

# ZOOTAXA

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## Checklist of the dragonflies and damselflies (Insecta: Odonata) of Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka

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## Abstract

A checklist of the dragonflies and damselflies occurring in Bangladesh, Bhutan, India (including Andaman and Nicobar Islands), Nepal, Pakistan and Sri Lanka is presented. In total 588 (including 559 full species) taxa are known to occur in the region of which 251 taxa (species & subspecies) are single country endemics. Recent taxonomic changes relevant to the area are summarized. Sixteen taxa are synonymized and a checklist of all synonyms established since 1950 is provided. Information is given on available larval descriptions including a list of genera present in the region for which no larvae have yet been described. Numerous species occurring in the area are still poorly known and a list of genera for which a revision is urgently needed is provided.

The following new synonyms are established: *Calicnemia sudhaae* Mitra, 1994 = *Calicnemia imitans* Lieftinck, 1948 **syn. nov.**; *Ceriagrion fallax cerinomelas* Lieftinck, 1927 = *Ceriagrion fallax* Ris, 1914 **syn. nov.**; *Ceriagrion fallax pendleburyi* Laidlaw, 1931 = *Ceriagrion fallax* Ris, 1914 **syn. nov.**; *Coenagrion kashmirus* Chowdhary & Das, 1975 = *Ischnura forcipata* Morton, 1907 **syn. nov.**; *Enallagma insula* Fraser, 1920 = *Aciagrion occidentale* Laidlaw, 1919 **syn. nov.**; *Himalagrion pithoragarhicum* Sahni, 1964 = *Ceriagrion fallax* Ris, 1914 **syn. nov.**; *Ischnura bhimtalensis* Sahni, 1965 = *Ischnura rubilio* Selys, 1876 **syn. nov.**; *Onychargia indica* Sahni, 1964 = *Paracercion calamorum* (Ris, 1916) **syn. nov.**; *Anaciaeschna kashmirensis* Singh & Baijal, 1954 = *Anaciaeschna martini* (Selys, 1897) **syn. nov.**; *Cyclogomphus vesiculosus* Selys, 1854 = *Cyclogomphus ypsilon* Selys, 1954 **syn. nov.**; *Chlorogomphus brittoi* Navás, 1934 = *Chlorogomphus xanthoptera* (Fraser, 1919) **syn. nov.**; *Hylaeothemis indica* Fraser, 1946 = *Hylaeothemis apicalis* Fraser, 1924 **syn. nov.**; *Sympetrum durum* Bartenev, 1916 = *Sympetrum striolatum commixtum* Selys, 1884 **syn. nov.**; *Sympetrum himalayanum* Navás, 1934 = *Sympetrum hypomelas* (Selys, 1884) **syn. nov.**; *Sympetrum haematoneura* Fraser, 1924 = *Sympetrum speciosum* Oguma, 1915 **syn. nov.**; *Sympetrum speciosum taiwanum* Asahina, 1951 = *Sympetrum speciosum* Oguma, 1915 **syn. nov.**.

In addition, *Periaeschna lebasi* Navás, 1930 is regarded a nomen nudum. The following new combinations are proposed: *Onychogomphus acinaces* Laidlaw, 1922 is transferred to the genus *Melligomphus* Chao, 1990 resulting in *Melligomphus acinaces* (Laidlaw, 1922) **comb. nov.** *Onychogomphus saundersii* Selys, 1854 is transferred to the genus *Nychogomphus* Carle, 1986 resulting in *Nychogomphus saundersii* (Selys, 1854) **comb. nov..**

**Key words:** damselfly; dragonfly; diversity, taxonomy; larval description; Indian subcontinent, South Asia

## Introduction

This paper presents an overview of the species of damselflies and dragonflies occurring in Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka (hereafter called the Indian Subcontinent) as well as the biogeographically distinct Andaman and Nicobar Islands, which are part of India politically. It is a huge and diverse region as regards to biodiversity, ecosystems, habitats, topography, climate and altitude. Four global biodiversity hotspots cover large parts of the area: Sundaland (Nicobar Islands of India); Eastern Himalaya (Nepal, Bhutan and India); Indo-Burma (India and Bangladesh), and the Western Ghats and Sri Lanka (SW India and Sri Lanka) (Myers *et al.* 2000). The region is densely populated which has resulted in the diminishing of natural vegetation cover with an increasingly deleterious effect on freshwater resources. This, combined with the impact of climate change places the freshwater fauna and flora of South Asia under extreme pressure.

Dragonflies and damselflies are good indicators of freshwater habitat quality and could be used for this purpose

on a regional and national basis. If dragonflies and damselflies are to serve as indicators of environmental health it is necessary to produce handbooks and field guides that enable both professionals and citizen scientists to accurately identify the species. In recent years several identification guides for parts of the region have been published but for large tracts complete, up to date, user friendly field guides are still lacking. Despite the region having a rich odonatological tradition, beginning with the numerous and monumental works of such eminent odonatologists as E. de Selys-Longchamps, F.C. Fraser and F.F. Laidlaw among others in the second half of 19th and first half of 20th century, many odonate species occurring in the region are still poorly known and the taxonomy of many remains problematic. In addition, the larvae of many species and even genera are not known making it impossible to produce keys to the larvae found in this region. In the coming decade we hope to resolve most outstanding taxonomical problems, redescribe species when needed and describe larvae, especially those presently unknown at the generic level. The current checklist is an important step towards this endeavour. It provides critically reviewed, up-to-date checklists of species for individual countries and for the region as a whole, it solves several outstanding taxonomical problems by synonymising 13 species and 3 subspecies, it enumerates the most important additional taxonomical puzzles and provides a bibliography on available larval descriptions and lists the genera whose larvae remain unknown. We hope that this updated checklist with its supplementary information will stimulate further work on the dragonflies and damselflies of Indian subcontinent so that by 2030 most of the uncertainties and absence of information listed in this paper will be resolved.

## Methods

The checklist presented in Table 1 includes all species of dragonflies and damselflies known to occur in Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka (the Indian Subcontinent) as well the tectonically and biogeographically distinct Andaman and Nicobar Islands, which are part of India politically. This whole area we refer to as South Asia. The taxonomic arrangement of the families follows Dijkstra *et al.* (2013, 2014). The entries for India exclude those species known only from the Andaman and Nicobar Islands, which are listed separately. Some species are only known from old records from Kashmir. In these cases, the species is included for both India and Pakistan with a question mark. Species whose presence in a country is recorded in a thesis but not in a formal scientific publication are omitted.

In this paper 16 new synonyms are established. In many cases type material of these species is unavailable and hence we rely on the original descriptions and the balance of probabilities as to their identity. We deem this justified as it is the only way to solve the problem of so called 'zombie' species (species remaining in existence only by virtue of the lack of material and the absence of a proper description).

The foundation of all checklists in the region under consideration was laid by the works of Fraser (1933a, 1934, 1936). The following references contain more recent checklists or include additions to previous checklists:

**Bangladesh:** Khan 2015a, b; Habib *et al.* 2016; Khan 2018; Tuhin & Khan 2018; Shah & Khan 2020. Chowdhury & Mohiuddin (2011) reported over 40 species new to Bangladesh, most of which have since been confirmed. Those species in the list whose presence has not been confirmed include several highly unlikely to occur in Bangladesh (e.g. *Orthetrum brunneum*, *O. cancellatum* and *Enallagma cyathigerum*). This also sheds doubt on the correct identification of other species in this list for which reason it was decided to exclude all these species until the material has been re-examined and identification confirmed.

**Bhutan:** Gyeltshen 2017; Gyeltshen & Kalkman 2017; Gyeltshen *et al.* 2017a, b.; Gyeltshen 2020.

**Sri Lanka:** Bedjanić *et al.* 2014, 2016; Priyadarshana *et al.* 2015, 2016, 2018.

**Nepal:** Vick 1989; Clausnitzer & Wesche 1996; Kemp & Butler 2001; Brockhaus 2015; Conniff & Limbu 2018; Sharma 2018; Sharma *et al.* 2018; Conniff *et al.* 2020.

**Pakistan:** Yousuf 1972; Khaliq & Murtaza 1994; Khaliq *et. al.* 1994a, b, 1995a, b; Hussain & Riaz 1999a, b, 2000; Hussain & Ahmed 2003, 2004; Rafi *et al.* 2009; Zia *et al.* 2009, 2011; Chaudhry 2010; Zia 2010; Dow *et al.* 2014; Chaudhry *et al.* 2013, 2015, 2016; Naeem 2016; Zia 2015, 2016, 2019. Some species whose occurrence in Pakistan is unlikely, but have been claimed to occur there without clear evidence are omitted from the checklist. This includes species like *Coenagrion pulchellum* (Vander Linden, 1825), *Ceriagrion tenellum* (de Villers, 1789), *Aeshna grandis* (Linnaeus, 1758), *Boyeria irene* (Fonscolombe, 1838) and *Libellula fulva* Müller, 1764 which were recorded in Din *et al.* (2013) based on larvae identified with European literature.

**India:** Prasad & Varshney 1995; Mitra 2002; Mitra & Babu 2010; Babu *et al.* 2013; Subramanian *et al.* 2013; Nair & Subramanian 2014; Kiran *et al.* 2015; Emiliyamma & Palot 2016a, b; Sheela *et al.* 2016; Joshi & Kunte 2017; Joshi *et al.* 2017; Subramanian & Babu 2017; Subramanian *et al.* 2018; Payra *et al.* 2018; Rangnekar *et al.* 2019; Joshi & Sawant 2019, 2020; Babu & Subramanian 2019; Joshi & Sawant 2020; Payra *et al.* 2020..

**Andaman and Nicobar Islands:** Chhotani *et al.* 1983; Hämäläinen *et al.* 1999; Ram *et al.* 2000; Yeh & Veenakumari 2000; Hämäläinen 2002; Nandy & Babu 2009, 2012; Sivaperuman *et al.* 2011; Mitra *et al.* 2013; Sivaperuman 2015; Rajeshkumar *et al.* 2017a, b; Rajeshkumar & Raghunathan 2018; Babu *et al.* 2018; Koparde *et al.* 2018; Bedjanič *et al.* 2020.

Subspecies are only listed when a non-nominate subspecies occurs in the area. Authors and years of publication of each taxon is given in Tables 1 and 2 and are according to Schorr & Paulson (2019). The checklist also provides a summary of information published on larvae based partly on Prasad & Varshney (1995). For some species a large number of publications provide information on identification and in these cases only the most relevant, often the most recent or most widely available, publications are given. For some genera none of the larvae of species occurring in the Indian Subcontinent have been described. In these cases, we give references to papers describing non-Indian species of the genus. Species known from South Asia and synonymized after 1950 are listed in Table 2.

## New synonyms

### *Calicnemia sudhaae* Mitra, 1994 = *C. imitans* Lieftinck, 1948 syn. nov.

*Calicnemia sudhaae* Mitra, 1994 was first reported by Mitra (1994) but the first full description was provided by Mitra (2002). The species is said to resemble *Calicnemia pulverulans* but can be separated from this species by the penis which falls into species-group 1 of Lieftinck (1984: recurved penis lobe narrow, ribbon-like or filamentous apically) whereas *C. pulverulans* falls into species-group 2 (recurved penis lobe broad, variously expanded, lacking filaments). Strangely, Mitra (2002) does not compare his species with *C. imitans*, which was already known to occur in eastern India, despite the fact that *C. sudhaae* easily keys out here in the key provided in Lieftinck (1984). The description given by Mitra (2002) and the photograph provided of the holotype (Sheela *et al.* 2016) closely match *C. imitans* Lieftinck, 1948. The length of the filaments on the secondary genitalia is shorter than those depicted by Lieftinck (1984) but this might simply be an artefact of the drawing, and is in any case not a compelling character. We therefore consider *C. sudhaae* to be a synonym of *C. imitans*. The species is widespread and known from Myanmar (Lieftinck 1948b), Thailand (Hämäläinen & Pinratana 1999), Laos (Yokoi & Souphanthong 2004), Vietnam, and Manipur, Meghalaya and Mizoram in India (e.g. Asahina 1985; Lahiri 1987).

### *Ceriagrion fallax cerinomelas* Lieftinck, 1927 = *Ceriagrion fallax* Ris, 1914 syn. nov.

### *Ceriagrion fallax pendleburyi* Laidlaw, 1931 = *Ceriagrion fallax* Ris, 1914 syn. nov.

Three subspecies of *C. fallax* have been described: *C. f. fallax* Ris, 1914, *C. f. cerinomelas* Lieftinck, 1927 and *C. f. pendleburyi* Laidlaw, 1931 of which the latter two have been recorded from the Indian subcontinent. The differences between these subspecies are minor and only relate to the extent of black and the size of the specimens. Asahina (1967) in his revision of Asian *Ceriagrion* stated that the ‘differences are rather slight and there are possibilities that some problematic individuals will be found in intermediate areas’. In our opinion the characters mentioned might exhibit a continuous spectrum of geographic variation with paler specimens being found in dryer regions and we therefore consider *C. f. cerinomelas* Lieftinck, 1927 and *C. f. pendleburyi* Laidlaw, 1931 to be synonyms of *C. f. fallax* Ris, 1914.

**TABLE 1.** Checklist of dragonflies and damselflies of Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka and the Andaman and Nicobar Islands. ‘x’ denotes the presence of a species, ‘e’ indicates the species to be endemic to the given country and ‘e (WG)’ indicates the species to be endemic to the Western Ghats.

	Larval description		
	Note	Bangladesh	Pakistan
<b>Order Odonata</b>	Fabricius, 1793		
<b>Suborder Zygoptera</b>	Selys, 1854		
<b>Superfamily Lestoidea</b>	Calvert, 1901		
<b>Family: Synlestidae</b>	Tillyard, 1917		
<b>Megaletes</b>	Selys, 1862		
<i>Megaletes gyalsey</i>	Gyeltshen, Kalkman & Orr 2017	x	x
<i>Megaletes irma</i>	Fraser, 1926	x	x
<i>Megaletes kurashii</i>	Asahina, 1985		x
<i>Megaletes lieftincki</i>	Lahiri, 1979		e
<i>Megaletes major</i>	Selys, 1862	x	x
<i>Megaletes micans</i>	Needham, 1930		x
<i>Megaletes raychoudhurii</i>	Lahiri, 1987		e
<b>Family: Lestidae</b>	Calvert, 1907		
<b>Indolestes</b>	Fraser, 1922	1	
<i>Indolestes assamicus</i>	Fraser, 1930		e
<i>Indolestes cyaneus</i>	(Selys, 1862)	x	x
<i>Indolestes divisus</i>	(Hagen in Selys, 1862)	x	x
<i>Indolestes gracilis</i>	(Hagen in Selys, 1862)	2	e

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TABLE 1. (Continued)

Larval description						
	Note	Bangladesh	Pakistan	Sri Lanka	Nepal	India
Andaman and Nicobar Islands						
<i>Indolestes gracilis gracilis</i>	(Hagen in Selys, 1862)	2	e	e (WG)		
	Fraser, 1930	2		e		
<i>Indolestes indicus</i>	Fraser, 1922					
<i>Indolestes pulcherrimus</i>	Fraser, 1924			e (WG)		
<b>Lestes</b>	<b>Leach, 1815</b>					
<i>Lestes barbarus</i>	(Fabricius, 1798)		x	x		
<i>Lestes concinnus</i>	Hagen in Selys, 1862	3	x	x	x	
						Theischinger & Hawking 2006; Theischinger & Endersby 2009
<i>Lestes dorothae</i>	Fraser, 1924		x	x	x	
<i>Lestes elatus</i>	Hagen in Selys, 1862		x	x	x	
<i>Lestes garoensis</i>	Lahiri, 1987	4		e		
<i>Lestes malabaricus</i>	Fraser, 1929		x	x	x	
<i>Lestes nigriceps</i>	Fraser, 1924			x		
<i>Lestes nodalis</i>	Selys, 1891	4		x		
<i>Lestes patricia</i>	Fraser, 1924	5	x		x	
<i>Lestes praemorsus</i>	Hagen in Selys, 1862	6				
<i>Lestes praemorsus sitkima</i>	Fraser, 1929	6		e		
<i>Lestes praemorsus decipiens</i>	Kirby, 1893	6	x	x	x	
<i>Lestes viridulus</i>	Rambur, 1842		x	x	x	
						Khaliq <i>et al.</i> 1995a

.....continued on the next page

TABLE 1. (Continued)

	Larval description		
	Note		
<b>Orolestes</b>			Andaman and Nicobar Islands
<i>Orolestes durga</i>			
<i>Orolestes selysi</i>			
<b>Platylestes</b>			
<i>Platylestes platystylus</i>			
<b>Sinhallestes</b>			
<i>Sinhallestes orientalis</i>			
<b>Sympetrum</b>			
<i>Sympetrum paedisca</i>			
<b>Superfamily Platystictoidea</b>			
<b>Family: Platystictidae</b>			
<b>Ceylonosticta</b>			
<i>Ceylonosticta adami</i>			
<i>Ceylonosticta ahwisi</i>			
<i>Ceylonosticta anamia</i>			
<i>Ceylonosticta austeni</i>			
<i>Ceylonosticta bine</i>			
<i>Ceylonosticta brincki</i>			
<i>Ceylonosticta digna</i>			

.....continued on the next page

TABLE 1. (Continued)

Larval description	
Note	
Andaman and Nicobar Islands	
Bangladesh	
Pakistan	
Bhutan	
Sri Lanka	
Nepal	
India	
<i>Ceylonosticta goodalei</i>	Priyadarshana & Wijewardana, 2018
<i>Ceylonosticta hilari</i> s	(Hagen in Selys, 1860)
<i>Ceylonosticta inferioreducta</i>	Bedjanic & Conniff, 2016
<i>Ceylonosticta lankensis</i>	Fraser, 1931
<i>Ceylonosticta mirifica</i>	Bedjanic, 2016
<i>Ceylonosticta mojca</i>	(Bedjanic, 2010)
<i>Ceylonosticta montana</i>	(Hagen in Selys, 1860)
<i>Ceylonosticta nancyae</i>	Priyadarshana & Wijewardana, 2016
<i>Ceylonosticta nietneri</i>	Fraser, 1931
<i>Ceylonosticta rupasinghe</i>	Priyadarshana & Wijewardana, 2016
<i>Ceylonosticta submontana</i>	Fraser, 1933
<i>Ceylonosticta subtropica</i>	Fraser, 1933
<i>Ceylonosticta tropica</i>	(Hagen in Selys, 1860)
<i>Ceylonosticta venusta</i>	Bedjanic & Conniff, 2016
<i>Ceylonosticta walli</i>	Fraser, 1931
	e

.....continued on the next page

TABLE 1. (Continued)

		Larval description					
	Note	Bangladesh	Pakistan	Sri Lanka	Nepal	India	Andaman and Nicobar Islands
<b>Drepanosticta</b>	<b>Laidlaw, 1917</b>	7					Lieftinck 1962; Orr 2003; Tze-Wai <i>et al.</i> 2011; Orr & Dow 2015a
<i>Drepanosticta amandalei</i>						e	
	Fraser, 1924						
<i>Drepanosticta carmichaeli</i>				x	x	x	x
	(Laidlaw, 1915)						
<i>Drepanosticta polychromatica</i>			7	x		x	x
<b>Indosticta</b>	<b>Bedjanic, 2016</b>						
<i>Indosticta deccanensis</i>						e (WG)	
	(Laidlaw, 1915)	8					
<b>Platysticta</b>	<b>Selys, 1860</b>						
<i>Platysticta apicalis</i>				e			
	Kirby, 1894						
<i>Platysticta maculata</i>				e			
	(Hagen in Selys, 1860)						
<i>Platysticta secreta</i>				e			
	Bedjanic & van Tol, 2016						
<i>Platysticta serendibica</i>				e			
	Bedjanic & van Tol, 2016						
<b>Protosticta</b>	<b>Selys, 1885</b>						
<i>Protosticta antelopoides</i>				e (WG)			
	Fraser, 1931						
<i>Protosticta damacornu</i>				e			
	Terzani & Carletti, 1998						
<i>Protosticta davenporii</i>				e (WG)			
	Fraser, 1931						
<i>Protosticta fraseri</i>				e			
	Kennedy, 1936						
<i>Protosticta graveyi</i>				e (WG)			
	Laidlaw, 1915			Fraser 1919			

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TABLE 1. (Continued)

Larval description						
	Note	Bangladesh	Pakistan	Sri Lanka	Nepal	India
Andaman and Nicobar Islands						
<i>Protosticta hearseyi</i>	Fraser, 1922	x	x	x		
<i>Protosticta himalaica</i>	Laidlaw, 1917		x	x		
<i>Protosticta monticola</i>	Emiliyamma & Palot, 2016			e (WG)		
<i>Protosticta mortoni</i>	Fraser, 1924			e	Fraser 1943	
<i>Protosticta pommudiensis</i>	Kiran, Kalesh & Kunte, 2015			e	e (WG)	
<i>Protosticta rufostigma</i>	Kimmmins, 1958			e (WG)		
<i>Protosticta sanguinostigma</i>	Fraser, 1922			e (WG)		
Superfamily Calopterygoidea						
Family: Calopterygidae						
<i>Caliphaea</i>	<i>Hagen in Selys, 1853</i>					
<i>Caliphaea confusa</i>	Hagen in Selys, 1859	x	x	x		Fraser 1943
<b>Echo</b>	<i>Selys, 1853</i>					van Tol 1992
<i>Echo margarita</i>	Selys, 1853	9		x		
<i>Echo perornata</i>	Yu & Hämäläinen, 2012	10		x		
<b>Matrona</b>						
<i>Matrona nigripectus</i>	<i>Selys, 1879</i>	11	x	x		Matsuki & Lien 1978; Ishida <i>et al.</i> 1988; Ishida 1996; Ozono <i>et al.</i> 2012; Wang <i>et al.</i> 2017
						Fraser 1919

