

Supplementary Table 1. Indian *Elattoneura* species and their geographical distribution.

Species	Distribution	IUCN Status
<i>Elattoneura atkinsoni</i> (Selys, 1886)	India: Assam and Meghalaya (Fraser, 1933; Lahiri, 1985; Dow, 2009a; Babu et al., 2013)	Near Threatened
<i>Elattoneura campioni</i> (Fraser, 1922)	India: Assam, Meghalaya, and Uttar Pradesh; Myanmar and Pakistan, (Fraser, 1933; Lahiri, 1985; Terzani & Carletti, 1998; Mitra et al., 2010; Sharma & Dow, 2010; Zia, 2016)	Data Deficient
<i>Elattoneura campioni cacharensis</i> (Fraser, 1933)	India: Assam and West Bengal (Fraser, 1933)	NA
<i>Elattoneura tetrica</i> (Laidlaw, 1917)	India: Kerala, Karnataka (Fraser, 1933), Goa (Emiliyamma et al., 2007; Kakkasery 2011; Babu et al., 2013)	Least Concern
<i>Elattoneura nigerrima</i> (Laidlaw, 1917)	India: Madhya Pradesh, Maharashtra and Gujarat (Fraser, 1933; Mitra, 1986; Mishra, 2007; Tiple, 2012; Babu et al., 2013; Kakkasery, 2013; Koparde et al., 2015; Tiple & Koparde, 2015; Rathod et al., 2016; Koparde et al., 2019)	Data Deficient
<i>Elattoneura nihari</i> Mitra, 1995	India: Madhaya Pradesh (Mitra, 1995)	Data Deficient
<i>Elattoneura souteri</i> (Fraser, 1924)	India: Karnataka, Kerala (Fraser, 1933; Emiliyamma et al., 2007; Babu et al., 2013; Kakkasery, 2013; Nair, 2017)	Data Deficient

Supplementary Table 2. Metadata of spatiotemporal distribution of *Elattonneura* spp.

Species	Observer	Locality	District	State	Latitude	Longitude	Altitude (masl)	Month	Year	Source
EN	Laidlaw, 1917	Nagpur	Central Province	MH	21.14	79.06	305	September	1916	Published
EN	Fraser, 1933	Mhow	Central Province	MP	22.62	75.75	551	January	1921	Published
EN	Fraser, 1933	Mhow	Central Province	MP	22.62	75.75	551	February	1921	Published
EN	Amol Sonawane	Gupteshwar Lake	Pune	MH	18.25133	74.33518	611	December	2011	Primary
EN	Pankaj Koparde	Amba	Kolhapur	MH	16.07037	74.07702	680	November	2012	Primary
EN	Ashish Tiple	Bor Dam	Wardha	MH	20.9717	78.7049	316	October	2012	Primary
EN	Ashish Tiple	Seloo	Wardha	MH	20.8365	78.7093	264.5	October	2012	Primary
EN	Ashish Tiple	Kanan River	Nagpur	MH	21.2264	79.2271	279	October	2012	Primary
EN	Ashish Tiple	Balaghat	Balaghat	MP	21.8064	80.1587	302	October	2012	Primary
EN	Ashish Tiple	Pench Tiger Reserve	Nagpur	MH	21.7017	79.2279	483	October	2012	Primary
EN	Ashish Tiple	Kanhan River	Nagpur	MH	21.26414	79.16878	278	March	2012	Primary
EN	Ashish Tiple	Warora	Chandrapur	MH	20.23757	79.01332	214	November	2013	Primary
EN	Pankaj Koparde	Kasani	Satara	MH	17.70797	73.81496	1009	February	2013	Primary
EN	Ashish Tiple	Pothara River, Nagri	Warora	MH	20.425	78.8666	209.5	November	2013	Primary

