DRAGONFLIES (ANISOPTERA)





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CLUBTAILS (FAMILY:GOMPHIDAE)

ClubTails are large or medium sized dragonflies. They are generally black or yellow and marked with yellow or green. The eyes are well separated and large. The wings are transparent. The last abdominal segments of many species are bulbous, giving a club shaped appearance. Clubtails are very diverse family with 919 species distributed throughout the world. Indian fauna is represented by 90 species with 27 peninsular Indian species. ClubTails inhabit diverse aquatic habitats and many of them breed in streams and rivers.





Common Club Tail feeding on a fly Head of Common ClubTail

1. Syrandiri Clubtail (Davidioides martini)

Size: Male: Abdomen: 38mm. Hind wing: 33mm

Description: A medium sized black and yellow dragonfly with out a clubtail. Only

males are known. Male:

Eves: Emerald green above. *Thorax*: Black, with yellow interrupted collar anteriorly and two oblique yellow spots below the collar. A narrow yellow line laterally and under side is yellow. **Legs**: Black. Femora of front and middle pair yellow on the innerside. Wings: Transparent. Wing spot: Blackish brown. Abdomen: Black. The first segment is marked with yellow on the dorsal side and laterally. Dorsal spot on the second segment is perpendicular to the spot on the first. The 3rd to 7th segments have yellow basal rings and terminal segments are unmarked.

Habits and Habitat: Not much is known about this



Syrandiri Clubtail



Syrandiri Clubtail seen from above

elusive species. **Flight season:** May. **Distribution:** Endemic to Western Ghats. It is known only from Silent Valley National Park, Kerala.

2. Common Clubtail (Ictinogomphus rapax)

Size: Male: Abdomen: 52mm, Hind wing: 40mm. Female: Abdomen: 50mm,

Hind wing: 42-44mm

Description: Male: Eyes: Bluish grey. *Thorax*: Black marked with yellow. Collar complete with oblique dorsal spots. Dorsal side of the thorax has a large yellow central spot. The lateral stripes are yellowish green. Legs: Black. First two basal segments of leg yellow. Inner surface of the forelegs has a yellow stripe. Wings: Transparent. Wing spot: Black. Abdomen: Black, marked with yellow. Dorsal stripe and lateral spot on segment 1 and 2 confluent. Basal half of segment 3 is yellow. Segment 4-6 have large dorsal basal spots. Basal half of segments 7 and 8 are yellow. A black wing like projection present in



Common Clubtail



Common Clubtail seen from above

segment 8. *Female*: The female is very similar to the male. The yellow markings are more extensive. Abdomen stouter, laterally compressed and short. **Habits and habitat**: This common dragonfly usually perches on a bare twig facing the water. Commonly found in ponds, tanks and rivers. **Breeding:** Breeds both in running and still waters; more frequently in the latter. Pairing takes place over water. Female deposits eggs by quick dipping abdomen over water. **Flight season**: Throughout the year. **Distribution**: Throughout Oriental region.

DARNERS (FAMILY: AESHNIDAE)

Darners are large or medium sized, non-iridescent coloured dragonflies. Eyes meet broadly overhead. The wings are transparent and species like the Blue-tailed Green Darner (Anax guttatus) have amber coloured hindwing patches. The abdomen is longer than the wings and often tumid at the base. Most of the darners inhabit marshes, ponds and lakes. Most of the species are diurnal. However a few species like the Parakeet Darner (Gynacantha bayadera) are crepuscular. Darners have cosmopolitan distribution and 412 species are known world wide. Within Indian region 42 species are known, of which 8 species are found in peninsular India.



Rusty Darner



Blue-tailed Green Darner

3. Rusty Darner (Anaciaeschna jaspidea)

Size: Male: Abdomen: 43-48mm, Hind wing: 41-46mm . Female: Abdomen: 43-

46mm, Hind wing: 41-43mm

Description: Male: Eyes: Bluish grey above pale yellow below. Thorax: Reddish brown with two broad greenish yellow stripes on each side. Legs: Black, femora dark reddish brown.

<u>Wings</u>: Transparent, suffused with pale amber-yellow. <u>Wing</u>
<u>spot</u>: Bright ochreous

Abdomen: Reddish brown.

A large squarish pale yellow spot is present on each side of first segment and second segment glistening pearly white. Second segment is azure blue dorsally and laterally. The blue and white from the second segment continues to the third segment, which has a pair of dorsal apical yellow spots.

Segment 4-7 are rusty with

yellow lateral bands and



Rusty Darner



Rusty Darner seen from above

segment 8 is with a pale spot on lateral and dorsal sides. The 9th and 10th segments are darker with dorsal pale apical spots. **Female:** Very similar to male. **Habits and habitat:** A crepuscular species. Flies during dawn and dusk and frequently comes to light at night. This species is common in marshes surrounded by woodland. It is seen upto an altitude of 2200m ASL in the Western Ghats. **Breeding:** Breeds in marshes. **Flight season:** Common during August-November. **Distribution:** Throughout the Oriental region.

4. Blue-tailed Green Darner (Anax guttatus)

Size: *Male*: *Abdomen*: 56-62mm, *Hind wing:* 50-54mm. *Female*: *Abdomen*: 56-58mm, *Hind wing*: 52-54mm.

Description: *Male*: Face golden yellow to bright greenish yellow. *Eyes*: Blue with

yellow and black behind. *Thorax*: Pale green. Legs: Black. Outer and inner surfaces of anterior femora is yellow. Transparent. Hindwing with large amber yellow patch. Wing spot: Long narrow and reddish. Abdomen: The first and second segment is pale green; however the second segment is turquoise blue dorsally. The third segment green with a pair of dorsal triangular turquoise blue spots. This is flanked by a pair of anterior and posterior bright orange spots. The segment 4-7 has 3 pairs of bright orange spots. In segments 8 and 9 two pairs of orange spots are confluent and segment 10 is entirely yellow. Female: The female is similar to the male in most respects. However, the hindwing often lack the amber



Blue-tailed Green Darner



Blue-tailed Green Darner

patch. The turquoise blue of second segment is broken into four square patches. The orange spots of the abdomen are more confluent. **Habits and habitat**: A diurnal species, which occasionally, comes to light at night. Usually seen perched on bare twigs and makes frequent sallies to catch insects such as small butterflies and dragonflies. This dragonfly is very common near marshes, ponds and big wells. **Breeding:** Breeds in marshes. **Flight season**: May-November. **Distribution**: Throughout the Oriental region and occurs up to an altitude of 1800m (ASL) in the Western Ghats.