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TABLE 1. (Continued)

	Larval description							
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India	Andaman and Nicobar Islands
<b>Neurobasis</b>								Orr 2003
<i>Neurobasis chinensis</i>	Selys, 1853 (Linnaeus, 1758)	x	x	x	x	x	x	Fraser 1932a; Kumar 1973a; Tze-Wai <i>et al.</i> 2011; Naeem 2016; Zhang 2019; Dawn & Chandra 2019
<b>Vestalaria</b>	May, 1935 (Selys, 1879)				x			Wang <i>et al.</i> 2017
<b>Vestalis</b>	Selys, 1853							Orr 2003
<i>Vestalis apicalis</i>	Selys, 1873 (Rambur, 1842)	x	x	x	x	x	x	
<i>Vestalis gracilis</i>	Fraser, 1929	12		e				
<i>Vestalis nigrescens</i>	Fraser, 1934	12		e				
<i>Vestalis submontana</i>	Cowley, 1937							
<b>Family: Chlorocyphidae</b>	Laidlaw, 1950							
<b>Aristocyppha</b>	(Selys, 1853)	13	x	x	x	x	x	
<i>Aristocyppha cuneata</i>	Rambur, 1842	13	x		x	x		van Tol 1992
<i>Aristocyppha fenestrella</i>	Fraser, 1927	13	x					
<i>Aristocyppha hilaryae</i>	Fraser, 1927	13	x		x			
<i>Aristocyppha hilaryae hilaryae</i>	Lahiri & Sinha, 1991	13	x		e			
<i>Aristocyppha hilaryae miaoa</i>	Selys, 1879	13	x		x			Kumar & Prasad 1977a
<i>Aristocyppha immaculata</i>	Selys, 1853	13	x	x	x	x		Kumar & Prasad 1977a; Gerken & Sternberg 1999; Naeem 2016
<i>Aristocyppha trifasciata</i>	Selys, 1853	13	x	x	x	x		
<i>Aristocyppha quadrifasciata</i>								

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TABLE 1. (Continued)

		Larval description				
	Note	Bangladesh	Pakistan	Nepal	Sri Lanka	India
Andaman and Nicobar Islands						
<i>Aristocypha spuria</i>	(Selys, 1879)	13		x		
<b>Calocypha</b>	<b>Fraser, 1928</b>			e (WG)		
<i>Calocypha laidlawi</i>	(Fraser, 1924)	13				
<b>Heliocypha</b>	<b>Fraser, 1949</b>					Lieftinck 1962
<i>Heliocypha biforata</i>	(Selys, 1859)	13,		x	x	Kumar & Prasad 1977a
		14				
<i>Heliocypha bisignata</i>	(Hagen in Selys, 1853)	13		e		Fraser 1921
<i>Heliocypha perforata</i>	(Percheron, 1835)	13				Tze-Wai <i>et al.</i> 2011; Xu 2015; Zhang 2019
<i>Heliocypha perforata beatifica</i>	Fraser, 1927	13		e		
<i>Heliocypha perforata limbata</i>	Selys, 1879	13		x		
<b>Heterocypha</b>	<b>Laidlaw, 1950</b>					
<i>Heterocypha vitrinella</i>	(Fraser, 1935)	13				
<b>Indocypha</b>	<b>Fraser, 1949</b>					
<i>Indocypha vittata</i>	(Selys, 1891)			x		Orr 2003
<b>Libellago</b>	<b>Selys, 1840</b>					
<i>Libellago adami</i>	Fraser, 1939			e		
<i>Libellago andamanensis</i>	(Fraser, 1924)				e	
<i>Libellago aurantiaca</i>	(Selys, 1959)			x	x	
<i>Libellago balus</i>	Hämäläinen, 2002				e	
<i>Libellago blanda</i>	(Hagen in Selys, 1853)				e	
<i>Libellago corbetti</i>	van der Poorten, 2009			e		

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TABLE 1. (Continued)

Larval description						
	Note	Bangladesh	Pakistan	Bhutan	Nepal	India
Andaman and Nicobar Islands						
<i>Libellago finalis</i>	(Hagen in Selys, 1869)			e		
<i>Libellago greeni</i>	(Laidlawi, 1924)	15		e		
<i>Libellago indica</i>	(Fraser, 1928)	16			e	
<i>Libellago lineata</i>	(Burmeister, 1839)		x	x	x	
<b>Paracypha</b>	<b>Fraser, 1949</b>					Fraser 1919
<i>Paracypha unimaculata</i>	(Selys, 1853)	13	x	x	x	
<b>Rhinocypha</b>	<b>Rambur, 1842</b>					Laidlaw 1920; Kumar 1973a
<i>Rhinocypha ignipennis</i>	Selys, 1879					Ishida <i>et al.</i> 1988; Ishida 1996
<i>Rhinocypha trimaculata</i>	Selys, 1853					Fraser 1920
Family: Euphaeidae						
<b>Yakobson &amp; Bainchi, 1905</b>						
<b>Anisopleura</b>	<b>Selys, 1853</b>	17				
<i>Anisopleura comes</i>	Hagen, 1880		x	x	x	
<i>Anisopleura lesiooides</i>	Selys, 1853		x	x	x	Kumar & Prasad 1977a
<i>Anisopleura subplatystyla</i>	Fraser, 1927	17	x	x	x	Fraser 1928
<i>Anisopleura vallei</i>	St. Quentin, 1937				e	
<b>Bayadera</b>	<b>Selys, 1853</b>	18				Matsuki & Lien 1978; Ishida <i>et al.</i> 1988; Ishida 1996
<i>Bayadera hyalina</i>	Selys, 1879			x	x	
<i>Bayadera indica</i>	(Selys, 1853)		x	x	x	Kumar 1973a; Khaliq <i>et al.</i> 1995a
<i>Bayadera kali</i>	Cowley, 1936				e	
<i>Bayadera longicauda</i>	Fraser, 1928		x	x	x	

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TABLE 1. (Continued)

Larval description			
	Note		
	Andaman and Nicobar Islands		
<b>Dysphaea</b>			
<i>Dysphaea ethela</i>	Selys, 1853 Fraser, 1924	19	e
<i>Dysphaea gloriosa</i>	Fraser, 1938	x	x
<b>Epallage</b>	<b>Charpentier, 1840</b>		
<i>Epallage fatime</i>	(Charpentier, 1840)	20	x
<b>Euphaea</b>	<b>Selys, 1840</b>		
<i>Euphaea cardinalis</i>	(Fraser, 1924)		e (WG)
<i>Euphaea dispar</i>	Rambur, 1842		e (WG)
<i>Euphaea fraseri</i>	(Laidlaw, 1920)		e (WG)
<i>Euphaea masoni</i>	Selys, 1879	x	x
<i>Euphaea ochracea</i>	Selys, 1859	x	x
<i>Euphaea splendens</i>	Hagen in Selys, 1853	x	x
<b>Schmidtiaphaea</b>	<b>Asahina, 1978</b>		
<i>Schmidtiaphaea chittaranjani</i>	Lahiri, 2003	18	e
<i>Schmidtiaphaea schmidii</i>	Asahina, 1978	18	e
<b>Genera incertae sedis</b>		21	
<b>Burmargiolestes</b>	<b>Kennedy, 1925</b>		
<i>Burmargiolestes laidlawi</i>	Liefvink, 1960	e	

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TABLE 1. (Continued)

Larval description						
	Note	Bangladesh	Pakistan	Nepal	Sri Lanka	India
<b>Family: Philogangidae</b>	Kennedy, 1920					
<b>Philoganga</b>	Kirby, 1890 (Hagen in Selys, 1859)		x	x	x	Tze-Wai <i>et al.</i> 2011; Xu 2016
<i>Philoganga montana</i>						
<b>Superfamily Coenagrionidea</b>	Kirby, 1890					
<b>Family: Platycnemididae</b>	Yakobson & Bainchi, 1905					
<b>Calicnemia</b>	Strand, 1928					Tze-Wai <i>et al.</i> 2011
<i>Calicnemia doonensis</i>	Sangal & Tyagi, 1984 Sangal & Tyagi, 1984	22	22	e		
<i>Calicnemia doonensis doonensis</i>	Liefvink, 1984	22		e		
<i>Calicnemia doonensis carminea</i>	(Selys, 1891)			x		
<i>Calicnemia erythromelas</i>	(Selys, 1863)		x	x	x	Dawn 2019
<i>Calicnemia eximia</i>	Dow, Zia, Naeem & Rafi 2014	e				
<i>Calicnemia fortis</i>	Liefvink, 1948	x		x		
<i>Calicnemia imitans</i>	(Laidlaw, 1917)			x		
<i>Calicnemia miles</i>	(Selys, 1886)	x	x	x		Kumar & Prasad 1977a (as C. miles); the description of Fraser 1919 belongs to a different genus (Dawn 2019)
<i>Calicnemia miniata</i>						
<i>Calicnemia mortoni</i>	(Laidlaw, 1917)	x	x	x		
<i>Calicnemia mukherjeei</i>	Lahiri, 1976			e		
<i>Calicnemia niphonica</i>	Kimmings, 1958	x				

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TABLE 1. (Continued)

Larval description						
		Note	Pakistan	Bhutan	Sri Lanka	Nepal
Andaman and Nicobar Islands						
<i>Calichemia pulverulans</i>	(Selys, 1886)		x		x	x
<b>Coelicia</b>	<b>Kirby, 1890</b>					
<i>Coelicia bimaculata</i>	Laidlaw, 1914 (Selys, 1863)		x		x	x
<i>Coelicia didyma loringae</i>	Laidlaw, 1932				x	
<i>Coelicia dorothaea</i>	Fraser, 1933				e	
<i>Coelicia fraseri</i>	Laidlaw, 1932 Fraser in Laidlaw, 1932				e	
<i>Coelicia logali</i>	Lahiri, 1985 (Selys, 1886)		x		x	e
<i>Coelicia prakritiae</i>	Asahina, 1984				e	
<i>Coelicia renifera</i>	Asahina, 1984				x	
<i>Coelicia rotundata</i>	Asahina, 1984 Lahiri, 1987				x	
<i>Coelicia sartbottama</i>	Asahina, 1984				e	
<i>Coelicia schmidti</i>	Asahina, 1970				e	
<i>Coelicia svihleri</i>	Laidlaw, 1932		x		x	
<i>Coelicia vacca</i>	<b>Fraser, 1922</b>	23				
<b>Pseudocopera</b>						
<i>Pseudocopera ciliata</i>	(Selys, 1863)	23	x	x	x	x

TABLE 1. (Continued)

Larval description						
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	India
Andaman and Nicobar Islands						
<i>Pseudocopera superplatypes</i>	Fraser, 1927	23		x		
<b>Copera</b>	<b>Kirby, 1890</b>					Dawn & Chandra 2019
<i>Copera marginipes</i>	(Rambur, 1842)	x	x	x	x	x
<i>Copera vittata</i>	Selys, 1863		x	x	x	
<i>Copera vittata assamensis</i>	Laidlaw, 1914	x				Fraser 1919; Kumar 1973a; van Tol 1992; Tze-Wai <i>et al.</i> 2011; Zhang 2019
<i>Copera vittata deccanensis</i>	Laidlaw, 1917					Orr 2003
<i>Copera vittata serapica</i>	(Selys, 1863)			e		
<b>Indocnemis</b>	<b>Laidlaw, 1917</b>			x		
<i>Indocnemis orang</i>	(Förster in Laidlaw, 1907)			x		
<b>Platycnemis</b>	<b>Burmeister, 1839</b>					Ishida <i>et al.</i> 1988; Ishida 1996; Gerken & Sternberg 1999;
<i>Platycnemis dealbata</i>	Selys, 1863	23	x		x?	Brochard <i>et al.</i> 2012
<b>Caconeura</b>	<b>Kirby, 1890</b>					
<i>Caconeura gomphoides</i>	(Rambur, 1842)			e (WG)		
<i>Caconeura obscura</i>	(Fraser, 1933)			e		Fraser 1943
<i>Caconeura ramburi</i>	(Fraser, 1922)			e		
<i>Caconeura risi</i>	(Fraser, 1931)			e (WG)		
<i>Caconeura t-coerulea</i>	(Fraser, 1933)			e (WG)		
<b>Disparoneura</b>	<b>Selys, 1860</b>					
<i>Disparoneura apicalis</i>	(Fraser, 1924)			e (WG)		Fraser 1943

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TABLE 1. (Continued)

	Larval description		
	Note		
<i>Disparoneura quadrinotata</i>	(Rambur, 1842)		
<b>Elattonoeura</b>	<b>Cowley, 1935</b>	24	e
<i>Elattonoeura atkinsoni</i>	(Selys, 1886)		e
<i>Elattonoeura campioni</i>	(Fraser, 1922)		
<i>Elattonoeura campioni campioni</i>	(Fraser, 1922)	x	x
<i>Elattonoeura campioni cacharensis</i>	(Fraser, 1933)		e
<i>Elattonoeura caesia</i>	(Hagen in Selys, 1860)		e
<i>Elattonoeura centralis</i>	(Hagen in Selys, 1860)		e
<i>Elattonoeura leucostigma</i>	(Fraser, 1933)		e
<i>Elattonoeura nigerrima</i>	(Laidlaw, 1917)		e
<i>Elattonoeura nihari</i>	Mitra, 1995		e
<i>Elattonoeura oculata</i>	Kirby, 1894	e	e (WG)
<i>Elattonoeura souteri</i>	(Fraser, 1924)		
<i>Elattonoeura tenax</i>	(Hagen in Selys, 1860)	e	e (WG)
<i>Elattonoeura tetrica</i>	(Laidlaw, 1917)		
<b>Esme</b>	<b>Fraser, 1922</b>		
<i>Esme cyaneovittata</i>	Fraser, 1922		e (WG)
<i>Esme longistyla</i>	Fraser, 1931		e (WG)
<i>Esme mudensis</i>	Fraser, 1931		e (WG)
<b>Melanoneura</b>	<b>Fraser, 1922</b>		
<i>Melanoneura bilineata</i>	Fraser, 1922		e (WG)

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TABLE 1. (Continued)

	Larval description			
	Note	Pakistan	Nepal	India
<b>Hagen in Selys, 1860</b>				
<i>Nososticta nicobarica</i>	Rajeshkumar, Raghunathan & Chandra, 2017			e
<i>Nososticta nancowra</i>	Rajeshkumar, 2018			e
<b>Onychargia</b>	<b>Selys, 1865</b>	25	x	x
	(Selys, 1865)			x
<b>Phylloneura</b>	<b>Fraser, 1922</b>			e (WG)
	<i>Phylloneura westermannii</i> (Selys, 1860)			
<b>Prodasineura</b>	<b>Cowley, 1934</b>			Matsukui 1991
	(Fraser, 1922)	x	x	
	<i>Prodasineura autumnalis</i> Forster 1907	x	x	Liefkind 1953; Tze-Wai <i>et al.</i> 2011
	<i>Prodasineura laidlawii</i> (Fraser, 1922)	x	x	
	<i>Prodasineura odoneli</i> (Kirby, 1894)		x	
	<i>Prodasineura sita</i> (Selys, 1860)		e	
	<i>Prodasineura verticalis</i> (Fraser, 1924)	x		
	<i>Prodasineura verticalis burmanensis</i> <i>andamanensis</i>			
	<i>Prodasineura verticalis amandalei</i>	(Fraser, 1933)	x	
		(Fraser, 1921)	e	

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TABLE 1. (Continued)

		Larval description					
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India
<b>Andaman and Nicobar Islands</b>							
<b>Family: Coenagrionidae</b>	Kirby, 1890						
<b>Aciagrion</b>	Selys, 1891	26					
<i>Aciagrion approximans</i>	(Selys, 1876)	26			x	x	
<i>Aciagrion approximans approximans</i>	(Selys, 1876)	26			x	x	
<i>Aciagrion approximans krishna</i>	Fraser, 1921	26			e (WG)		
<i>Aciagrion azureum</i>	Fraser, 1922				x		
<i>Aciagrion borneense</i>	Ris, 1911				x		
<i>Aciagrion hisopa</i>	(Selys, 1876)	26	x?		x?	x?	
<i>Aciagrion occidentale</i>	Laidlaw, 1919		x		x	x	x
<i>Aciagrion olympicum</i>	Laidlaw, 1919	27	x		x	x	
<i>Aciagrion pallidum</i>	Selys, 1891	x	x		x	x	x
<b>Agriocnemis</b>	Selys, 1877						Theischinger & Hawking 2006
<i>Agriocnemis clauseni</i>	Fraser, 1922	x	x	x	x	x	
<i>Agriocnemis corbeti</i>	Kumar & Prasad, 1978		x		e		Kumar & Prasad 1978
<i>Agriocnemis dabreuui</i>	Fraser, 1919		x		x	x	
<i>Agriocnemis femina</i>	(Brauer, 1868)	28	x	x	x	x	Ishida <i>et al.</i> 1988; Ishida 1996; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012; Saetung & Boonsoong 2019
<i>Agriocnemis kalinga</i>	Nair & Subramanian, 2014				x		

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TABLE 1. (Continued)

Larval description						
	Note	Pakistan	Sri Lanka	Nepal	India	Andaman and Nicobar Islands
<i>Agriocnemis keralensis</i>	Peters, 1981				e (WG)	
<i>Agriocnemis lacteola</i>	Selys, 1877	x	x	x	x	Dawn & Chandra 2019
<i>Agriocnemis nana</i>	Laidlaw, 1914	x			x	
<i>Agriocnemis pieris</i>	Laidlaw, 1919	x			x	
<i>Agriocnemis pygmaea</i>	(Rambur, 1842)	x	x	x	x	Kumar 1973a; Ishida 1996; Theischinger & Hawking 2006; Theischinger & Endersby 2009; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012; Saetung & Boonsoong 2019
<i>Agriocnemis splendidissima</i>	Laidlaw, 1919	x		x	x	
<b>Amphiallagma</b>	<b>Kennedy, 1920</b>					
<i>Amphiallagma parvum</i>	(Selys, 1877)	29	x	x	x	
<b>Archibasis</b>	<b>Kirby, 1890</b>					Theischinger & Hawking 2006
<i>Archibasis oscillans</i>	(Selys, 1877)				x	
<i>Archibasis oscillans oscillans</i>	(Selys, 1877)				x	
<i>Archibasis oscillans hamwellanensis</i>	Conniff & Bedjanic, 2013			e		
<i>Archibasis lieftincki</i>	Conniff & Bedjanic, 2013					
<b>Argiocnemis</b>	<b>Selys, 1877</b>					
<i>Argiocnemis rubescens</i>	Selys, 1877					Theischinger & Hawking 2006; Theischinger & Endersby 2009
<i>Argiocnemis rubescens rubeola</i>	Selys, 1877	x	x		x	x

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TABLE 1. (Continued)

	Larval description							
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India	Andaman and Nicobar Islands
<b>Ceriagrion</b>	<b>Selys, 1876</b>							Ishida <i>et al.</i> 1988; Ishida 1996; Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012; Theischinger & Hawking 2006; Theischinger & Endersby 2009
<i>Ceriagrion aeruginosum</i>	(Brauer, 1869) Fraser, 1922				x	x	x	Tze-Wai <i>et al.</i> 2011; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019
<i>Ceriagrion azureum</i>	(Selys, 1891)	30	x	x	x	x	x	
<i>Ceriagrion cerinorubellum</i>	(Brauer, 1865)	x	x	x	x	x	x	
<i>Ceriagrion chromothorax</i>	Joshi & Sawant 2019					e (WG)		
<i>Ceriagrion coromandelianum</i>	(Fabricius, 1798)	x	x	x	x	x	x	Kumar 1981; Khalil <i>et al.</i> 1995a; Dawn & Chandra 2019
<i>Ceriagrion fallax</i>	Ris, 1914		x	x	x	x	x	Matsuki 1985
<i>Ceriagrion olivaceum</i>	Laidlaw, 1914	31	x					
<i>Ceriagrion olivaceum olivaceum</i>	Laidlaw, 1914	31			x		x	
<i>Ceriagrion olivaceum auranticum</i>	Fraser, 1924	31				x		
<i>Ceriagrion rubiae</i>	Laidlaw, 1916			x		x	x	
<i>Ceriagrion pratermissum</i>	Liefkind, 1929				x			
<b>Coenagrion</b>	<b>Kirby, 1890</b>	32						Ishida <i>et al.</i> 1988; Ishida 1996; Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012; Ozono <i>et al.</i> 2012
<i>Coenagrion exclamatorium</i>	(Fraser, 1919)	32	x	x	x	x	x	
<b>Enallagma</b>	<b>Charpentier, 1840</b>							Ishida <i>et al.</i> 1988
<i>Enallagma cyathigerum</i>	(Charpentier, 1840)	33						Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012
<i>Enallagma cyathigerum risi</i>	Schmidt, 1961	33	x		x			Seidenbusch 1997

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TABLE 1. (Continued)

