male: Eyes: Olivaceous green above, bright orange below and bluish beneath. Thorax: Olivaceous green with azure blue sides. Median fine black line with broad black parallel line present on each side. On sides, a fine black lline is present and the under side is white. Wings: Transparent. Legs: Yellow. Femora black on outer and rear surfaces. Wing spot: Reddish brown. **Abdomen**: The segment 1-2 is olivaceous green above and azure blue on sides. The segment 3-7 is black, bronzed green above. The 8<sup>th</sup> segment has a broad black cone above and the 9th and 10th segments are azure blue. Female:



Saffron-faced Blue Dart - male



Saffron-faced Blue Darts mating

The face is rusty brown. **Eyes**: Dark blue above, azure blue below. **Thorax**: Markings similar to male but the colour is dull bluish green. **Abdomen**: The markings above the segments broader than in males. The mark on 8<sup>th</sup> segment extends the whole length of the segment and 9<sup>th</sup> segment has basal forked markings above. **Habits and Habitat**: Frequents banks of large rivers. Usually perches on aquatic plants on the bank and is seen in small groups of 3-4 individuals. **Breeding:** Breed in marshes along the river bank. **Flight season**: Throughout the year. **Distribution:** Oriental region.

# BUSH DARTS (FAMILY: PLATYCNEMIDIDAE)

Bush Darts are small, slender damselflies. They are predominantly black

damselflies with blue, red or yellow markings. The narrow, transparent wings are rounded at the tip. Abdomen is longer than the hindwing. Bush Darts are found only in Old World and 197 species are known from this region. Within Indian limits 30 species are known. Only two species are known from peninsular India and the rest of the species are found in the eastern Himalayas. Bush darts breed in small mountain streams and adults usually dart among riparian vegetaion. Newly emerged Bush Darts are conspicuously white and without any marking.



Yellow Bush Darts mating

#### 44. Blue Bush Dart (Copera vittata)

Size: Male: Abdomen: 28-34mm, Hindwing: 16-18mm. Female: Abdomen: 28-

30mm, Hindwing: 18mm

**Description:** A black band extend from eye to eye. Male: Eyes: Black cap above, olivaceous green below with а black equatorial belt. *Thorax*: Black above, chocolate brown on sides with a few coarse yellow spots. A narrow yellow stripe beneath continuous as bluish or yellowish in front. Underside of the thorax is yellow. *Legs*: Reddish yellow. Wings: Transparent. Wing spot:

**Abdomen**: Black above. The segments one and two reddish yellow.

brown.

Reddish



Blue Bush Darts mating



Blue Bush Dart - male

Pale blue rings at the front end of segments 3-7. The segment 9 has a blue spot and segment 10 is entirely blue. *Female*: *Eyes*: Dark brown cap above with pale apple green below. The black equatorial belt present as in males. *Thorax*: Pale brown and marked similar to males. *Wings*: Transparent. *Wing spot*: Blackish brown. *Legs*: Yellow. *Abdomen*: Pale brown with dark purplish black. Segments 1-2 pale yellowish brown. Segment 3-7 with pale brown anterior rings. The 9<sup>th</sup> segment has a broad pale brown T-shaped mark. Segment 10 is pale brown. **Habits and Habitat**: Found along ponds, puddles, canals and streams. Flies very close to the ground (<1m). **Breeding:** Breeds in shallow water collections, such as rainwater puddles and backwaters of streams. **Flight season**: August-November. **Distribution**: Throughout the Oriental region.

#### 45. Yellow Bush Dart (Copera marginipes)

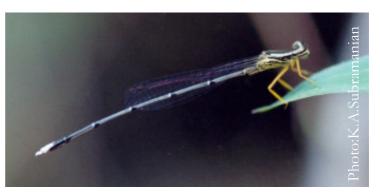
Size: Male: Abdomen: 28-31mm, Hindwing: 16-18mm. Female: Abdomen: 29-

30mm, Hindwing: 20mm.

**Description:** A black band extend from eye to eye. *Male*: **Eyes**: Black above, greenish on sides and beneath with black equatorial band. **Thorax**: Bronze black with fine yellow lines on sides. The stripe on sides is narrow and pale greenish yellow. *Legs*: Bright yellowish orange. **Wings**: Transparent. **Wing** spot: Brown. Abdomen: Bronzed black above. Segment 3-6 with a pale stripe along the side and a narrow pale greenish white ring at the end of each segment . *Female*: Ground colour is dark and of varying shades of brown. **Eyes:** Similar to the male but has a brown cap. *Thorax*: Ground colour is brown. The black stripe above is similar to that of males and black stripe on sides is irregular. **Legs**:



Yellow Bush Dart - male



Yellow Bush Dart -female



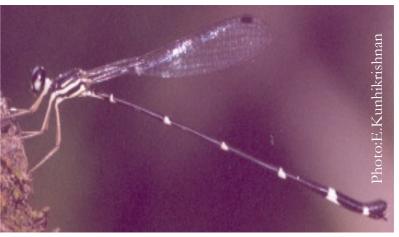
Yellow Bush Dart - male

Brownish. <u>Wings</u>: Transparent. <u>Wing spot</u>: Pale brown. <u>Abdomen</u>: Brown above with broad rings towards the end. Half of 8th segment and the whole of 9-10th segments pale brownish white. **Habitat**: Found along ponds, puddles, canals and streams. Flies very close to the ground (<1m). **Breeding:** Breeds in shallow water collections, such as rainwater puddles and backwaters of streams. **Flight season**: August-November. **Distribution**:Oriental region.

# REEDTAILS (FAMILY: PLATYSTICTIDAE)

Reedtails are small black or brown damselflies marked with white, blue or, rarely, iridescent markings.

Transparent wings are slightly pointed at the tip. Abdomen is very long and twice or more than twice the length of the hindwing. Reed Tails are found in tropical Old and New World. 142 species are known world wide. Within Indian region 13 species



Pied Reed Tail - female

are known, of which 8 are found in the Western Ghats. Reed Tails are exclusively found in forested streams and they breed in them.

