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Dragonflies and damselflies (Insecta: Odonata) of the northeastern region of Bangladesh with five new additions to the Odonata fauna of Bangladesh

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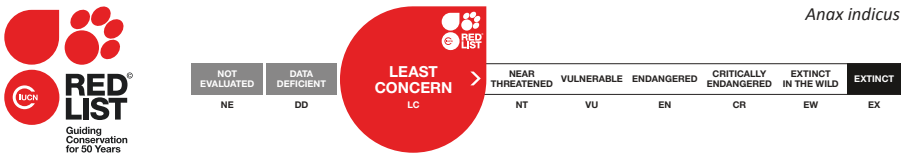
Abstract: Odonata were surveyed in one reserve forest, two national parks, one Eco Park, one lake and one University campus in the northeastern region of Bangladesh from March 2014 to March 2015. A total of 64 species of Anisoptera and Zygoptera belonging to 41 genera under seven families were recorded. Among them 45 species and 19 genera were new records for the study area. Two species of Anisoptera, i.e., *Anax indicus* Lieftinck, 1942 and *Gynacantha khasiaca* MacLachlan, 1896, and three species of Zygoptera i.e., *Matrona nigripectus* Selys, 1879, *Agriocnemis kalinga* Nair & Subramanian, 2014, and *Prodasineura laidlawii* Forster, 1907 were recorded for the first time from Bangladesh.

Keywords: *Agriocnemis kalinga, Anax indicus,* Anisoptera, Bangladesh, *Gynacantha khasiaca, Matrona nigripectus,* Odonata diversity, *Prodasineura laidlawii,* Zygoptera.

Odonata (dragonflies and damselflies) are gorgeous aquatic insects distributed throughout the world. Odonates are highly specific to their niche, depend heavily on water bodies for feeding and breeding and are extremely sensitive to the alteration of the locale (Crowley & Johnson 1982; Butler 2008; Silva et al. 2010). Hence, dragonflies and damselflies are considered indicators of wetland health. Besides, they are important elements of the food chain; many birds feed on them while odonates predate on other small insects like mosquitoes, moths, butterflies and conspecific and heterospecific Odonata (Cheshire et al. 2005). Till date, 6050 species of Odonata belonging to 600 genera have been recorded throughout the World (Vick 2002).

Bangladesh possess an enormus area of wetlands including rivers, lakes and ponds. Moreover, in monsoon heavy rainfall creates many temporary water bodies which hold water for more than three months. The



Anax indicus

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temporary water resources can act as breeding places for many Odonata species (Chowdhury & Mohiuddin 1994). In addition to those permanent and temporary stagnant wetlands, a good number of waterfalls and streams exist, particularly in the north-east and the south-east part of the country. This diverse range of water bodies along with many tropical forest patches has generated a suitable habitat for many Odonata species. Despite that ambient milieu, ironically, scanty research has been carried out to document the Odonata fauna of Bangladesh (Begum et al. 1977; Biswas et al. 1980; Chowdhury & Akhteruzzaman 1983; Chowdhury & Miah 1989; Chowdhury & Mohiuddin 1993; Nomura & Alam 1995; Khan 2015). The most comprehensive work was carried out by Chowdhury & Mohiuddin (2011), where the researchers had documented 96 species of Odonata from the eastern region of Bangladesh.

The northeastern region of Bangladesh is administratively under Sylhet division. The division covers more than 12,636sq.km. and consists of four districts (Sylhet, Maulavibazar, Sunamgong and Habigonj) which are surrounded by the Indian states of Meghalaya, Tripura and Assam. This naturally enriched region contains four protected areas, i.e., Lawachara National Park, Satchari National Park, Khadimnagor National Park and Rema-Kalenga Wildlife Sanctuary; three eco parks, i.e., Madhabkunda Eco Park, Tilagar Eco Park and Borshijora Eco Park. Also, the northeastern region is well known for its large lakes—Tanguar Haor, Hakaluki Haor, Baikkar Bill; rivers—Surma, Kushiara, Kalindi and Khoai; waterfalls—Madhobkunda and Hamham. Previously, a total of 31 species of Odonata of which 17 species of dragonflies and 14 species of damselflies were recorded from the area (Chowdhury & Mohiuddin 2011). The present study have added 45 species new to this region of which five species are recorded for the first time from Bangladesh. The present paper also updates the checklist diversity, distribution and status of Odonata in the northeastern region.