	Larval description						
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India
<b>Huosoma</b>							
<b>Guan, Dumont, Yu, Han &amp; Vierstraete, 2013</b>							
<i>Huosoma tinctipenne</i> (McLachlan, 1894)	34		x				
<b>Ischnura</b>							
<i>Ischnura elegans</i> (Vander Linden, 1823)		x		x	x		
<i>Ischnura forcipata</i>	Morton, 1907	x	x	x	x		
<i>Ischnura fontainei</i>	Morton, 1905	x					
<i>Ischnura imarmata</i>	Calvert, 1898	x			x		
<i>Ischnura nursei</i>	(Morton, 1907)	35	x		x	x	
<i>Ischnura pumilio</i>	(Chapentier, 1825)				x		
<i>Ischnura rubilio</i>	Selys, 1876	x	x	x	x	x	
<i>Ischnura rufostigma</i>	Selys, 1876	x					
<i>Ischnura rufostigma annandalei</i>	Laidlaw, 1919	37			x		
<i>Ischnura rufostigma rufostigma</i>	Selys, 1876	37	x	x	x	x	
<i>Ischnura senegalensis</i>	(Rambur, 1842)						
<b>Mortonagrion</b>							
<b>Fraser, 1920</b>							
<i>Mortonagrion aborense</i> (Laidlaw, 1914)	38	x	x		x	x	
<i>Mortonagrion ceylonicum</i> Lieftinck, 1971			e				

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TABLE 1. (Continued)

Larval description						
	Note					
<i>Mortonagrion varallii</i>	Fraser, 1920	x			x	Ishida <i>et al.</i> 1988
<b>Paracercion</b>	<b>Weeker &amp; Dumont,</b> 2004	39				
<i>Paracercion calamorum</i>	(Ris, 1916)	39	x	x	x	Ishida 1996; Tze-Wai <i>et al.</i> 2011; Jung 2011; Ozono <i>et al.</i> 2012
<b>Pseudagrion</b>	(Selys, 1876)	39	x	x	x	
<b>Selys, 1876</b>	Fraser, 1924				e	
<i>Pseudagrion andamanicum</i>	Selys, 1876	40	x		x	
<i>Pseudagrion australasiae</i>	Morton, 1907				x	
<i>Pseudagrion bidentatum</i>	(Rambur, 1842)	x	x	x	x	Suri Babu 1998; Naeem 2016
<i>Pseudagrion decorum</i>	Selys, 1876	x			x	Fraser 1919
<i>Pseudagrion hypermelas</i>	Fraser, 1924				e (WG)	Kumar 1973a; Naeem 2016
<i>Pseudagrion indicum</i>	Fraser, 1922	x			x	
<i>Pseudagrion laidlawi</i>	Fraser, 1924	x	x	x	x	
<i>Pseudagrion malabaricum</i>	(Rambur, 1842)	x	x	x	x	Fraser 1919; Lieftinck 1962; Ishida <i>et al.</i> 1988; Ishida 1996; Theischinger & Hawking 2006; Theischinger & Endersby 2009; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012
<i>Pseudagrion microcephalum</i>	(Brauer, 1868)				x	Ishida 1996; Ozono <i>et al.</i> 2012
<i>Pseudagrion pilidorsum</i>	(Burmeister, 1839)	x	x	x	x	Tze-Wai <i>et al.</i> 2011; Saetung & Boonsoong 2016; Zhang 2019
Andaman and Nicobar Islands						

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TABLE 1. (Continued)

		Larval description					
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India
<i>Pseudagrion rubriceps</i>	Selys, 1876						
<i>Pseudagrion rubriceps rubriceps</i>	Selys, 1876 (Kirby, 1891)	x	x	x	x	x	x
<i>Pseudagrion rubriceps ceylonicum</i>	41	x	x	x	x	x	x
<i>Pseudagrion spencei</i>	Fraser, 1922	x	x	x	x	x	x
<i>Pseudagrion williamseni</i>	Fraser, 1922			x	x	x	x
<b>Suborder Anisozygoptera</b>	<b>Hanflisch, 1906</b>						
<b>Superfamily Epiophlebioidea</b>	<b>Muttkowski, 1910</b>						
<b>Family: Epiophlebiidae</b>	<b>Muttkowski, 1910</b>						
<b>Epiopterygia</b>	<b>Calvert, 1903</b>			x	x	x	x
<i>Epiophlebia laidlawi</i>	Tillyard, 1921						
<b>Suborder Anisoptera</b>	<b>Selys, 1854</b>						
<b>Superfamily Aeshnoidea</b>	<b>Leach, 1815</b>						
<b>Family: Aeshnidae</b>	<b>Leach, 1815</b>						
<b>Aeshna</b>	<b>Fabricius, 1775</b> (Linnaeus, 1758)	x			x		
<i>Aeshna mixta</i>	Latreille, 1805				x		
<i>Aeshna shennong</i>	Zhang & Cai, 2014	x					
<i>Aeshna petalura</i>	Martin, 1906	x	x	x	x		
							Asahina 1983a

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TABLE 1. (Continued)

Larval description									
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India	Burma	Andaman and Nicobar Islands
<b>Anaciaeschna</b>	<b>Selys, 1878</b>								Liefeldt 1962; van Tol 1992; Theischinger & Hawking 2006
	(Selys, 1897)	42	x	x	x	x	x	x	Ishida <i>et al.</i> 1988; Jung 2011
	(Burmeister, 1839)		x	x	x	x	x	x	Tze-Wai <i>et al.</i> 2011; Ishida 1996; Theischinger & Hawking 2006; Theischinger & Endersby 2009; Ozono <i>et al.</i> 2012
<b>Anax</b>	<b>Leach, 1815</b>								
	<i>Anax ephippiger</i>	(Burmeister, 1839)	43	x	x	x	x	x	Gerken & Sternberg 1999; Ozono <i>et al.</i> 2012
	<i>Anax guttatus</i>	(Burmeister, 1839)	x	x	x	x	x	x	St. Quentin 1970; Sangal & Kumar 1970b; Asahina 1974; Matsuki 1987; Ishida 1996; Orr 2003; Theischinger & Hawking 2006; Theischinger & Endersby 2009; Tze-Wai <i>et al.</i> 2011; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019
	<i>Anax immaculifrons</i>	Rambur, 1842		x	x	x	x		Liefeldt 1940; Fraser 1943; Sangal & Kumar 1970b; Asahina 1974; Kumar 1984a; Khalil <i>et al.</i> 1994a; Tze-Wai <i>et al.</i> 2011; Zhang 2019; Naeem 2016
	<i>Anax imperator</i>	Leach, 1815			x				Asahina 1974; Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012
	<i>Anax indicus</i>	Liefeldt, 1942	x	x	x	x	x		
	<i>Anax nigrofasciatus</i>	Oguma, 1915							Asahina 1974; Khalil & Murtaza 1994; Ishida 1996; Tze-Wai <i>et al.</i> 2011; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019
	<i>Anax nigrofasciatus nigrolineatus</i>	Fraser, 1935	44	x	x	x	x		St. Quentin 1970; Kumar 1973b; Matsuki 1987; Sasamoto & Ushijima 2000
	<i>Anax parthenope</i>	(Selys, 1839)			x	x	x		Kumar 1973b; Yousuf <i>et al.</i> 1995; Gerken & Sternberg 1999; Hussain & Riaz 2000; Brochard <i>et al.</i> 2012

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TABLE 1. (Continued)

		Larval description		
Note		Bangladesh	Pakistan	India
	<i>Anax panybeus</i>	Hagen, 1867		x Asahina 1974; Matsuki 1987; Ishida 1996; Ozono <i>et al.</i> 2012
	<i>Anax tristis</i>	Hagen, 1867	x	
	<b>Cephalaeschna</b>	<b>Selys, 1883</b>		Asahina 1961; Tze-Wai <i>et al.</i> 2011; Zhang 2019
	<i>Cephalaeschna acutifrons</i>	(Martin, 1909)	x	
	<i>Cephalaeschna acanthifrons</i>	Joshi & Kunte, 2017	x	
	<i>Cephalaeschna klapperichi</i>	(Schmidt, 1961)	x	
	<i>Cephalaeschna masoni</i>	(Martin, 1909)	x	
	<i>Cephalaeschna orbifrons</i>	Selys, 1883	x	
	<i>Cephalaeschna viridifrons</i>	(Fraser, 1922)	x	
	<i>Cephalaeschna triadica</i>	Liefinck, 1977	x	
	<b>Gynacantha</b>	<b>Rambur, 1842</b>	45, 46	Matsuki 1986; Arai 1987; Ishida <i>et al.</i> 1988; Ishida 1996; Theischinger & Hawking 2006; Theischinger & Endersby 2009; Tze-Wai <i>et al.</i> 2011; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019
	<i>Gynacantha albistyla</i>	Fraser, 1927	x	
	<i>Gynacantha andamanae</i>	Yeh & Veenakumari, 2000	e	
	<i>Gynacantha apicalis</i>	Fraser, 1927	e	
	<i>Gynacantha arnaudi</i>	Asahina, 1984	e	
	<i>Gynacantha bainbridgei</i>	Fraser, 1922	e	
	<i>Gynacantha bayadera</i>	Selys, 1891	x	x
	<i>Gynacantha biliarica</i>	Fraser, 1927	e	

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TABLE 1. (Continued)

	Larval description						
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India
<i>Gynacantha dravida</i>	Liefinck, 1960	45	x?		x	x	x?
<i>Gynacantha khasiaca</i>	MacLachlan, 1896		x	x	x	x	
<i>Gynacantha millardi</i>	Fraser, 1920	47		x	x	x	Dawn & Chandra 2016
<i>Gynacantha incisura</i>	Fraser, 1935	46		x	x		
<i>Gynacantha pallampurica</i>	Lahiri, Sandhu & Walia, 2007				e		
<i>Gynacantha odoneli</i>	Fraser, 1922				e		
<i>Gynacantha rammohani</i>	Mitra & Lahiri, 1975				e		
<i>Gynacantha rotundata</i>	Navás, 1930	45			e		
<i>Gynacantha subinterrupta</i>	Rambur, 1842		x	x	x	x	Tze-Wai <i>et al.</i> 2011
<b>Gynacanthaechina</b>	<b>Fraser, 1921</b>						
<i>Gynacanthaechina sikrima</i>	(Karsch, 1891)		x	x	x	x	
<b>Oligoaeschna</b>	<b>Selys, 1889</b>						
<i>Oligoaeschna andamani</i>	Chhotani, Lahiri & Mitra, 1983				e		
<b>Periaeschna</b>	<b>Martin, 1908</b>						
<i>Periaeschna flinti</i>	Asahina, 1978						
<i>Periaeschna flinti flinti</i>	Asahina, 1978				x		Zhang & Tong 2011
<i>Periaeschna flinti assamensis</i>	Asahina, 1981				e		
<i>Periaeschna magdalena</i>	Martin, 1909				x		Matsuiki & Lien 1984a
<i>Periaeschna nocturnalis</i>	Fraser, 1927				x		

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TABLE 1. (Continued)

	Larval description			
	Note	Pakistan	Sri Lanka	Nepal
<i>Periaeschna unifasciata</i>	Fraser, 1935	x	x	India
<b>Petaliaeschna</b>	<b>Fraser, 1927</b>			Kawashima & Karube 2006
<i>Petaliaeschna fletcheri</i>	Fraser, 1927	e		
<b>Planaeschna</b>	<b>McLachlan, 1896</b>			Matsuki 1989b; Matsuki & Yamamoto 1990; Ishida 1996;
<i>Planaeschna intersedens</i>	(Martin, 1909)	x		Zhang 2010; Ozono <i>et al.</i> 2012; Zhang 2019
<i>Planaeschna poumai</i>	Joshi & Kunte, 2017	x		Ishida <i>et al.</i> 1988; Ishida 1996; Ozono <i>et al.</i> 2012; Zhang 2019
<b>Polycanthagyna</b>	<b>Fraser, 1933</b>			Matsuki & Lien 1985; Tze-Wai <i>et al.</i> 2011; Wong <i>et al.</i> 2012
<i>Polycanthagyna erythromelas</i>	(McLachlan, 1896)	x	x	Wong <i>et al.</i> 2012
<i>Polycanthagyna ornithocephala</i>	(McLachlan, 1896)	x		Asahina 1958b; Matsuki 1993c (as Oligoaeschna); Ishida 1996; Kawashima 2002, 2003; Ozono <i>et al.</i> 2012
<b>Saraeschna</b>	<b>Karube &amp; Yeh, 2001</b>	48		
<i>Saraeschna decorata</i>	(Lieftinck, 1968)	x		
<i>Saraeschna khasiana</i>	Lieftinck, 1968	e		
<i>Saraeschna martini</i>	(Laidlaw, 1921)	x	x	
<i>Saraeschna speciosa</i>	Karube, 1998	e		Orr 2001, 2003; Orr <i>et al.</i> 2010
<b>Tetracanthagyna</b>	<b>Selys, 1883</b>			Matsuki 1988b; Tze-Wai <i>et al.</i> 2011; Zhang 2019
<i>Tetracanthagyna warehousei</i>	McLachlan, 1898	x		
<b>Superfamily Gomphoidea</b>	<b>Rambur, 1842</b>			
<b>Family: Gomphidae</b>	<b>Rambur, 1842</b>			

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TABLE 1. (Continued)

	Larval description					
	Note	Bangladesh	Pakistan	Nepal	Sri Lanka	India
<b><i>Acrogomphus</i></b>	Laidlaw, 1925					Butler <i>et al.</i> 2016
<i>Acrogomphus fraseri</i>	Laidlaw, 1925					
<b><i>Anisogomphus</i></b>	<b>Selys, 1857</b>					
<i>Anisogomphus bivittatus</i>	Selys, 1854	x	x	x	x	e (WG)
<i>Anisogomphus caudalis</i>	Fraser, 1926				x	
<i>Anisogomphus ceylonicus</i>	(Hagen in Selys, 1878)		e			Asahina & Yamamoto 1959; Ishida <i>et al.</i> 1988; Ishida 1996; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019
<i>Anisogomphus occipitalis</i>	(Selys, 1854)	x	x	x	x	
<i>Anisogomphus orites</i>	Laidlaw, 1922		x	x	x	Kumar 1973b
<i>Anisogomphus vulvatus</i>	Yousuf & Yunus, 1977	x				
<b><i>Anormogomphus</i></b>	<b>Selys, 1854</b>					
<i>Anormogomphus exilocorpus</i>	Yousuf & Yunus, 1977	e				
<i>Anormogomphus heteropterus</i>	Selys, 1854				x	Seidenbusch 1995d; Borisov 2008; Schneider <i>et al.</i> 2017
<i>Anormogomphus kiritschenkoi</i>	Bartenef, 1913	x				Ishida <i>et al.</i> 1988; Ishida 1996; Tze-Wai <i>et al.</i> 2011; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019
<b><i>Asiagomphus</i></b>	<b>Asahina, 1984</b>					
<i>Asiagomphus nilgiricus</i>	(Laidlaw, 1922)					e (WG)
<i>Asiagomphus odoneli</i>	(Fraser, 1922)	x				
<i>Asiagomphus personatus</i>	(Selys, 1873)	x				
<b><i>Burmagomphus</i></b>	<b>Williamson, 1907</b>					
<i>Burmagomphus canvericus</i>	Fraser, 1926					e (WG)

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TABLE 1. (Continued)

Larval description		
Note		
		Andaman and Nicobar Islands
		India
		Nepal
	Sri Lanka	
	Bhutan	
	Pakistan	
	Bangladesh	
	St. Lamka	
		Liefinck 1964; Yang & Davies 1996
		Fraser, 1926
		Fraser, 1924
		Laidlaw, 1922
		Laidlaw, 1922
		e (WG)
		Liefinck 1940
		Fraser, 1933
		Kumar 1973b
		Laidlaw, 1922
		e
		Selys, 1854
		Rangnekar <i>et al.</i> 2019
		Fraser, 1926
		Selys, 1854
		Fraser, 1926
		Selys, 1854
		Fraser, 1924
		Fraser, 1924
		Selys, 1878
		(Selys, 1873)
		(Selys, 1873)
		Fraser, 1926
		e
		Ishida <i>et al.</i> 1988; Ishida 1996; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019
		.....continued on the next page

TABLE 1. (Continued)

		Larval description					
	Note	Bangladesh	Pakistan	Nepal	Sri Lanka	Bhutan	India
Andaman and Nicobar Islands							
<i>Davidius aberrans schmidti</i>	Asahina, 1994						e
<i>Davidius baronii</i>	Liefkind, 1977	49					e
<i>Davidius davidii</i>	Selys, 1878						
<i>Davidius davidii assamensis</i>	Laidlaw, 1916						e
<i>Davidius delineatus</i>	Fraser, 1926	49	x	x	x	x	
<i>Davidius kumaonensis</i>	Fraser, 1926						e
<i>Davidius malloryi</i>	Fraser, 1926						e
<b>Dubitogomphus</b>	Fraser, 1940						
<i>Dubitogomphus bidentatus</i>	(Fraser, 1930)						e
<i>Euthygomphus</i>	Kosterin, 2016	50					
<i>Euthygomphus martini</i>	(Fraser, 1922)	50					x
<b>Gomphidia</b>	Selys, 1854						
<i>Gomphidia fletcheri</i>	Fraser, 1923						e (WG)
<i>Gomphidia ganesha</i>	Chotani, Lahiri &	51					
	Mitra, 1983						
	Fraser, 1923						e (WG)
	Mitra, 1994						e
	Fraser, 1933						
	Fraser, 1953						e (WG)
	Babu & Subramanian						e (WG)
	2019						

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TABLE 1. (Continued)

Larval description						
	Note	Bangladesh	Pakistan	Sri Lanka	Nepal	India
<i>Gomphidia t-nigrum</i>	Selys, 1854	x	x	x	x	Yousuf <i>et al.</i> 1995; Hussain & Riaz 2000; Butler 2007a; Naeem 2016
<i>Gomphidia williamsoni</i>	Fraser, 1923		x			
<b>Heliogomphus</b>	<b>Laidlaw, 1922</b>					Liefinck 1948a; Tze-Wai <i>et al.</i> 2011; Zhang 2019
<i>Heliogomphus kalaensis</i>	Fraser, 1934					
<i>Heliogomphus lyraeus</i>	Fraser, 1933		e			
<i>Heliogomphus nietneri</i>	(Hagen in Selys, 1878)		e			
<i>Heliogomphus walli</i>	Fraser, 1925		e			
<i>Heliogomphus promelas</i>	(Selys, 1873)			e		
<i>Heliogomphus szelysi</i>	Fraser, 1925			x		Boonsoong & Chainthong 2014a
<i>Heliogomphus spirillus</i>	(Fraser, 1922)		e			
<b>Ictinogomphus</b>	<b>Cowley, 1934</b>					Ishida <i>et al.</i> 1988; Theischinger & Hawking 2006; Theischinger & Endersby 2009
<i>Ictinogomphus alaquopterus</i>	Yousuf & Yunus, 1976	e				
<i>Ictinogomphus angulosus</i>	(Selys, 1854)	52	x	x?	x	
<i>Ictinogomphus decoratus</i>	(Selys, 1854)	52			x	
<i>Ictinogomphus distinctus</i>	Ram, 1985	52		e		
<i>Ictinogomphus kishori</i>	Ram, 1985	52	x	x		
<i>Ictinogomphus pertinax</i>	(Selys, 1854)		x	x		Ishida 1996; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012
<i>Ictinogomphus pugnivittatus</i>	Yousuf & Yunus, 1976	e				

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TABLE 1. (Continued)

		Larval description						
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India	Andaman and Nicobar Islands
<i>Ictinogomphus rapax</i>	(Rambur, 1842)	53	x	x	x	x	x	Liefeldt 1940; Begum <i>et al.</i> 1980; Kumar 1985; Butler 2007a; Zhang 2019
<b>Macrogomphus</b>	<b>Selys, 1857</b>							Liefeldt 1932; Orr 2003
<i>Macrogomphus annulatus</i>	(Selys, 1854)				e			Fraser 1919
<i>Macrogomphus annulatus annulatus</i>	(Selys, 1854)							
<i>Macrogomphus annulatus keiseri</i>	Liefeldt, 1955							
<i>Macrogomphus lankanensis</i>	Fraser, 1933				e			
<i>Macrogomphus montanus</i>	Selys, 1869		x		x	x		
<i>Macrogomphus robustus</i>	Selys, 1854		x		x	x		
<i>Macrogomphus seductus</i>	Fraser, 1926			x		x		
<i>Macrogomphus wynaadicus</i>	Fraser, 1924			x				
<b>Megalogomphus</b>	<b>Campion, 1923</b>				e (WG)			Liefeldt 1941; van Tol 1992; Wilson 1995; Orr 2003; Tze-Wai <i>et al.</i> 2011; Zhang 2019
<i>Megalogomphus bicornutus</i>	Fraser, 1922				e			
<i>Megalogomphus ceylonicus</i>	(Laidlaw, 1922)				e			Fraser 1933b
<i>Megalogomphus flavicolor</i>	(Fraser, 1923)				e			
<i>Megalogomphus hanningtoni</i>	(Fraser, 1923)				e			Fraser 1924
<i>Megalogomphus smithii</i>	(Selys, 1854)				x			
<i>Megalogomphus superbus</i>	Fraser, 1931				e (WG)			
<b>Merogomphus</b>	<b>Martin, 1904</b>	50						Liefeldt 1941; Yang & Davies 1996; Zhang 2019
<i>Merogomphus longistigma</i>	(Fraser, 1922)				e (WG)			Fraser 1943

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TABLE 1. (Continued)