5. Blue Darner (Anax immaculifrons)

Size: Male: Abdomen: 52-55mm, Hind wing: 55mm. Female: Abdomen:

56mm, *Hind wing*: 58-60mm. **Description:** Male: Face is

pale uniform pale green. Eves: Sapphire blue. **Thorax**: Thorax is pale bluish green dorsally and turquoise blue laterally with two black stripes. *Legs*: Black. *Wings*: Transparent and tinted with amber yellow from base to tip. Wing spot: Reddish brown. Abdomen: The first segment is black and the 2nd segment is turquoise blue with a black "bird in flight" dorsal mark. The segments 3-8 is broadly turquoise blue at its base and have black apical half. The segment 9 is black and 10th segment is black or brown on dorsum. Female: Is very similar to male but the turquoise blue is replaced by greenish yellow and black by dark reddish brown. Habits and habitat: Frequents slow flowing streams. Breeding: Breeds in hill streams. Female inserts into eggs



Blue Darner - male



Blue Darner - male

submerged water plant. Flight season: Not known. Distribution: Oriental region.

6. Brown Darner (Gynacantha dravida)

Size: Male: Abdomen: 50-58mm, Hind wing: 43-50. Female: Abdomen: 48-

55mm, Hind wing: 44-50mm

Description: Male: Face is olivaceous brown with a broad black T-shaped mark on the upper surface. **Eves:**. Olivaceous. *Thorax*: Brown. Legs: Reddish brown. **Wings**: Transparent and lightly tinted with reddish brown throughout. Wing Reddish brown. spot: Abdomen: Pale reddish brown. The third segment is constricted. Apical half of the first segment is black above. Segments 3-8 have dark brown triangular markings and remaining above segments are pale brown. Female: Is similar to the male but markings are duller. Habits and habitat: A crepuscular dragonfly. Common around weed covered ponds and tanks. Occasionally this dragonfly

Flight season: June-November **Distribution**: Oriental region.

comes to light at night. **Breeding:** Breeds in weed

covered ponds and tanks.



Brown Darner



Brown Darner

Dragonflies

7. Parakeet Darner (Gynacantha bayadera)

Size: Male: Abdomen: 46mm, Hind wing: 44mm. Female: Abdomen: 45mm,

Hind wing: 43-45mm.

Description: A large green dragonfly. Male: Face is pale olive green. Eves: Eyes are deep blue to blue grey above which fade to yellowish green below. **Thorax**: Bright grass green. **Legs**: Yellowish brown. Wings: Transparent. Wing Bright olive. spot: Abdomen: Pale brown to reddish brown above. Segments 1-3 are grass green on the sides. Female: Very similar to the male, however, the segments 8-10 are reddish brown. Habits and habitat: Frequents reed covered ponds and tanks. A crepuscular insect, visiting often light immediately after the rains. Breeding: Breeds in reed covered ponds and tanks. Flight season: Throughout the year. **Distribution**:

Oriental region.



Parakeet Darner



MOUNTAIN HAWKS (FAMILY:CORDULEGASTERIDAE)

Mountain Hawks are large black or dark brown dragonflies with bright yellow

markings. The eyes are large and they are m o d e r a t e l y separated or meet at a point. The wings are transparent or tinte d with golden yellow. The abdomen is cylindrical in both sexes or compressed in females. Mountain Hawks are forest species and they fly



Nilgiri Mountain Hawk

high above the tree canopy. Species of this family have cosmopolitan distribution and they breed in torrential streams. World over 82 species are known, of which 22 species are recorded from the Indian region. In the Western Ghats, only two species are found and they are restricted to the higher altitudes (>1800m) of Nilgiris and Anaimalais.

8. Nilgiri Mountatin Hawk (Chlorogomphus campioni)

Size: Male: Abdomen: 53mm, Hind wing: 45mm. Female: Abdomen: 52-55mm,

Hind wing: 50mm

Description: A large black and yellow dragonfly with amber coloured wings. *Male*: **Eyes:** Eyes moderately separated and emerald green in colour. *Thorax*: Black with three oblique bright yellow stripes. Underside is black.



Nilgiri Mountain Hawk

Legs: Black with

basal segments and outer side of anterior femora yellow. Wings: Transparent with tips dark brown. Wing spot: Black and narrow. Abdomen: Black with yellow markings. The first segment has a small dorsal spot. Second segment has a complete yellow apical ring and a pair of dorsal crescent marks. Segment 4-7 with narrow paired dorsal yellow crescent marks and the remaining segments are black. *Female*: The colour and markings of body very similar to male. *Wings*: Transparent and tinted with rich golden yellow. The wing tips are diffusely tipped with blackish-brown. Habits and habitat: Confined to high altitude forests. Usually soars above forest canopies descending occasionally to forest clearings. Breeding: Breeds in torrential streams. Flight season: April-September. Distribution: Restricted to the Western Ghats above 1200m in the region between Nilgiris and Kodagu.

SKIMMERS (FAMILY: LIBELLULIDAE)

Skimmers are the most diverse group of odonates. They are large, medium

or small dragonflies and non-iridecently coloured. Eyes are always broadly confluent. The wings vary in size, shape, width and colouration. This family has worldwide distribution and is represented by 1139 species. They breed in wide variety of aquatic habitats like puddles, ponds, marshes, rivers,



Fulvous Forest Skimmer - male

domestic storage tanks and aquaria. Within Indian limits, 95 species are known, of which 50 species are found in the peninsular India.