Materials and Methods

Study area

The study was carried out in six different areas of the northeastern region (administratively under Sylhet division) from March 2014 to March 2015 (Fig. 1). The study area includes two national parks, i.e.,

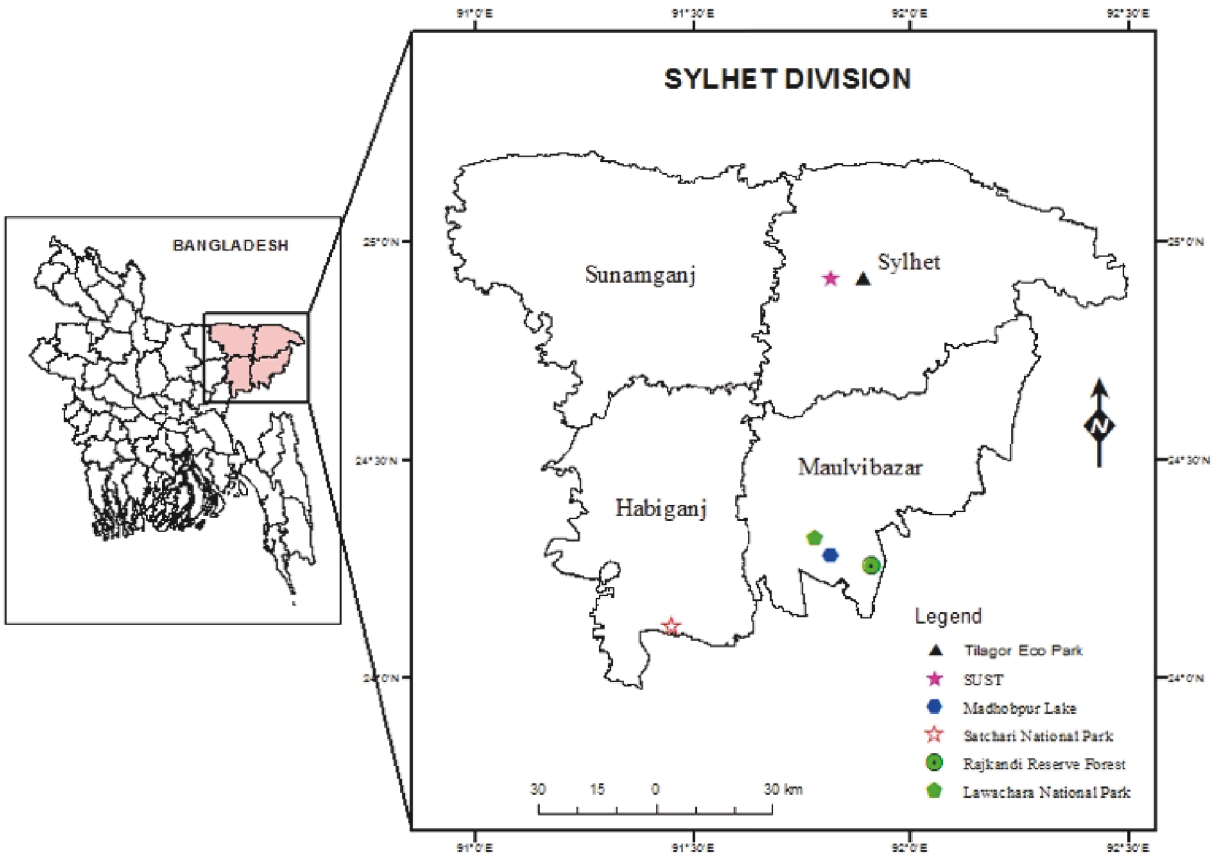

Figure 1. A reference map of the north east region (Sylhet division) of Bangladesh with the highlighted study area

Lawachara National park of Maulavibazar District and Satchari National Park of Habigonj District. The survey was also carried out in Rajkandi Reserve Forest and Tilagor Eco Park. Also, an extensive survey was carried out in Shahjalal University of Science and Technology (SUST) campus of Sylhet District and one opportunistic survey was executed in Madhobpur Lake. The average temperature of these study areas varies from 10–36 ^{0}C.