		Larval description				
	Note	Bangladesh	Pakistan	Sri Lanka	Nepal	India
<i>Merogomphus tamarcherriensis</i>	Fraser, 1931 50, 54					e (WG)
<b>Microgomphus</b>	<b>Selys, 1858</b> 55					
<i>Microgomphus souteri</i>	Fraser, 1924				e (WG)	
<i>Microgomphus torquatus</i>	(Selys, 1854)				e (WG)	
<i>Microgomphus verticalis</i>	(Selys, 1873)				e (WG)	
<i>Microgomphus wijaya</i>	Liefkind, 1940			e		Fraser 1919
<i>Microgomphus phewataali</i>	Conniff & Singh Limbu, 2018			e		Liefkind 1940
<b>Nepogomphus</b>	<b>Fraser, 1934</b>					
<i>Nepogomphus modestus</i>	(Selys, 1878)	x	x	x		
<i>Nepogomphus walli</i>	(Fraser, 1924)			x		
<b>Orientogomphus</b>	<b>Chao &amp; Xu, 1987</b>					
<i>Orientogomphus indicus</i>	(Lahiri, 1987) Fraser, 1922	56		e		Chao & Xu 1987
<b>Lamelligomphus</b>						
<i>Lamelligomphus biforceps</i>	(Selys, 1878)	x	x	x	x	
<i>Lamelligomphus nilgiriensis</i>	(Fraser, 1922)	57				Liefkind 1941 (as Onychogomphus castor); Ishida 1996 (as Onychogomphus viridicostus); Jung 2011; Zhang 2019
<i>Lamelligomphus nilgiriensis</i>	(Fraser, 1922)	57			e (WG)	

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TABLE 1. (Continued)

Larval description						
	Note	Bangladesh	Pakistan	Nepal	Sri Lanka	India
Andaman and Nicobar Islands						
<i>Lamelligomphus nilgiriensis</i>	Fraser, 1934	57				e
<i>annaimallaiicus</i>	(Fraser, 1922)	57	x	x	x	
<i>Lamelligomphus risi</i>	<b>Chao, 1990</b>					Ishida <i>et al.</i> 1988; Ozono <i>et al.</i> 2012; Zhang 2019
<i>Melligomphus</i>	(Laidlaw, 1922)	58				
<i>Melligomphus acinaces</i>						
<i>Onychogomphus</i>	<b>Selys, 1854</b>	59				e (WG)
<i>Onychogomphus grammicus</i>	(Rambur, 1842)					Brochard <i>et al.</i> 2012
“ <i>Onychogomphus</i> ”		60				
“ <i>Onychogomphus</i> ” <i>cacharicus</i>	Fraser, 1924	61				e
“ <i>Onychogomphus</i> ” <i>cerastis</i>	(Selys, 1854)	62			x	x
“ <i>Onychogomphus</i> ” <i>malabarensis</i>	(Fraser, 1924)	63				e (WG)
“ <i>Onychogomphus</i> ” <i>megalayanus</i>	Lahiri, 1987	64				e
<i>Nychogomphus</i>	<b>Carle, 1986</b>					
<i>Nychogomphus duaricus</i>	(Fraser, 1924)	65	x	x	x	Chainthong & Boonsoong 2016
<i>Nychogomphus striatus</i>	(Fraser, 1924)	65			x	
<i>Nychogomphus saundersii</i>	(Selys, 1854)	66		x	x	
<i>Scalmogomphus</i>	<b>Chao, 1990</b>					
<i>Scalmogomphus bistriatus</i>	(Hagen in Selys, 1854)		x	x	x	Yang & Davies 1993; Naeem 2016
<i>Scalmogomphus schmidti</i>	Fraser, 1937			x	x	
<i>Ophiogomphus</i>	<b>Selys, 1854</b>					Gerken & Sternberg 1999; Jung 2011; Brochard <i>et al.</i> 2012
<i>Ophiogomphus caudoforcipus</i>	Yousuf & Yunus, 1977			e		

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TABLE 1. (Continued)

Larval description				
	Note			
Andaman and Nicobar Islands				
<i>Ophiogomphus reductus</i>	Calvert, 1898	x	x	
<b>Paragomphus</b>	<b>Cowley, 1934</b>	67		Tze-Wai <i>et al.</i> 2011; Zhang 2019
<i>Paragomphus campestris</i>	Bedjanic, 2013	e		
<i>Paragomphus echinocapitatus</i>	(Fraser, 1922)	e		
<i>Paragomphus henryi</i>	(Laidlaw in Campion & Laidlaw, 1928)	e		Liefkind 1940
<i>Paragomphus lindgreni</i>	(Fraser, 1923)	x	x	
<i>Paragomphus lineatus</i>	(Selys, 1850)	x	x	Kumar 1973a; Dawn & Chandra 2019
<b>Perissogomphus</b>	<b>Laidlaw, 1922</b>			
<i>Perissogomphus stevensi</i>	Laidlaw, 1922	x	x	
<b>Phaenandrogomphus</b>	<b>Liefkind, 1964</b>			Liefkind 1964; Zhang 2019; Novelo-Gutiérrez & Sites 2019b
<i>Phaenandrogomphus aureus</i>	(Laidlaw, 1922)	e		
<b>Platygomphus</b>	<b>Selys, 1854</b>			
<i>Platygomphus dolabratus</i>	Selys, 1854	x	x	
<b>Stylogomphus</b>	<b>Fraser, 1922</b>			Watanabe 1979; Wilson 1995; Yang & Davies 1996; Ishida 1996; Sasamoto 2001; Ozono <i>et al.</i> 2012; Zhang 2019
<i>Stylogomphus inglesi</i>	Fraser, 1922	x	x	
<b>Superfamily Cordulegastroidea</b>	<b>Hagen, 1875</b>			
<b>Family: Chlorogomphidae</b>	<b>Needham, 1903</b>			

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TABLE 1. (Continued)

		Larval description					
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India
<b>Chlorogomphus</b>	<b>Selys, 1854</b>	68					
<i>Chlorogomphus campioni</i>	(Fraser, 1924)				e (WG)		
<i>Chlorogomphus fraseri</i>	St. Quentin, 1936			x	e		
<i>Chlorogomphus mortoni</i>	Fraser, 1936		x	x	x		
<i>Chlorogomphus preciosus</i>	(Fraser, 1924)			x	x	x	
<i>Chlorogomphus preciosus preciosus</i>	(Fraser, 1924)		x	x	x		
<i>Chlorogomphus fernandi</i>	Asahina, 1986				e		
<i>Chlorogomphus preciosus fernandi</i>	Asahina, 1986				e		
<i>Chlorogomphus schmidti</i>	(Fraser, 1919)				e (WG)		
<i>Chlorogomphus xanthoptera</i>	Carle, 1995						Zhang & Tong 2013
<b>Chloropetalia</b>							
<i>Chloropetalia selysi</i>	Fraser, 1929			x	x		
<b>Watanaabeopetalia</b>	<b>Karube, 2002</b>	69					Zhang & Tong 2010a; Zhang 2019
<i>Watanaabeopetalia atkinsoni</i>	(Selys, 1878)	69		x	x		Fraser 1923; Asahina 1961
<b>Family: Cordulegastridae</b>	<b>Hagen, 1875</b>						
<b>Anotogaster</b>	<b>Selys, 1854</b>						Ishida <i>et al.</i> 1988; Ishida 1996; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019
<i>Anotogaster basalis</i>	Selys, 1854						
<i>Anotogaster basalis basalis</i>	Selys, 1854				x		
<i>Anotogaster basalis palampurensis</i>	Fraser, 1929				x	x	

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TABLE 1. (Continued)

	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India	Andaman and Nicobar Islands	Larval description
<i>Anotogaster gregoryi</i>	Fraser, 1924			x	x				Novelo-Gutiérrez & Sites 2019a
<i>Anotogaster nipalensis</i>	Selys, 1854		x	x	x				Fraser 1925
<b>Cordulegaster</b>	<b>Leach, 1815</b>								Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012
<i>Cordulegaster brevistigma</i>	(Selys, 1854)	x		x	x				
<i>Cordulegaster parvistigma</i>	(Selys, 1873)			x					Yousuf <i>et al.</i> 1995
<b>Neallogaster</b>	<b>Cowley, 1934</b>			e					
<i>Neallogaster herminiae</i>	(Fraser, 1927)		x	x	x				Asahina 1982b; Zhang 2019
<i>Neallogaster latifrons</i>	(Selys, 1878)		x	x	x				
<i>Neallogaster ornata</i>	(Asahina, 1982)			x	x				
<i>Neallogaster schmidti</i>	Asahina, 1982			x					
<b>Superfamily Libelluloidea</b>	<b>Leach, 1815</b>								
<b>Family: Macromiidae</b>	<b>Needham, 1903</b>								
<b>Epophthalmia</b>	<b>Burmeister, 1839</b>								
<i>Epophthalmia frontalis</i>	Selys, 1871			x	x				
<i>Epophthalmia vittata</i>	Burmeister, 1839			x					
<i>Epophthalmia vittata cyanocephala</i>	Hagen, 1867			e					
<i>Epophthalmia vittata vittata</i>	Burmeister, 1839		x		x				Bedjanic 2000; Bedjanic & Šalamun 2002
<i>Epophthalmia vittigera</i>	(Rambur, 1842)								
<i>Epophthalmia vittigera bellicosa</i>	Liefkind, 1948						x		
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TABLE 1. (Continued)

		Larval description					
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India
<b>Macromia</b>		<b>Rambur, 1842</b>					
<i>Macromia annaimalaensis</i>							e (WG)
<i>Macromia bellicosa</i>							e (WG)
<i>Macromia cingulata</i>			x		x	x	
<i>Macromia capricineta</i>						x	
<i>Macromia ellisoni</i>						x	
<i>Macromia flavicincta</i>						e (WG)	
<i>Macromia flavigaster</i>						e	
<i>Macromia flavocolorata</i>					x	x	
<i>Macromia flavovittata</i>					e		
<i>Macromia flinti</i>						e	
<i>Macromia ida</i>						e (WG)	
<i>Macromia indica</i>						e (WG)	
<i>Macromia irata</i>						e (WG)	
<i>Macromia moorei</i>					x	x	Kumar 1973a; Naeem 2016
<i>Macromia sombui</i>					e		
<i>Macromia pallida</i>					x		
<i>Macromia whitei</i>					e		
<i>Macromia zeylanica</i>					e		Liefvink 1940; St. Quentin 1973

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TABLE 1. (Continued)

		Larval description			
	Note	Bangladesh	Pakistan	Nepal	India
<b>Family: Corduliidae</b>					
<b>Hemicordulia</b>					
<b>Selys, 1850</b>					
<b>Selys, 1870</b>					Liefinck 1962; Ubukata & Iga 1974; Ishida 1996; Theischinger & Endersby 2009; Ozono et al. 2012
<b>Hemicordulia asiatica</b>				x	
<b>Somatochlora</b>					Asahina 1959; Ishida et al. 1988; Ishida 1996; Gerken & Sternberg 1999; Jung 2011; Brochard et al. 2012; Ozono et al. 2012
<b>Selys, 1878</b>					
<b>Selys, 1871</b>					
<b>Somatochlora daviesi</b>	Liefinck, 1977		x	x	x
<b>Family: Libellulidae</b>					
<b>Leach, 1815</b>					
<b>Rambur, 1842</b>		x	x	x	x
<b>Acisoma</b>					Ishida et al. 1988; Yousuf et al. 1995; Ishida 1996; Tze-Wai et al. 2011; Ozono et al. 2012
<b>Acisoma panorpoides</b>	Rambur, 1842		x	x	x
<b>Aethriamanta</b>	Kirby, 1889				Liefinck 1934; Theischinger & Hawking 2006; Theischinger & Endersby 2009
<b>Aethriamanta brevipennis</b>	(Rambur, 1842)	x	x	x	
<b>Brauer, 1864</b>					Liefinck 1962
<b>Agrionoptera</b>	(Rambur, 1842)	x	x	x	Liefinck 1962; Kumar 1984b; Ishida et al. 1988; Ishida 1996; Yousuf et al. 1996; Hussain & Riaz 1999a; Gerken & Sternberg 1999; Theischinger & Hawking 2006; Tze-Wai et al. 2011; Ozono et al. 2012; Naeem 2016
<b>Agrionoptera insignis</b>					

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TABLE 1. (Continued)

	Larval description						
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India
<b>Andaman and Nicobar Islands</b>							
<b>Amphithemis</b>	<b>Selys, 1891</b>				x		
	Selys, 1891	72					
<b>Brachydiplex</b>	<b>Brauer, 1868</b>						
	Brauer, 1868	x			x	x	
<i>Brachydiplex chalybea</i>					x	x	
<i>Brachydiplex farinosa</i>	Krüger, 1902	x			x		
	(Rambur, 1842)	x	x	x	x	x	
<b>Brachythemis</b>	<b>Brauer, 1868</b>						
	(Fabricius, 1793)	x	x	x	x	x	x
<i>Brachythemis contaminata</i>							
<b>Bradinopyga</b>	<b>Kirby, 1893</b>						
	(Rambur, 1842)	x	x	x	x	x	
<i>Bradinopyga geminata</i>							
<i>Bradinopyga konkanensis</i>	Joshi & Sawant, 2020				e		
<b>Camacinia</b>	<b>Kirby, 1889</b>						
	(Brauer, 1867)	x	x		x	x	
<i>Camacinia gigantea</i>							
<i>Camacinia harterti</i>	Karsch, 1890	73			x	x	
<b>Cratilla</b>	<b>Kirby, 1900</b>						
	(Brauer, 1878)						

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TABLE 1. (Continued)

Larval description									
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India	Andaman and Nicobar Islands	
<i>Cratilla lineata calyerti</i>	Förster, 1903 (Brauer, 1878)	74 75	x	x	x	x	x	x	Lien & Matsuki 1988 (Cratilla l. assidua) Orr 2003
<b>Crocothemis</b>	<b>Brauer, 1868</b>								
<i>Crocothemis erythraea</i>	(Brullé, 1832) (Drury, 1770)		x	x	x	x	x	x	Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012 Sangal & Kumar 1970a; Khaliq <i>et al.</i> 1995a; Ishida 1996; Ozono <i>et al.</i> 2012; Naem 2016
<b>Diplacodes</b>	<b>Kirby, 1889</b>								
<i>Diplacodes lefebvrii</i>	(Rambur, 1842)		x	x	x	x	x		Seidenbusch 1995b; Von Hagen 1996; Seidenbusch & Heidemann 2007
<i>Diplacodes nebulosa</i>	(Fabricius, 1793) (Rambur, 1842)	76	x	x	x	x	x	x	Lieftinck 1962; Ishida <i>et al.</i> 1988; van Tol 1992; Ishida 1996; Theischinger & Hawking 2006; Theischinger & Endersby 2009; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012
<b>Epithemis</b>	<b>Laidlaw, 1955</b>								
<i>Epithemis mariae</i>	(Laidlaw, 1915)						e (WG)		
<b>Hydrobasileus</b>	<b>Kirby, 1889</b>								
<i>Hydrobasileus croceus</i>	(Brauer, 1867)			x	x	x	x	x	Ishida <i>et al.</i> 1988; van Tol 1992; Ishida 1996; Orr 2003; Theischinger & Hawking 2006; Theischinger & Endersby 2009; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012; Zhang 2019
<b>Hylaeothemis</b>	<b>Ris, 1909</b>								
<i>Hylaeothemis fruhstorferi</i>	(Karsch, 1889)						e		Sasamoto & Kawashima 2009
<i>Hylaeothemis gardneri</i>	Fraser, 1927						e		

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TABLE 1. (Continued)

Larval description						
	Note	Bangladesh	Pakistan	Sri Lanka	Nepal	India
Andaman and Nicobar Islands						
<i>Hylaethemis apicalis</i>	Fraser, 1926			e		
<b>Indothemis</b>	<b>Ris, 1909</b>	(Fabricius, 1798)	x	x	x	x
<i>Indothemis carnatica</i>	(Selys, 1891)	x	x	x	x	x
<i>Indothemis limbata</i>	Campion, 1923			x	x	
<i>Indothemis i. sita</i>						
<b>Lathrecista</b>	<b>Kirby, 1889</b>	(Fabricius, 1798)	x	x	x	x
<i>Lathrecista astatica</i>						
<b>Libellula</b>	<b>Linnaeus, 1758</b>	77	x	x	x	x
<i>Libellula quadrimaculata</i>	Linnaeus, 1758					
<b>Lyriothemis</b>	<b>Brauer, 1868</b>					
<i>Lyriothemis acigastra</i>	(Selys, 1878)	x	x	x	x	x
<i>Lyriothemis bivittata</i>	(Rambur, 1842)		x	x	x	x
<i>Lyriothemis cleis</i>	Brauer, 1868			x	x	Matsuki 1993b
<i>Lyriothemis defonsekai</i>	van der Poorten, 2009					van der Poorten 2009a
<i>Lyriothemis tricolor</i>	Ris, 1919	x	e	x	x	Ishida 1996; Matsuki 1993b
<b>Macrodipax</b>	<b>Brauer, 1868</b>					
<i>Macrodipax cora</i>	(Brauer, 1867)	x	x	x	x	Lieftinck 1962; Ishida <i>et al.</i> 1988; Ishida 1996; Theischinger & Hawking 2006; Ozono <i>et al.</i> 2012
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TABLE 1. (Continued)

Larval description				
	Note			
<b>Nannophya</b>	Rambur, 1842			
<i>Nannophya pygmaea</i>	Rambur, 1842	x	x	Ishida <i>et al.</i> 1988; Ishida 1996; Tze-Wai <i>et al.</i> 2011; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019
<b>Nesoxenia</b>	Kirby, 1889			
<i>Nesoxenia lineata</i>	(Selys, 1879)	x	x	Lieftinck 1962; Theischinger & Hawking 2006; Theischinger & Endersby 2009
<b>Neurothemis</b>	Brauer, 1867			
<i>Neurothemis degener</i>	Selys, 1879	78	x	
<i>Neurothemis fluctuans</i>	(Fabricius, 1793)	79	x	x
<i>Neurothemis fulvia</i>	(Drury, 1773)	x	x	x
<i>Neurothemis intermedia</i>	(Rambur, 1842)	78	x	x
<i>Neurothemis intermedia atalanta</i>	Ris, 1919	78	x	x
<i>Neurothemis intermedia intermedia</i>	(Rambur, 1842)	78	x	x
<i>Neurothemis ramburi</i>	(Brauer, 1866)	79	x	x
<i>Neurothemis tullia</i>	(Drury, 1773)	x	x	x
<b>Onychothemis</b>	Brauer, 1868			
<i>Onychothemis testacea</i>	Laidlaw, 1902	x	x	Zhang 2019
<i>Onychothemis testacea ceylanica</i>	Ris, 1912	x	x	
<b>Orthetrum</b>	Newman, 1833	80	e	
<i>Orthetrum andamanicum</i>	Bedjanic, Kalkman & Subramanian, 2020			
<i>Orthetrum coerulescens</i>	(Fabricius, 1798)			Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012

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TABLE 1. (Continued)

	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India	Andaman and Nicobar Islands	Larval description
<i>Orthetrum coerulescens anceps</i>	(Schneider, 1845) (Fonscolombe, 1837) (Limnaeus, 1758)	81	x	x	x	x	x	Khalilq <i>et al.</i> 1995b Kumar 1971; Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012	
<i>Orthetrum brunneum</i>	(Selys, 1891)		x	x	x	x	x	Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012	
<i>Orthetrum cancellatum</i>	(Brauer, 1865)	x	x	x	x	x	x	Tze-Wai <i>et al.</i> 2011; Zhang 2019	
<i>Orthetrum chrysis</i>	(McLachlan, 1894)	82	x	x	x	x	x	Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012; Zhang 2019	
<i>Orthetrum glaucum</i>	(Brauer, 1868)	x	x	x	x	x	x	Ishida 1996 Ishida 1988; Tze-Wai <i>et al.</i> 2011; Ishida 1996; Ozono <i>et al.</i> 2012; Zhang 2019	
<i>Orthetrum internum</i>	Asahina, 1978 (Burmeister, 1839)		x	x	x	x	x	Ozono <i>et al.</i> 2012	
<i>Orthetrum luzonicum</i>	(Rambur, 1842)	x	x	x	x	x	x	Kumar 1970; Khalilq <i>et al.</i> 1995b; Ishida 1996; Tze-Wai <i>et al.</i> 2011; Zhang 2019	
<i>Orthetrum martensi</i>	(Drury, 1770)	x	x	x	x	x	x	Liefkind 1962; Kumar 1973a; Seidenbusch 1995b; Ishida 1996; Theischinger & Endersby 2009; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012; Zhang 2019	
<i>Orthetrum pruinatum</i>	(Drury, 1770)	x	x	x	x	x	x	Kumar 1971; Seidenbusch 1995b; Naeem 2016; Khalilq <i>et al.</i> 1995b	
<i>Orthetrum pruinosum neglectum</i>									
<i>Orthetrum sabina</i>	(Schneider, 1845)	x	x	x	x	x	x		
<i>Orthetrum s. sabina</i>									
<i>Orthetrum taeniolatum</i>		x	x	x	x	x	x		
<i>Orthetrum testaceum</i>	Burmeister, 1839	x	x	x	x	x	x		
<i>Orthetrum triangulare</i>	(Selys, 1878)	x	x	x	x	x	x		
<i>Orthetrum triangulare triangulare</i>	(Selys, 1878)	x	x	x	x	x	x	Khalilq <i>et al.</i> 1995b; Tze-Wai <i>et al.</i> 2011	

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TABLE 1. (Continued)

