A check-list of the Odonata from the eastern region of Bangladesh With sometaxonomic notes.

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Abstract: A survey of the Odonate fauna was conducted in the Sylhet and Srimangal Districts of Sylhet Division and Chittagong, Khagrachari, Rangamati, Bandarban and Cox's Bazar Districts of Chittagong Division. The designated areas were visited periodically for nearly seven years from 1994 to 2000. The present paper includes a list of the odonate species collected during the survey period. A total of 764 specimens were collected which comprised 49 species of Anisoptera in 32 genera, and 47 species of Zygoptera in 18 genera. Of these 15 species in 8 genera of the former and 27 species in 11 genera in the latter suborder are new records from Bangladesh. The collection also includes females of three species and males of two species that happen to be new to science. The specimens are preserved in our personal collection.

Introduction

As explained in an earlier paper (Chowdhury and Mohiuddin, 2003) the region forming the Eastern part of Bangladesh is of great zoogeographical interest. The odonate fauna of British India were (1993; Fraser 1934; 1936). studied by Subsequently Lahiri (1987), Mitra (1983) and Prasad and Varshney (1988) added to our knowledge of Odonata of Indian Subcontinent. The Bangladesh odonate fauna, included only partly in these works, have earlier been studied by Begum et al. (1977), Biswas et al. (1980), Chowdhury and Akhteruzzaman Chowdhury and Mia (1989), and Chowdhury and Mohiuddin (1993). All these works were restricted to Dhaka (Begum et al., 1977), Bagerhat and Khulna (Biswas et al., 1980) and Chittagong (Chowdhury and co-workers). Thus the odonate fauna of the greater part of Bangladesh remained unexplored. The present paper presents a checklist based on the survey of six Eastern Districts of Bangladesh. All the specimens are preserved, but unfortunately in a poor state of preservation owing to frequent shifting.

Methods

Odonates were collected by using standard hand nets and chloroformed in the field. Back in the laboratory they were soaked overnight in acetone, air-dried and finally placed in polythene packets. Specimens were identified following Fraser (1933, 1934, 1936). In addition, Lahiri (1987), Mitra (1983) and Srivastava and Sinha (1993) were consulted, especially for information on the distribution of the odonates.

Results and Discussion

The odonate fauna recorded from the study areas are furnished below.

Sub-order Anisoptera Family Aeshnidae Anax Leach, 1815.

1 A. guttatus (Burmeister, 1839) Ramgarh (17.5.99)

Gynacantha Rambur, 1842

2. G hyalina Selys Ramu (22.5.99), Katalgonj(Chittagong city) (10.7.99).

Family Gomphidae Sub-family Ictininae Ictinogomphus (Rambur,1842)

3. *I. rapax* (Rambur,1842) Ctg. Cantt.(9.5.97), Lawachara forest (28.5.99), Rangamati (6.10.99)

Sub-family Gomphinae Mesogomphus Forster, 1906

4. *M. lineatus (Selys, Selys 1850). Ramgarh (17.5.99).

Anormogomphus Selys, 1854

5. *A. heteropterus Selys, 1854. Ramgarh (17.5.99)

Sub-family *Epigomphinae Macrogomphus* Selys, 1857

6.*M. robustus (Selys, 1854) Lawachara (28.5.99).

Family Libellulidae Sub-family Libellulinae Crocothemis Brauer, 1868

 C. servilia servilia (Drury, 1770) Foy's Lake(31.3.97), Bandarban(15.4.97 & 2.4.99), Ctg. Cantt.(9.5.97), Chittagong city(14.9.97), Ctg. Univ. campus(15.7.99), Ramu(21.5.99), Khasiachara(28.5.94).