Sampling of odonates

The odonates were surveyed by walking opportunistically through the forest paths, near streams, lakes, ponds and grasslands associated with the wetlands from 08.00–17.00 hr. The specimens were photographed for various identification features by Canon 600D camera using 55–250 mm lens. Voucher specimens were collected, wherever possible, using insect sweeping net and deposited in the Department of Biochemistry and Molecular Biology, Shahjalal University of Science and Technology, Sylhet, Bangladesh. The odonates were identified with the help of keys provided by Fraser (1933, 1934, 1936), Asahina (1967), Lahiri (1987), Mitra (2002), Subramanian (2005), and Nair (2011). Odonata taxonomy and binomial names provided by Subramanian (2009) were followed except for *Aristocypha* Laidlaw, 1950 instead of *Rhinocypha* Rambur, 1942. *Onychargia atrocyana* Selys, 1865 was placed in the family of Platycnemididae instead of *Coenagrionidae* as proposed by Dijkstra et al. (2013). The family classification was followed on the basis of Subramanian (2014) and Dijkstra (2013).

Results

A total of 64 species from seven families belonging to 41 genera were recorded from the study area (Tables 2,3). Among the documented odonates, 59% (38 species) belong to Anisoptera sub-order while the rest 40% (26 species) is of Zygoptera sub-order (Table 3). Libellulidae is the predominant Anisoptera family with 32 species from 22 genera (Fig. 2, Table 3). On the other hand, Coenagrionidae is the best represented Zygoptera family with 17 species from eight genera (Fig. 2, Table 3). A maximum of 52 species was recorded from Tilagor Eco Park followed by 45 from SUST campus whereas a minimum of 10 species was sighted from Madhobpur Lake (Table 1). *Crocothemis servilia* Drury, 1770, *Neurothemis fulvia* Drury, 1773, *Neurothemis intermedia* Rambur, 1842 and *Orthretrum sabina* Drury, 1770 were sighted from all of the study locations, and can be considered the most widespread species. *Crocothemis servilia* Drury, 1770 and *Orthretrum sabina* Drury, 1770 are the most abundant species from different locations except Rajkandi Reserve Forest and Lawachara National Park where *Neurothemis intermedia* Rambur, 1842 was the predominant species. The present study added 45 species (24 Anisoptera and 21 Zygoptera) to the known Odonata fauna of the north-east which is now 76 species (Appendix 1). Also, five Odonata species (two Anisoptera and three Zygoptera) were newly added to the current Odonata fauna of Bangladesh. The newly recorded species are discussed along with their taxonomic status.

***Anax indicus Lieftinck,* 1942 (Aeshnidae) (Image 1a)**

Anax is a large dragonfly genus of 29 species and distributed throughout the World (Tsuda 2000; Schorr & Paulson 2012). *Anax indicus* is the second *Anax* species recorded from Bangladesh after *Anax guttatus* (Chowdhury & Mohiuddin 2011). One *Anax indicus* male was sighted from the Shahjalal University of Science and Technology (SUST) campus on 16 April 2014. Previously the species was known from India, Nepal, Pakistan, Sri Lanka and Thailand (Mitra 2010). The present record extends its distribution to Bangladesh also. *Anax guttatus* and *Anax indicus* are closely related species. However, identification of the species is possible by the close comparison of the abdominal segments and anal appendages. The observed male specimen appropriately fit the description provided by Lieftinck, 1955 "The two pairs of postjugal spots are broadly fused to form a continuous band on 6, 7 & 8, also the orange spot on 9 is clearly formed by the fusion of a very small basal and a large apical spot".

IUCN Red List status: Least Concern (Mitra 2010).