		Larval description					
	Note	Bangladesh	Pakistan	Bhutan	Nepal	Sri Lanka	India
<b>Andaman and Nicobar Islands</b>							
<b>Palpopleura</b>							
<i>Palpopleura sexmaculata</i>	Rambur, 1842 (Fabricius, 1787)	x	x	x	x	x	x
<b>Pantala</b>	Hagen, 1861 (Fabricius, 1798)	x	x	x	x	x	x
<i>Pantala flavescens</i>	Lieftinck 1962; Kumar 1984b; Ishida 1988; Ishida 1996; Yousuf <i>et al.</i> 1996; Hussain & Riaz 1999a; Gerken & Sternberg 1999; Theischinger & Hawking 2006; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012; Naeem 2016						
<b>Potamarcha</b>							
<i>Potamarcha congener</i>	Karsch, 1890 (Rambur, 1842)	x	x	x	x	x	x
<b>Pseudothemis</b>	Kirby, 1889 (Burmeister, 1839)				x		
<i>Pseudothemis zonata</i>	Ishida <i>et al.</i> 1988; Ishida 1996; Tze-Wai <i>et al.</i> 2011; Jung 2011; Ozono <i>et al.</i> 2012; Zhang 2019						
<b>Pseudotraeme</b>							
<i>Pseudotraemea prateri</i>	Fraser, 1920 Fraser, 1920	x	x	x	x	x	x
<b>Rhodothemis</b>	Ris, 1909						
<i>Rhodothemis rufa</i>	(Rambur, 1842)	x	x	x	x	x	x
<b>Rhyothemis</b>	Hagen, 1867 Selys, 1883	84	x	x	x	x	x
<i>Rhyothemis plutonia</i>	Kirby, 1889	x	x	x	x	x	x
<i>Rhyothemis triangularis</i>	(Limnaeus, 1763)						
<i>Rhyothemis variegata</i>	(Limnaeus, 1763)	x	x	x	x	x	x
<i>Rhyothemis variegata variegata</i>							

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TABLE 1. (Continued)

Larval description						
	Note	Bangladesh	Pakistan	Nepal	Sri Lanka	India
<i>Rhyothemis phyllis</i>	(Sulzer, 1776)		x	x	x	Lieftinck 1962; Theischinger & Hawking 2006; Theischinger & Endersby 2009
<b>Selysiothemis</b>	<b>Ris, 1897</b>					
<i>Selysiothemis nigra</i>	(Vander Linden, 1825)	x	x	x	x	Seidenbusch 1999; Von Hagen 1996; Naeem 2016
<b>Sympetrum</b>	<b>Newman, 1833</b>					
<i>Sympetrum arenicolor</i>	Jödicke, 1994		x	x	x	Gerken & Sternberg 1999; Ozono <i>et al.</i> 2012; Brochard <i>et al.</i> 2012; Naeem 2016
<i>Sympetrum fonscolombii</i>	(Selys, 1840)	x	x	x	x	Seidenbusch 1999
<i>Sympetrum haritonovi</i>	Borisov, 1983		x	x	x	
<i>Sympetrum hypomelas</i>	(Selys, 1884)	x	x	x	x	
<i>Sympetrum meridionale</i>	(Selys, 1841)	x		x	x	
<i>Sympetrum orientale</i>	(Selys, 1883)	x	x	x	x	Takasaki 1959; Ishida 1996; Jung 2011; Ozono <i>et al.</i> 2012; Sasamoto <i>et al.</i> 2018
<i>Sympetrum speciosum</i>	Oguma, 1915	x	x	x	x	Gerken & Sternberg 1999; Brochard <i>et al.</i> 2012
<i>Sympetrum striolatum</i>	(Chapentier, 1840)					Kumar 1973a; Asahina 1984; Ishida <i>et al.</i> 1988; Jung 2011
<i>Sympetrum striolatum commixtum</i>	(Selys, 1884)	85	x	x	x	
<i>Sympetrum vulgatum</i>	(Linnaeus, 1758)					
<i>Sympetrum vulgatum decoloratum</i>	Selys, 1884	86	x			Theischinger & Hawking 2006; Theischinger & Endersby 2009
<b>Tetrathemis</b>	<b>Brauer, 1868</b>					
<i>Tetrathemis platyptera</i>	Selys, 1878		x	x	x	van Tol 1992
<i>Tetrathemis yerburi</i>	Kirby, 1894	e				

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TABLE 1. (Continued)

Larval description									
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India	Andaman and Nicobar Islands	
<b>Tholymis</b>									
<i>Tholymis tillarga</i>	Hagen, 1867 (Fabricius, 1798)	x	x	x	x	x	x	x	Fraser 1919; Lieftinck 1962; Kumar 1973a; Ishida <i>et al.</i> 1988; Ishida 1996; Theischinger & Hawking 2006; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012
<b>Tramea</b>	Hagen, 1861								Theischinger & Hawking 2006; Theischinger & Endersby 2009
<i>Tramea basilaris</i>	(Palisot de Beauvois, 1805)	87	x	x	x	x	x	x	Kumar 1973a; Yousuf <i>et al.</i> 1996
<i>Tramea eurybia</i>	Selys, 1878 (Desjardins, 1832)	x	x	x	x	x	x	x	Fraser 1919
<i>Tramea limbata</i>	Selys, 1878								Lieftinck 1962; Ishida <i>et al.</i> 1988; Ishida 1996; Ozono <i>et al.</i> 2012
<i>Tramea transmarina</i>									
<i>Tramea virginia</i>	(Rambur, 1842)	x	x	x	x	x	x	x	Kumar & Prasad 1977b; Tze-Wai <i>et al.</i> 2011; Ishida 1996; Ozono <i>et al.</i> 2012; Zhang 2019
<b>Trithemis</b>	Brauer, 1868								
<i>Trithemis aurora</i>	(Burmeister, 1839)	x	x	x	x	x	x	x	Kumar 1973a; Ishida <i>et al.</i> 1988; Ishida 1996; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012; Zhang 2019
<i>Trithemis festiva</i>	(Rambur, 1842)	x	x	x	x	x	x	x	Kumar 1972b; Tze-Wai <i>et al.</i> 2011; Naeem 2016; Zhang 2019
<i>Trithemis kirbyi</i>	Selys, 1891 (Kirby, 1889)	88	x	x	x	x	x	x	Naeem 2016
<i>Trithemis pallidinervis</i>									Khaliq <i>et al.</i> 1994b

.....continued on the next page

TABLE 1. (Continued)

	Larval description						
	Note	Bangladesh	Pakistan	Bhutan	Sri Lanka	Nepal	India
<b>Urothemis</b>							
	<b>Brauer, 1868</b>						Theischinger & Hawking 2006; Theischinger & Endersby 2009
<i>Urothemis signata</i>		(Rambur, 1842)	89	x	x	x	x
<i>Urothemis signata signata</i>		(Rambur, 1842)		x		x	Tze-Wai <i>et al.</i> 2011; Zhang 2019
<b>Zygonyx</b>	<b>Hagen, 1867</b>						Tze-Wai <i>et al.</i> 2011
<i>Zygonyx iris</i>	Selys, 1869		90	x	x	x	Matsuki 1988c; Matsuki & Saito 1995; Tze-Wai <i>et al.</i> 2011; Zhang 2019
<i>Zygonyx i. iris</i>	Selys, 1869				x		
<i>Zygonyx iris ceylonicus</i>	(Kirby, 1905)			e			
<i>Zygonyx iris davina</i>	Fraser, 1926				e		
<i>Zygonyx iris malabarica</i>	Fraser, 1926				e		
<i>Zygonyx iris metallica</i>	Fraser, 1931				e		
<i>Zygonyx iris intermedia</i>	Lahiri, 1987				e		
<i>Zygonyx torridus</i>	(Kirby, 1889)						Barnard 1937; Seidenbusch 1997b; Gerken & Sternberg 1999
<i>Zygonyx t. isis</i>	Fraser, 1924	91	x		x		
<b>Zyxomma</b>	<b>Rambur, 1842</b>						
<i>Zyxomma obtusum</i>	Albarda, 1881				x	x	van Tol 1992; Ozono <i>et al.</i> 2012
<i>Zyxomma petiolatum</i>	Rambur, 1842	x	x	x	x	x	Liefinck 1962; Kumar 1973a; Ishida <i>et al.</i> 1988; Ishida 1996; Theischinger & Hawking 2006; Theischinger 2007; Tze-Wai <i>et al.</i> 2011; Ozono <i>et al.</i> 2012; Zhang 2019
<b>Genera incertae sedis</b>							
<b>Idionyx</b>	<b>Hagen, 1867</b>						Tze-Wai <i>et al.</i> 2011; Zhang & Tong 2010b; Zhang 2019
							.....continued on the next page

TABLE 1. (Continued)

	Larval description		
	Note	Pakistan	Bhutan
<i>Idionyx corona</i>			
<i>Idionyx c. corona</i>	Fraser, 1921	92	e (WG)
<i>Idionyx c. burlivarensis</i>	Fraser, 1921	92	e (WG)
<i>Idionyx galatea</i>	Fraser, 1924	92	e (WG)
<i>Idionyx gomantakensis</i>	Fraser, 1924		e (WG)
	Subramanian, Rang-naker and Nayak, 2013		
<i>Idionyx imbricata</i>	Fraser, 1926		e
<i>Idionyx intricata</i>	Fraser, 1926		e
<i>Idionyx minima</i>	Fraser, 1931		e (WG)
<i>Idionyx nadganiensis</i>	Fraser, 1924		e (WG)
<i>Idionyx nilgiriensis</i>	(Fraser, 1918)	92	e (WG)
<i>Idionyx optata</i>	Selys, 1878		x
<i>Idionyx periyashola</i>	Fraser, 1939		e (WG)
<i>Idionyx rhinoceroides</i>	Fraser, 1934		e (WG)
<i>Idionyx saffronata</i>	Fraser, 1924		e (WG)
<i>Idionyx stevensi</i>	Fraser, 1924	x	x
<i>Idionyx travancorensis</i>	Fraser, 1931	x	Butler 2007b
<b>Macromidia</b>	<b>Martin, 1907</b>		Tze-Wai <i>et al.</i> 2011; Matsuki 1989a; Orr 2001 (as <i>Onychothemis coccinea</i> ); Ozono <i>et al.</i> 2012
<i>Macromidia donaldi</i>	(Fraser, 1924)		Fraser 1936b
<i>Macromidia donaldi donaldi</i>	(Fraser, 1924)		
<i>Macromidia donaldi pehiyagodai</i>	van der Poorten, 2012	e	
Andaman and Nicobar Islands			
<i>Idionyx</i>	Nepal	India	
<i>Idionyx</i>	Sri Lanka	Bhutan	
<i>Idionyx</i>	Pakistan	Pakistan	
<i>Idionyx</i>	Bhutan	Bhutan	
<i>Idionyx</i>	Sri Lanka	Sri Lanka	
<i>Idionyx</i>	Nepal	Nepal	
<i>Idionyx</i>	India	India	

TABLE 2. Synonyms of dragonflies and damselflies occurring in South Asia established since 1950.

Synonym	Original genus	Synonym of	Established or confirmed by	Note
<i>autumnalis gaudavicus</i> Sahni, 1964	<i>Cacaneura</i>	<i>Prodasineura a. autumnalis</i> Fraser, 1922	Hämäläinen, 1989	
<i>bhatnagri</i> Sahni, 1965	<i>Disparoneura</i>	<i>Copera marginipes</i> (Rambur, 1842)	Hämäläinen, 1989	
<i>bhimitalensis</i> Sahni, 1965	<i>Ischnura</i>	<i>Ischnura rubilio</i> Selys, 1876	Hämäläinen, 1989; this paper	
<i>bijemmata</i> Lieftinck, 1971	<i>Disparoneura</i>	<i>Elattoneura oculata</i> (Kirby, 1894)	Bedjanic, 2008	22
<i>brittoi</i> Navás, 1934	<i>Chlorogomphus</i>	<i>Chlorogomphus xanthoptera</i> Fraser (1919)	This paper	
<i>carminea</i> Lieftinck, 1974	<i>Calcnemia</i>	<i>Calcnemia doonensis</i> Sangal & Tyagi, 1984	Hämäläinen, 1989	
<i>carpenieri</i> Fraser, 1946	<i>Ischnura</i>	<i>Ischnura annandalei</i> Laidlaw, 1919	Asahina, 1970, 1991a	
<i>cerinomelas</i> Lieftinck, 1927 (ssp. of <i>C. fallax</i> )	<i>Ceriatrion</i>	<i>Ceriatrion fallax</i> Ris, 1914	This paper	
<i>chandrabali</i> Mehrotra, 1961	<i>Orthetrum</i>	<i>Orthetrum triangulare</i> (Selys, 1878)	Suggested by Hämäläinen, 1989; Mitra, 2002	
<i>corbetti</i> Kumar & Prasad, 1978	<i>Agriocnemis</i>	<i>Agriocnemis pygmaea</i> (Rambur, 1842)	This paper	
<i>devium</i> St Quentin, 1970	<i>Orthetrum</i>	<i>Orthetrum luzonicum</i> Brauer, 1868	Asahina, 1988	
<i>dierli</i> St. Quentin, 1970	<i>Coeliccia</i>	<i>Coeliccia renifera</i> (Selys, 1886)	Vick, 1989	
<i>dondalli</i> Fraser, 1922	<i>Anaciaeschna</i>	<i>Anaciaeschna martini</i> (Selys, 1897)	Conniff <i>et al.</i> 2019	
<i>durum</i> Bartenef, 1916	<i>Sympetrum</i>	<i>Sympetrum striolatum commixtum</i> (Selys, 1884)	This paper	
<i>dyeri</i> (Fraser, 1920)	<i>Cercion</i>	<i>Paracercion calamorum</i> (Ris, 1916)	Weekers & Dumont, 2004	
<i>fraseri</i> Lieftinck, 1955	<i>Drepanosticta</i>	<i>Ceylonosticta submontana</i> Fraser, 1933	Bedjanic, 2012	
<i>fraseri</i> Sahni, 1965	<i>Orthetrum</i>	<i>Orthetrum glaucum</i> (Brauer, 1865)	Davies & Tobin, 1984, 1985	
<i>ganeshii</i> Mehrotra, 1961	<i>Orthetrum</i>	<i>Orthetrum glaucum</i> (Brauer, 1865)	Suggested by Hämäläinen, 1989	
<i>gangi</i> Sahni, 1965	<i>Orthetrum</i>	<i>Orthetrum taeniolatum</i> (Schneider, 1845)	Davies & Tobin, 1984, 1985	
<i>garhwalicum</i> Singh & Baijal 1954	<i>Omychogomphus</i>	<i>Omychogomphus bistriatus</i> (Hagen in Selys, 1854)	Hämäläinen, 1989	
<i>garhwalicum</i> Singh & Baijal, 1954	<i>Mortoniagrion</i>	<i>Mortoniagrion aborense</i> (Laidlaw, 1914)	Hämäläinen, 1989	
<i>gautama</i> Fraser, 1922	<i>Orthetrum</i>	<i>Orthetrum cancellatum</i> (Linnaeus, 1758)	Schorr & Paulson 2019	
<i>guptai</i> Baijal, 1955	<i>Sympetrum</i>	<i>Sympetrum speciosum</i> Oguma, 1915	Suggested by Hämäläinen, 1989	
<i>haematonera</i> Fraser, 1924	<i>Sympetrum</i>	<i>Sympetrum hypomelas</i> (Selys 1884)	This paper	
<i>himalayanum</i> Navás, 1934	<i>Hylaeothemis</i>	<i>Hylaeothemis apicalis</i> Fraser, 1924	This paper	
<i>indica</i> Fraser, 1956	<i>Onychargia</i>	<i>Paracercion calamorum</i> (Ris, 1916)	This paper	
<i>indica</i> Sahni, 1964	<i>Crocothemis</i>	<i>Crocothemis servilia</i> (Drury, 1770)	Mitra, 2002	
<i>insula</i> Fraser 1920	<i>Enallagma</i>	<i>Aciagrion occidentale</i> Laidlaw 1919	This paper	
<i>kashmirensis</i> Singh & Baijal, 1954	<i>Anaciaeschna</i>	<i>Anaciaeschna martini</i> (Selys 1897)	This paper	
<i>kashmirus</i> Chowdhary & Das, 1975	<i>Coenagrion</i>	<i>Ischnura forcipata</i> Morton, 1907	This paper	

.....continued on the next page

TABLE 2. (Continued)

Synonym	Original genus	Synonym of	Established or confirmed by	Note
<i>kairainensis</i> Bajjal in Singh et al., 1955	<i>Nanophya</i> (sic)	<i>Brachythemis contaminata</i> (Fabricius, 1793)	Suggested by Hämäläinen, 1989	
<i>kairaiensis</i> Singh, 1955	<i>Nanophya</i>	<i>Brachythemis contaminata</i> (Fabricius, 1793)	Hämäläinen, 1989	
<i>kirbyi ardens</i> Gerstäcker, 1891	<i>Trithemis</i>	<i>Trithemis kirbyi</i> Selys, 1891	Dumont 1991, Jacquemin & Boudot, 1999	
<i>kumaonensis</i> Singh & Bajjal, 1954	<i>Coelicia</i>	<i>Coelicia renifera</i> (Selys, 1886)	Hämäläinen, 1989	
<i>kusumi</i> Sahni, 1965	<i>Anisopleura</i>	<i>Anisopleura lestooides</i> Selys, 1853	Zhang et al., 2014	
<i>liefitincki</i> Prasad & Ghosh, 1984	<i>Anisopleura</i>	<i>Anisopleura subplatystyla</i> Fraser, 1927	Zhang et al., 2014	
<i>maheshi</i> Sahni, 1964	<i>Calicnemia</i>	<i>Coelicia renifera</i> (Selys, 1886)	Hämäläinen, 1989	
<i>manaliensis</i> Singh, 1955	<i>Leses</i>	<i>Indolestes cyanescens</i> (Selys, 1862)	Liefitinck, 1977; Mitra, 2002	
<i>mathewi</i> Singh & Bajjal, 1955	<i>Orthetrum</i>	<i>Pantala flavescens</i> (Fabricius, 1798)	Ram & Srivastava, 1984	
<i>mildredae</i> Fraser 1927	<i>Ischnura</i>	<i>Ischnura annandalei</i> Laidlaw, 1919	Asahina, 1970, 1991	
<i>misrai</i> Bajjal & Agarwal, 1956	<i>Crocothemis</i>	<i>Trithemis aurora</i> (Burmeister, 1839)	Mitra, 2002; Sheela et al., 2016	
<i>mohani</i> Sahni, 1964	<i>Acrogomphus</i>	<i>Anisognomphus bivittatus</i> Selys, 1854	Schorr & Paulson 2019	
<i>nainitalensis</i> Sahni, 1964	<i>Agriocnemis</i>	<i>Ischnura forcipata</i> Morton, 1907	Hämäläinen, 1989	
<i>olympicus</i> Fraser, 1933	<i>Chlorogomphus</i>	<i>Watanaabeopetala atkinsoni</i> (Selys, 1878)	Kanube, 2002	
<i>pakistanica</i> Yousuf & Yunis, 1974	<i>Kuldananagaster</i>	<i>Cordulegaster brevistigma</i> (Selys, 1854)	Schorr & Paulson 2019	
<i>paratillarga</i> Singh & Bajjal, 1980	<i>Tholymis</i>	<i>Tholymis tillarga</i> (Fabricius 1798)	Hämäläinen, 1989	
<i>pendleburyi</i> Laidlaw, 1931 (ssp. of <i>C. fallax</i> )	<i>Ceriagrion</i>	<i>Ceriagrion fallax</i> Ris, 1914	this paper	
<i>pithoragarhicum</i> Sahni, 1964b	<i>Himalagrion</i>	<i>Ceriagrion fallax</i> Ris 1914	This paper	
<i>ramajana</i> Liefitinck, 1971	<i>Disparoneura</i>	<i>Elatoneura leucostigma</i> (Fraser, 1933)	Bedjančić, 2012	
<i>saintjohanni</i> Bajjal & Agarwal, 1956	<i>Bradinopyga</i>	<i>Bradinopyga geminata</i> (Rambur, 1842)	Mitra, 2002	
<i>sinhalensis</i> Liefitinck, 1971	<i>Drepanosticta</i>	<i>Ceylonosticta lankanensis</i> Fraser, 1931	Bedjančić, 2012	
<i>solitaria</i> Liefitinck, 1971	<i>Anisognomphus</i>	<i>Anisognomphus ceylonicus</i> (Hagen in Selys, 1878)	Bedjančić & van der Poorten, 2013	
<i>starmuehlneri</i> St. Quentin, 1972	<i>Drepanosticta</i>	<i>Ceylonosticta lankanensis</i> Fraser, 1931	Bedjančić, 2009	
<i>sudhaae</i> Mitra, 1994	<i>Calicnemia</i>	<i>Calicnemia imitans</i> Liefitinck, 1948	This paper	
<i>sushmae</i> Bajjal, 1955	<i>Archibasis</i>	<i>Indolestes cyanescens</i> (Selys, 1862)	Hämäläinen, 1989	
<i>tandicola</i> Singh, 1955	<i>Sympetrum</i>	<i>Pantala flavescens</i> (Fabricius, 1798)	Mitra, 1973	
<i>tengchongensis</i> Yu & Bu, 2007	<i>Coenagrion</i>	<i>Coenagrion exclamationis</i> (Fraser, 1919)	Gyeltschen & Kalkman, 2017	
<i>thoracica</i> Laidlaw, 1920	<i>Leses</i>	<i>Leses concinnus</i> Hagen in Selys, 1862	Dumont et al., 2017	
<i>umbrina</i> Selys, 1891	<i>Leses</i>	<i>Leses concinnus</i> Hagen in Selys, 1862	Dumont et al., 2017	
<i>vesiculosus</i> Selys 1854	<i>Cyclogomphus</i>	<i>Cyclogomphus ypsilon</i> Selys 1954	Fraser, 1934; This paper	
<i>vulgarum</i> <i>flavum</i> Barteneff, 1915	<i>Sympetrum</i>	<i>Sympetrum vulgarum decoloratum</i> (Selys, 1884)	Jödicke, 1994	

***Coenagrion kashmirus* Chowdhary & Das, 1975 = *Ischnura forcipata* Morton, 1907 syn. nov.**

The original description of *C. kashmirus* is very poor and confusing, with no holotype designation and no details on the location ('Kashmir'). As far as is known none of the material used to describe the species has been preserved. Hämäläinen (1989) stated that this species probably refers to an *Agriocnemis* or *Ischnura*. The size does not fit with *Agriocnemis*. The description of the adult does not give much detail except for the fact that it is blue and black, that the females are dichromatic and lacks "ventral spines" (sic). We consider the latter statement to be in error and assume that the authors were not familiar with this character and overlooked the small spine. All other characters as well as the habitat (eutrophic and mesotrophic lakes) fit with *Ischnura forcipata* which is the commonest species of *Ischnura* in Kashmir. We therefore synonymize *C. kashmirus* with *Ischnura forcipata*.