Zyxomma Rambur, 1842

8. Z. petiolatum Rambur, 1842. C.U.campus (7.9.98), Ramu (3.4.99).

Trithemis Brauer, 1868

- 9. **T. aurora* (Burmeister, 1839) Bandarban(15.4.97), Madhabkundu(27.5.99)
- 10. **T. festiva* (Rambur, 1842) Bandarban (15.4.97, 23.4.99 & 10.5.2000), Ramgarh(17.5.99), C.U.campus(21.65.98).
- 11. * *T. kirbyi kirbyi* (Selys,1886) Bandarban(23.4.99).
- 12. *T. pallidinervis* (Kirby,1889) Ctg. Cantt. (18.12.99,15.5.2000 & 7.12.99)

Diplacodes Kirby, 1889

- D. trivialis (Rambur,1842) Widely distributed in Chittagong, Ctg. Hill Tract districts and both districts of Sylhet surveyed between March and September.
- 14. *D. nebulosa* (Fabricius, 1793) Ctg. Univ. campus (21.6.97)

Rhodothemis Ris,1909.

15. *R. rufa* (Rambur,1842) Bandarban (15.4.97 & 25.5.99), Ramgarh (27.4.99), C.U. campus (8.9.99).

Pantala Hagen, 1861

16. *P.flavescens* (Fabricius,1798) Found all over the surveyed area (and also the rest of the country) between March and September.

Orthetrum Newman, 1833.

- 17. *O.sabina* (Drury,1770) This species is also very widely distributed found between March and September.
- 18. *O. pruinosum neglectum* (Rambur, 1842) Sri Mangal (14.5.995& 14.3.97), Ctg. City(14.6.94), Chunati(8.8.98), Bandarban (23.4.99) and Sitakundu(1.5.97).
- 19. *O. brunneum brunneum (Fonscolombe,1837) Khasiachara (21.5.94), Bandarban(25.5.99 & 10.5.2000), C.U. campus (16.6.97).
- 20. *O. chrysis (Selys, 1891). Ramgarh (17.5.99), Ctg. City (14.3.97), Lawachara (28.5.99).
- 21. *O. glaucum (Brauer, 1865) Bandarban (15.4.97,-23.4.99), Rangamati (6.10.99).Sitakundu (14.11.99)
- 22. *O. cancellatum* cancellatum (Linnaeus,1758) Madhabkundu(26.5.98).
- 23. O. testaceum testaceum (Burmeister, 1839) C.U.campus (29.6.98).

Tholymis Hagen, 1867.

24. *T. tillarga* (Fabricius,1798). Collected from many locations throughout the survey area between February and October.

Neurothemis Brauer, 1867.

- 25. N.tullia tullia (Drury,1773). Ctg. Cantt.(15.4.99), C.U. campus (8.9.99, 21.11.99, 19.6.99). Also in many other places between Ctg. City and C.U.campus from May to November.
- 26. *N. intermedia intermedia* Rambur Khasiachara (28.5.99).
- 27. *N. itermedia atalanta* Ris, 1916. C.U. campus (16.6.97)
- 28. *N.fulvia* (Drury,1773). Ctg. City(14.3.97), C.U.campus(28.5.99 and 8.9.99), Ramu(25.3.99), Banshkhali (24.4.99)Madhabkundu(26.5.98).

Brachydiplax Brauer, 1868.

- 29. *B. chalybea* Brauer 1868. Ctg. Cantt.(9.5.97). C.U. campus (28.5.99, 25.8.99, 8.9.99 & 14.9.99).
- 30. *B. sobrina* (Rambur,1842). Ctg. Cantt.(9.5.97 & 15.5.2000), Ramgarh(17.5.99).
- 31. *B. farinosa* Kruger, 1891. C.U. campus (16.6.97).

Acisoma Rambur, 1842.

32. A. panorpoides panorpoides Rambur, 1842. Ctg. Cantt.(9.5.97), C.U.campus (15.7.99, 25.8.99, 8.9.99 & 23.11.99),

Brachythemis Brauer, 1868.

33. B. contaminata (Fabricius, 1793). Srimangal (17.5.95), Very common in Ctg. City, Ctg.cantt. Supati (26.2.97), Chunati (21.3.98).

Aethriamanta Kirby, 1889.

34. *A. brevipennis brevipennis* (Rambur, 1842). C.U.campus (16.6.97), Banshkhali (28.8.99), Bandarban (3.5.2000), Sitakundu (1.5.97), Lawachara (20.5.99), Srimangal (24.5.98), Ctg. Cantt.(9.5.97).