***Gynacantha Khasiaca* MacLachlan, 1896 (Aeshnidae) (Image 1b)**

Gynacantha khasiaca is the most beautiful of the genus *Gynacantha* and can be distinguished easily by the great length of the inferior anal appendages (Fraser 1936). I have sighted the species on 24 October 2014 from stream associated shade of the Tilagor Eco Park. The male matches perfectly with the identification key provided by Fraser (1936) "Inferior anal appendages more than half of the length of superiors; thorax brightly grass green with two sharply defined blackish-brown stripes on each sides". Previously the species was known from India, Myanmar and Nepal. Except for the record in 1980 from Nepal, all the other records of the species are older than 70 years which may indicate the extreme rarity of the species. However, the claim cannot be consolidated due to the scanty nature of the studies and lack of expert sampling in the area.

Table 1. Details of survey localities of the present study

	Locality	GPS	District	Date visited	Habitat	No. of species
1	Madhobpur Lake	24°16'51.1"N & 91°49'1.61"E	Maulavibazar	24 January 2015	Lake associated forest patches	10
2	Lawachara National Park	24°19'11"N & 91°47'01"E	Maulavibazar	5 May 2014 5 November 2014 15 December 2014	Semi ever-green forest	14
3	Rajkandi Reserve Forest	24°15'25"N & 91°54'47"E	Maulavibazar	6 November 2014 13–14 December 2014	Semi ever-green forest with streams and water falls	21
4	Shahjalal University of Science and Technology (SUST) campus	24°55'09"N & 91°49'54"E	Sylhet	Weekly visit in the study period	Semi urban area with forest patches and lakes	45
5	Satchari National Park	24°07'12"N & 91°27'03"E	Habigonj	3–5 October 2014	Tropical evergreen forest	13
6	Tilagor Eco Park	24°55'2.3"N & 91°53'37.2"E	Sylhet	Biweekly visit in the study period	Semi ever-green forest	52

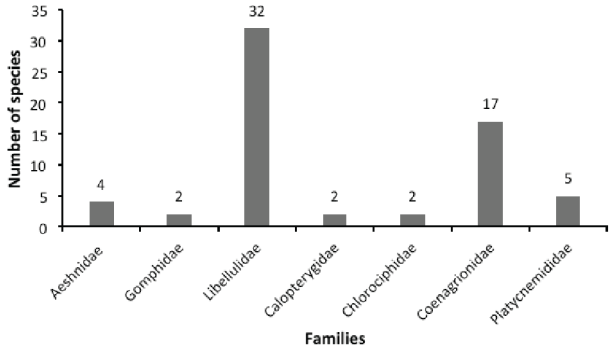

Figure 2. Number of families and their corresponding species recorded in the northeastern region of Bangladesh.

IUCN Red List status: Data Deficient (Mitra et al. 2010).

***Matrona nigripectus* Selys, 1879 (Calopterygidae) (Image 2a,b)**

Although *Matrona nigripectus* was previously considered as a subspecies of *Matrona basilaris*, currently it is regarded as a distinct species of the seven-membered *Matrona* genus (Dow 2009). The species was sighted on 6 November 2014 in a hilly stream in Rajkandi Reserve Forest. More than 10 males and three females were observed perched on the rock and shrubs associated with the stream. Previously the species were known from India, Thailand and Vietnam (Hamalainen & Zhang 2011; Joshi & Kunte 2014).

IUCN Red List status: Not Evaluated.

***Agriocnemis kalinga* Nair & Subramanian, 2014 (Coenagrionidae) (Image 2c,d)**

Agriocnemis kalinga Nair & Subramanian, 2014 has been recently described as a new species to science from eastern India (Nair & Subramanian 2014). The

Image 1. Newly recorded Anisoptera from Bangladesh (Aeshnidae).
1a - *Anax indicus* Lieftinck, 1942 (male);
1b - *Gynacantha khasiaca* McLachlan, 1896 (male).