***Enallagma insula* Fraser, 1920 = *Aciagrion occidentale* Laidlaw, 1919**

*Enallagma insula* was described based on a single female from Chilka lake, Odisha State, India (Fraser 1920). The original description is brief without illustrations and without comparison to other species. In a redescription provided by Fraser (1933a) no important additional details are given but a comparison is made with *Amphillagma parvum*, *Enallagma cyathigerum* and *Paracercion malayanum*, at that time all placed in the genus *Enallagma*. The species has not been found since. Fraser (1933a) states that the holotype is in the Indian Museum but the species is not listed in the type catalogues of the Central Entomology Laboratory, ZSI, Kolkata (Sheela *et al.* 2016) nor in the type catalogues of the British Museum (Kimmings 1970) and the type is therefore unavailable for study. Most of the details described by Fraser (1920, 1933a) fit for the females of numerous species of Coenagrionidae however the pattern of the tip of the abdomen is peculiar. The dorsum of segments 1-8 is black like in most females of Coenagrionidae but segment 9 and 10 are described as follows (Fraser 1920): "Two small, tongue-like spots at the base of the 9th segment which are situated subdorsally and extend for about half the length of the segment. The 10th segment immaculate". In the redescription given by Fraser (1933a) it is stated that segment 10 is blue. In our region this pattern is only found in the genus *Aciagrion*. When comparing the description with the characters of the species of *Aciagrion* occurring in the Indian Subcontinent it was found that it matches closely with *A. occidentale*. Most convincing are the following characters: (1) "a large postocular blue spot" (Fraser 1933a) which suggest that the postocular spots are connected as is the case in *A. occidentale*, (2) "a narrow pale blue antehumeral stripe" (Fraser 1933a), (3) thorax "laterally palest blue, without markings; whitish beneath" (Fraser 1933a), (4) "anal appendages pale blue" (Fraser 1933a), (5) "Legs whitish, the distal ends of the femora black" (Fraser 1920) and (6) "a spine on the ventral surface of 8th segment" (Fraser 1920). In addition, the size and description of the venation also matches *Aciagrion*. From the above it is concluded that *E. insula* is an *Aciagrion* and based on the distribution and the above-mentioned details it is deduced that it is *A. occidentale*.

***Himalagrion pithoragarhicum* Sahni, 1964 = *Ceriagrion fallax* Ris, 1914, syn nov.**

The species *H. pithoragarhicum* was placed in *Himalagrion* by Sahni (1964) without any rationale. From the description it is clear that it actually refers to *C. fallax*. The description of the colouration of the body parts fits this species well, with the thorax being greenish and segments 1-6 of the abdomen being unmarked, segments 8-10 marked black dorsally and segment nine being entirely black. The drawing of the appendages suggest that the inferior appendages are shorter than the superior appendages and the base of the superior appendages is slender. However, this contradicts the text which states that the inferior appendages are slightly longer than the superiors and the superiors to have a broad base. For information on the genus *Himalagrion* see note 32.

***Ischnura bhimtalensis* Sahni, 1965 = *Ischnura rubilio* Selys, 1876 syn. nov.**

*Ischnura bhimtalensis* was synonymised with *Ischnura aurora aurora* by Hämäläinen (1989). Specimens from the Indian subcontinent, previously treated as *I. aurora*, are now considered to belong to *I. rubilio* (see note 36) and therefore *I. bhimtalensis* should be considered a synonym of *I. rubilio*.

***Onycharcia indica* Sahni, 1964 = *Paracercion calamorum* (Ris, 1916) syn. nov.**

The original description fails to state why the species was placed in the genus *Onycharcia*. Kosterin (2015) previously noted that, based on the description of the anal appendages, the species is very unlikely to belong in *Onycharcia*. The holotype is from “Sat Tal, Naini Tal, 6500 feet” where four paratypes were also collected (Sahni 1964). Two other paratypes are from Bageshwar on the Gaudawri river (position of river unclear). Both localities are in the Indian province of Uttarakhand. The whereabouts of the type series is unknown, however based on the description it is clear that *O. indica* is in fact a synonym of *P. calamorum*. Characters given in the description matching closely with *P. calamorum* are the length and shape of the superior appendages in combination with the very short inferior appendages, the pattern on the abdomen (largely black with S7-10 blue), the pale labium, the strong pruinosity on the thorax and parts of the abdomen, the general shape of the wing and shape and colouration of the pterostigma. As there are no characters mentioned in the description which are obviously different from *P. calamorum* and as the latter is fairly common within this area, we conclude that *O. indica* is a synonym of *P. calamorum*.

***Anaciaeschna kashmirensis* Singh & Baijal, 1954 = *Anaciaeschna martini* (Selys, 1897) syn. nov.**

*Anaciaeschna kashmirensis* was described based on a male and a female from Dal Lake (Jammu & Kashmir, India) (Singh & Baijal, 1954) and was suggested to be a synonym of *A. jaspidea* by Hämäläinen (1989). The holotype and paratype are shown in Sheela *et al.* (2016) but the specimens are damaged and the colours are difficult to judge. Both male and female are described in the original description which is illustrated with drawings of the wings, sadly the male appendages were only described as being “brown and short” and have since apparently been lost. The venation makes clear that it is indeed an *Anaciaeschna* (no veins in median space, IR3 with fork, R3, anal triangle of male long reaching almost to the hind wing angle, membranulae large, bordering the anal triangle for more than half its length). The photographs of the male holotype and the female paratype shows that the frons has a black T-mark of which the stem is a broad triangle. This rules out *A. jaspidea* as that species has a transverse black bar which is not connected to the base of the frons. The original description compares *A. kashmirensis* with *A. jaspidea* but not with *A. martini*. However the latter is a more likely candidate as it is known to occur in Bhutan and Nepal at mountain lakes between 1500 and 1800 m in altitude which is comparable to the altitude of the type locality (Dal Lake has an average elevation of 1580 m). The thorax of the male holotype is discoloured and pattern is scarcely visible on the photograph in Sheela *et al.* (2016) however the description of the pattern given in the original publication matches that of an *Anaciaeschna*. The pale parts are being described as being pale blue. The latter does not agree with *A. jaspidea* but does match *A. martini*. None of the characters mentioned strongly conflicts with those of *A. martini* except for the tint of the wings. In fully mature females the wing bases have a dark patch in *A. martini* which is not visible on the photograph of the paratype, although the wings are in the original description described as “deeply tinted with amber yellow”. The wings of the males have a yellowish tint when mature but that of the holotype *A. kashmirensis* is described as “hyaline, with obscure pale amber-yellow tint basally near the anterior margin”. These differences could however be related to age. As none of the other characters described for *A. kashmirensis* separate it from *A. martini* and the occurrence of the latter in the general region and altitude is very probable we deem *A. kashmirensis* to be a synonym of *A. martini*.

***Cyclogomphus vesiculosus* Selys, 1873 = *C. ypsilon* Selys, 1854 syn. nov.**

*Cyclogomphus vesiculosus* was described by Selys in 1873 based on a single male of which the last five abdominal segments including the appendages were missing with as type locality ‘India’ (Selys 1873). Laidlaw (1922) wrote that it had been recorded from Pune (=Poona, Maharashtra, India) by Fraser, who however did not mention it in his own publications and it seems likely that Fraser wrote to Laidlaw on a record of *C. vesiculosus* from Poona but later reidentified as *C. ypsilon* in his work (Fraser 1934). Laidlaw (1922) wrote that the only difference between *C. vesiculosus* and *C. ypsilon* was the smaller size of the former and Fraser wrote that it was “probably a small specimen” of *C. ypsilon* with which he synonymised it. Except for the type no other records of this species are known. The type was part of the Moore Collection in the East Indian Museum in London. This museum collection was dispersed in 1879 with the natural history objects going to the British Natural History Museum, London. Fraser (1934) suspected the type to be lost and it is also not listed in the type catalogues of the BMNH (Kimmings 1969) so that the type is presumed lost. As no clear differences are known with between *C. vesiculosus* and *C. ypsilon*, the type locality is unknown and the type is unavailable we deem *C. vesiculosus* a junior synonym of *C. ypsilon*.

***Chlorogomphus brittoi* Navás, 1934 = *Chlorogomphus xanthoptera* (Fraser, 1919) syn. nov.**

The short description of the holotype female *C. brittoi* is in Latin and is only illustrated with a sketch of the base of the hindwing showing the shape of the triangle and the anal loop (Navás, 1934). Nothing has been published on this species since its original description although it is mentioned in Subramanian *et al.* (2018). The type is presumed lost, like many of Navás' types. The description and the illustration of the base of the hindwing show clearly that it is indeed a species of *Chlorogomphus*. The description mentions the wings as being yellow tinted with the frontal third being most intense in colour. It also describes the rather distinctive yellow pattern on front of the thorax with a yellow line along the suture sharply bent inwards at the upper corner and running down to form an antehumeral stripe. These characters fit both species of *Chlorogomphus* known to occur in southern parts of the Indian peninsula. These two species are restricted to the Western Ghats and are closely related with one of them found north of the Palakkad gap (*C. campioni*) and one of them found south of the Palakkad gap (*C. xanthoptera*) (Subramanian *et al.* 2018). The type of *C. brittoi* is from Shenbaganur, Kodaikanal, Tamil Nadu state which is within the range of *C. xanthoptera*. As there are no clear differences between *C. brittoi* and *C. xanthoptera* we conclude that the former is a synonym of the latter.

***Sympetrum durum* Bartenev, 1916 = *Sympetrum striolatum commixtum* (Selys, 1884) syn. nov.**

*Sympetrum durum* was described in Russian with a Latin summary based on two males present in the Wiener Hof Museum of which the collections are presently housed in the Naturhistorische Museum, Wien. Since its original description no new information has become available. Bartenev (1916) states that both of them bear the label "Hügel" with one of them also with a label "Ind. or." an abbreviation for India, Oriental. Hügel refers to the botanical collector Charles von Hügel (1795-1870) who travelled in the Indian subcontinent in the 1830s, spending most time in the Kashmir and Punjab regions. We have not studied the types, however, as *Sympetrum* species generally have large ranges it is most likely *S. durum* refers to one of the species of *Sympetrum* already known from Northeastern India. The black legs rule out *S. arenicolor*, *S. decoloratum*, *S. fonscolombii*, *S. haritonovi* and *S. meridionale*. The thorax depicted in the original description is shown to have two black lines on the side, the anterior one being clear but narrow and the posterior one being broad. Such a broad black line is present in two other species found in the Himalayan region, *S. hypomelas* and *S. speciosum*, however in these the anterior line is as broad or broader than the posterior. These two species also have a black line at the inner side of the lateral lobes of the labium which is apparently absent in *S. durum*. The only species matching the description of *S. durum* is *S. striolatum commixtum*. Subspecies *commixtum* matches the nominal subspecies closely but has the posterior dark line on the side of the thorax much broader which is in line with the description given for *S. durum*. We therefore deem *S. durum* to be a junior synonym of *S. commixtum*. See note 85 on the subspecies status of *S. s. commixtum*.

***Sympetrum haematoneura* Fraser, 1924 = *Sympetrum speciosum* Oguma, 1915 syn. nov.**

***Sympetrum speciosum taiwanum* Asahina, 1951 = *Sympetrum speciosum* Oguma, 1915 syn. nov.**

The close relationship of *S. haematoneura* with *S. speciosum* was first mentioned by Asahina (1984a). He did not formally synonymize them, calling them vicariants, as *S. haematoneura* was only known from the Himalayan region and *S. speciosum* from Japan and Taiwan. However new records have shown that the species occurs widely in the areas in between. Dumont (2003) stated that to his knowledge *S. haematoneura* only differs from *S. speciosum* by the more restricted extent of the basal wing patch of the hind wings and regarded them as subspecies. Sasamoto *et al.* (2018) studied the taxonomical relationship between *S. speciosum* and *S. haematoneura* based on adult and larval morphology and genetic data. They showed that the differences between taxa is minor and in the adult restricted to variation in the extent of the yellow patch of the wings and in the larva in the size of the dorsal and lateral spines of abdomen. In addition, no clear genetic differences were found. Sasamoto *et al.* (2018) refrained from synonymising both taxa but based on their data and previous publications we judge that there is ample evidence to regard both species and their subspecies as synonyms. Hence the species *S. speciosum* should be regarded as monotypic. The range of *S. speciosum* includes Japan, Taiwan, Mongolia, mainland China, Korea, northern Vietnam, northern and eastern India (Himachal Pradesh, Jammu and Kashmir, Meghalaya, Uttarakhand), Bhutan and Nepal.

***Sympetrum himalayanum* Navás, 1934 = *Sympetrum hypomelas* (Selys, 1884) syn. nov.**

*Sympetrum himalayanum* was described based on a single male from Kurseong, Darjeeling, West Bengal (Navás 1934). The brief description is in Latin and the only illustration is a rather crude drawing of the anal appendages in lateral view. From the description it is clear that it belongs to the genus *Sympetrum*. Members of this genus usually have relatively large ranges and are often common within their range. The fact that the species has not been recorded since its original description makes it likely that it is a synonym of one of the known species of *Sympetrum* found in the Himalayan region. From the description it is clear that the thorax and abdomen is largely red, the legs are black and the thorax has two broad black stripes. This fits three species of *Sympetrum* occurring in the area: *S. striolatum commixtum*, *S. speciosum* and *S. hypomelas*. The description also states that the sides of the dorsum of the abdomen are black, which only agrees with *S. hypomelas*. Furthermore, the description of the yellow in the base of the wings fits this species best as the yellow is far more extensive in *S. speciosum* and nearly absent in *S. striolatum commixtum*. As the description does not include any characters indicating that it is different from *S. hypomelas* we conclude that *S. himalayanum* is a synonym of *S. hypomelas*.

***Hylaeothemis indica* Fraser, 1946 = *Hylaeothemis apicalis* Fraser, 1924 syn. nov.**

Four species of *Hylaeothemis* are currently known: *H. fruhstorferi* from Sri Lanka, *H. apicalis* from the Western Ghats, *H. gardeneri* from northeastern India and *H. clementia* Ris, 1909 occurring in southeast Asia, east of the Indian Region. Fraser (1946) recognised that the species from Sri Lanka and the Western Ghats were distinct and that the name *H. fruhstorferi* had to be restricted to the population from Sri Lanka. He described the specimens from the Western Ghats as a new species (*H. indica* Fraser, 1946). However, he overlooked that he himself had already described subspecies *H. fruhstorferi apicalis* for specimens from the Coorg (Western Ghats) based on the “tips of the wings, especially those of the female, broadly tipped with black” (Fraser 1924b). Therefore, *H. fruhstorferi apicalis* and *H. indica* are synonymous and as the taxon *H. f. apicalis* precedes the taxon *H. indica* the correct name is *Hylaeothemis apicalis*.

***Periaeschna lebasi* Navás, 1930 nomen nudum**

The brief description of *Periaeschna lebasi* is in Latin and is illustrated with a drawing showing the pterostigma and the base of the wing (Navás, 1930). The description is based on a single female from Kurseong, Darjeeling, West Bengal. No information on the species has been published since and the holotype is, like many of the types of Navás, presumed lost. From the description it can be concluded that the species is indeed a *Periaeschna* as it has cross-vein in the median space, the pterostigma is very small for an aeshnid and has a brace vein. The description does not mention whether or not the frons is inflated (as found in *Cephalaeschna*), which indicates that it is most likely not, as it is likely that an inflated frons, if present, would have been mentioned by the author. Four species of *Periaeschna* are known from the region from which *P. lebasi* was described. Identification of females is difficult and the description of the female holotype of *P. lebasi* does not enable us to identify which of the four species it belongs to; nor does it show that it is distinctly different from these species. We therefore conclude that the name *P. lebasi* should be considered a *nomen nudum*, a name for which it is impossible to determine which taxon it refers to.

**Taxonomic progress**

Since the start of 21st century there has been a substantial increase in the number of good and valuable faunistic papers on the odonates of South Asia. The increase is partially facilitated by new technologies and the improved access to information on the identification of dragonflies and damselflies. However, knowledge on odonate fauna of individual countries or regions remains very different.

There is also a steady flow of well illustrated species description with over 30 new species described from various subregions in the last decade, e.g. Peninsular India: Subramanian *et al.* (2013); Nair & Subramanian (2014); Kiran *et al.* (2015); Emiliyamma & Palot (2016b); Joshi & Kunte (2017); Joshi & Sawant (2019, 2020); Rangnekar *et al.* (2019); Babu & Subramanian (2019); Andaman Islands: Bedjanč *et al.* (2020); Nicobar Islands: Rajeshkumar *et al.*

*al.* (2017a); Rajeshkumar & Raghunathan (2018); Nepal: Conniff & Singh Limbu (2018); Bhutan: Gyeltshen *et al.* (2017a); Sri Lanka: van der Poorten (2009a, 2009b, 2012); Bedjančić (2010); Conniff & Bedjančić (2013); Bedjančić (2013); Bedjančić *et al.* (2016); Priyadarshana *et al.* (2016, 2018). There is still potential for new species to be found in Sri Lanka, the Western Ghats, Pakistan and especially the northeast of India.

For several countries and regions field guides have been published allowing a good number of odonate species to be identified with relative ease and in addition large numbers of photographs have become available on internet making it possible to crosscheck identifications. There are however still many genera where identification is difficult due to the confused state of the taxonomy. This is especially the case for the following genera: *Indolestes*, *Lestes*, *Coeliccia*, *Elatoneura*, *Aciagrion*, *Cephalaechna*, *Gynacantha* and *Periaeschna*. In addition, there are numerous smaller problems, such as those of the *Ischnura rufostigma* group (see note 37), which need attention. The family Gomphidae is particularly problematic as it is not always clear to which genus species belong; for example the four species of “*Onychogomphus*” probably do not belong in that genus but their correct placement is unclear. In addition, several gomphid genera are rather large, with small differences between the species and a re-evaluation of their characters and distribution is needed (for instance *Burmagomphus*, *Davidius*, *Ictinogomphus*). One of the main problems in studying the taxonomy of the species occurring in the region is the access to material. For several species the type material is lost while the remainder of the types is either in Kolkata (National Collection of the Zoological Survey of India), in Islamabad (National Insect Museum, Pakistan) or in London (British Museum of Natural History) with the result that nobody has easy access to all the material. An example of poorly known species are the five species described by Yousuf & Yunus (1974, 1976, 1977). None of these species has been recorded since and material is not available. Further study might show that some of these are synonyms. Another problem is that the taxonomic issues are not limited to South Asia and that for a thorough revision of most genera it is needed to take into account the species occurring in Southeast Asia and China. The greatest number of poorly known species and taxonomical problems are found in northeast India and the Himalayan region. This is complicated by the fact that adjacent Myanmar is probably the least studied country in Asia. Recently two cases of species being described from both South Asia and East Asia came to light: *Sympetrum haematoneura* described from Kashmir, India was found to be a synonym of *S. speciosum* from Japan (see paragraph on new synonyms) and *Anaciaeschna donaldi* Fraser, 1922 described from Kodaikanal (Western Ghats, India) was found to be a synonym of *A. martini* originally described from Japan (Conniff *et al.* 2019; see note 42). In all these cases the ranges of these species were seemingly widely separated due to which the possibility of their synonymy was overlooked or ignored for a long time. More field work in the intervening areas has however shown that these are wide-ranging species occurring across large parts of south, southeast and east Asia. It seems likely that a few more such cases will be discovered when the fauna of South Asia is compared in more detail with that of Southeast Asia. A good way to determine if species from South Asia are conspecific with species occurring in Southeast Asia or China would be to produce DNA-barcodes for all species. For Bhutan a programme has begun with a hundred or more species targeted. It is hoped that this will be followed by similar initiatives in Bangladesh, India, Nepal, Pakistan and Sri Lanka. In future when describing new species an effort should be made to publish a DNA-barcode together with the morphological description whenever possible.

## Larval descriptions

Table 1 includes a summary of available descriptions and/or illustrations of larva or exuviae from species or genera occurring in the South Asia. The aquatic stage of many species and even many genera in the region is still unknown and an increased effort to collect and describe the larval stages is most desirable. Moreover, the quality of available descriptions and illustrations varies greatly, with some characterised very precisely, others only by poor illustrations that are recognisable only at the generic level at best and should be redescribed. For example, in India, of the genus *Megalestes*, only the larva of *M. major* has been described (Laidlaw 1920) and for *Cephalaechna* only *C. orbifrons* has been described (Fraser 1943).