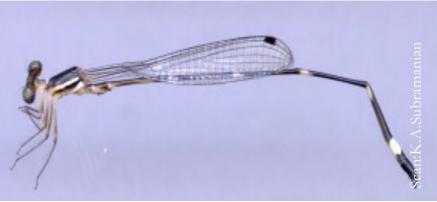
#### 46. Pied Reedtail (Protosticta gravelyi)

**Size**: *Male*: *Abdomen*: 46-49mm, *Hindwing*: 20-22mm. *Female*: *Abdomen*: 33-35mm, *Hindwing*: 19-23mm

Description: Male: Eyes: Dark bottle green, fading to pale greenish beneath. *Thorax*: Glossy black. marked with broad diagonal creamy white stripe, extending from middle and hind pair o f leas. Legs: white. Creamy *Wings*: Transparent. Wing spot: Black. Abdomen: Black, marked with creamy white rings at the end

of segments 3-7.

The sides of first and



Pied Reed Tail - male



Pied Reed Tail - female

second segment and basal half of 8<sup>th</sup> segments are turquoise blue. The 9<sup>th</sup> and 10<sup>th</sup> segments are unmarked. *Female*: Very similar to male, but abdomen is short. *Eyes*: With an ill defined white spot on the outer side. *Abdomen*: Turquoise blue marking on segment 8 of male is replaced by white spot. *Habits and Habitat*: Occurs in heavily shaded hill streams. Found among rocks and ferns in streams. It flies in short jerks holding the abdomen rigid and horizontal. In dark forest understorey, the species appears like a chain of darting white dots. *Breeding:* Heavily shaded hill streams. *Flight season*: May-June and again in September-October. *Distribution*: Endemic to the Western Ghats. Does not occur north of of Sharavathi Valley.

## BAMBOOTAILS (FAMILY: PROTONEURIDAE)

Bambootails are small to medium sized slender damselflies. They are usually black coloured and marked with blue, red, yellow or rarely iridescent. Wings are transparent and rounded or pointed at the tip. Abdomen is long and never twice the length of the hindwing. Bamboo Tails are highly diverse family with 244 known species. Within Indian limits 24 species are known of which 15 are found in peninsular India. All the species breed in running waters and they are restricted to forested landscapes.



Nilgiri Bambootail



Head and thorax of Nilgiri Bambootail

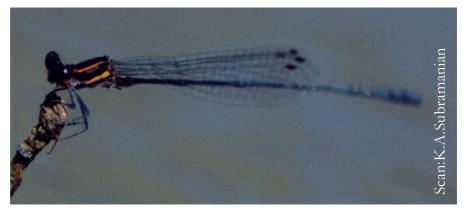
#### 47. Black Bambootail (Prodasineura verticalis)

Size: Male: Abdomen: 29mm, Hindwing: 19mm. Female: Abdomen: 30mm,

Hindwing: 20mm.

**Description:** A medium sized black damselfly with blood red thoracic stripes.

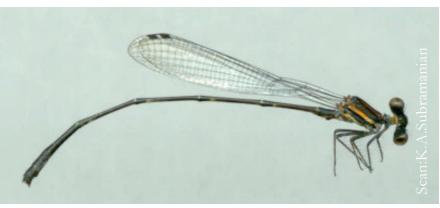
Male: Eves: Velvety black on upper side coral red below. Thorax: Velvety black with two diagonal brick red stripes on sides. Under side yellowish. *Legs*: Black. Wings: Transparent. Wing spot: Dark reddish brown. *Abdomen*: Black with yellow basal spots from segments 3-7. The first segment has a small spot on each side and the second segment has a narrow yellow border below.



Black Bamboo Tail



Black Bamboo Tail dorsal view



Black Bamboo Tail

**Female**: Similar to the male and the bright red markings of male are largely replaced by pale yellowish white. **Habits and Habitat**: Found along the banks of large ponds and rivers, usually sitting among emergent water plants. **Breeding:** Not known. **Flight season**: August-December. **Distribution**: Western Ghats, Northeast India extending to Southeast Asia.

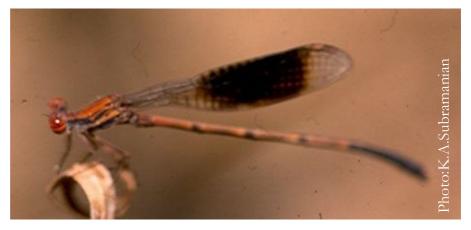
#### 48. Black-winged Bambootail (Disparoneura quadrimaculata)

Size: Male: Abdomen: 32mm, Hind wing: 22mm. Female: Abdomen: 29-30mm, Hind

wing: 22mm.

**Description:** medium sized brick red damselfly with black banded wing. Male: Eves: Brick red with two equatorial black stripes. *Thorax*: Bright brick red above, paler on sides.A black narrow stripe above and incomplete or broken stripes are present on sides. **Legs**: Pale brown, Femora, Speckled with black. Wings:

Transparent with



Black-winged Bamboo Tail



Black-winged Bamboo Tail

broad blackish brown bands in the centre. *Wing spot*: Rusty brown. *Abdomen*: Brick red. The first segment is black above and the second segment has a large black ring above. The base of segments 3-6 has a pair of small whitish spots above. A narrow pale stripe on each side and a broad black ring towards the end is present. The segments 7-9 is black and the 10<sup>th</sup> segment is reddish. *Female*: Differ drastically from male. *Thorax*: The thorax is black above. The side is olivaceous green shaded with ochrous and black as in the male. *Legs*: Pale reddish brown. *Wings*: Transparent and without broad brownish black bands. Occasionally edges of the wings are smoky brown. *Abdomen*: Pale olivaceous with rusty brown above, which is marked and shaded with black and brown. *Habits and Habitat*: Streams and rivers. Perches on emergent boulders and aquatic plants. *Breeding*: Not known. *Flight season*: August-December. *Distribution*: Western Ghats, Bihar, West Bengal, Delhi and Rajasthan.

#### 49. Nilgiri Bambootail (Esme longistyla)

Size: Male: Abdomen: 44mm, Hindwing: 28-29mm. Female: Abdomen: 42-

43mm, Hindwing: 28mm.