Ground Skimmer

9. Trumpet Tail (Acisoma panorpoides)

Size: Male: Abdomen: 15-18mm, Hind wing: 16-21mm. Female: Abdomen: 15-

18mm, *Hind wing*: 17-22mm

Description: A small blue dragonfly with bluged abdomen.

Male: Face is pale blue. <u>Eyes:</u>.Blue, glossy brown spotted with black behind. <u>Thorax</u>:Azure blue, marbled with black.

Legs: Black, femora striped with yellow. Wings: Transparent. Wing spot: Pale yellow. *Abdomen*: Azure blue in colour. Abdomen from segments 1-5 widely dilated slim and abruptly and cylindrical from segments 6-10. The underside of segments 1-5 have broad black border. Dorsal black stripe broadens at apical borders of segments. The segment 3-5 are with large lateral spots. The segments 6-10 are black, however 6th and 7th segments have a large spot



Trumpet Tail



Trumpet Tail seen from above

of azure blue. *Female*: Very similar to the male. **Habits and habitat**: A species closely associated with water. Commonly found among reeds in ponds and tanks. The species has a very weak and short flight. **Breeding**: Breeds in marshes associated with tanks and ponds. **Flight season**: Not known. **Distribution**: Widely distributed throughout the Oriental region.

10. Scarlet Marsh Hawk (Aethriamanta brevipennis)

Size: *Male*: *Abdomen*: 17-20mm. *Hind wing*: 23-26mm. *Female*: *Abdomen*: 16mm, *Hind wing*: 23mm.

Description: A small dragonfly with black thorax and scarlet yellow abdomen. *Male*: The face is covered with short and stiff black hairs. *Eyes:* Dark reddish brown paler towards lateral and undersides. *Thorax*: Dark chocolate brown above, which pales to golden olivaceous-brown on sides.



Legs: Black. Hind femora

Scarlet Marsh Hawk - male

marked with bright blood-red spot. Wings: Transparent and tinted with deep
golden amber at base. In the hind wings the amber tint encircles a black opaque
area. The venation within this region are bright golden yellow. Wing spot:
Blackish brown. Abdomen: Bright red contrasting with blackish thorax. Female:
Eyes: Dark reddish brown. Thorax: Golden-olivaceous above and paler sides.
Legs: Black. The red spot on hind femora of male is replaced by bright yellow.
Wings: Very similar to the male, but opaque black basal spot usually small. Wing
spot: Greyish white. Abdomen: Golden olivaceous with dorsal black triangular
or rhomboidal markings. Habits and habitat: Found in weed covered ponds,
tanks and ditches. They have adapted to urban environment and could be seen
in garden ponds in cities. Breeding: Breeds in weed covered ponds and tanks.
Flight season: May-October. Distribution: Widely distributed in the Western
Ghats and North eastern India.

11. Ditch Jewel (Brachythemis contaminata)

Size: Male: Abdomen: 18-21mm, Hind wing: 20-23mm. Female: Abdomen: 18-

20mm, *Hind wing*: 22-25mm.

Description: Face Male: olivaceous. *Eyes*: Olivaceous brown above bluish grey below. Thorax: Olivaceous brown to reddish brown above with two reddish brown lateral stripes. **Legs**: Dark brown in colour. **Wings**: Transparent with reddish venation. A broad bright orange patch extending from wing base to wing spot is present in fore and hind wings. Wing **spot**: Rusty. **Abdomen**: Bright red. Female: Face is yellowish white. Eyes: Pale brown above and bluish grey below. *Thorax*: Pale greenish-yellow, with a narrow brown middorsal stripe. A dark brown lateral stripe is also present. Legs: Similar to that of the males. *Wings*: Transparent. The bright orange wing patches of males absent. The hindwing tinted with yellow at the base. Wing spot: Rusty. Abdomen: Pale olivaceous-brown with a black middorsal stripe. In segments 2-6 a subdorsal brown stripe borders the middorsal stripe, enclosing a yellow



Ditch Jewel - male



Ditch Jewel - female

area. **Habits and habitat**: A dragonfly of polluted waters. This species is very common along sewage canals, tanks, ponds and ditches. Sometimes huge congregations (>1000) gather in sewage treatment ponds. Flies very close to the ground and perches on aquatic weeds. **Breeding:** Breeds in ponds, marshes and tanks. **Flight season**: Throughout the year. **Distribution**: Widely distributed in the plains of Oriental region.

12. Granite Ghost (Bradinopyga geminata)

Size: Male: Abdomen: 26-29mm, Hind wing: 33-36mm. Female: Abdomen: 26-

29mm, *Hind wing*: 32-36mm

Description: A medium sized grey dragonfly with black and white markings.

Male: <u>Eyes</u>: Brown above, pale greyish beneath. <u>Thorax</u>: Grey thorax is marbled and peppered with black and light grey. <u>Legs</u>: Grey.

Wings: Transparent. Wing spot: Black in the center and white at both the ends. Abdomen: Is coloured very similar to the thorax. Female: Is very similar to the male. Habits and habitat: This species is usually seen perched on compound stone walls, boulders etc. It easily merges with such perching sites because of its colouration extremely



Granite Ghost



Granite Ghost

varied species quite impossible to catch with bare hands. The species is commonly found near rock pools and other similar small water collections. It is common in the urban landscapes and breeds in overhead tanks and garden ponds. In aquaria larvae tend to destroy fish hatchlings. After sunset it comes for roosting to the same locality day after day. **Breeding:** Breeds in small water collections such as rock pools, overhead tanks etc. **Flight season**: Throughout the year. **Distribution**: Oriental region.