Table 2. A list of the odonates recorded in the current study. Study area- 1. Lawachara National Park, 2. Madhobpur Lake, 3. Rajkandi Reserve Forest, 4. Satchari National Park, 5. Shahjalal University of Science and Technology (SUST) campus, 6. Tilagor Eco Park

	Species name	1	2	3	4	5	6	Chowdhury & Mohiuddin2011
	Aeshnidae							
1	*Anax indicus* Lieftinck, 1942*					+		
2	*Gynacantha hyalina* Selys, 1882					+	+	
3	*Gynacantha khasiaca* McLachlan, 1896*						+	
4	*Gynacantha subinterrupta* Rambur, 1842				+		+	
	Gomphidae							
5	*Ictinogomphus rapax* Rambur, 1842					+	+	+
6	*Paragomphus lineatus* Selys, 1850					+	+	
	Libellulidae							
7	*Acisoma panorpoides* Rambur, 1842					+	+	
8	*Aethriamanta brevipennis* Rambur, 1842					+	+	+
9	*Brachydiplax chalybea* Brauer, 1868					+	+	
10	*Brachydiplax farinosa* Krüger, 1902					+	+	
11	*Brachydiplax sobrina* Rambur, 1842					+	+	
12	*Brachythemis contaminata* Fabricius, 1793	+				+	+	+
13	*Cratilla lineata* Foerster, 1903	+		+	+		+	
14	*Crocothemis servilia* Drury, 1770	+	+	+	+	+	+	
15	*Diplacodes nebulosa* Fabricius, 1793			+		+	+	
16	*Diplacodes trivialis* Rambur, 1842	+		+	+	+	+	+
17	*Hydrobasileus croceus* Brauer, 1867					+		
18	*Indothemis limbata* Selys, 1891			+				
19	*Lathrecista asiatica* Fabricius, 1798	+					+	+
20	*Neurothemis fulvia* Drury, 1773	+	+	+	+	+	+	+
21	*Neurothemis intermedia* Rambur, 1842	+	+	+	+	+	+	
22	*Neurothemis tullia* Drury, 1773					+	+	
23	*Orthetrum chrysis* Selys, 1891	+		+	+	+	+	+
24	*Orthetrum glaucum* Brauer, 1865						+	
25	*Orthetrum luzonicum* Brauer, 1868	+						
26	*Orthetrum pruinosum* Rambur, 1842	+		+	+	+	+	+
27	*Orthetrum sabina* Drury, 1770	+	+	+	+	+	+	+
28	*Palpopleura sexmaculata* Fabricius, 1787			+		+	+	+
29	*Pantala flavescens* Fabricius, 1798					+	+	
30	*Potamarcha congener* Rambur, 1842			+		+	+	
31	*Rhodothemis rufa* Rambur, 1842					+	+	
32	*Rhyothemis variegata* Linnaeus, 1763					+	+	+
33	*Tholymis tillarga* Fabricius, 1798	+		+		+	+	+
34	*Tramea basilaris* Kirby, 1889						+	
35	*Trithemis festiva* Rambur, 1842			+				
36	*Trithemis pallidinervis* Kirby, 1889					+		
37	*Urothemis signata* Rambur, 1842			+		+	+	
38	*Zyxomma petiolatum* Rambur, 1842					+	+	
	Calopterygidae							
39	*Vestalis gracilis* Rambur, 1842			+			+	
40	*Matrona nigripectus* Selys, 1879*			+				