**Description:** A large blue damselfly with black thoracic stripes. *Male*: *Eyes*: Sky blue, capped with black. Thorax: Black above with with narrow blue stripes. Azure blue on sides with a diagonal black stripe. Under side is greenish yellow or blue. *Legs*: Black. *Wings*: Transparent. Wing spot: Black and rhomboidal in shpe. Abdomen: Long and slender. The first and segments 8-10 azure blue. The second segment is black with broad irregular azure blue stripe on sides. The segments 3-7 is black



Nilgiri Bamboo Tail



Nilgiri Bamboo Tail

with azure blue rings at the end of each segment. *Female*: Very similar to male. **Habits and Habitat**: Shaded forest streams. Perches on overhanging vegetation. **Breeding:** Breeds in forest streams. **Flight season**: May-November. **Distribution**: Endemic to Western Ghats from north of the Palghat gap to South Kannada.

#### 50. Myristica Bambootail (Phylloneura westermanni)

Size: Male: Abdomen: 41-51mm, Hindwing: 28-37mm. Female: Abdomen: 45-

46mm, *Hindwing*: 33-35mm

Description: *Male*: *Eyes*: Deep blue capped with back. Thorax: Black above marked with narrow black stripe, blue on sides with diagonal black stripe. *Legs*: Black. *Wings*: Transparent and smoky. Double cells between main nervures are very characteristic. *Wing spot*: Black or dark reddish brown. *Abdomen*: Black with blue markings. The first segment is broadly blue on sides and second segment has blue broader on underside. The segments 3-5 has narrow blue basal rings. The apical half of 7th segment is azure blue. The 8th and 9th segments are entirely azure blue.

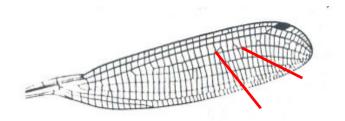
**Female:** Very similar to the male, however, the 8th and 9th abdominal segments have large triangular blue spots above. Habits and Habitat: Shaded mountain streams and associated Myristica (Nutmeg) swamps. Perches on overhanging plants. When disturbed, flies higher in to the trees. Breeding: Streams and Myristica swamps. Flight season: August-Novmber. **Distribution**: This rare damselfly is endemic to the Western Ghats between the Nilgiris and Sharavathi Valley.



Myristica Bamboo Tail



Myristica Bamboo Tail



Wing of Myristica Bamboo Tail showing double cell

#### SPREADWINGS (FAMILY: LESTIDAE)

Spreadwings are small to medium sized damselflies with iridescent or non-iridescent markings on head, thorax and abdomen. Spreadwings rest with their wings wide open. The abdomen is long and slender. Spreadwings are found throughout the world and 159 species are known. Indian fauna is represented by 25 species of which 8 are recorded from peninsular India. Spreadwings breed in a variety of aquatic habitats like marshes, ponds and rarely in running waters.



**Emerald Spreadwing** 



Head of Emerald Spreadwing

# Damselflies

#### 51. Emerald Spreadwing (Lestes elatus)

Size: Male: Abdomen: 34-36mm, Hindwing: 23-24mm. Female: Abdomen:

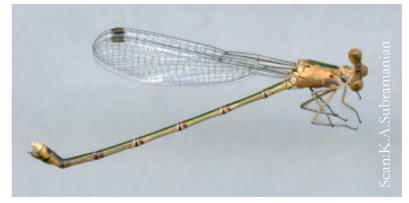
34mm, Hindwing: 24mm.

Description: A medium sized brown damselfly with narrow iridescent green thoracic stripes. *Male*: *Eyes*: Brown above, torquise blue below. *Thorax*: Dark brown above, fading to white below. Upper side marked with a pair of narrow iridescent green stripes. *Legs*: Pale greenish

brown. Wings:
Transparent. Wing spot:
Black. Abdomen: Pale
bluish green on sides.
Upper side is iridescent
green or bronze, changing
to dull black on terminal
segments. Female: Similar



**Emerald Spread Wing** 



**Emerald Spread Wing** 

to male, but the ground colour is pale brown and markings are less iridescent. **Habits and Habitat**: Common around tanks, ponds and streams. Usually sits with open wings among plants. Though a weak flier, it is very alert and difficult to approach. **Breeding:** Breed in ponds, canals and tanks. **Flight season**: Throughout the year, however very abundant during September-December months in grasslands. **Distribution**: Peninsular India and Sri Lanka.

#### 52. Malabar Spreadwing (Lestes malabarica)

Size: Male: Abdomen: 24-25mm, Hindwing: 21mm. Female: Abdomen: 32-

33mm, Hindwing: 22-23mm.

**Description:** A small brown damselfly with broad iridescent green thoracic stripes. *Male*: **Eyes**: Torquoise blue, paler beneath. *Thorax*: Bright iridescent green above. Sides of the thorax black. A dark brown stripe is present medially and on sides. Underside is black covered by pruinescence. *Legs*: Yellowish with a parallel pair of black stripes on outer sides of femora. Wings: Transparent and smoky. Wing spot: Black. Abdomen: Sides azure blue, dulli iridescent green above. The segments 3-6 have a narrow basal ring of blue and pale yellow ring. Remaining terminal segments are black.

Female: Very similar to male,



Malabar Spread Wing - male



Malabar Spread Wing -female

however the ground colour more greenish. The sides of the thorax brown with five black spots. The abdomen is dull coppery above upto segment 6, then dull black. The 6<sup>th</sup> segment partially, the sides of 9<sup>th</sup> and entire 10<sup>th</sup> segment is yellow. **Habits and Habitat**: Makes short flight among bushes. Rarely flies above 1m. Perches on dry twigs with open wings, and slowly waging its tail. **Breeding:** Tanks and ponds. **Flight season**: May-June. **Distribution**: Western Ghats, Andaman Islands and Chandigarh. Coinciding with south west monsoon there appears to be local migration which is not clearly known.

# GLORIES (FAMILY: CALOPTERYGIDAE)

Glories are large damselflies with broad head and conspicuous round eyes.

These iridescent coloured damselflies have broad rounded hindwing. Wings are transparent, amber or iridescent coloured. Abdomen is longer than the hindwing. Glories are found in temperate and tropical regions. Worldwide 169 species are known. Within Indian limits 10 species are known of which 3 species are found in peninsular India. Glories are associated with forested streams and they breed in them.