Urothemis Brauer, 1868.

35. *U. signata signata* (Rambur1839). Ramgarh, (17.5.99), Bandarban (3.5.2000), Boroichari (30.5.2000).

Tramea Hagen, 1861.

- 36. *T. limbata* (Desjardins,1832). Ctg. Cantt.(7.12.99).
- 37. *T. basilaris burmeisteri* Kirby, 1889. C.U.campus (16.6.98).

Rhyothemis Hagen, 1867.

38. *R. variegata variegate*a (Linnaeus,1763). Ramgarh (17.5.99), Ramu(20.5.99 & 25.9.99), Madhabkundu (27.5.99), Rangamati (6.10.99).39. *R. plutonia* Selys, 1883. C.U.campus (16.6.97).

Macrodiplax Brauer, 1868.

40. M.cora (Brauer, 1867). C.U. campus (16.6.97).

Hydrobasileus Kirby,1889.

41. *H. croceus* (Brauer,1867). C.U.campus (16.6.97).

Potamarcha Karsch, 1890.

42. *P. obscura* (Rambur, 1842). Khasiachara (21.5.94 & 28.5.94), Bandarban (23.4.99 & 10.5.2000), Banshkhali (24.4.99), Ramu (21.5.99), Madhabkundu(27.5.99), Sitakundu (14.11.99), C.U.campus(25.8.99), Ctg.cantt. (9.5.97).

Palpopleura Rambur, 1842.

43. P. sexmaculata sexmaculata (Fabricius, 1787) C.U.campus(16.6.97, 23.11.99 & 19.6.2000), Bandarban(3.5.2000), Madhabkundu(26.5.98).

*Bradinopyga Kirby,1893.

44. *B. geminata (Rambur, 1842). Rangamati (6.10.99), Ramu(21.5.99).

*Lathrecista Kirby(1889).

45. *L. asiatica asiatica (Fabricius, 1798). Lawachara(28.5.98).

*Cratilla Kirby,1900.

- 46. **C. lineata* (Brauer, 1881). Lawachara(28.5.98), Sitakundu(14.11.99)
- 47. *C. metallica (Brauer, 1878). Lawachara (28.5.99).

*Indothemis Ris, 1909.

48. **I. limbata sita* Campion, 1923. Bandarban (15.4.97 & 25.5.99).

*Pseudotramea Fraser,1920.

49. * P. prateri Fraser, 1920. Chunati (21.3.97).

Sub-order - Zygoptera Family - Coenagriidae Sub-family - Coenagriinae Pseudagrion Selys, 1876.

- P.rubriceps Selys, 1876. Very common all over Ctg., Ctg. Hill Tracts and Sylhet. Collected from March till December.
- 2. *P. bengalense Laidlaw 1919. Boroichari(30.4.2000).
- 3. *P. microcephalum (Rambur, 1842). Ctg. Cantt. (9.5.99), Foy's Lake (19.12.99).
- *P. malabaricum Fraser, 1924. C.U. campus (8.9.99), Ctg. Cantt. (7.12.99), Foy's Lake (19.12.99).
- 5. *P. ceylanicum (Kirby, 1881). Extremely rare, only a single specimen was collected from C.U. campus (15.5.2000).

6. *P. indicum Fraser,1924. Ctg. Cantt. (21.5.2000).

Ischnura Charpentier, 1840.

- 7. *I. rufostigma* Selys, 1876. C.U. campus (5.4.97), Ctg. Cantt. (10.5.99).
- 8. *I. delicata* (Hagen, 1858). Ctg. Cantt. (7.12.99), C.U. campus (8.9.99), Boroichari (10.8.2000).
- 9. **I. forcipata* Morton, 1907). Ctg. Cantt. (18.12.99), Foy's Lake (6.10.99, 19.12.99 & 20.4.2000).
- I. senegalensis (Rambur, 1842). Supati (26.2.97), Foy's lake (21.3.97, 20.4.2000 & 19.12.99), Ctg. Cantt. (9.5.97, 15.5.2000), Boroichari (10.8.2000), Rangamati (6.10.99), Ctg. City (14.3.97).