EN	Ashish Tiple	Hyderabad	Hyderabad	TL	17.5537	78.3772	584.5	November	2013	Primary
EN	Rathod <i>et al.</i> 2016	Navsari Agricultural University	Navsari	GJ	20.92576	72.90816	6	June	2014	Published
EN	Rathod <i>et al.</i> 2016	Kevdi	Surat	GJ	21.33917	73.41278	108	July	2014	Published
EN	Amol Sonawane	Rawet Bridge	Pune	MH	18.64011	73.75435	564.5	November	2014	Primary
EN	Amol Sonawane	Aditya Birla Nala	Pune	MH	18.62776	73.77591	568.5	November	2014	Primary
EN	Amol Sonawane	Bopodi Bridge	Pune	MH	18.57499	73.83718	558	November	2014	Primary
EN	Amol Sonawane	Aundh Rawet	Pune	MH	18.56833	73.81233	557.5	November	2014	Primary
EN	Amol Sonawane	Pavana River	Pune	MH	18.38316	74.45039	648	August	2014	Primary
EN	Ashwini Raju	Agumbe	Shimoga	KN	13.59169	75.14522	628	April	2014	Primary
EN	Ashwini Raju	Agumbe	Shimoga	KN	13.54951	75.13289	627	February	2014	Primary
EN	Arajush Payra	Balikiary Reserve Forest	Cuttack	ODS	20.57	85.01	147.5	May	2015	Primary
EN	Rathod <i>et al.</i> 2016	Purna River	Dangs	GJ	20.79619	73.60404	870	September	2015	Published
EN	Rathod <i>et al.</i> 2016	Waghai	Dangs	GJ	20.77073	73.48978	111	October	2015	Published
EN	Rathod <i>et al.</i> 2016	Dediapada	Narmada	GJ	21.67778	73.74333	287	May	2015	Published
EN	Rathod <i>et al.</i> 2016	Chakdhara	Tapi	GJ	20.97586	73.49122	76	May	2015	Published
EN	Rathod <i>et al.</i> 2016	Hiran River	Geer	GJ	21.17811	70.58656	148	NULL	2015	Published

EN	Rathod <i>et al.</i> 2016	Mahi River	Vadodara	GJ	22.25813	72.84966	0	NULL	2015	Published
EN	Rathod <i>et al.</i> 2016	Nal Sarovar	Ahmedabad	GJ	22.81983	72.04428	12	NULL	2015	Published
EN	Rathod <i>et al.</i> 2016	Pariej Lake	Vadodara	GJ	22.55269	72.62458	14	NULL	2015	Published
EN	Koparde <i>et al.</i> 2019	Nande	Pune	MH	18.55821	73.71236	563	November	2016	Published
EN	Pankaj Koparde	Jambughoda Wildlife Sanctuary	Surat	GJ	22.3697	73.71102	113.5	March	2016	Primary
EN	Arajush Payra	Patora Dam	Nuapada	ODS	20.73924	82.43015	339.5	March	2016	Primary
EN	Kaushal Patel	Navsari	Valsad	GJ	20.96366	72.99493	18	February	2016	Primary
EN	Ashish Tiple	Melghat Tiger Reserve	Amravati	MH	21.44583	77.19722	532	October	2018	Primary
EN	Ashish Tiple	Tadoba Tiger Reserve	Chandrapur	MH	20.16667	79.4	224	October	2018	Primary
EN	Dattaprasad Sawant	Gadheshwar Pavel	Raigad	MH	19.03	73.24	77.5	August	2018	DSA
EN	Sandeep Ranade	Sakurli Shahapur	Thane	MH	19.45	73.32	69.5	December	2018	DSA
EN	Omkar Damle	Talegaon Dabhade	Pune	MH	18.72	73.66	643	July	2018	DSA
EN	Dattaprasad Sawant	Kondheshwar Lake, Ambarnath	Thane	MH	19.12	73.23	68.5	January	2019	OOI
EN	Vivek Sharma	Jabalpur	Jabalpur	MP	23.16	80.01	447.5	-	-	DSA
ET	Laidlaw, 1917	Talewadi	Uttarakannada	KN	15.72	74.26	773	October	1916	Published