Male Stream Glory flashing its wings



Head and thorax of Forest Glory

#### 53. St ream Glory (Neurobasis chinensis)

Size: Male: Abdomen: 45-50mm, Hind wing: 32-38mm. Female: Abdomen: 44-

50mm, Hind wing: 36-40mm.

Description: Male: Eyes: Blackish brown above, bluish white below. Thorax: Iridescent green with a coppery wash. **Legs**: Long and lanky legs are dark bronze with white outer stripe. Wings: Rounded at tips. Forewings transparent, tinted with pale yellowish green with emerald green venation. Hindwings opaque, basal two thirds iridescent green or peacock blue. Apical half is blackish brown with violet reflections and green iridescent veins. Underside of hindwing uniformly blackish brown with dull golden reflections. Wing spot:



Stream Glory - male



Stream Glory - female

Absent in all wings. *Abdomen*: Iridescent green above and on sides, Underside black. The 9<sup>th</sup> and 10<sup>th</sup> segments are whitish. *Female: Eyes*: Brownish above, yellowish white below. *Thorax*: Similar to males. *Legs*: Similar to males. *Wings*: Transparent and amber coloured. All wings have a round creamy white central opaque spot on the edge of the wing. *Wing spot*: Absent in forewings and creamy white in hindwings. *Abdomen*: Dull iridescent green above and black below. Green metallic stripe on sides in all segments bordered with black. *Habits and Habitat*: Common in hill streams upto an altitude of 2250m. Commonly found between 500-1200m. Perches on emergent boulders and fallen logs in streams. Males flash its iridiscent green marking of hind wing immediately after alighting. *Breeding:* Female lays eggs on submerged decaying logs in streams during sout west monsoon. *Flight season*: May to November. *Distribution*: Throughout forested landscapes of Oriental region.

#### 54. Clear-winged Forest Glory (Vestalis gracilis)

Size: Male: Abdomen: 45-46mm, Hindwing: 34-38mm. Female: Abdomen: 43-

50mm, *Hindwing*: 36-39mm

**Description:** A large iridescent green damselfly with transparent wings. *Male*: **Eves**: Dark brown above, greenish yellow below. Thorax: Iridescent emerald green above, yellowish beneath. **Legs**: Pale to dark brown. Wings: transparent with blue а sheen. Wingspot: Absent. **Abdomen**: Iridescent green or blue above and black Female: beneath.



Clear-winged Forest Glory

Resembles males in colour and markings. However, the abdomen is dull iridescent green. **Habits and Habitat**: Commonly found along hill streams. Large numbers usually rest among bushes in forest paths in association with Black-tipped Forest Glory. **Breeding:** In forest streams. **Flight season**: May to November. **Distribution**: Throughout Oriental region.

#### 55. Black-tipped Forest Glory (Vestalis apicalis)

**Size**: *Male*: *Abdomen*: 49-55mm, *Hindwing*: 36-39mm. *Female*: *Abdomen*: 46-50mm, *Hindwing*: 38-40mm.

Description: Male: Blackish <u>Eves</u>: brown above, white yellowish below. Thorax: Metallic green above and on sides. The underside is yellowish white. Legs: Blackish Wings: brown.

transparent with



Black-tipped Forest Glory

Abdomen: Iridescent green or blue, black underneath. Female: Resembles the male. The black markings on wing tips are paler and less sharply defined. Abdomen is less iridescent green and more coppery. Habits and Habitat: Commonly found along hill streams. Large numbers usually rest among bushes in forest paths in association with Clear-winged Forest Glory. Breeding: Breeds in forest streams. Flight season: May to November. Distribution: Forested areas of Oriental region.

### STREAM JEWELS (FAMILY: CHLOROCYPHIDAE)

Stream Jewels are small damselflies with large bulb like eyes and a protruding face. Thorax is short and stout. The wings are transparent, iridescent in males and transparent in females. Abdomen is cylindrical and shorter than the hindwing. Stream Jewels are restricted the Old World with 158 known species. Indian fauna is represented by 20 species, of which 3 are found in peninsular India. Stream Jewels are associated with forested streams and they breed in them.



River Heliodor - female



Freshly emerged River Heliodor

#### 56. Stream Ruby (Rhinocypha bisignata)

Size: Male: Abdomen: 20mm, Hindwing: 24-26mm. Female: Abdomen: 16mm,

Hindwing: 22mm

**Description:** A small black and red damselfly with red iridescent streaks on wings. Male: Eyes: Blackish brown. Thorax: Black thorax with two triangular orange-red spots. On sides, it has a narrow rusty stripe and below that another broken rusty stripe is also present. **Legs**: Black with white outer surface. **Wings**: Transparent and amber tinted. Forewings are tipped black with brilliant coppery sheen. Hindwings black tipped with two series of elongated brilliant iridescence. Wing spot: Black. Abdomen: Black, marked with yellow from

segments 1-5. Female: Eyes:



Stream Ruby



Stream Ruby

Brownish black above, bluish grey below. <u>Thorax</u>: Similar to male but orange red and rusty stripes more yellowish. <u>Legs</u>: Black with creamy white centres. <u>Wings</u>: Transparent, tinted with yellow. <u>Wing spot</u>: Black. <u>Abdomen</u>: Similar to male but dull coloured. <u>Habitat</u>: Very common in hill streams. Males are very conspicuous and hover over streams. Frequently sit on boulders and twigs. Females are more elusive. <u>Breeding</u>: Breeds in hill streams. <u>Flight season</u>: Throughout the year. <u>Distribution</u>: Hills of peninsular India.

#### 57. River Heliodor (Libellago lineata)

Size: Male: Abdomen: 14-16mm, Hindwing: 15-18mm. Female: Abdomen: 13-

17mm, Hindwing: 17-20mm

**Description:** A small black and yellow damselfly with black tipped transparent wing. *Male*: Eves: Dark brown above and grey below. *Thorax*: Black with yellow stripes above and on sides. *Legs*: Black with white outer surface. Wings: Transparent and amber tinted at the base. The tips of the forewings black. Hindwings shorter than fore wing. Wingspot: Absent forewings, black in hind wings. *Abdomen*: Golden yellow with black dumb bell shaped markings above. The segments 8-10 are black.