Ceriagrion Selys, 1876.

- C.cerinorubellum (Brauer,1863). Supati (26.2.97), Ctg. Cantt.(9.5.97), C.U.campus (7.6.94, 19.6.2000, 8.9.99 &23.11.99), Rangamati (6.10.99), Ramgarh (15.7.99).
- 12. *C. coromandelianum* (Fabricius, 1798). Ctg. Cantt. (10.5.99),C.U.campus (common between june and November), Foy's Lake (21.3.97), Ctg. City (14.3.97), Ramu (21.5.99).13. **C. nigroflavum* Fraser, 1993. Boroichari (30.4. & 10.8. 2000), Burischar, 11.9.2000). A single female was taken from Boroichari on 30.4.2000. This is the first record of that sex.
- 14. * *C. olivaceum* Laidlaw 1914. Ramgarh (25.4.98)

*Argiocnemis Selys, 1977.

15.* A. rubescens Selys, 1877. Foy's Lake. Only a single teneral female was taken on 7.19.99.

Agriocnemis Selys, 1869.

- 16. *A. lacteola* Selys, 1877. Foy's Lake (21.3.97 & 7.6.94), C.U.campus (12.5.99, 3.6.99, 25.8.99 & 19.6.2000), Lawachara (25.5.98).
- 17. *A. pygmea*, (Rambur, 1842). Foy's Lake (7.6.94., 21.3.97.,19.12.99., 20.4.2000), Ctg. Cantt. (9.5.97., 7.12.99), C.U.Campus (12.5.99., 19.6.2000).
- 18. *A. femina* (Brauer, 1868). Ramu (4.4.99), C.U.campus (15.7.99, 3.6.99 & 8.9.99), Foy's Lake (19.12.99), Ctg.cantt. (7.12.99).
- 19. *A. d'abreui* Fraser 1919. C.U.campus(8.9.99), Ctg. Cantt. (30.4.2000), Boroichari (10.8.2000), Rangunia (30.4.2000).
- *A. naia Fraser 1923. Foy's Lake (19.12.99), Ctg. Cantt. (7.12.99), Srimangal (26.5.98).
 A. spendidissima Laidlaw 1919. C.U. campus (12.5.99,19.7.99, 25.8.99, 23.11.99),

- Ctg. Cantt.(20.4.2000), Foy's ake (20.4.2000, 5.8.2000), Rangunia (30.4.2000), Rowjan (22.9.99).
- 22. *A. pieris Laidlaw 1919. C.U. campus (15.9.99), Boroichari (5.8.2000).
- 23. *A. nana Laidlaw 1914. Ramu (19.5.2000), Bang. Oxygen Ltd.(4.3.97).

* Enallagma Charpentier 1840.

- 24. * *E. Parvum Selys* 1876. Ctg. Cantt. (9.5.97), C.U.campus (23.11.99), Boroichari (10.8.2000).
- 25. **E. malayanum* Selys 1876. Ctg. Cantt. (9.5.97), Foy's Lake (19.12.99 & 20.4.2000), Bang. Oxygen Ltd. (14.3.97).
- 26. * E. cyathigerum Charpentier 1840. Supati (20.2.97).

* Coenagrion Kirby 1890.

- 27. *C. dyeri Fraser 1923. Bandarban (23.4.99), Rangamati (6.10. 99).
 - * Onychargia Selys 1865.
- 28. * O. atrocyana C.U. campus (8.9.99. & 19.6.2000).

* Mortonagrion Fraser 1920.

29. * *M.gautama (Fraser 1922).* C.U. campus. The male was previously unknown.

Sub-family - Protoneurinae *Caconeura Kirby 1890

- 30. * C. botti Fraser 1922. Lawachara (25.5.98 & 28.9.99)
 - 31. * *C. verticalis annandalei* Fraser 1921. Bandarban (15.4.97 & 3.5.2000).

* Disparoneura Selys 1860.