13. Emerald-banded Skimmer (Cratilla lineata)

Size: Male: Abdomen: 30-32mm, Hind wing: 35-38mm. Female: Abdomen: 31-

32mm, *Hind wing*: 37-41mm

Description: A medium sized cream vellow dragonfly with iridescent green thoracic stripes. *Male*: Frons creamy white in front, iridescent blue or green above. *Eyes:* Dark reddish brown above, which fades to pale blue below. *Thorax*: Cream vellow with lateral iridescent stripes. *Legs*: Black on outer surface and yellow on inner surface. Wings: Transparent and tips occasionally brown. In adults wings are smoky brown. Wing spot: Yellowish white and long. Abdomen: Black with broad middorsal and subdorsal yellow stripe.



Emerald-banded Skimmer seen from above



Emerald-banded Skimmer

Female: Very similar to

the male. **Habits and habitat**: Large number of these dragonflies can be seen perched on forest understory, often in association with Fulvous Forest Skimmer. Sunlit forest paths and canopy gaps are preferred locations for this species. **Breeding:** Breeds in marshes associated with hill streams. **Flight season**: May-November. **Distribution**: Forested areas of Oriental region.

14. Ruddy Marsh Skimmer (Crocothemis servilia)

Size: *Male*: *Abdomen*: 24-25mm, *Hind wing*: 27-38mm. *Female*: *Abdomen* 25-32mm:, *Hind wing*: 31-37mm.

Description: A medium sized blood red or reddish yellow dragonfly with amber coloured patch at wing base. Male: Face is blood red. *Eyes:* Blood red above. purple on the sides. *Thorax*: Blood red to bright orange. Legs: Reddish. Wings: Transparent base marked with rich amber. Wing spot: Dark

b r o w n

Abdomen:



Ruddy Marsh Skimmer - male



RuddyMarsh Skimmer - female

Blood red. *Female*: Face is pale yellow. <u>Eyes:</u> Eyes are brown above and olivaceous below. <u>Thorax</u>: Dark brown. <u>Legs</u>: Dark brown. <u>Wings</u>: Transparent and basal amber marking paler than in the males. <u>Wing spot</u>: Pale yellow. <u>Abdomen</u>: Yellowish brown with a mid dorsal black stripe. Habits and habitat: One of the commonest red dragonflies. Frequently found in ponds, puddles, rivers, big wells, tanks, ditches and paddy fields. This dragonfly perches on aquatic weeds and chases any passing by dragonflies. **Breeding:** Breeds in marshes associated with ponds, rivers and tanks. **Flight season**: Throughout the year. **Distribution**: Widely distributed in Oriental and Australian region.

15. Ground Skimmer (Diplocodes trivialis)

Size: Male: Abdomen: 19-22mm, Hind wing: 22-23mm. Female: Abdomen: 18-

20mm, Hind wing: 22-24mm

Description: A small greenish yellow or blue dragonfly with black markings. Male: Face is pale azure blue. **Eyes**: Reddish brown above and pale bluish or yellowish below. *Thorax*: Greenish yellow or olivaceous. The dorso-lateral area is violet brown and is speckled with minute dots. In old adults the thorax is covered with fine blue pruinescence. Legs: Greenish yellow marked with black. Wings: Transparent. Wing spot: Dark grey to black. *Abdomen*: The segments 1-7 greenish yellow with middorsal and subdorsal black stripes. Remaining segments black. In old individuals all markings are obscured by fine blue pruinescence. Female: Resemble young or sub adult male. Abdominal markings are broader and continued on to segments 8-10. The 10th segment and anal appendages are completely yellow.

Habits and habitat: One of the



Ground Skimmer



Ground Skimmer

commonest dragonflies in gardens, fields, playgrounds, etc. This dragonfly usually perches on the ground and rarely flies above 1m. **Breeding:** Breeds in muddy puddles, tanks and pond edges. **Flight season**: Throughout the year. **Distribution**: Throughout Oriental region and Pacific islands.

16. Asiatic Blood Tail (Lathrecista asiatica)

Size: Male: Abdomen: 27-32mm, Hind wing: 33-37mm. Female: Abdomen: 27-

32mm, Hind wing: 34-36mm.

Description: A medium sized dark brown dragonfly with blood red tail. *Male*: Face is yellow below and upper surface of frons is steel black or iridescent blue black. *Eyes:* Eyes are broadly confluent. The upper surface is brown and lower surface is bluish grey. *Thorax*:

Dark coppery- brown above and bright yellow on sides. In subadults, the upper surface is coppery brown with two parallel yellow stripes. A narrow lateral yellow stripe extends to mid leg. In addition to this, two black lateral "Y" shaped markings are present. *Legs*: Dark



Asiatic Blood Tail -male



Asiatic Blood Tail - female

reddish brown to black. The anterior femora is yellow on inner side. <u>Wings</u>: Transparent with smoky brown tips. <u>Wing spot</u>: Reddish brown. <u>Abdomen</u>: The segments 1-2 with a broad lateral and fine mid dorsal yellow stripe. In older individuals these markings covered by fine bluish white pruinescence. The segments 3-8 are bright crimson red and segments at the tip are black. *Female*: Resemble males, however the abdomen is rich olivaceous brown. A middorsal greenish yellow stripe is present, which is bordered with black lateral stripes. **Habits and habitat**: This shy dragonfly is found in ponds, tanks and marshes. When disturbed, it flies very rapidly. **Breeding:** Breeds in marshes associated with ponds and tanks. **Flight season**: Not known. **Distribution**:Oriental region.

17. Fulvous Forest Skimmer (Neurothemis fulvia)

Size: Male: Abdomen: 21-26mm, Hind wing: 27-32mm. Female: Abdomen: 20-

24mm, Hind wing: 26-32mm

Description: A medium sized rusty coloured dragonfly with transparent wing tips. *Male*: Face is reddish brown. **Eves**: Dark reddish brown above, golden brown below. Thorax: Reddish brown. Leas: Dark reddish brown. Wings: Opaque dark reddish brown with an irregular triangular transparent area at the tip of the wing. Wing spot: Dark reddish brown. Abdomen: Reddish brown. Female: Many forms of females are found. Colour of head, thorax and abdomen paler than males or rusty brown. Wings are clear amber yellow with a dark ray extending to the tip in fore wing. **Habits and habitat**: A dragonfly of wet forests. Usually perches on fallen logs and shrubs. A large number of them can be found together in canopy gaps and forest edges. **Breeding:** Breeds in marshes associated with



Fulvous Forest Skimmer - male



Fulvous Forest Skimmer - female

forest streams and rivers. **Flight season**: Found throughout the year. However, large number can be seen between May-September. **Distribution**: Forested areas of Oriental region.