Female: Eyes: Brown above grey below. Thorax: Similar to



River Heliodor - male



River Heliodor - female

male and markings more extensive and dull. <u>Legs:</u> Yellow, femora lined extensively with brown. <u>Wings</u>: Transparent with amber tint. <u>Wing spot</u>: Creamy white. Present in all wings. <u>Abdomen</u>: Yellow, with black markings. The first segment has a large square spot above. The segments 2-8 has a broad black patch above. This is bisected by a narrow yellow line, which extend to the 9<sup>th</sup> segment and the last segment is black. **Habitat**: Confined to hill streams and rivers of forested landscapes. Frequently sits in emergent water plants and overhanging bushes. **Breeding:** Breed in hill streams. **Flight season**: Throughout the year. **Distribution**: Oriental region.

### TORRENT DARTS (FAMILY: EUPHAEIDAE)

Torrent Darts are large damselflies with large round eyes. The wings are transparent, tinted or with iridescent markings. Forewings are long and narrow and hindwings broad and rounded. The hindwings are shorter than the forewings and abdomen.



Malabar Torrent Dart

The abdomen is longer than the hindwings in males and shorter or of the same length in the females. Species of this family are found predominantly in the Oriental region. Worldwide 65 species are known. Within Indian limits, 19 species are recorded, of which 4 are found in peninsular India.

#### 58. Nilgiri Torrent Dart (Euphaea dispar)

Size: Male: Abdomen: 39-47mm, Hind wing: 32-40mm, Fore wing: 35-42mm.

Female: Abdomen: 35-38mm, Hind wing: 34-39mm

Description: Male: Eyes: Black above, bluish grey below. Thorax: Black, marked with bright orange red. Orange stripes on sides fused in front and behind to enclose a long oval black spot.

Legs: Bright yellow, outer surface of tibia and femora are reddish. Wings: Transparent, smoky light brown tips of forewings tipped with blackish brown. Tips of hindwing broadly black.



Nilgiri Torrent Dart - male



Nilgiri Torrent Dart - female

Though the tip appears black it is iridescent red on upper side and blue on lower side. *Wing spot*: Black. *Abdomen*: Bright orange red. Segment joints and apical end of segment 6 to the end black. *Female*: *Thorax*: Markings similar to males. However the bright orange red of male is replaced by dull yellow. *Legs*: Similar to male, but more blackish. *Wings*: Transparent and uniformly covered with brown. In old individuals the hindwing tip is brownish black. *Wing spot*: Black. *Abdomen*: Black, marked with bright yellow. The first segment is yellow, and segments 2-7 have longitudinal yellow stripes on either sides. The 8th and 9th segment is marked with black square spots on sides. The last segment is unmarked. Habits and Habitat: Found in streams flowing through evergreen forests. Males perch on boulders and dry twigs near streams. They fly up to riparian trees when disturbed. Males prominently display their copper red markings of forewings immediately after alighting. Breeding: Streams flowing through evergreen forest. Flight season: May-November. Distribution: Endemic to Western Ghats between Nilgiris and Udupi districts.

#### 59. Malabar Torrent Dart (Euphaea fraseri)

Size: Male: Abdomen: 36-41mm, Hind wing: 29-35mm, Fore wing: 34-38mm.

Female: Abdomen: 33-34mm, Hind wing: 31-33mm.

**Description:** *Male*: *Eyes*: Dark brown above, pale brown below. Thorax: Black with azure blue stripe above. The two stripes on sides are rusty and encloses an oval black spot. Underside is rusty. **Legs**: Coral red. Wings: Transparent. Hindwings are markedly shorter than the forewings. Forewings are tipped with brown. Hindwings are broadly tipped with iridescent coppery above and blue below. Wing spot: Black. **Abdomen**: Upto segment 6 coral red. The 7<sup>th</sup> segment has black tip and remaining terminal segments are black. Female:

Similar to male, however the azure



Male Malabar Torrent Dart



Male and Female MalabarTorrent Dart

blue and red area of thorax and abdomen are replaced by dull yellow. *Eyes*: Dark brown above and bluish grey below. *Legs*: Greyish yellow. *Wings*: Transparent and covered with blackish brown. Hindwing without iridescent apices of males. *Wing spot*: Black. *Abdomen*: The segments 1-7 is black above and it is yellow on sides and below, with a black longitudinal stripe. The terminal segments are black with a yellow spot on segment 10. *Habits and Habitat*: Common in hill streams from about 90m-1000m. Males are very common and can be seen using same perch for days together. Females are rarer. Males open wings and prominently display the iridescent copper markings of the upperhind wing. *Breeding*: Breeds in hill streams and larvae can be collected throughout the year. *Flight season*: May to December. *Distribution*: Earlier thought to be endemic to the Western Ghats from Agastyamalai to Dakshin Kannada. But the author has recorded this species from the Eastern Ghats (Thalakonan falls of Thirupathi Hills and Nagarjunasagar Wildlife Sanctuary) also.

#### 60. Black Torrent Dart (Dysphaea ethela)

Size: Male: Abdomen: 38mm, Hindwing: 33mm.Female: Abdomen: 32mm,

Hindwing: 33mm.

**Description:** A large black damselfly with amber coloured wings.

amber coloured wings.

Male: Eyes: Black above, pale bluish grey below. Thorax: Velvety black. Legs:
Black. Wings: Transparent and amber coloured.

Wingspot: Long and



**Black Torrent Dart** 

black. <u>Abdomen</u>: Black with very faint yellow rings at the end of segments. Female: <u>Eyes</u>: Dark olivaceous brown above, bluish grey beneath. <u>Thorax</u>: Black, marked with bright yellow. Two yellow stripes on sides enclose a black area. Three yellow stripes on sides separated by black area. <u>Legs</u>: Black, with yellow marks within. <u>Wings</u>: Transparent and covered with amber colour. <u>Wingspot</u>: Long black. <u>Abdomen</u>: Black with more pronounced yellow markings. <u>Habits and Habitat</u>: Torrential hill streams from 300-1000m ASL. This damselfly is rare and usually sits in the middle of streams on boulders or emergent twigs. If disturbed flies high up to riparian trees. <u>Breeding</u>: Not known. <u>Flight season</u>: June to December. <u>Distribution</u>: Western Ghats from Agastyamalai to Aghanashini river in Uttara Kannara district. This species is also known from the Eastern Ghats.