32. * *D. campioni Fraser* 1922. Lawachara (28.5.99).

*Aciagrion Selys 1891.

33. **A. occidentale* Fraser 1923. Mirsarai (8.7.2000).

Sub-family – *Platicneminae*Copera Kirby 1890.

- C. annulata (Selys, 1863). Quite common all over Chittagong and Sylhet from May to November near both stagnant and slowrunning water bodies.
- 35. *C. vittata* (Selys, 1863). Ctg. City (25.8.99), Sitakundu (9.4.99), C.U.campus (25.8.99 & 3.11.99), B.T.R.I (29.5.99), Ctg. Cantt. (15.5.2000), Bandarban (10.5.2000).
- 36. *C. marginipes (Rambur, 1842). Srimongal (27.7.94), Bandarban (15.4.97, 23.4.99 & 25.5.99), B.T.R.I. (29.5.99), Rangamati (6.10.99), Sitakundu (14.11.99), C.U. campus

- (23.11.99), Boroichari (30.4. 2000), Khasiachara (28.5.99).
- 37. **C. assamensis* Laidlaw 1914. Madhabkundu (27.5.99), Lawachara (28.5.99), Rangamati (6.10.99).

*Coeliccia Kirby 1890.

- 38. *C.didyma (Selys 1863). Madhabkundu (3.5.97),Rangamati (6.10.99), Sitakundu (14.11.99), Bandarban (10.5.2000), Boroichari (30.4.2000 & 10.8.2000). A single female recorded previously was by Lahiri(1973) from Meghalaya. We have 3 females. 39. *C. loogali Laidlaw 1932. Bandarban (15.4.97).
- *C. vacca Laidlaw 1932. Boroichari (30.4.2000 & 10.8.2000). The only specimen(the type) is an incomplete female. The male in our collection is the first record of that sex.
- 41. *C. bimaculata Laidlaw 1914. Lawachara (25.5.98).

Calicnemis Selys 1863.

- 42. *C.pulverulans* Selys 1886. Sitakundu (10.5.99), Madhabkundu (25.5.98 & 27.5.99), Rangamati (6.10.99), Bandarban (10.5.2000).
- 43. **C. eximia* Selys 1863. Madhabkundu (27.5.99), Bandarban (10.5.2000), Lawachara (25.5.98), Sitakundu (1.5.97).

Family - *Agriidae Sub-family - * Libellaginae *Libellago Selys 1840.

- 44. * *L. lineata lineata* (Burmeister 1839). Bandarban (23.4.99, 15.5.97 & 10.5.20000, Rangamati (6.10.99), Khasiachara (28.5.94)
- 45. * *L. lineate indica* (Fraser 1919).Lawachara (28.5.99), Rangamati (6.10.99), madhabkundu (27.5.99), Bandarban (25.5.99).

Sub-family - *Epallaginae *Allophaea Fraser 1929.

46. *A. brunnea (Selys 1879). Madhabkundu (27.5.99).

Sub-family -* Agriinae

* Vestalis Selys 1853.

47. **V. smaragdina* Selys 1853. Madhabkundu (27.5.99), Lawachara (28.5.99), Bandarban (10.5.2000), Sitakundo (21.5.2000).

Taxonomic notes

Potamarcha obscura: In one specimen in our collection the discoidal cell in fore wing is distal to that in the hind wing and the tibial spines in hind legs long. Both these features are similar to that of *Lathrecista* Kirby.

Ictinogomphus rapax:

In two specimens from Noakhali (outside the designated survey area) the fore wing have 4 (right wing) and 3 (left wing) discoidal cells. Further, in one of these the yellow mark on 2nd. Abdominal segment is nearly obliterated but distinct in the other. Also in the former, the spots and bands on abdomen are rather brownish instead of yellow. In both the costal margin is finely yellow as in *I. partinax* Selys.

Trithemis kirbyi: Our specimens differ from Selys's description in having 13½ antenodals in the fore wing and the basal black dots on middorsum of segments 9 & 10 (not 8 & 9).