ET	Fraser, 1933	Fraserpet	Coorg	KN	12.37	75.87	907	May	1923	Published
ET	Pankaj Koparde	Amboli	Sindhudurg	MH	15.9265	74.00617	844	September	2012	Primary
ET	Parag Rangnekar	Kulem	South Goa	Goa	15.334	74.273	101.5	April	2012	Primary
ET	Sridhar Halali	Collem	South Goa	Goa	15.33827	74.24804	81	May	2014	Primary
ET	Sridhar Halali	Collem	South Goa	Goa	15.33317	74.27666	129.5	May	2014	Primary
ET	Sridhar Halali	Sanguem river	South Goa	Goa	15.22229	74.15464	34.5	May	2014	Primary
ET	Vinayan Nair	Chavanappuzha	Kannur	KL	12.0493	75.39341	42.5	October	2016	DSA
ET	Vinayan Nair	Varadoor	Kannur	KL	11.71251	76.10163	722	January	2016	DSA
ET	Vinayan Nair	Chavanappuzha	Kannur	KL	12.0493	75.39341	42.5	November	2013	DSA
ET	Vinayan Nair	Varadoor	Kannur	KL	11.71251	76.10163	722	November	2011	DSA
ET	Balachandran V.	Chaukul	Sindhudurg	MH	15.9022	74.034	807	October	2019	DSA
ET	Hemant Oagle	Chaukul	Sindhudurg	MH	15.9022	74.034	807	October	2018	DSA
ET	Vinayan Nair	Varadoor	Kannur	KL	11.71251	76.10163	722	April	2018	DSA

EN: *E. nigerrima*, **ET:** *E. tetrica*, **MH:** Maharashtra, **GJ:** Gujarat, **ODS:** Odisha, **MP:** Madhya Pradesh; **TL:** Telangana; **GA:** Goa, **KL:** Kerala;

masl: Meter above sea level; **DSA:** DragonflySouthAsia; **OOI:** Odonata of India.

Supplementary Table 3. Metadata of the sampled *Elattonaura* species for morphometry.

Species	Collector	Locality	State	Latitude	Longitude	Altitude (masl)	No.	Month	Year
EN	AT	Pothara River, Nagri	MH	20.42	78.87	209	4 ♂, 1 ♀	April	2020
EN	PK	Jambughoda WLS	GJ	22.37	73.71	117	5 ♂	March	2016
EN	KP	Navsari	GJ	20.96	72.99	21	3 ♂	February	2016
EN	AS	Aditya Birla Nallah	MH	18.63	73.78	561	2 ♂, 1 ♀	November	2014
EN	AS	Bopodi Bridge	MH	18.57	73.84	547	1 ♂, 1 ♀	November	2014
EN	AS	Pavana River	MH	18.38	74.45	632	1 ♂	August	2014
EN	AS	Gupteshwar Lake	MH	18.25	74.34	612	1 ♂	November	2011
ET	PR	Collem River	Goa	15.33	74.27	81	5 ♂, 2 ♀	May	2015
ET	SH	Dudhsagar River	Goa	15.34	74.25	80	7 ♂, 1 ♀	May	2015
ET	SH	Sanguem River	Goa	15.22	74.15	24	2 ♂	May	2015

EN: *E. nigerrima*, **ET:** *E. tetrica*, **PK:** Pankaj Koparde, **AP:** Arajush Payra, **KP:** Kaushal Patel, **AS:** Amol Sonawane, **AT:** Ashish Tiple, **PR:**

Parag Ranganekar, **SH:** Sridhar Halali, **MH:** Maharashtra, **GJ:** Gujarat, **ORS:** Orissa, **masl:** meter above sea level.

Supplementary Table 4. PC loadings for different morphometric variables measured for the first two Principal Components.

Variable	PC 1	PC 2
Thorax length	0.1316	0.0392
Abdomen length	0.1906	0.9411
Hind wing length	0.6904	-0.1628
Fore wing length	0.6700	-0.1225
Segment 2	-0.0309	0.0978
Segment 3	0.1221	-0.0143
Segment 4	0.0189	0.1733
Segment 5	0.0582	0.1559
Segment 6	0.0254	0.0843
Segments 8, 9, 10	0.0239	0.0045

Supplementary Table 5. Spatially derived data for *Elattoneura* species.