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# Glossary

#### **GLOSSARY OF TERMS**

Biotope: Refers to habitat in broad sense. See habitat

**Clutch**: Complement of oocytes that mature together to produce a batch of eggs, which are usually laid together.

**Conspecific**: Belonging to the same species.

**Courtship**: A set of behavioural interactions between male and female that facilities copulations; usually refers to displays by males.

**Crepuscular**: Active during twilight hours.

**Dimorphism**: Occurrence of two forms of individuals of a species.

**Dispersal**: Spatial displacement of individuals, that causes them to become further apart.

**Diurnal**: Active during day.

**Ecosystem**: Natural unit consisting of interacting living and non living parts.

Eclosion: See emergence.

**Ectoparasite**: Parasite living on the host. Also parasite and parasitoid.

**Emergence**: Events associated with emergence of adult from larva.

**Endemic**: Restricted to a particular geographic area.

**Feeding**: Behaviour that follows prey capture.

**Flight season**: Period of the year during which reproductively mature adults are active.

Foliate: Leaf like.

**Foraging**: Behaviour that increases the likelihood of prey capture.

**Guarding:** Behaviour of male when escorting a female and usually while she is ovipositing.

**Habitat:** Place where a given species or community lives.

Hyaline: Transparent, colourless.

**Instar:** Stage of larva between two successive moults.

Larva: Development stage between egg and adult.

**Microhabitat:** Specific part of a habitat in which an individual is normally found during a specific stage of its life cycle or when performing a particular activity.

**Migration:** Spatial displacement of population from emergence site to a different habitat where reproduction ensues. Migration may be facultative or obligate and migrating individuals may or may not travel in aggregations.

Monotypic: Genus with only one species.

**Myristica swamps:** Patches of evergreen swamp forests dominated by species of nutmeg family (Myristicacea).

Nocturnal: During night.

**Obelisk posture:** Position adopted by perching dragonflies with abdomen pointing vertically upward, usually when the sun is overhead.

**Ovipositor:** Extension of female genetalia involved in oviposition.

Ovipostion: Act of laying eggs.

**Parasitism:** Interaction between species in which one species-the parasite-lives in or on the other species-the host-from which it is benefited; the host is not necessarily killed by the interaction.

**Parasitoid:** Larvae of insects which parasite other insects and kill host.

Pruinescence: Bloom on body surface, more often in males, caused by supracuticular pigment that reflects ultraviolet light.

**Riparian:** Along the bank of a river or lake.

**Site fidelity:** Duration of site residentiality.

**Tandem linkage:** Physical connection between male and female before copulation formed by male holding female by prothorax or head with his anal appendages.

**Wetland:** Ecosystems of fresh or brackish water with distinct set of plant and animal community. Ecosystems such as puddles, pools, ponds, tanks, lakes, reservoirs, canals, streams, rivers, marshes, paddy fields and estuaries are wetlands.

Wheel position: Copulation.

# **Check List**

# CHECKLIST OF PENINSULAR INDIAN DRAGONFLIES AND DAMSELFLIES

#### **Damselflies (Zygoptera)**

SI NO:	Family	Name as in Fraser, 1933-36	Name as in Prasad & Varshney, 1996
ı	Coenagrionidae		
1	<b>3</b>	Aciagrion hisopa	Aciagrion hisopa (Selys,1876)
2		Aciagrion occidentale	Aciagrion occidentale Laidlaw,1919
3		Aciagrion pallidum	Aciagrion pallidum Selys,1891
4		pamaem.	Agriocnemis keralensis Peters, 1981
5			Agriocnemis lacteola Selys,1877
6		Agriocnemis pieris	Agriocnemis pieris Laidlaw, 1919
7		Agriocnemis pygmea	Agriocnemis pygmea (Rambur, 1842)
8		Agriocnemis splendissima	Agriocnemis splendissima Laidlaw,1919
9		Archibasis mimetes	Archibasis oscillans (Selys, 1877)
10		Coenagrion dyeri	Cercion calamorum (Ris, 1916)
11		Ceriagrion cerinorubellum	Ceriagrion cerinorubellum (Brauer,1865)
12		Ceriagrion coromandelianum	Ceriagrion coromandelianum (Fabr.,1798)
13		Ceriagrion olivaceum	Ceriagrion olivaceum Laidlaw, 1914
14		•	Ceriagrion rubiae Laidlaw,1916
15			Enallagma parvum Selys,1876
16		Ischnura delicata	Ischnura aurora (Brauer, 1865)
17		Ischnura senegalensis	Ischnura senegalensis (Ramb.,1842)
18		Mortonagrion varralli	Mortonagrion varralli Fraser,1920
19		Onychargia atrocyana	Onychargia atrocyana Selys,1877
20		Pseudagrion decorum	Pseudagrion decorum (Rambur,1842)
21			Pseudagrion hypermelas Selys,1876
22		Pseudagrion indicum	<b>Pseudagrion indicum</b> Fraser,1924
23		Pseudagrion malabaricum	Pseudagrion malabaricum Fraser,1924
24		Pseudagrion microcephalum	Pseudagrion microcephalum
•	ur,1842)		
25		Pseudagrion rubriceps	Pseudagrion rubriceps Selys,1876
II	Platycenemididae		
26		Copera marginipes	Copera marginipes (Ramb.,1842)
27		Copera vittata	Copera vittata Laidlaw,1917
Ш	Platystictidae		
28		Platysticta deccanensis	Platysticta maculata Laidlaw,1915
29		Protosticta antelopoides	<b>Protosticta antelopoides</b> Fraser,1931
30		Protosticta devanporti	Protosticta devanporti Fraser,1931
31		Protosticta gravelyi	Protosticta gravelyi Laidlaw, 1915
32		Protosticta hearseyi	Protosticta hearseyi Fraser, 1922
33		Protosticta mortoni	Protosticta mortoni Fraser, 1924
34		Protosticta rufostigma	Protosticta rufostigma Kimmins, 1958
35		Protosticta sanguinostigma	Protosticta sanguinostigma Fraser,1922
IV	Protoneuridae		
36			Caconeura gomphoides (Ramb.,1842)
37		Caconeura verticalis	Prodasineura verticalis (Fraser,1921)
38		Chloroneura apicalis	Disparoneura apicalis (Fraser,1924)
39		Chloroneura quadrimaculata	Disparoneura quadrimaculata (Ramb.,1842)
40		Disparoneura canningi	Disparoneura canningi Fraser,1922