Trithemis festiva: In one male specimen there are elongated dorsolateral orange spots on segments 6 & 7. In another specimen (also male) there is a small orange patch close to the lower part of segments 5 & 6.

Brachydiplax sobrina: One male taken from the Chittagong cantt. area has the distal half of the 3rd. tarsi purely white.

Orthetrum glaucum: In one male specimen from Bandarban only segments 1-5 are pruinosed, whereas in specimens from Rangamati segments 1-8 are pruinosed as described by Brauer. The bandarban specimen has the discoidal cell in left hind wing traversed but not the one in the right wing.

Neurothemis fulvia: We have a rare heterochrome-isochrome form of female with the apical areas of all four wings light amber-yellow instead of being transparent (uncoloured).

Cratilla lineata: One male specimen from Sitakundu has the last antenodals in both fore wings incomplete.

Anormogomphus heteropterus: We have one complete female specimen. The only other specimen on record has the head missing.

Libellago lineata indica: In a male specimen bright citron yellow spots on segment 7 are obscure but still discernible. We have another specimen, probably older, where these spots are absent and white pruinescence on fore tibia and femur more prominent. Such age related differences have been noted by Fraser in L. l. lineata but not for L. l. indica. Also in our specimens the black tip of fore wing is barely 2mm. instead of 3mm. or more as recorded by Fraser.

Coeliccia vacca: One of our specimens differ from Laidlaw as follows: (i) Fore wing with 18, not 19 post-nodals; (ii) Pterostigma with three sides

other than the costal with fine line instead of only the costal side with such a line; (iii) 9th Segment entirely yellow on dorsum. This colour probably invades the whole of the dorsum as the insect matures; (iv) Yellow spots on dorsum of 10th. segment near base or a narrow basal area yellow.

Coeliccia didyma: We have a pair in copula where the female resembles *Coeliccia loogali* in thoracic marking -a narrow stripe unlike *C. didyma* which has two pyriform spots.

Copera annulata: One male specimen in our collection differs from Selys's as follows: (i). Three black dots on labrum; (ii) White areas on frons and vertex rather brownish, particularly the two small ones close to antennal base.

Copera marginipe: We have the Bengal form as well as the Assam and Sri Lanka forms from the same area. In one specimen a tiny longish black dot is clearly visible on clypeus in addition to two round ones on postclypeus.

Copera assamensis: One male in our collection has the 2nd and 3rd tibia distinctly dilated and the whole of the 10th, greater part of the 9th and apical third of the 8th. Segments blue. This and another male and two females were taken from the same locality on the same day. The other male has the whole of 10th segment blue as in Bengal form of *C. vittata*. It is doubtful if these two (*C. assamensis and C. vittata*) are distinct species. Fraser (1934) is also of the opinion that these two and *C. marginipes* are more like to be mere races.

Caconeura botti (nearest to): Our specimens differ from Fraser's description as follows: (i) Abdominal segments 3-5 with a subapical blue spot vetrolaterally; (ii) One obscure blue spot on either side of mid-dorsal line of abdominal segment 9; and (iii) Minute basal blue points on abdominal segments 3-6.

Pseudagrion bengalense: We have the first female of this species from the Indian subcontinent.

Pseudagrion rubriceps: One male from Chittagong Cantonment area has 8 postnodals in the hind wing instead of 9 and the wings are enfumed as in *P. ceylanicum*. In two specimens from the same area there is a narrow black line covering the dorsum and extending partly laterally. In some specimens the dorsal mark (goblet shaped marking) is absent on the 2nd segment, the black marking extending to the base of the segment. Thus there is a mixture of features of Coorg and Assam forms. The claw hooks are small as in the original description by Selys, but not found by Fraser in his specimens.

Ceriagrion cerinorubellum: One male specimen in our collection differs the Assam form as follows: (i) part of abdominal segment 3 red as segments 1 & 2; (ii) Abdominal segments 7 - 10 ochreous instead of brick-red. This could be age related.

Ceriagrion sp.: We have a male and a female in our collection. They are nearest to *C. nigroflavum* of which the female is unknown. Our male differs from that of *C. nigroflavum* only in the light black colour of abdomen from segment 4 instead 7 and 11 & 12 antenodals in fore and hind wings respectively.