For the following genera the larva is still unknown: **Lestidae**: *Platylestes*, *Sinhalestes*; **Platystictidae**: *Ceylonosticta*, *Indosticta*, *Platysticta*; **Chlorocyphidae**: *Calocypha*, *Heterocypha*, *Indocypha*; **Euphaeidae**: *Dysphaea*, *Schmidtiphaea*; **Incertae sedis**: *Burmargiolestes*; **Platycnemididae**: *Indocnemis*, *Esme*, *Melanoneura*, *Phyllo-neura*; **Coenagrionidae**: *Amphiallagma*, *Huosoma*; **Aeshnidae**: *Gynacanthaechna*; *Oligoaeschna*; **Gomphidae**:

*Davidioides*, *Dubitogomphus*, *Nepogomphus*, *Perissogomphus*, *Platygompus*; **Libellulidae**: *Amphithemis*, *Epithecis*, *Indothemis*, *Nesoxenia*, *Pseudotrama*. The description of the larva or exuviae of the genera of Gomphidae is especially important as these are relatively often collected as larva, while adults are difficult to obtain. Larvae are also potentially useful in determining the phylogenetic position of the genus in some families. For a good number of genera no larva has been described for species found in the Indian Subcontinent, making description of the larva or exuviae highly desirable. These include: **Lestidae**: *Indolestes*; **Platystictidae**: *Drepanosticta*; **Calopterygidae**: *Echo*, *Vestalis*; **Philogangidae**: *Philoganga*; **Platycnemididae**: *Coeliccia*, *Nososticta*; **Coenagrionidae**: *Aciagrion*, *Archibasis*, *Coenagrion*, *Mortonagrion*; **Aeshnidae**: *Petaliaeschna*, *Planaeschna*, *Sarasaeschna*; **Gomphidae**: *Acrogomphus*, *Asiagomphus*, *Davidius*, *Euthygomphus*, *Nepogomphus*, *Orientogomphus*, *Melligomphus*, *Onychogomphus*, *Phaenandrogomphus*, *Stylogomphus*; **Chlorogomphidae**: *Chloropetalia*; **Cordulegastridae**: *Cordulegaster*; **Corduliidae**: *Hemicordulia*, *Somatochlora*; **Libellulidae**: *Aethriamanta*, *Hylaeothemis*, *Onychothemis*.

One of the difficulties of describing the larva is matching the adult with the correct larva. Often this is only possible by captive breeding or when a newly emerged adult is found with its exuviae. Nowadays it is also possible to match larva to adults using DNA-techniques. Generating DNA barcodes for the species found in the Indian Region is therefore of high value. In addition to the description of larva and exuviae, there is a need for keys to the genera and, where possible, species. Most valuable for faunistic studies would be keys to the genera of the Aeshnidae, Gomphidae, Chlorogomphidae and Cordulegastridae as these include many species which are often more easily collected as larva than as adults. To emphasise this, the remarkable *Epiophlebia laidlawi* was described from the larva in 1921 (Tillyard 1921) and adults were collected only several decades later in Nepal (Asahina 1963; Tani & Miyatake 1979). However even for those species for which adults are easy to obtain, the ability to identify larvae and exuviae is of great value in both ecological studies and environmental monitoring.

## Notes

**Note 01.** Prasad & Varshney (1995) included *Indolestes tenuissimus* Tillyard, 1906 in their checklist of India. This species is however restricted to New Guinea and Australia and is unlikely to occur in the Indian Subcontinent. Many species of *Indolestes* have formerly been included *Ceylonolestes* but the latter is presently considered a synonym of *Indolestes*.

**Note 02.** Most recent checklists of India have *Indolestes gracilis birmanus* (Selys, 1891) as occurring in India. Kosterin & Poggi (2015) showed that the assumption that *I. g. davenporti* (Fraser, 1930) is a synonym of *I. g. birmanus* is incorrect and that the name *birmanus* applies to a taxon of *Indolestes* occurring in Burma and Cambodia.

**Note 03.** Both *Lestes umbrina* Selys 1891 and *Lestes thoracica* Laidlaw, 1920 are synonyms of *Lestes concinnus*. See Dumont *et al.* (2017) for details.

**Note 04.** *Lestes garoensis* and *L. nodalis* are two closely related species, both with a brown pterostigma which is, especially at the lateral sides but also on the costal side, bordered with yellow-white; they also have a peculiar slender thorax. The species differ in the shape of the superior appendages with the tips of those of *L. garoensis* being more pointed. *Lestes garoensis* was described from Manipur in northeast India. As pointed out by Kosterin (2019) at least part of the material of *L. nodalis* from India mentioned by Fraser (1933) in fact belongs to *L. garoensis*. The appendages of material of *L. nodalis* as depicted by Emilyamma & Palot (2016a) from Kerala match those depicted by Lieftinck (1960a). So based on current knowledge this means that *L. nodalis* is known from southern India, China, Laos, Cambodia, Thailand and Myanmar, from where the holotype originates, whereas *L. garoensis* is restricted to northeast India.

**Note 05.** Rafi *et al.* (2009) recorded the occurrence of *Lestes patricia* in Azad Jammu & Kashmir from three localities in two districts. The species had been known only from the Western Ghats. It remains to be seen if these specimens represent the same species. If so, the species would be expected to occur in other parts of western India and part of Pakistan as well.

**Note 06.** *Lestes praemorsus* is a variable species with a very wide distribution ranging from the Indian subcontinent over southeast Asia, the Philippines, the Indonesian Archipelago to New Guinea. Two subspecies are generally recognised: *L. p. praemorsus* and *L. p. decipiens*. We here follow Lieftinck (1949) who described differences between the two subspecies and concluded that *L. p. decipiens* is found from the Indian Subcontinent (holotype comes from Sri Lanka) through southeast Asia to Sumatra and Java. *L. p. praemorsus* is found from the Philippines (holotype comes from Luzon) and Sulawesi to New Guinea and is thus not known to occur in the Indian Subcontinent. In addition to these two taxa the subspecies *L. p. sikkima* has been described from Sikkim. This taxon has a distinct pattern on the thorax (Fraser 1929) and further study might show it to be a distinct species.

**Note 07.** *Drepanosticta polychromatica* was described from Gopaldhara in West Bengal but has not been recorded there since. The only other published but doubtful record is that of Khaliq (1990) who recorded it from two different localities in Pakistan. Fraser (1933a) gives only minor and probably meaningless differences in wing venation and details in colouration, with no significant structural characters differentiating this species from *D. carmichaeli*. It seems likely that *D. polychromatica* is a junior synonym of *D. carmichaeli*. Although *D. carmichaeli* seems to have wide range, at least one very similar undescribed species is known from central Nepal (M. Bedjančić & K. Conniff unpubl.) so identification should be made with care and voucher material should be collected.

**Note 08.** Until recently the south Indian *Indosticta deccanensis* was placed in *Platysticta*, a genus restricted to Sri Lanka. Based on differences in morphology this placement was already doubted and molecular work has since shown that *I. deccanensis* is not closely related to *Platysticta* justifying the erection of the genus *Indosticta* (Bedjančić *et al.* 2016).

**Note 09.** The subspecies *Echo margarita tripartita* is considered a synonym of the (only) nominotypic race (Hämäläinen 2016).

**Note 10.** *Echo perornata* was recently added to the fauna of India based on a photograph of a male taken in Arunachal Pradesh (Gogoi & Payra 2019).

**Note 11.** *Matrona nigripectus* has often been regarded as a subspecies of *M. basilaris* (Selys, 1853). However, Hämäläinen *et al.* (2011) showed they should be regarded as full species. As far as known all published records of *Matrona* from India are in fact *M. nigripectus*. See Yu *et al.* (2015) for more information on the history and distribution of these two species.

**Note 12.** *Vestalis submontana* and *Vestalis nigrescens* were until recently regarded as subspecies of *Vestalis apicalis*. They are now regarded as three distinct species with *Vestalis nigrescens* being confined to Sri Lanka, *V. submontana* known from the southern Western Ghats and the Eastern Ghats and *V. apicalis* is endemic to mainland southern and central India (Hämäläinen 2011, 2016).

**Note 13.** All species of *Aristocypha*, *Calocypha*, *Heliocypha*, *Heterocypha* and *Paracypha* occurring in the Indian Subcontinent, with the exception of *H. perforata* which was described as *Agrion*, were originally described as *Rhinocypha*. Here we follow Hämäläinen (2016) and divide the genus *Rhinocypha* into *Aristocypha*, *Calocypha*, *Heliocypha* and *Rhinocypha*.

**Note 14.** The subspecies *Heliocypha biforata abbreviata* is considered a synonym of the nominotypic race (Hämäläinen 2016).

**Note 15.** *Libellago greeni* has been recorded in the literature from Pakistan (Zia 2010; Zia *et al.* 2009, 2011). These records are however considered unlikely as the species is believed to be endemic to Sri Lanka and is not known to occur in mainland India. The identification was based on poorly preserved material which probably led to a mistake in identification.

**Note 16.** We follow Hämäläinen (2016) and regard *Libellago indica* as distinct species rather than a subspecies of *Libellago lineata*. *Libellago indica* is endemic to peninsular India whereas *L. lineata* is widespread in large parts of tropical Southeast Asia.

**Note 17.** Mitra & Thinley (2006) described *Anisopleura bella*. Their publication does not fulfil the requirements of Article 8.1 of the Code of zoological nomenclature and therefore the name is not available for zoological nomenclature (Hämäläinen 2016). The characters mentioned for this species seem to fall within the range of variation of *A. subplatystyla*.

**Note 18.** Asahina (1978) described *Schmidtiphaea schmidi* from a single specimen from India (Huahu in Manipur). His redescription of the species based on specimens from Doi Suthep in Thailand (Asahina 1987) were later found to be based on material belonging to an undescribed taxon for which Hämäläinen (2003) erected the genus *Cryptophaea*. *Schmidtiphaea schmidi* is still only known from the holotype. Lahiri (2003) described *Bayadera chittaranjani* which was later found to belong in the genus *Schmidtiphaea* (Hämäläinen 2013).

**Note 19.** The type of *Dysphaea walli* Fraser, 1927 is from Burma (Maymyo in Mandalay division) (Fraser 1927). The species has been listed from India (e.g. Subramanian 2014; Subramanian & Babu 2017) and from Bangladesh (Habib *et al.* 2016). However, all these records pertain to photographs and no vouchers are available. According to Matti Hämäläinen (pers. com.) the specimens shown on the photographs from northeast India and Bangladesh are doubtfully conspecific with *D. walli* and are more likely to pertain to an undescribed species. Voucher material is needed to confirm this.

**Note 20.** *Epallage fatime* is mentioned for India in several checklists. This is probably based on Fraser (1934) who states the genus to occur in ‘India and Kashmir’ (at the time of writing, Pakistan was part of India). However, in his work (Fraser 1934), he mentions that *E. fatime* was not collected from Kashmir. We therefore consider *Epallage* to be absent from India and regard the record from Quetta in Pakistan as its eastern most known occurrence.

**Note 21.** For several genera of damselflies, it is still unclear to which family they belong and for this reason they are considered *Incertae sedis* (of uncertain placement). The only genus found in the Indian subcontinent falling into this category is *Burmargiolestes*. For more information on this see Dijkstra *et al.* (2014).

**Note 22.** Lieftinck (1984) described *Calicnemia carminea* which he split into two subspecies: *C. c. carminea* and *C. c. pyrrhosoma*. Sangal & Tyagi (1984) described *Calicnemia doonensis*. Hämäläinen (1989) showed *C. c. pyrrhosoma* to be a junior synonym of *C. doonensis*. As a result of this we now have a taxon *C. doonensis doonensis* known from India and a taxon *C. doonensis carminea* known from Nepal. The identification of the two subspecies is based on small differences in colouration and further study might show that a division of *C. doonensis* into subspecies is not warranted.

**Note 23.** Based on both molecular and morphological evidence Dijkstra *et al.* (2014) resurrected *Pseudocopera* Fraser, 1922 to contain four species formerly placed in the genus *Copera*, including *Pseudocopera ciliata* and *P. superplatypes*. The northwest Asian *Platycnemis dealbata* reaches the eastern limit of its range in Pakistan (Morton 1907; Mitra & Babu 2009). The species is included in the list of Indian species based on the records of Fraser (1933a) from Kashmir. However, it has not been found there since and it is not certain that the record was made within present day India.

**Note 24.** *Elattoneura coomansi* Lieftinck, 1937 has been recorded from India based on an incorrect citation of Lieftinck (1937) by Prasad & Varshney (1995). Subsequently the species has been reported from Nagaland by Joshi & Kunte (2014) however the photographs of these specimens shows according to Dow (2019) colour and patterns unlike *E. coomansi* from Sundaland. It is not clear what species the record of Joshi & Kunte (2014) refers to but it is clear that it is not *E. coomansi* for which reason the species is omitted from the checklist of India.

**Note 25.** The genus *Onychargia* was considered to belong to the family Coenagrionidae until molecular data showed it to belong to the Platycnemididae (Dijkstra *et al.* 2014) which was later confirmed by the morphology of the larvae (Orr & Dow 2015b).

**Note 26.** The taxon *krishna* was until recently considered a subspecies of *Aciagrion hisopa* (Selys, 1876). Joshi *et al.* (2016) however showed that it should be considered a subspecies of *A. approximans*. *Aciagrion approximans krishna* is endemic to the Western Ghats while *A. a. approximans* is found in the northeast India and Nepal (Joshi *et al.* 2016). Records of *A. hisopa* have been published for several countries in the Indian subcontinent however all these are in need of confirmation and are therefore given with a question mark in the checklist.

**Note 27.** Mitra & Thinley (2006) described the subspecies *Aciagrion olympicum aruni*. Their publication however does not fulfil the requirements of Article 8.1 of the Code of zoological nomenclature and therefore the name is not available. Study of a larger amount of material from several regions might show that *Aciagrion olympicum* can indeed be divided into several subspecies, in which case a new name needs to be introduced for the taxon found in Bhutan.

**Note 28.** As noted by Bedjanič *et al.* (2014), *Agriocnemis femina* breaks up into a number of structurally fairly well-defined taxa which unfortunately have not yet been sufficiently studied. As previously stated by Ris (1916) and Bedjanič (2002), populations from Sri Lanka at least appear to be a distinct taxon from the nominotypical *A. femina*, but further research in this respect is needed.

**Note 29.** This species was originally described as *Enallagma parvum* and this name is still regularly being used. However, May (2002) showed that it does not belong to the genus *Enallagma* and it is currently placed in the monotypic genus *Amphiallagma*.

**Note 30.** Subramanian & Babu (2017) mention *Ceriagrion coeruleum* Laidlaw, 1919 in their checklist however this species has been regarded a synonym of *C. azureum* since Fraser (1923).

**Note 31.** Fraser (1924a) described *C. aurantiacum* from southern India but later (Fraser 1933a) concluded that it was a subspecies of *C. olivaceum*. Asahina (1967) in his revision of Asian *Ceriagrion* noted that all characters mentioned by Fraser to separate *C. o. aurantiacum* from *C. o. olivaceum* seemed merely to refer to individual variation. However, he discovered a small morphological character distinguishing the two taxa, stating: ‘sub-apical tooth of superior caudal appendages differently shaped; there is a usual hook in *aurantiacum* instead of a rather black ridge in *olivaceum*’. Since then this character has never been properly examined and it is unclear if it does separate *C. o. aurantiacum* from *C. o. olivaceum*. Currently, *C. o. olivaceum* is considered to be widespread in India and parts of mainland Southeast Asia. Specimens considered to be *C. o. aurantiacum* by Asahina (1967) are only known from southwest India. A re-evaluation of the character mentioned by Asahina (1967) followed by re-identification of material from India is needed to establish the true status and distribution of these two taxa.

**Note 32.** Gyeltshen & Kalkman (2017) synonymized *Coenagrion tengchongensis* Yu & Bu, 2007 with *Himalagrion exclamacionis* Fraser, 1919 and synonymized *Himalagrion* Fraser, 1919 with *Coenagrion* Kirby, 1890 which resulted in the new combination of *Coenagrion exclamacionis* (Fraser, 1919). The species is restricted to the Himalaya Range from 1400 to 2500 m and is known from Nepal, India, Bhutan and China (Gyeltshen & Kalkman 2017). *Himalagrion pithoragarhicum* Sahni, 1964 is a synonym of *Ceriagrion fallax*.

**Note 33.** *Enallagma cyathigerum* occurs throughout a large part of the Palaearctic region and is believed to consist of a complex of four subspecies. In some publications these subspecies are regarded as full species, however, as the differences are small and as intermediates are known, we prefer to treat them as subspecies. The characters distinguishing the subspecies are illustrated by Stoks *et al.* (2005). As presently understood the subspecies occurring in Central Asia and large parts of China is *E. c. risi*. It therefore seems likely that this is the only subspecies present in the Indian subcontinent. When publishing new records, it is important to mention if the

characters distinguishing subspecies *E. c. risi* and *E. c. cyathigerum* were carefully checked.

**Note 34.** *Huosoma tinctipenne* was originally described as *Pyrrosoma tinctipenne* but was placed in a newly erected genus *Huosoma* together with *H. latiloba* (Yu *et al.*, 2008) by Guan *et al.* (2013). *Huosoma latiloba* is only known from China and *H. tinctipenne* is known from China and Bhutan (Guan *et al.* 2013).

**Note 35.** *Ischnura nursei* was until recently the sole member of the genus *Rhodischnura*. Based on molecular data Dumont (2013) showed that the species belongs in the genus *Ischnura* and *Rhodischnura* is currently considered a synonym of *Ischnura*.

**Note 36.** Papazian *et al.* (2007) consider specimens of *Ischnura aurora* from Southeast Iran, Pakistan, India and Sri Lanka to belong to subspecies *I. aurora rubilio* with the nominate subspecies, *I. aurora aurora* being found in the Australasian region. The taxon *I. a. rubilio* is briefly characterized by having the dorsum of segment 8 completely blue instead of having half of the segment black as is the case in *I. aurora aurora*. We regard the two taxa as full species of which only *Ischnura rubilio* is known to occur on the Indian subcontinent.

**Note 37.** Vick (1986) revised the *Ischnura rufostigma*-group and concluded that it consists of five species found in mainland Asia: *I. inarmata*; *I. rufostigma*; *I. annandalei*; *I. mildredae* Fraser, 1927 and *I. carpentieri* Fraser, 1946, which differ from each other by the pattern on the abdomen and especially by the shape of the anal appendages. The differences are illustrated in Vick (1986) based partly on study of the type material. Asahina (1991a) considered *I. inarmata* from Kashmir a distinct species. However, he considered *I. carpentieri* and *I. mildredae* synonyms of *I. annandalei* (Asahina 1970; 1991a) and considered *annandalei* a subspecies of *I. rufostigma* with *I. rufostigma rufostigma* from Central and East India and Nepal, with males without black dorsally on S2 and S7, and *I. r. annandalei* from East India, Myanmar, Thailand, Laos, South China, and Vietnam, with black dorsally on S2 and S7 (Sanmartín-Villar *et al.* 2016).

**Note 38.** *Mortonagrion gautama* Fraser, 1922 was described based on a single female from Assam and is regarded a synonym of *Mortonagrion aborense* (Schorr & Paulson 2019). The latter is known from northeast India, Bangladesh and the Andaman Islands and has been recorded as *M. gautama* from Pakistan by Zia *et al.* (2009).

**Note 39.** Weekers & Dumont (2004) showed that *Cercion lindenii* (Selys, 1840), the type species of the genus *Cercion* Navás, 1907 belongs to the genus *Erythromma* Charpentier, 1840. All other species of the genus *Cercion* were found to not be closely related to the type species of the genus and were transferred to *Paracercion* Weekers & Dumont, 2004. *Cercion dyeri* (Fraser, 1920) is a synonym of *Paracercion calamorum* (see Weeker & Dumont 2004). In older literature *Paracercion malayanum* is still included in the genus *Enallagma*.

**Note 40.** Lieftinck (1936) showed that *Pseudagrion bengalense* Laidlaw, 1919 is a junior synonym of *Pseudagrion australasiae*. This paper has been overlooked by several later authors hence the species still appears on some regional checklists.

**Note 41.** *Pseudagrion rubriceps ceylonicum* is generally considered to be endemic to Sri Lanka but has been recorded for Pakistan, possibly erroneously, in several publications.

**Note 42.** Conniff *et al.* (2019) showed that *Anaciaeschna donaldi* Fraser, 1922 is a synonym of *A. martini*. In this paper we synonymise *Anaciaeschna kashmirensis* with *A. martini*. The latter is now known to range from Japan, Korea and Taiwan through south China and southeast Asia to the Indian Subcontinent where it is found in the Himalayan region and in Sri Lanka and the hills of south India (Conniff *et al.* 2019).

**Note 43.** Together with the Australian *Anax papuensis* (Burmeister, 1839), *Anax ephippiger* was for a long time placed in the genus *Hemianax* but most modern authors consider both species as belonging in the genus *Anax*.