41 42 43 44 45 46 47		Disparoneura nigerrima Disparoneura souteri Disparoneura tetrica Esme cyaneovittata Esme longistyla Esme mudiensis Indoneura ramburi	Elattoneura nigerrima Laidlaw,1917 Elattoneura souteri Fraser,1924 Elattoneura tetrica Laidlaw,1917 Esme cyaneovittata Fraser,1922 Esme longistyla Fraser,1931 Esme mudiensis Fraser,1931 Caconeura ramburi Fraser,1933	
48 49 50		Indoneura risi Melanoneura bilineata Phylloneura westermanni	Caconeura risi Fraser,1931 Melanoneura bilineata Fraser,1931 Phylloneura westermanni Selys,1860	
V 51 52 53 54 55 56 57 58	Lestidae	Ceylonolestes davenporti Ceylonolestes pulcherrima Lestes dorothea Lestes elata Lestes malabarica Lestes patricia Lestes praemrosa Lestes viridula	Indolestes davenporti Fraser, 1930 Indolestes pulcherrimus Fraser, 1924 Lestes dorothea Fraser, 1930 Lestes elatus Hagen in Selys, 1862 Lestes malabarica Fraser, 1929 Lestes patricia Fraser, 1924 Lestes praemrosus Kirby, 1893 Lestes viridulus Rambur, 1842	
<b>VI</b> 59 60 61	Calopterygidae	Neurobasis chinensis Vestalis apicalis Vestalis gracilis	Neurobasis chinensis (Linnaeus,1758) Vestalis apicalis Selys,1873 Vestalis gracilis (Rambur,1842)	
<b>VII</b> 62 63 64	Chlorocyphidae	<b>Calocypha laidlawi</b> Libellago lineata Rhinocypha bisignata	Calocypha laidlawi (Fraser,1924) Libellago lineata (Fraser,1928) Rhinocypha bisignata (Selys,1853)	
<b>VIII</b> 65 66 67 68	Euphaeidae	Indophaea cardinalis Indophaea dispar Indophaea fraseri Dysphaea ethela	Euphaea cardinalis Fraser,1924 Euphaea dispar (Ramb.,1842) Euphaea fraseri (Laidlaw,1920) Dysphaea ethela Fraser,1924	
Dragonflies (Anisoptera)				
SINO: IX	Family Gomphidae	Name as in Fraser, 1933-36	Name as in Prasad & Varshney, 1996	
69 79 70 71 72 73		Acrogomphus fraseri Gomphus nilgiricus Burmagomphus cauvericus Burmagomphus laidlawi Burmagomphus pyramidalis Cvclogomphus heterostylus	Acrogomphus fraseri Laidlaw, 1925 Asiagomphus nilgiricus (Laidlaw, 1922) Burmagomphus cauvericus Fraser, 1926 Burmagomphus laidlawi Fraser, 1924 Burmagomphus pyramidalis Fraser, 1922 Cyclogomphus heterostylus Selvs, 1854	

69	Acrogompnus iraseri	Acrogompnus iraseri Laidiaw, 1925
79	Gomphus nilgiricus	Asiagomphus nilgiricus (Laidlaw, 1922)
70	Burmagomphus cauvericus	Burmagomphus cauvericus Fraser, 1926
71	Burmagomphus laidlawi	Burmagomphus laidlawi Fraser,1924
72	Burmagomphus pyramidalis	Burmagomphus pyramidalis Fraser,1922
73	Cyclogomphus heterostylus	Cyclogomphus heterostylus Selys,1854
74	Cyclogomphus wilkinsi	Cyclogomphus wilkinsi Fraser,1924
75	Davidioides martini	Davidioides martini Fraser, 1924
76	Gomphidia fletcheri	Gomphidia fletcheri Fraser,1923
77	Gomphidia kodaguensis	Gomphidia kodaguensis Fraser, 1923
78	Gomphidia T-nigrum	Gomphidia T-nigrum Selys,1854
80	Heliogomphus kalarensis	Heliogomphus kalarensis Fraser,1934
81	Heliogomphus promelas	Heliogomphus promelas (Selys, 1873)
82	Ictinus rapax	Ictinogomphus rapax Rambur,1842
86	Macrogomphus annulatus	Macrogomphus annulatus (Selys,1854)
87	Macrogomphus wynaadicus	Macrogomphus wynaadicus (Fraser, 1924)
88	Megalogomphus hannyngtoni	<i>Megalogomphus hannyngtoni</i> (Fraser,1923)