Ischnura senegalensis: Going by the key characters and description given by Fraser our specimens (both sexes) undoubtedly belong to this species, but there is a distinct ventral spine in the 8th abdominal segment. This has been listed as a key character for the genus *Enallagma* by Fraser.

Ischnura delicata: This species has neither been included in the Fauna of West Bengal (1993) nor in Odonate Fauna of Meghalaya (1987). Fraser (1933) has generally remarked as "widely distributed in South Asia, India, Ceylon and Burma". Our specimen differs from Hagen's description in having 5 and 6 antenodals in fore and hind wings instead of 7 and 6, respectively.

Agriocnemis pygmaea: One male in our collection has the colour on thorax and up to segment 7 dull black and clouded thereafter. The ground colour more yellow, not greenish- yellow as in other specimens. The labrum is faded yellow clouded with black, not brilliant metallic blue.

Agriocnemis nana: We have a female. The features do not tally with any of the Agriocnemis species recorded by Fraser (1933). The ground colour of head and abdomen is orange-yellow rather than blue. Abdominal segments 1-6 are entirely of the ground colour, devoid of black markings. Legs without black marking on tibia and femur. On the basis of notched posterior lobe of prothorax, a feature found only in A. nana we have placed our specimen in that taxon.

Agriocnemis d'abreui: We have two males collected from the same spot in Rangunia on the same date. They are both Siamese forms but differ from each other. In one there are two blue spots on a broad black patch on clypeus, not labrum, on which also there is a black patch. 10th segment almost entirely black, save a tiny ochreous on either side of dorsum. In the one blue

spots on clypeus and labrum are absent, black markings fron segments 7-10 further restricted, 9th segment with a pair of small but distinct black spots on either side of a narrow middorsal black line, 10th almost entirely ochreous except a light black triangle on dorsum.

Enallagma malayanum: The females in our collection differ from Selys's in the clypeus being shiny blue-black, coloured spots on abdominal segments 3-6 not expanding subapically, segments 8 and 9 with black bands, 9 postnodals in fore wing and 7 in the hind.

Acknowledgement

Financial support from NUFU (Norwegian University Research Fund) and IUCN, Bangladesh is gratefully acknowledged.

References

- Begum, A., Bashar, M.A. Dutta A.K & Bashak, L.C 1977. A Systematic note on the Dragonflies of Dhaka City and its suburbs. *J. Asiatic Soc. Bangladesh.* **2:** 43 45.
- Biswas, V., Bashar, M.A. & Begum, A. 1980 On a collection of Odonata from Bagerhat district, Khulna, Bangladesh. Indian Odonatology. **3:** 65–66.
- Chowdhury, S.H. & Akhteruzzaman 1983. Dragonflies (Anisoptera, Odonata) of Chittagong University Campus, Bangladesh. C.U. Studies Part II. **7(I)**: 39 -48.
- Chowdhury, S.H. & Mia, M.I. 1989. Notes on some damselflies (Odonata, Zygoptera) of Chittagong University Campus. C.U. Studies Part II. **13**: 65–70.
- Chowdhury, S.H. & Mohiuddin, M. 1993. New Dragonflies from Chittagong University Campus. *Bangladesh J. Zool.* **21(2)**:149 -150.
- Fraser, F.C. 1933, 1934 and 1936. Fauna of British India, including Ceylon and Burmah. Odonata. Vols. I,II&III. pp.423, pp.398 and pp.461. Today and Tomorrow's Publishers, New Delhi.
- Lahiri, A.R. 1987. Studies on the Odonate Fauna of Meghalaya. Misc. Publications. Occasional Paper no. 99, Zool. Surv. India. 395pp.
- Mitra, T.R. 1983. A list of Odonata of Calcutta. Ent. Monthly Mag. **119**: 29 -31.
- Prasad,M. and R.K. Varshney. 1988. The Odonata of Bihar, India. Misc. Publications. Occ. Paper no. **110**. *Zool. Surv. India*. 44pp.