	Species name	1	2	3	4	5	6	Chowdhury & Mohiuddin2011
	Chlorociphidae							
41	*Aristocypha quadrimaculata* Selys, 1853			+				
42	*Libellago lineata* Burmeister, 1839						+	+
	Coenagrionidae							
43	*Aciagrion pallidum* Selys, 1891						+	
44	*Agriocnemis femina* Brauer, 1868		+			+	+	
45	*Agriocnemis kalinga* Nair & Subramanian, 2015*			+		+	+	+
46	*Agriocnemis lacteola* Selys, 1877					+	+	
47	*Agriocnemis pieris* Laidlaw, 1919		+			+		
48	*Agriocnemis pygmaea* Rambur, 1842		+		+	+	+	
49	*Argiocnemis rubescens* Selys, 1877					+		
50	*Ceriagrion cerinorubellum* Brauer, 1865					+	+	
51	*Ceriagrion coromandelianum* Fabricius, 1798		+			+	+	
52	*Ceriagrion olivaceum* Laidlaw, 1914				+		+	
53	*Ischnura aurora* Brauer, 1865				+	+	+	
54	*Ischnura rufostigma* Selys, 1876						+	
55	*Ischnura senegalensis* Rambur, 1842					+		
56	*Mortonagrion aborense* Laidlaw, 1914					+	+	
57	*Paracercion calamorum* Ris, 1916		+					
58	*Pseudagrion microcephalum* Rambur, 1842					+	+	
59	*Pseudagrion rubriceps* Selys, 1876			+		+	+	+
	Platycnemididae							
60	*Copera ciliata* Selys, 1863					+	+	+
61	*Copera marginipes* Rambur, 1842	+		+	+	+	+	+
62	*Copera vittata* Selys, 1863	+			+		+	+
63	*Onychargia atrocyana* Selys, 1865					+	+	
64	*Prodasineura laidlawii* Forster, 1907*						+	

* new records for Bangladesh

current sightings from Bangladesh is the first record of the species from outside of the geographical boundary of India. The species was sighted several times from SUST campus and Tilagor Eco Park from January to October. The male is similar to *Agriocnemis keralensis* and can be differentiated by comparing the post ocular spot mainly while the females are apple green in color and can be distinguished easily from the *Agriocnemis* female.

IUCN Red List Status: Not Evaluated.

***Prodasineura laidlawii* Foester, 1907 (Platycnemididae) (Image 2e,f)**

Prodasineura laidlawii are quiet common in the shaded region of the stream in Tilagor Eco Park. I have sighted a plethora of male individuals during the post monsoon (August-November) visits at the study site. The sightings of females were extremely rare indicating the paucity of females. The collected specimen matches perfectly with the description provided by Asahina (1993). The blue-striped species can be identified and distinguished easily from the similar species by the following feature: black abdomen with a blue longitudinal streak on segment 2; a pair of blue spot at segment 8; the dorsal side of segment 9 and 10 and superior anal appendages are azure blue. The species was previously known from Malaysia, Cambodia, Vietnam, Thailand and Myanmar (Kosterin & Vikhrev 2009). The present record extended its distribution to further south in Bangladesh.

IUCN Red List status: Least Concern (Dow 2011).

Discussion

Although regular surveys were carried out in Tilagor Eco Park and Shahjalal University of Science and Technology by covering all the seasons, studies in the other four sites were opportunistic. Hence, the present checklist needs to be updated from time to time by more

Image 2. Newly recorded Zygoptera from Bangladesh (Calopterygidae, Coenagrionidae, Platycnemididae).
a - *Matrona nigripectus* Selys, 1879 (male); b - *Matrona nigripectus* Selys, 1879 (female); c - *Agriocnemis kalinga* Nair & Subramanian, 2014 (male); d - *Agriocnemis kalinga* Nair & Subramanian, 2014 (female); e - *Prodasineura laidlawii* Forster, 1907 (male); f - *Prodasineura laidlawii* Forster, 1907 (female).

surveys particularly in the waterfalls, streams, canopy and forests of the study area. However, opportunistic studies sometimes play an important role in updating the status of many Odonata species, particularly of the cryptic species (Koparde et al. 2014). The present study added five new species to Bangladeshsi Odonata fauna, among them two were sighted during opportunistic visits. Moreover, among the 45 new regional records, six species (3 Anisoptera and 3 Zygoptera) were documented only at times of opportunistic visits which further justifies the importance of such surveys.

The present study recorded three *Gynacantha* species, all of them from the dark shades of the forest canopy. Due to their crepuscular nature, capturing and even photographing them was extremely difficult (Dijkstra 2005). Perhaps that is why no *Gynacantha* species was previously known from the study area.