	<i>E. nigerrima</i>	<i>E. tetrica</i>
Number of non-overlapping spatial points	47	15
Elevation (masl)	372 ± 256	497 ± 363
EOO in km ²	891084	21735
AOO in km ²	172	36
Average annual temperature in °C	29.69 ± 3.4	26.95 ± 2.5
Average annual precipitation in mm	1473 ± 923	3178 ± 585

References:

Dow RA 2009 *Elattoneura atkinsoni*. *IUCN Red List of Threatened Species*. Version 2014.3. Retrieved March 12, 2015 from <www.iucnredlist.org>.

Dow RA 2019 *Elattoneura coomansi*. *IUCN Red List of Threatened Species*. Version 2020-1. Retrieved March 24, 2020 from <www.iucnredlist.org>.

Emiliyamma KG, Radhakrishnan C and Muhamed Jafer Palot 2007 in *Odonata (Insecta) of Kerala*. (Zoological Survey of India, India) **269** 1-200

Joshi S and Kunte K 2014 Dragonflies and damselflies (Insecta: Odonata) of Nagaland, with an addition to the Indian odonate fauna. *J. Threat. Taxa* **6**(11) 6458-6472.

Kakkasery F 2013 *Elattoneura souteri*. *IUCN Red List of Threatened Species*. Version 2014.3. Retrieved March 12, 2015 from <www.iucnredlist.org>.

Koparde P, Dawn P and Darshetkar A 2019 Odonates across a tropical urbanization gradient (Mula River, Pune, Maharashtra, India). *Int. Dragonfly Fund – Rep.* **128** 1-13.

Koparde P, Mhaske P and Patwardhan A 2015 Habitat correlates of Odonata species diversity in the northern Western Ghats, India. *Odonatologica* **44**(1) 21-43.

Lahiri AR 1985 Studies on Odonate fauna of Meghalaya. *Rec. Zool. Survey India* **99** 1-402.

- Mishra S 2007 Insecta: Odonata in *Fauna of Madhya Pradesh (including Chhattisgarh) Part – I. State Fauna Series* (ed) Director – ZSI (Zoological Survey of India, Kolkata, India) **15** pp 1-564
- Mitra A, Dow R, Subramanian KA and Sharma G. (2010) The status and distribution of dragonflies and damselflies (Odonata) of the eastern Himalaya. *The Status and Distribution of Freshwater Biodiversity in the Eastern Himalaya* (eds) by DJ Allen, S Molur and BA Daniel (IUCN, Cambridge, UK & Gland, Switzerland/Zoo Outreach Organization, Coimbatore, India) pp 54-64
- Mitra TR 1986 Note on the Odonata fauna of Central India. *Rec. Zool. Survey India* **83** 69-81
- Nair VP 2017 Dragonflies: Additions to the Odonata (Insecta) Fauna of Varadoor, Kannur, Kerala, South India. *ZOO'S PRINT* **32**(11) 24-30.
- Rathod DM, Parasharya BM and Talmale, SS 2016 Odonata (Insecta) diversity of southern Gujarat, India. *J. Threat. Taxa* **8**(11) 9339-9349
- Sharma G and Dow RA 2010 *Elattonneura campioni*. *IUCN Red List of Threatened Species*. Version 2014.3. Retrieved March 12, 2015 from <www.iucnredlist.org>.
- Terzani F and Carletti B 1998 *Protosticta damacornu spec. nov.* and other odonate records from northeastern India (Zygoptera: Platystictidae). *Odonatologica* **27**(4) 479-485
- Tiple A 2012 Dragonflies and Damselflies (Insecta-Odonata) from Nagpur city environs in Vidharba, together with other records from Maharashtra, India. *Colemania* **27** 1-12
- Tiple AD and Koparde P 2015 Odonata of Maharashtra, India with notes on species distribution. *J. Insect Sci.* **15**(1) 47-57
- Zia A 2016 Zygoptera in Himalayan Foot Hills of Pakistan. *Int. Dragonfly Fund – Rep.* **96** 1-60