**Note 44.** Asahina (1983b) discussed the differences between the subspecies *Anax nigrofasciatus nigrofasciatus* and *A. n. nigrolineatus* based on material from Nepal to Japan and stated that “By a closer re-examination the sepa-

ration of the two races was found to be still possible, laying main point at the head characters. However, it may be surmised that the two subspecies might be connected as a cline of a single taxon, if rich material had become available from the yet blank areas such as Szeuchuan, Yunnan and northern Burma". The characters mentioned are the extent of the black on the frons, the boldness of the black pattern on the side of the thorax and whether or not the spots on segment 10 are connected. All these characters are rather unconvincing and it seems likely that further study may show that the subspecific names cannot be justified.

**Note 45.** Lieftinck (1960b) showed that specimens of *Gynacantha hyalina* Selys, 1882 originating from the Indian subcontinent were not conspecific with the type of *G. hyalina* from Luzon, the Philippines and belonged to an undescribed species which he named *G. dravida*. Several publications have since mentioned *G. hyalina* as occurring in the Indian Subcontinent but as identification was often based on Fraser (1934) it is doubtful if these records are correct. Therefore, *G. hyalina* is regarded as not present on the Indian subcontinent. *Gynacantha rotundata* is only known from the type description and it is unclear if the holotype is still present in the Navás collection in Barcelona. Based on the description and the area where the type originates from (Mumbai) it might be identical with *G. dravida*. If so than *G. dravida* would be a junior synonym of *G. rotundata*.

**Note 46.** *Gynacantha japonica* Bartenev, 1910 (Japan, China, Taiwan, Korea), *G. ryukyuensis* Asahina, 1962 (Ryukyu Islands, Japan) and *G. incisura* (Bhutan, Burma, Nepal) and *G. arnaudi* (Assam, India) form a group of closely related species (Asahina 1984b, c). *Gynacantha ryukyuensis* is well differentiated from *G. japonica* by the shape of the anal appendages as well as the male eye colour in life. The other three are however so closely related that their identification is problematic. In his description of *G. arnaudi*, a species only known from the type series, Asahina (1984b) also included figures of the anal appendages of *G. japonica* and *G. incisura* but did not specifically state differences between these species (see also Asahina 1984c). The small differences noticeable in the anal appendages indicate that *G. arnaudi* has a slightly more drawn out tip of the appendages and that *G. incisura* has slightly more slender anal appendages. It is doubtful if these differences would allow for a correct identification. Unpublished COI data show that the differences in COI between material from Bhutan (presumed *G. incisura*), China and Japan (*G. japonica*) are small and do not convincingly show that more than one species is involved.

**Note 47.** *Gynacantha millardi* has for a long time been considered as a synonym of *G. bayadera*. Priyadarshana *et al.* (2015) pointed out that it is a valid species and that its synonymy was based on an incorrect interpretation of a remark by Lieftinck (1930) who stated that a single female from Java identified by Fraser as *G. millardi* was in fact a *G. bayadera*. *Gynacantha millardi* is currently known from India and Sri Lanka while the widespread *G. bayadera* is known from the northeast of the Indian subcontinent (Priyadarshana *et al.* 2015). It is unclear if the two species overlap in distribution and a review of records of both species from the Indian subcontinent is needed.

**Note 48.** The genus *Sarasaeschna* was created by Karube & Yeh (2001) to encompass the species of the *Oligoaeschna pryeri*-group of Lieftinck (1968). All *Oligoaeschna* species previously recorded from the mainland of the Indian subcontinent are included in this group. Based on the penile structure the genus is considered to be closer to the Nearctic genus *Gomphaeschna* Selys, 1871 (von Ellenrieder 2002).

**Note 49.** The records of *Davidius zallorensis* Hagen in Selys, 1878 published from Bhutan (Gyeltshen 2017) pertain in fact to *D. delineatus* which was previously regarded as a subspecies of *D. zallorensis*. Lieftinck (1977a) pointed out there are clear differences between the two for which reason the taxon *delineatus* is currently regarded as a full species. The type of *Davidius zallorensis* is from "Le col de Zallore" in the Himalayan region. The precise location of this site is unknown and it might fall outside the region covered in this checklist for which reason it is not included. *Davidius baronii* which is currently known only from Bhutan is very close to *D. delineatus* and requires further study when more material becomes available.

**Note 50.** Kostern (2016) rearranged the species placed in *Merogomphus* and *Anisogomphus* and described a new genus *Euthygomphus*. He restricted the use of *Merogomphus* to the species with the cerci lyrate and (in most

species) with strong lateral spines. The species previously placed in *Merogomphus* without lyrate cerci and lacking lateral spines he placed in his new genus *Euthygomphus*. For the Indian subcontinent this generic redefinition results only in one new combination: *Euthygomphus martini* (previously either *Leptogomphus martini* or *Merogomphus martini*).

**Note 51.** Two of the species of *Gomphidia* occurring in the region are poorly known, viz. *G. ganeshi* from the Andaman Islands and *G. leonorae* from eastern India. The first is known from a holotype male only and has not been found since its description. The original description (Chhotani *et al.* 1983) provides only figures of wings; the anal appendages are described as partly broken and are not figured. The type is stated to be deposited in National Collection of the Zoological Survey of India, Calcutta, but the species is not mentioned in the type catalogue of this collection (Sheela *et al.* 2016). The type of *G. leonorae* is deposited in National Collection of the Zoological Survey of India. Babu & Subramanian (2019) provide photographs of it as well as a life photograph of a supposed female.

**Note 52.** The genus *Ictinogomphus* has not been well studied and several species are poorly known. *Ictinogomphus angulosus*, *I. pertinax* and *I. rapax* are widespread in parts of the Indian subcontinent. *Ictinogomphus decoratus* is widespread in southeast Asia, the Philippines and parts of the Indonesian Archipelago. The species is listed on the Checklist of Odonata of India by Subramanian & Babu (2017) based on a record from the Andaman Islands (Babu *et. al.* 2018). *Ictinogomphus atrox* Selys, 1854 is considered a synonym of *Ictinogomphus angulosus*. *Ictinogomphus distinctus* is known from the original description based on three males from Howrah District, West Bengal, India which is very close to Kolkata (=Calcutta) (Ram 1985) and from a few unpublished photographic records from Maharashtra and West Bengal (pers. com. Subramanian). In the same paper *Ictinogomphus kishori* is described from Azamgarh, Mahaso, Uttar Pradesh, India (Ram 1985). Later this species was also recorded from Nepal (Vick 1989). *Ictinogomphus angulosus* was recorded from Nepal by Mahato (1987) based on an identification by M. Hämäläinen but after *I. kishori* was found in Nepal he suggested his own identification would need confirmation (Vick 1989) for which reason we place a question mark on the occurrence of *I. angulosus* in Nepal. Further work on the taxonomy and distribution of the genus in the Indian Subcontinent is clearly needed.

**Note 53.** The record of *Ictinogomphus rapax* from the Andaman Islands (Rajeshkumar *et al.* 2017b) proved to be incorrect and to pertain to *I. decoratus*. *Ictinogomphus* collections at Zoological Survey of India at Port Blair (Andaman Islands) made by Rajeshkumar were studied in 2018 and all of them were found to be *I. decoratus* (Subramanian, pers. com.).

**Note 54.** The taxon *tamaracherriensis* Fraser, 1931 was described as “race or sp. ?” of *Merogomphus longistigma*. In his treatise on the Odonata of the Indian continent Fraser (1934) treated the taxon as a subspecies but later it was elevated to species level based on structural differences in the anal appendages (Fraser 1953).

**Note 55.** *Microgomphus chelifer* Selys, 1858 is listed for India in the checklist of Subramanian (2014) but has not been recorded with certainty from India and was deleted from the Indian checklist by Subramanian & Babu (2017).

**Note 56.** The taxon *indicus* was originally described in *Nihonogomphus* but was transferred to *Orientogomphus* by Wilson & Xu (2009).

**Note 57.** Both *Lamelligomphus risi* and *L. nilgiriensis* have been placed by many authors in *Onychogomphus* but should be included in *Lamelligomphus* following Fraser (1934), based on the shape of the male anal appendages.

**Note 58.** *Melligomphus acinaces* **comb. nov.** was originally described as a *Onychogomphus*. However, both the pattern and the shape of the anal appendages do not fit *Onychogomphus sensu stricto* but are very close to those of the species placed in *Melligomphus*.

**Note 59.** Prasad & Varshney (1995) included *Onychogomphus thienemanni* Schmidt, 1934 as occurring in India but as far as known this species is restricted to Peninsular Malaysia, Sumatra and Java (Lieftinck 1954). Until further evidence is presented *Onychogomphus thienemanni* is not considered to be part of the Indian fauna.

**Note 60.** Four species known from the Indian Subcontinent are currently placed in most checklists in the genus “*Onychogomphus*”. These species are however poorly known (see notes 57-59) and it seems unlikely that they fall in the genus *Onychogomphus sensu stricto*. Lahiri (1987) lists a record of a female specimen from Barapani lake in the central Khasi hills, Meghalaya as *Onychogomphus? maculivertex* (Selys, 1891). The holotype of this species is also a female originating from Meteleo, Burma. Lahiri (1987) states that it “comes close to *O. maculivertex* (Selys) in the shape of the vulvar scale, but is much larger (abdomen 44.0 mm vs 33.0 mm, and hindwing 35.0 mm vs 31.0 mm). It also differs from *maculivertex* in having more elaborate greenish yellow markings and a complete humeral stripe”. As no other specimens of *O. maculivertex* are known and as the specimen of Lahiri is only doubtfully conspecific with the holotype we do not list it as part of the Indian fauna.

**Note 61.** “*Onychogomphus*” *cacharicus* is only known from a female from Assam (Fraser 1934). It is therefore currently not possible to determine to which genus this species belongs. From a biogeographical point of view, it seems unlikely that it belongs to *Onychogomphus sensu stricto*. There is a record of a male from Arunachal Pradesh supposedly belonging to this species (Prasad 1997) but the identity of this specimen requires confirmation.

**Note 62.** “*Onychogomphus*” *cerastis* was described from a female (Selys collection) probably from Nepal (Fraser 1934). The only other material attributed to this species are two females and one male of which segments 4 to 10 are missing, from northern India. It is therefore currently not possible to determine the genus this species belongs to.

**Note 63.** “*Onychogomphus*” *malabarensis* is known only from a female holotype collected at Palakkad (=Palghat), Kerala in the Western Ghats (Fraser 1934). It is currently not possible to determine the genus to which this species belongs to, although it is unlikely to be *Onychogomphus* in the strict sense.

**Note 64.** “*Onychogomphus*” *megalayanus* is known only from a female holotype collected at Rongregiri in the Garo Hills of Meghalaya, India (Lahiri 1987). It is therefore not possible at present to determine which genus this species belongs to.

**Note 65.** *Nychogomphus* was established as subgenus of *Onychogomphus* by Carle (1986) with *N. geometricus* (Selys, 1854) as the type based on the shape of the male cerci and the secondary genitalia. Chao (1990), in his revision of Chinese gomphids elevated this taxon to genus level and transferred *Onychogomphus duaricus* and *O. striatus* to *Nychogomphus*. Fraser (1934) stated that *Onychogomphus saundersii* is a “near relative of *O. duaricus*, differing principally by the absence of any trace of an upper subbasal spine on the inferior anal appendage of the male”. The type is believed to come from India although locality details are lacking (Fraser 1934). The only other record is from a pair from Bhamo, Burma (Williamson 1907). As it is unlikely that *O. saundersii* belongs to *Onychogomphus sensu stricto* and the shape of the appendages fits the description of Carle (1986) we transfer *Onychogomphus saundersii* to *Nychogomphus saundersii* comb. nov.

**Note 66.** *Nychogomphus saundersii* was originally placed in *Onychogomphus*, but according to Chao (1990) it belongs in *Nychogomphus*.

**Note 67.** *Mesogomphus* is still regularly used in but has long been considered a synonym of *Paragomphus* by most authors.

**Note 68.** Subramanian (2014) lists *Chlorogomphus brevistigma okinawensis* Ishida, 1964 for India. The taxon *okinawensis* is currently considered a full species endemic to Japan while *Chlorogomphus brevistigma* Oguma, 1926 is endemic to Taiwan. Neither are likely to occur in India and Subramanian & Babu (2017) deleted it from

the Indian checklist.

**Note 69.** Karube (2002) erected the genus *Watanabeopetalia* in which he included *W. atkinsoni* from Nepal, northern India and northern Thailand, *W. usignata* (Chao, 1999) from the Chinese provinces of Sichuan and Shaanxi and *W. uenoi* (Asahina, 1995) from northern Vietnam. Later he added *Watanabeopetalia ojisan* Karube, 2013 from Vietnam to the genus. Karube (2002) placed *Chlorogomphus olympicus* Fraser, 1933 as a synonym of *Watanabeopetalia atkinsoni*.

**Note 70.** Subramanian (2014) listed *Neallogaster annandalei* (Fraser, 1923) for India. This species, currently placed in the genus *Cordulegaster* (van Pelt 1996), was deleted from the Indian checklist by Subramanian & Babu (2017). The holotype male is from "Pungtzula" collected during the Percy Sladen Expedition and therefore probably originates from west Yunnan, China (van Pelt 1996). The only other records of this species as far as we know are those depicted from Yunnan (Dali) by Zhang (2019) and a female described by Zhou (1988) from Dali, Yunnan, China (see van Pelt (1996) for an English translation of this description).

**Note 71.** *Somatochlora daviesi* was described from several males from the Khasi Hills in Assam, roughly 150 km south of Bhutan (Lieftinck 1977b). Five years later Asahina (1982a) described *S. nepalensis* based on material from Nepal. The differences between these two species are small and unconvincing. In a note at the end of the paper Asahina (1982a) briefly discusses an additional specimen from Assam, stating that this specimen is intermediate between *S. daviesi* and *S. nepalensis*; Asahina clearly doubted the validity of his species, stating that 'a taxonomic solution should better be postponed to some future day when sufficient material became available'. We agree with this, and consider *S. nepalensis* a junior synonym of *S. daviesi*.

**Note 72.** *Amphithemis* contains three species all confined to tropical mainland Asia. On the Indian subcontinent only *A. vacilans* is known to occur with certainty. *Amphithemis curvistyla* Selys 1891 is known from Myanmar and was listed for India without details by Prasad & Varshney (1995). Although its occurrence is not unlikely it is not presently regarded as part of the fauna.

**Note 73.** *Camacinia harmandi* Martin, 1900, a synonym of *C. harterti*, was described based on a male from Sikkim, India. Based on this Fraser listed *C. harterti* as occurring in Sikkim (Fraser 1920), but later changed his mind (Fraser 1936), stating that the report from Sikkim was erroneous and actually referred to *Camacinia gigantea* (Brauer, 1867). However, Wilson (2018) pointed out that the original description of *Camacinia harmandi* clearly shows that it is *C. harterti*. Recently the species was also found at Namdapha Tiger Reserve, Arunachal Pradesh and Buxa Tiger Reserve, West Bengal (Payra *et al.* 2020), showing that the occurrence of this species in the lower mountains of Bhutan and the eastern states of India is likely.

**Note 74.** Subspecies *Cratilla lineata calverti* Förster, 1903 was described from Malabar, India but Fraser (1936) synonymised the subspecies considering it to be just a late stage maturation colour form. Based on a more comprehensive analysis of material from Oriental region, Lieftinck (1953) was of opinion that *C. lineata calverti* deserves a subspecific rank, and outlined its distribution as India and Sri Lanka, with the nominate subspecies occurring in the Malay Peninsula and on Borneo and Sumatra.

**Note 75.** *Cratilla metallica* has been reported for the Andaman islands, but *Cratilla* specimens of both sexes with darkened wing tips from that locality belong to *Cratilla lineata* (Hämäläinen *et al.* 1999; M. Bedjanč pers. observ.).

**Note 76.** The photograph in Sivaperuman *et al.* (2011) of *Diplacodes nebulosa* from Andaman Islands is not correctly identified and the species is not known to occur on the Andaman and Nicobar Islands.

**Note 77.** Several subspecies of *Libellula quadrimaculata* have been described with *L. q. grigorjevi* Schmidt, 1961 being listed from India. All these subspecies are mostly based on the extent of the black pattern on the abdomen. This variation in pattern is related to climate with specimens from more arid environments showing a less extensive black pattern. Hence specimens from different regions showing the same pattern are not necessarily

closely related. All subspecies are presently considered to be invalid.

**Note 78.** *Neurothemis degener* was until recently considered a subspecies of *N. intermedia* but Seehausen & Gunther (2016) raised it to species level due to clear differences in the vesica spermatis. *Neurothemis intermedia* is represented in the Indian subcontinent by two subspecies *N. i. intermedia* and *N. i. atalanta*. According to Seehausen & Gunther (2016) the latter might however be more closely related to *Neurothemis nesaea* Ris, 1911 from Sulawesi.

**Note 79.** In their review of the ‘reddishbrown-winged’ group of *Neurothemis* Seehausen & Dow (2016) confirm the presence of *N. fluctuans* in the Andaman and Nicobar Islands and state that it appears likely that the species is absent from Bangladesh and mainland India. Previous records of *N. fluctuans* from the Indian subcontinent proper are considered incorrect. In the same paper *N. ramburii* is shown to be present in the Andaman and Nicobar Islands but to be absent from other parts of mainland Asia with the possible exception of Peninsular Malaysia.

**Note 80.** In his checklist of the dragonflies of Nepal, Vick (1989) lists *Orthetrum* sp. aff. *lineostigma* stating that “A specimen which I received from Lt Col. M.G. Allen, taken in Chitwan in 1984, is close to, but definitely specifically distinct from *lineostigma*”. The mature male specimen was forwarded to Dr. S. Asahina and who discussed it and provided a description and some illustrations (Asahina 1991b). He stated that it is allied to *O. lineostigma* of North China, pointing out some differences, but concluded that it was not possible to decide if it merited new specific status.

**Note 81.** *Orthetrum coerulescens anceps* is often regarded as a full species and is present in many checklists of the Indian subcontinent under that name. The nominate subspecies is found in western Europe while *O. coerulescens anceps* is found from southeast Europe eastwards. However over large areas of southeast Europe intermediates can be found, for which reason we deem it better to treat these two taxa as subspecies rather than species. St. Quentin (1970) lists *Orthetrum ramburi* as occurring in Nepal. *Orthetrum ramburi* is a synonym of *O. coerulescens anceps*. No other records of this species are known from Nepal and it is unclear if St. Quentin was referring to this species.

**Note 82.** *Orthetrum internum* was previously regarded as subspecies of *O. japonicum*. Molecular studies showed however, that these taxa are distinct at the species level (Yong *et al.* 2014).

**Note 83.** *Palpopleura sexmaculata octomaculata* Fraser, 1935 is considered a synonym of *Palpopleura sexmaculata*.

**Note 84.** Subramanian (2014) listed *Rhyothemis obsolescens* Kirby, 1889 for India. This species is widespread in southeast Asia but has not been recorded with certainty from India and was deleted from the Indian checklist by Subramanian & Babu (2017).

**Note 85.** *Sympetrum commixtum* was described as full species but is very close to *S. striolatum*, with Ris (1911) remarking that it should better be regarded a subspecies. Asahina (1984a) in his overview of the species of *Sympetrum* of the Himalayan region kept it as full species “since its present range seems strictly isolated”. We now know that the range of *S. striolatum* is extensive, ranging from Iran to Afghanistan and Pakistan (Kalkman *et al.* 2015) and it seems not unlikely that the ranges of the two taxa meet. We therefore prefer to list them as subspecies.

**Note 86.** In older checklists *Sympetrum vulgatum decoloratum* appears as *S. vulgatum flavum* which is a junior synonym (Jödicke 1994). Although morphologically similar *S. v. decoloratum* is clearly distinct in pattern and colouration and is sometimes regarded a full species. The record for Nepal by Yadav *et al.* (1981) is considered incorrect (see Vick 1989).

**Note 87.** *Tramea basilaris* was recorded as new to the Nicobar & Andaman Islands by Rajeshkumar *et al.* (2017b).

However, the illustration in this paper shows *T. transmarina*.

**Note 88.** Two subspecies have been described based on the extent of the amber in the wing base, with *Trithemis k. kirbyi* occurring in the Indian subcontinent and *T. k. ardens* in Africa. However, the extent of the amber area in the wing shows clear regional variation, with the populations from the Arabian Peninsula and North Africa being intermediate (Dumont 1991, Jacquemin & Boudot 1999). These subspecies are therefore considered invalid.

**Note 89.** The photograph in Rajeshkumar *et al.* (2017b) of *Urothemis signata* from Great Nicobar Island is not correctly determined and the species is not known to occur on the Andaman and Nicobar Islands.

**Note 90.** The subspecies of *Zygonyx iris* are poorly studied and little detail is available on their distribution. A revision of all subspecies of *Z. iris* is needed.

**Note 91.** The subspecies *Zygonyx torridus isis* was described as full species. The original description (Fraser 1924b) does not compare the species with *Z. torridus* and probably Fraser was at the time not aware of their close affinity. Later the taxon *isis* was downgraded to a subspecies of *Z. torridus* but the differences between the nominate subspecies known from Africa and the Middle East and *Z. torridus isis* have not been studied in detail. Further study might show that subspecific status for the Indian population is not warranted.

**Note 92.** *Idionyx nilgiriensis* was originally described as a *Phyllomacromia* (Fraser 1918). Fraser (1924b) moved the species to the genus *Idionyx*. However, Fraser (1922) already described a taxon *nilgiriensis* as subspecies of *Idionyx corona* for which reason he renamed *Idionyx corona nilgiriensis* (sensu Fraser 1922) to *I. c. burlilyarensis* (Fraser, 1924b). The distinction between both subspecies is minor for which reason *I. corona* is currently considered monotypic.

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