Most of the recorded Libellulidae species except *Hydrobasileus croceus, Orthretrum glaucum* and *Tramea basilaris* are quiet common on SUST campus and Tilagor Eco Park and can be seen in flight throughout most of the year. *Hydrobasileus croceus* was sighted only once from

Table 3. A taxonomic summary of odonates of the northeastern region of Bangladesh

Sub-order Anisoptera	
Genus	**No. of species**
Aeshnidae	
Anax	1
Gynacantha	3
Gomphidae	
Ictinogomphus	1
Paragomphus	1
Libellulidae	
Acisoma	1
Aethriamanta	1
Brachydiplax	3
Brachythemis	1
Cratilla	1
Crocothemis	1
Diplacodes	2
Hydrobasileus	1
Indothemis	1
Lathrecista	1
Neurothemis	3
Orthetrum	5
Palpopleura	1
Pantala	1
Potamarcha	1
Rhodothemis	1
Rhyothemis	1
Tholymis	1
Tramea	1
Trithemis	2
Urothemis	1
Zyxomma	1
Total genera (26)	**Total species (38)**
Sub-order Zygoptera	
Calopterygidae	
Vestalis	1
Matrona	1
Chlorociphidae	
Aristocypha	1
Libellago	1
Coenagrionidae	
Aciagrion	1
Agriocnemis	5
Argiocnemis	1
Ceriagrion	3
Ischnura	3
Mortonagrion	1
Paracercion	1
Pseudagrion	2
Platycnemididae	
Copera	3
Onychargia	1
Prodasineura	1
Total genera (15)	**Total species (26)**

SUST campus on 28 October 2014 while *Orthretrum glaucum* and *Tramea basilaris* were observed from Tilagor Eco Park on 30 November 2014 and 20 May 2014 respectively. The lack of sightings indicates the extreme rarity of these species in the study area. On the other hand, although *Indothemis limbata* and *Orthetrum luzonicum* were sighted once from Rajkandi Reserve Forest and Lawachara National Park respectively, their status cannot be confirmed because the study did not cover the seasonal variation in those two study areas. Also *Diplacodes nebulosa* and *Lathrecista asiatica* were sighted rarely and are quiet uncommon species in the northeastern region.

Calopterygidae and Chlorociphidae are two rare families found in the study area whose distribution is restricted to streams and waterfalls as suggested by the previous study. *Vestalis gracilis,* was sighted from the forest canopy of Lawachara National Park and stream associated canopy of Rajkandi Reserve Forest and Tilagor Eco Park. The distribution of *Matrona nigripectus* and *Aristocypha quadrimaculata* is confined to HamHam Waterfall of the Rajkandi Reserve Forest.

Among the members of the Coenagrionidae family, *Aciagrion pallidum* and *Ceriagrion olivaceum* are extremely rare in the study area. An *Aciagrion pallidum* male was sighted from the canopy of Tilagor Eco Park on 2 January 2015 and a single female was recorded from the same locale on 11 January 2015. Another rare species, *Ceriagrion olivaceum* was observed from Satchari National Park on 3 August 2014 and from Tilagor Eco Park on 30 September 2014. The rest of the Coenagrionidae species are common in the lakes, ponds and other temporary water bodies of SUST campus and Tilagor Eco Park.

The present study reveals the diversity of Odonata in the northeastern region of Bangladesh. Moreover, the study has exposed the underexplored Odonata of the northeastern hilly streams and the richness of the habitat. Future explorations needs be carried out in the the unexplored area to update the present checklist.

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Appendix 1. A checklist of the Odonata fauna of the northeastern region of Bangladesh. The newly added species to the Bangladeshi Odonata fauna are shown in astericks (*). Species recorded by Chowdhury & Mohiuddin (2011) but not in the present study are shown in bold.