89 90 92 93 94 83 84 85 95		Megalogomphus superbus Merogomphus longistigma  Microgomphus souteri Microgomphus torquatus Lamelligomphus acinaces Lamelligomphus malabarensis Lamelligomphus nilgiriensis Onychogomphus striatus Mesogomphus lineatus	Megalogomphus superbus Fraser,1931 Merogomphus longistigma (Fraser,1922) Microgomphus chelifer Selys,1858 Microgomphus souteri Fraser,1924 Microgomphus torquatus (Selys,1854) Onychogomphus acinaces (Laidlaw,1922) Onychogomphus malabarens (Fraser,1924) Onychogomphus nilgiriensis (Fraser,1934) Onychogomphus striatus (Fraser,1924) Paragomphus lineatus (Selys,1850)
<b>X</b> 96 97 98 99 100 101 102 103	Aeshnidae	Anaciaeschna jaspidea Anaciaeschna martini Anax guttatus Anax immaculifrons Anax parthenope Gynacantha hyalina Gynacantha millardi	Anaciaeschna jaspidea (Burmeister,1839) Anaciaeschna donaldi (Fraser,1922) Anax guttatus (Burmeister,1839) Anax immaculifrons Rambur,1842 Anax parthenope (Selys,1839) Gynacantha dravida Lieftnick,1960 Gynacantha bayadera Selys,1891 Hemianax ephippiger (Burmeister,1839)
XI 104 105 (Fraser	Cordulegasteridae (,1919)	Chlorogomphus campioni Chlorogomphus xanthoptera	Chlorogomphus campioni (Fraser,1924) Chlorogomphus xanthoptera
XII 106 107 108 109 110 111 112 116 117 113 114 115 118 119 120 121 122 123 124 127 125 126	Cordulidae	Epophthalmia frontalis Epophthalmia vittata Hemicordulia asiatica Idionyx burliyarensis Idionyx galeata Idionyx minima Idionyx nadganiensis Idiophya nilgiriensis Idiophya nilgiriensis Idionyx rhinoceroides Idionyx travancorensis Macromia annaimallaiensis Macromia bellicosa Macromia cingulata Macromia flavicincta Macromia flavoclorata Macromia ida Macromia indica Macromia irata Macromidia donaldi	Epophthalmia frontalis Fraser,1924 Epophthalmia vittata Burmeister,1839 Hemicordulia asiatica Selys,1878 Idionyx corona Fraser,1928 Idionyx galeata Fraser,1924 Idionyx minima Fraser,1931 Idionyx nadganiensis Fraser,1924 Idionyx nilgiriensis Fraser,1918 Idionyx periyashola Fraser,1939 Idionyx rhinoceroides Fraser,1934 Idionyx saffronata Fraser,1924 Idionyx travancorensis Fraser,1931 Macromia annaimallaiensis Fraser,1931 Macromia bellicosa Fraser,1924 Macromia cingulata Rambur,1842 Macromia ellisoni Fraser,1924 Macromia flavicincta Selys 1874 Macromia ida Fraser,1924 Macromia indica Fraser,1924 Macromia indica Fraser,1924 Macromia irata Fraser,1924 Macromia irata Fraser,1924 Macromia irata Fraser,1924 Macromidia donaldi Fraser,1924
XIII 128 129 130 131 132 133 134	Libellulidae	Acisoma panorpoides Aethriamanta brevipennis Barchydiplax sobrina Brachythemis contaminata Bradinopyga geminata Cratilla lineata Crocothemis servilia	Acisoma panorpoides Rambur,1842 Aethriamanta brevipennis (Rambur,1842) Barchydiplax sobrina (Rambur,1842) Brachythemis contaminata (Fabr.,1793) Bradinopyga geminata (Rambur,1842) Cratilla lineata Foerster,1903 Crocothemis servilia (Drury,1770)

135	Diplacodes lefebvrei	Diplacodes lefebvrei (Rambur,1842)
136	Diplacodes nebulosa	Diplacodes nebulosa (Fabricius,1793)
137	Diplacodes trivialis	Diplacodes trivialis (Rambur, 1842)
138	Amphithemis mariae	<b>Epithemis mariae</b> Laidlaw,1915
139	Hydrobasileus croceus	Hydrobasileus croceus Brauer,1867
140	Hylaeothemis frushtorferi	Hylaeothemis frushtorferi Fraser, 1924
141	Indothemis caesia	Indothemis carnatica (Fabr.,1798)
142	Indothemis limbata	,
		Indothemis limbata Campion, 1923
143	Lathrecista asiatica	Lathrecista asiatica (Fabr.,1798)
144	Macrodiplax cora	Macrodiplax cora (Brauer, 1867)
145	Neurothemis fulvia	Neurothemis fulvia (Drury,1773)
146	Neurothemis intermedia	Neurothemis intermedia (Ris,1919)
147	Neurothemis tullia	Neurothemis tullia (Drury,1773)
148	Onychothemis testacea	Onychothemis testacea Ris,1912
149	Orthetrum chrysis	Orthetrum chrysis (Selys,1892)
150	Orthetrum chrysostigma	Orthetrum luzonicum (Brauer, 1868)
151	Orthetrum glaucum	Orthetrum glaucum(Brauer, 1865)
152	Orthetrum pruinosum	Orthetrum pruinosum (Rambur, 1842)
153	Orthetrum sabina	Orthetrum sabina (Drury,1770)
154	Orthetrum triangulare	Orthetrum triangulare (Selys,1878)
155	Palpopleura sexmaculata	Palpopleura sexmaculata (Fabr.,1787)
156	Pantala flavescens	Pantala flavescens (Fabr.,1798)
157	Potamaracha obscura	Potamarcha congener (Rambur, 1842)
158	Rhodothemis rufa	
		Rhodothemis rufa (Rambur, 1842)
159	Rhyothemis triangularis	Rhyothemis triangularis Kirby,1889
160	Rhyothemis variegata	Rhyothemis variegate Linn.,1763
161	Sympetrum fonscolombi	Sympetrum fonscolombi (Selys,1840)
162		Sympetrum hypomelas (Selys,1844)
163	Tetrathemis platyptera	Tetrathemis platyptera Selys,1878
164	Tholymis tillarga	Tholymis tillarga (Fabr.,1798)
165	Tramea basilaris	<i>Tramea basilaris</i> Kirby,1889
166		Tramea eurybia Selys,1878
167	Tramea limbata	Tramea limbata (Rambur, 1842)
168		Tramea virgina (Rambur, 1842)
169	Trithemis aurora	Trithemis aurora (Burmeister, 1839)
170	Trithemis festiva	Trithemis festiva (Rambur, 1842)
171	Trithemis kirbyi	Trithemis kirbyi Selys,1891
172	Trithemis pallidinervis	Trithemis pallidinervis Selys,1889
173	Urothemis signata	Urothemis signata (Rambur,1842)
174	•	• ,
	Zygonyx iris	Zygonyx malabaricus Fraser,1926
175	7	Zygonyx metallicus Fraser,1931
176	Zygonyx torrida	Zygonyx torridus Fraser,1924
177	Zyxomma petiolatum	Zyxomma petiolatum Rambur,1842

Note: 1.Species in bold are endemic to peninsular Inida.
2.Family and species level classification follows:

- **1. Davies, D.A.L and Tobin, P. (1984, 1985).** The dragonflies of the world: A systematic list of the extant species of Odonata. *Vol. I&II. Soc. Internat. Odonatol. Rapid Comm. (Suppl.), Nos.3&5. Pages 1-127&1-151.*
- **2. Prasad, M and Varshney, R.K (1995).** A checklist of the Odonata of India including data on larval studies. *Oriental Insects*, 29:385-428.

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