18. Pied Paddy Skimmer (Neurothemis tullia)

Size: Male: Abdomen: 16-20mm, Hind wing: 19-23mm. Female: Abdomen: 16-

19mm, *Hind wing*: 20-23mm.

Description: *Male*: Face is black. **Eves**: Blackish brown above, vialaceous below. *Thorax*: Black with middorsal cream stripe. Legs: Black. Wings: Basal half is opaque blue black which is bordered by a milky white patch towards the tip. The wing tips are transparent. Wing spot: Dull brown. Abdomen: Black with a broad middorsal creamy white stripe on the upperside. Female: Differs significantly from the male in body markings and colouration. The face is olivaceous yellow. *Eyes:* Pale brown above, which fade to pale olivaceous towards the sides and below. Thorax: Greenish yellow with a bright yellow mid dorsal stripe. This stripe is broadly bordered with blackish brown throughout. **Legs**: The outer surface of legs is yellow and



Pied Paddy Skimmer - male



Pied Paddy Skimmer - female

the inner surface is black. <u>Wings</u>: Base of the wings bright amber yellow. Front edge of the wing is blackish brown, broadening into a very large blackish brown spot. This spot extend to the rear edge of the wing. In hindwings this spot is irregular or sickle shaped. Tips of all wings are broadly blackish brown. <u>Wing spot</u>: Dull brown. <u>Abdomen</u>: Bright yellow with a broad black band above. Underside is black. Habits and habitat: A conspicuous species of ponds, marshes and paddy fields. Flight is slow and weak. Usually perches on twigs, aquatic weeds and other plants. This species is very common along irrigation canals in paddy fields. **Breeding:** Breeds in marshes and ponds. **Flight season**: Found throughout the year. However, peak abundance is during July-September months. **Distribution**: Throughout the Oriental region.

19. Green Marsh Hawk (Orthetrum sabina)

Size: Male: Abdomen: 30-36mm, Hind wing: 30-36mm. Female: Abdomen: 32-

35mm, *Hind wing*: 31-35mm

Description: *Male*: Face is yellowish green. *Eyes:* Green mottled with black. Thorax: Greenish yellow with black tiger like stripes. *Legs*: Black; inner side of anterior femora is yellow. Wings: Transparent; inner edge of hindwing tinted with yellow. Wing spot: Black with reddish brown spot. **Abdomen:** The segments 1-3 are green with broad black rings and distinctly swollen at the base. *Female*: Is very similar to the male. Habits and habitat: A common dragonfly of gardens and fields. This dragonfly perches motionless on shrubs and dry twigs for a long time. Hawks flying insects such as flies, small butterflies and dragonflies. This species can be seen far away from water and occassionally enters houses at night attracted by the light. Breeding: Breeds in ponds and tanks. Flight season:



Green Marsh Hawk



Green Marsh Hawks mating

Throughout the year. **Distribution**: Widely distributed in Ethiopian, Oriental and Australian region. It is found throughout Indian subcontinent upto an altitude of 2000m ASL.

20. Blue-tailed Forest Hawk (Orthetrum triangulare)

Size: *Male*: *Abdomen*: 29-33mm, *Hind wing*: 37-41mm. *Female*: *Abdomen*:, *Hind wing*: 37mm.

Description: A medium sized dragonfly with black thorax, black brown patch at wing base and blue tail. *Male*: Face is glossy black. *Eyes:* Dark blue. *Thorax*: Velvety black. *Legs*: Black. *Wings*: Transparent. The hindwing has a broad triangular blackish brown spot at the base. *Wing spot*: Black. *Abdomen*: Broad at the base and gradually tapering towards the tip. The segments 1-2 and 8-10 black. The segment 3-7 azure blue and covered with fine hair. *Female*:



Thorax: Olivaceous green

Blue-tailed Forest Hawk

above, often suffused with reddish brown. The sides are dark reddish brown with two bright yellow stripes. <u>Wings</u>: The transparent wing is suffused with brown. The hindwing does not have basal black area instead it is tinted with yellow. <u>Abdomen</u>: The abdomen is black and without fine hairs. A middorsal yellow or olivaceous green stripe runs from segments 1-7. The segments 2-7 have two yellow spot underneath. <u>Habits and habitat</u>: A species of the hills. Usually found in marshes associated with hill streams. <u>Breeding</u>: Breeds in brooks flowing through marshes in foothills. <u>Flight season</u>: Not known. <u>Distribution</u>: It is distributed in the hill ranges of Oriental region.

21. Blue Marsh Hawk (Orthetrum glaucaum)

Size: Male: Abdomen: 29-35mm, Hind wing: 33-40mm. Female: Abdomen: 28-

32mm, *Hind wing*: 32-37mm **Description:** A medium sized dragonfly with bluish black thorax and blue tail. *Male*:Face is pale olivaceous brown in young adults changing to glossy black in old individuals. **Eyes:** Dark green and is capped with reddish brown. **Thorax**: In old individuals it is dark dull blue or black with fine black blue or black hair. *Legs*: Black. *Wings*: Transparent, with extreme base tinted with dark amber yellow. In old adults, wings are smoky brown. Wing spot: Dark reddish brown. <u>Abdomen</u>: Bulged segments 1-3. Segments 1-8 are pruinosed pale blue



Blue Marsh Hawk - male



Blue Marsh Hawk - female

and the remaining segments black. *Female: Thorax*: Olivaceous above bordered by a broad reddish brown lateral stripe. Lateral side is reddish brown with two yellowish-white narrow stripes. *Legs*: Black externally and yellow internally. *Wings*: Similar to that of males. *Abdomen*: Reddish brown with a broad greenish yellow middorsal stripe. Segments 8-10 are black middorsally. *Habits and habitat*: Commonly found in marshes associated with forest streams, plantations and canals. *Breeding*: Breeds in Marshes.*Flight season*: May-October. *Distribution*: Widely distributed in the Oriental region.