	Species name
	Aeshnidae
1	*Anax indicus* Lieftinck, 1942*
2	*Gynacantha hyalina* Selys, 1882*
3	***Gynacantha khasiaca* McLachlan, 1896***
4	*Gynacantha subinterrupta* Rambur, 1842*
	Gomphidae
5	*Ictinogomphus rapax* Rambur, 1842
6	*Paragomphus lineatus* Selys, 1850
7	***Macrogomphus robustus* Selys, 1854**
	Libellulidae
8	*Acisoma panorpoides* Rambur, 1842
9	*Aethriamanta brevipennis* Rambur, 1842
10	*Brachydiplax chalybea* Brauer, 1868
11	*Brachydiplax farinosa* Krüger, 1902
12	*Brachydiplax sobrina* Rambur, 1842
13	*Brachythemis contaminata* Fabricius, 1793
14	*Cratilla lineata* Foerster, 1903
15	*Crocothemis servilia* Drury, 1770
16	*Diplacodes nebulosa* Fabricius, 1793
17	*Diplacodes trivialis* Rambur, 1842
18	*Hydrobasileus croceus* Brauer, 1867
19	*Indothemis limbata* Selys, 1891
20	*Lathrecista asiatica* Fabricius, 1798
21	*Neurothemis fulvia* Drury, 1773
22	*Neurothemis intermedia* Rambur, 1842
23	*Neurothemis tullia* Drury, 1773
24	***Orthetrum cancellatum* Linnaeus, 1758**
25	*Orthetrum chrysis* Selys, 1891
26	*Orthetrum glaucum* Brauer, 1865
27	*Orthetrum luzonicum* Brauer, 1868
28	*Orthetrum pruinosum* Rambur, 1842
29	*Orthetrum sabina* Drury, 1770
30	*Palpopleura sexmaculata* Fabricius, 1787
31	*Pantala flavescens* Fabricius, 1798
32	*Potamarcha congener* Rambur, 1842
33	*Rhodothemis rufa* Rambur, 1842
34	*Rhyothemis variegata* Linnaeus, 1763
35	*Tholymis tillarga* Fabricius, 1798
36	*Tramea basilaris* Kirby, 1889
37	***Trithemis aurora* Burmeister, 1839**
38	*Trithemis festiva* Rambur, 1842
39	*Trithemis pallidinervis* Kirby, 1889
40	*Urothemis signata* Rambur, 1842
41	*Zyxomma petiolatum* Rambur, 1842
	Calopterygidae
42	***Allophaea ochracea* Selys, 1859 syn. *Allophaea brunnea* Selys, 1879**
43	*Vestalis gracilis* Rambur, 1842
44	***Vestalis smaragdina* Selys, 1853**
45	*Matrona nigripectus* Selys, 1879*
	Chlorociphidae
46	*Aristocypha quadrimaculata* Selys, 1853
47	*Libellago lineata* Burmeister, 1839
	Coenagrionidae
48	*Aciagrion pallidum* Selys, 1891
49	*Agriocnemis femina* Brauer, 1868
50	*Agriocnemis Kalinga* Nair & Subramanian, 2015
51	*Agriocnemis lacteola* Selys, 1877
52	***Agriocnemis naia* Fraser, 1923**
53	*Agriocnemis pieris* Laidlaw, 1919
54	*Agriocnemis pygmaea* Rambur, 1842
55	*Argiocnemis rubescens* Selys, 1877
56	*Ceriagrion cerinorubellum* Brauer, 1865
57	*Ceriagrion coromandelianum* Fabricius, 1798
58	*Ceriagrion olivaceum* Laidlaw, 1914
59	*Ischnura aurora* Brauer, 1865
60	*Ischnura rufostigma* Selys, 1876
61	*Ischnura senegalensis* Rambur, 1842
62	*Mortonagrion aborense* Laidlaw, 1914
63	*Paracercion calamorum* Ris, 1916
64	*Pseudagrion microcephalum* Rambur, 1842
65	*Pseudagrion rubriceps* Selys, 1876
	Platycnemididae
66	***Coeliccia bimaculata* Laidlaw, 1914**
67	***Coeliccia didyma* Selys, 1863**
68	***Calicnemia pulverulans* Selys, 1886**
69	***Calicnemia eximia* Selys, 1863**
70	*Copera ciliata* Selys, 1863
71	*Copera marginipes* Rambur, 1842
72	*Copera vittata* Selys, 1863
73	*Onychargia atrocyana* Selys, 1865
74	*Prodasineura laidlawii* Forster, 1907*
75	***Caconeura botti* Fraser, 1922 syn. *Prodasineura collaris* Selys, 1860**
76	***Disparoneura campioni* Fraser, 1922 syn. *Elattoneura campioni* Fraser, 1922**