22. Crimson-tailed Marsh Hawk (Orthetrum pruinosum)

Size: Male: Abdomen: 28-31mm, Hind wing: 32-36mm. Female: Abdomen:

30mm, Hind wing: 37mm.

Description: *Male*: Face is ochreous to pale reddish brown. Eyes: Blue black above and bluish grey below. *Thorax*: Is covered with fine hairs and reddish brown to dull purple. Legs: Black and reddish brown at the base. Wings: Transparent. In old adults, it is pale brown towards the tip.On the fore and hindwings, the basal area is marked with reddish brown. Wing **spot**: Reddish brown. **Abdomen**: Bright red. In old adults it is purplish due to pruniscence. Female: Face is pale olivaceous. *Eyes:* Yellowish, capped with brown. Thorax: Reddish brown or dull ochreous with indistinct lateral brown stripe. **Wings**: Similar to male but the basal markings are indistinct. Abdomen: Is dull ochreous with each segment thinly bordered with black. Habits and habitat: A very common dragonfly of wells, ponds, ditches, tanks and rivers. Males are very conspicuous and can be seen perched on shrubs, stones etc. Breeding: Breeds in puddles, ponds and tanks. Flight season: Throughout the year. **Distribution**: Oriental region.



Crimson-tailed Marsh Hawk - male



Crimson-tailed Marsh Hawks - mating

23. Blue-tailed Yellow Skimmer (Palpopleura sexmaculata)

Size: Male: Abdomen: 14-16mm, Hind wing: 15-21mm. Female: Abdomen: 13-

14mm, *Hind wing*: 18-21mm

Description: Asmall dragonfly with greenish yellow thorax and blue abdomen. *Male*: Face is creamy yellow with brilliant iridescent blue frons. *Eyes:* Bluish grey, capped with brown above. *Thorax*: Pale greenish yellow. Dorsal side is warm reddish brown. *Leas*:



Blue-tailed Yellow Skimmer

Bright yellow with black terminal segments. *Wings*: Forewings are transparent with three black streaks extending from the wing base to the tip. A prominent black spot is also present in the wing node. The hind wings are tinted with yellow and have two short black streaks extending from the wing base to the tip. *Wing spot*: Black with central white streak. *Abdomen*: Light blue and covered with pruinescence. The sides of 1&2 and base of 3rd segments yellow. Underside is yellow with a median black stripe. *Female*: Face is yellow without iridescent markings. *Thorax*: Rich orange brown with lateral brown stripe. *Wings*: Transparent and more broadly marked with blackish-brown and black. The amber yellow tint in the hind wing is deeper. *Wing spot*: Black and creamy white. *Abdomen*: Bright redish brown with a median black stripe. A broad lateral black stripe is also present. *Habits and habitat*: This dragonfly is usually found in marshes associated with bamboo brakes. It resembles wasps in appearance and with slow, circling flight. *Breeding*: Breeds in marshes. *Flight season*: Not known. *Distribution*: Throughout the Oriental region.

24. Wandering Glider (Pantala flavescens)

Size: Abdomen: 29-35mm, Hind wing: 38-40mm

Description:A medium sized dragonfly with rusty thorax and yellow abdomen. *Male*: Face is bright golden yellow or orange. *Eyes:* Reddish brown above, bluish grey on sides below. and Thorax: Olivaceous or rusty and is coated thickly with fine yellowish hair. On sides, it is pale green or bluish green. Leas: Black. Wings: Transparent and base of hind wing amber yellow. Wing spot: Bright redish brown. Abdomen: Bright redish brown and is tinted with brick red dorsally. The segments 8-10 have black spots above. **Female:** Is very similar to the male. Eyes are olivaceous

brown above and wings are



Wandering Glider



Wandering Glider

Habits and habitat: Most common dragonfly. Huge swarms can be seen just before and after monsoon. Thousands of them swarm over harvesting fields and playground during early morning and evening. They are ubiquitous and migrate in large numbers with the monsoon winds. The swarms usually use clearings such as railway tracks, higways and rivers to migrate. These swarms frequently bump into passing vehicles and die on road. Breeding: Breeds in marshes and small puddles. Flight season: Throughout the year. However large numbers can be seen between September-December. Distribution: Throughout the tropics.

25. Yellow-tailed Ashy Skimmer (Potamarcha congener)

Size: Male: Abdomen: 29-32mm, Hind wing: 33-35mm. Female: Abdomen: 29-

31mm, *Hind wing*: 33-37mm

Description: A medium sized dragonfly with bluish black thorax and yellow tail with black markings. *Male*: Face is olivaceous yellow to steel black or brown. *Eyes:* Reddish brown above and bluish grey below. *Thorax*: Black in adults and covered with bluish pruinescence. In young adults, yellow



Yellow-tailed Ashy Skimmer - male

markings are visible through the pruinescence. <u>Legs</u>: Black or reddish brown. <u>Wings</u>: Transparent and tipped with brown. <u>Wing spot</u>: Dark reddish brown. <u>Abdomen</u>: Basal segments covered with bluish pruinescence. The segments 1-8 with medial and lateral yellow stripe bordered with black. **Female**: <u>Thorax</u>: Is reddish-brown above, fading to dull brown on sides. A medial yellow and brown lateral markings present. <u>Legs</u>: Black and femora obscurely striped with yellow. <u>Wings</u>: Transparent and brown coloured area in the wing tip much more defined. The yellow tinting of the wings is deeper. <u>Abdomen</u>: Similar to male, however the yellow stripe beneath is broad leaving a black narrow stripe. **Habits and habitat**: Found in weedy ponds and marshes. Large colonies are often found in woods associated with ponds and marshes. **Breeding:** Breeds in marshes. **Flight season**: Not known. **Distribution**: Oriental region.

26. Common Picture Wing (Rhyothemis variegata)

Size: Male: Abdomen: 23-25mm, Hind wing: 33-36mm. Female: Abdomen: 20-

22mm, Hind wing: 28-37mm.

Description: A medium sized dragonfly with butterfly like yellow and brown wings. Male: Frons iridescent green. Eyes: Dark reddish brown above. *Thorax*: Iridescent green. Legs: Black. The forewing Wings: transparent and golden yellow. The wing tip, leading edge and centre of the wing are marked with deep coffee brown spots. The hindwing also has similar spots; however the central spot is absent. More over, the wing base is marked with an irregular brown patch. The trailing edge of the hindwing has a characteristic 'W' shaped coffee brown mark. Wing spot: Black. Abdomen:

Black. *Female*: *Wings*: Tips of



Common Picture Wing - male



Common Picture Wing - female

the forewings is transparent. A dark brown opaque area extends to the centre of fore wing. This area borders a bright yellow hockey stick shaped patch. In hindwings the brown opaque area is more extensive and reaches upto the wing tip, which encloses a long yellow central patch and a small yellow spot towards the wing tip. This patch also borders yellow spots of wing margins. *Wing spot*: Black. *Abdomen*: Bluish black. *Habits and habitat*: A prominent dragonfly of marshes, paddy fields and ponds. This species is easily mistaken for a butterfly. A weak flier and frequently perches on aquatic weeds. This dragonfly is rarely seen away from water. *Breeding:* Breeds in marshes, ponds and paddy fields. *Flight season*: Throughout the year, especially near perennial marshes. *Distribution*: Throughout the Oriental region.

27. Pigmy Skimmer (Tetrathemis platyptera)

Size: Male: Abdomen: 15-18mm, Hind wing: 18-21mm. Female: Abdomen: 14-

16mm, *Hind wing*: 19-24mm.

Description: A small, large headed black and yellow dragonfly with amber coloured hinwing patch. *Male*: Face is bright yellow with upper part and side brilliant metallic blue. Eves:. Eyes are emerald green in colour. *Thorax*: Black with a bronze green sheen. A narrow median stripe and pair of broad stripe on sides is bright yellow. Underside is yellow with a broad black triangle. Legs: Black. Wings: Wings transparent. Base of the forewing and nearly half of the hindwing tinted with amber yellow. Wing spot: Black. Abdomen: Black with yellow spots on sides. *Female*: Female is very similar to the male, but the amber coloured areas of the wing much deeper. Habits and habitat: Common in ponds, weed covered irrigation wells and similar



Pigmy Skimmer



Pigmy Skimmer dorsal view

small water collections. Always found close to water. **Breeding:** Breeds in ponds and small stagnant water collections. **Flight season**: Not known. **Distribution**: Throughout the Oriental region.

28. Coral-tailed Cloud Wing (Tholymis tillarga)

Size: Male: Abdomen: 28-33mm, Hind wing: 33-37mm. Female: Abdomen: 27-

31mm, *Hind wing*: 31-37mm. **Description:** A medium sized

red dragonfly with brown and white hindwing patch. *Male*: Face is rusty brown with a crimson flush. *Eyes*: Brown with reddish capped below. olivaceous Thorax: Reddish above golden yellow or olivaceous on sides. *Legs*: Rustybrown. Wings: Transparent with a broad fan shaped golden brown patch on the hindwing. This is bordered by a milky white patch. Wing spot: Reddish brown. Abdomen: Bright rusty-red. Female: Head and thorax olivaceous without any red tinge. Hindwing brown without the milky white border and the brown patch is very pale and obscure. Abdomen: Olivaceous brown. Habits and habitat: A



Coral-tailed Cloud Wing - male



Coral-tailed Cloud Wing - female

crepuscular dragonfly, active at the time of sunset and flies at night. Frequently comes to light at night. This fast flying dragonfly is very difficult to follow. Commonly found in ponds, marshes and tanks. **Breeding:** Breeds in marshes and ponds. **Flight season**: Throughout the year. **Distribution**: Throughout the Ethiopian, Oriental and Australian regions and Pacific Islands.

29. Red Marsh Trotter (Tramea basilaris)

Size: Male: Abdomen: 30-35mm, Hind wing: 40-44mm. Female: Abdomen: 32-

36mm, *Hind wing*: 38-45mm.

red or yellow dragonfly with brown and yellow hindwing patches. *Male*: *Eyes:* Dark reddish brown. *Thorax*: Olivaceous, reddish above and bluish green on sides with a black lateral stripe. *Legs*: Black. *Wings*: Transparent. The hindwing base has a reddish brown marking surrounded by golden amber at the base. The veins in this area are bright golden yellow. *Wing spot*: Bright ochreous.

Abdomen: Bright brick-red with median black triangular markings. The segments 4-7 are black with triangular yellow spot on each side. The joints of segments 7-9 are bright



Red Marsh Trotter - male



Red Marsh Trotter - female

yellow. The segments 9 and 10 are black with small spots on sides. *Female*: Face is bright yellow. *Thorax*: Bluish green on sides with two prominent lateral stripes. *Abdomen*: Olivaceous green to yellow with black markings as in male. **Habits and habitat**: Marshes and ponds. **Breeding:** Breeds in marshes and ponds. **Flight season**: Not known. **Distribution**: Oriental region.

30. Black Marsh Trotter (Tramea limbata)

Size: Male: Abdomen: 33-35.5mm, Hind wing: 44-46mm. Female: Abdomen:

32mm, Hind wing: 43-46mm.

Description: A medium sized black dragonfly with blood red tail and black hindwing patch. Male: Face is olivaceous or bright ochreous in front and dark iridescent violet above. Eves: Dark brown above, olivaceous on sides and below. Thorax: Olivaceous with reddish suffusion. Leas: Black with reddish brown base. Wings: Transparent with reddish venation towards the base. The base of hindwing has an extremely variable blackish brown marking. The veins within this black area are reddish. Wing **spot**: Dark brown. **Abdomen**: Blood red marked with black triangles above. Female: Very similar to male. However, the black markings on the abdomen are more extensive. Habits and habitat: This midday flying dragonfly is commonly seen patrolling over water bodies. Breeding:



Black Marsh Trotter



Black Marsh Trotter

Breeds in ponds, marshes and tanks. **Flight season**: Throughout the year. **Distribution**: Widely distributed in Ethiopian and Oriental region.

31. Crimson Marsh Glider (Trithemis aurora)

Size: Male: Abdomen: 21-29mm, Hind wing: 24-34mm. Female: Abdomen: 19-

27mm, *Hind wing*: 24-24mm

Description: *Male*: Face is redish brown changing to reddish above. *Eyes:* Crimson above and brown on sides. *Thorax*: Red with fine dull purple pruinescence. Legs: Black. Wings: Transparent with crimson venation. Base of the wings has a broad amber patch. Wing spot: Dark reddish brown. Abdomen: Crimson with a violet tinge. The base of abdomen is swollen. Female: Face olivaceous or bright redish brown. **Eyes**: Purplish brown above and grey below. *Thorax*: Olivaceous with brown median and black lateral stripes. **Legs**: Dark grey with narrow yellow stripes. Wings: Transparent with brown tips. The venation is bright yellow to brown and basal amber markings are pale. Wing spot: Dark brown. Abdomen: Redish brown with median and lateral black markings. The black markings are confluent at the end of each segment and



Crimson Marsh Glider - male



Crimson Marsh Glider - male



Crimson Marsh Glider - female

enclose an redish brown spot. **Habits and habitat**: One of the common dragonflies of wetlands. The males usually perch on dry twigs, aquatic plants and over head cables. **Breeding:** Breeds in streams, rivers, canals, ponds and tanks. **Flight season**: Throughout the year. **Distribution**: Oriental region.

32. Black Stream Glider (Trithemis festiva)

Size: *Male*: *Abdomen*: 22-28mm, *Hind wing:* 26-32mm. *Female*: *Abdomen*: 21-24mm, *Hind wing*: 29mm.

Description: *Male*: Frons is dark brown in front and iridescent violet above. Eyes: Dark brown above with a purple tinge. It is bluish grey laterally and beneath. **Thorax**: Black, covered with purple pruinescence. This deep blue gives а appearance. Legs: Black. **Wings**: Transparent, with a dark opaque brown mark at the base of hindwing. Wing spot: Black. Abdomen: Black covered with fine blue pruinescence. Female: Face is dirty brown in front and changes to brown above. **Eyes**: Dark brown above and grey below. *Thorax*: Greenish yellow to olivaceous. A medial and lateral dark brown stripe is present. In addition to this,



Black Stream Glider - male



Black Stream Glider - male

on the sides inverted 'Y' shaped stripes present. <u>Legs</u>: Black and anterior femora is yellow on the inner side. <u>Wings</u>: Transparent with dark-reddish brown tip. <u>Wing spot</u>: Black. <u>Abdomen</u>: Bright yellow with medial, lateral and ventral black stripes. The medial and lateral stripes are confluent at abdominal segments to enclose a wedge shaped yellow spot. **Habits and habitat**: Very common in slow flowing streams and canals. Usually perches on boulders and aquatic plants. **Breeding:** Breeds in sluggish streams. **Flight season**: May-November. **Distribution**: Throughout Oriental region.

33. Long-legged Marsh Glider (Trithemis pallidinervis)

Size: *Male*: *Abdomen*: 28-32mm, *Hind wing:* 30-36mm. *Female*: *Abdomen*: 26-28mm, *Hind wing*: 30-32mm.

Description: A medium sized yellowish brown dragonfly with long spider like legs. *Male*: Face is yellow or pale brown in front and iridescent purple above. *Eyes*: Reddish brown above, brown on sides and bluish grey below. *Thorax*: Olivaceous-brown above with a dark brown triangle. On sides, it is bright yellowish brown with three black stripes on each side.



Long-legged Marsh Glider

<u>Legs</u>: Black, long and spidery. The basal half of femora of first pair of legs are bright yellow. <u>Wings</u>: Transparent with reddish venation. The forewings have amber coloured basal markings. The wings have a golden sheen when viewed from certain angle. <u>Wing spot</u>: Black with creamy white ends. <u>Abdomen</u>: Bright yellow with black median and lateral stripes. These stripes are confluent at the end of each abdominal segment to enclose a wedge shaped yellow spot. *Female*: Resemble male and the wings are often tinted with yellow or reddish brown. Base of abdomen is broadly black. **Habits and habitat**: A dragonfly partial to the marshes and weedy ponds. Usually perches on tall aquatic weeds or bare ends of shrubs. The long legs are very noticeable at this time. **Breeding:** Breeds in marshes. **Flight season**: Throughout the year. **Distribution**: Oriental region.

34. Brown Dusk Hawk (Zyxomma petiolatum)

Size: *Male*: *Abdomen*: 37-43mm, *Hind wing:* 32-35mm. *Female*: *Abdomen*: 37-

42mm, *Hind wing*: 32-38mm

Description: A large brown dragonfly with long thin abdomen and brown tipped wings.

Male: Face is pale olivaceous which darkens above. **Eves**: Brilliant emerald green. **Thorax**: Chocolate brown, paling at sides. Legs: Pale reddish brown. Wings: Transparent with dark brown tips. Wing spot: Dark and blackish. Abdomen: Dark reddish brown with black rings at the end of each segment. Abdomen is swollen from segments 1-3, then abruptly contracted and slim to the end. Female: Very similar to



Brown Dusk Hawk

the male. **Habits and habitat**: A crepuscular dragonfly that flies after sunset. This dragonfly occasionally comes to light at night, especially after the first summer showers. **Breeding:** Breeds in ponds, tanks and marshes. **Flight season**: Not known. **Distribution**: Found throughout India and Myanmar up to an altitude of 1000m ASL.