

## INSECTA : ODONATA

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### INTRODUCTION

The order Odonata comprising of suborders Zygoptera, Anisozygoptera and Anisoptera are one of most primitive groups of insects. The larvae are aquatic and adults are terrestrial. The larval and adult habitats are highly species specific. They are very sensitive to changes in terrestrial and wetland habitat quality and are reliable indicators of ecosystem health. Globally 5,740 species of odonates are known of this 470 species in 139 genera and 19 families exist in India (Subramanian, 2009).

The Odonata fauna of northern Western Ghats was earlier explored by Fraser (1924, 1932, 1933-36). The Odonata of the Western Ghats is characterized by high levels of endemism and habitat- restricted species. They are also threatened with various anthropogenic impacts (Subramanian *et.al.*, 2011). Recent studies on the odonate fauna of northern Western Ghats are species checklists based on field surveys (Prasad, 1987; Kulkarni *et al.*, 2006a and 2006b; Kulkarni and Talmale, 2009) and provide updated information on Odonata of the region. However, there were no specific studies on Odonata diversity of Radhanagari wildlife sanctuary and hence this study was carried out.

### MATERIALS AND METHODS

Adult Odonata were collected from streams, reservoir banks and forest trek paths of the national park by different survey teams with a hand held sweep net. Few representative samples were collected for identification. Dried specimens were identified by consulting Fraser (1933-1936). Species which are very common and easily identifiable in the field were not collected but was recorded.

### RESULTS AND DISCUSSION

A total of 68 adult Odonates were collected and studied. The Odonata fauna of the national park comprise of 23 species in 17 genera, 7 families and 2 suborders. The family Libellulidae dominated the Odonata fauna of the National Park with 7 genera and 11 species. All the 23 species recorded are very widespread in the Oriental region and there were no Western Ghats endemics. However, *Rhynocypha bisignata* is restricted to peninsular India. Species such as *Vestalis gracilis*, *Vestalis apicalis*, *Disparoneura quadrimaculata*, *Libellago lineata* and *Rhynocypha bisignata* breed in streams and other in lentic habitats such as marshes and pools.

### SYSTEMATIC LIST

Order : ODONATA

Suborder : ZYGOPTERA

Superfamily : COENAGRIONOIDEA

Family : COENAGRIONIDAE

Subfamily : PSEUDAGRIONINAE

Genus : ***Pseudagrion*** Selys, 1876

1. *Pseudagrion hypermelas* Selys, 1876.

2. *Pseudagrion rubriceps* Selys, 1876.

Subfamily : AGRIOCNEMIDINAE

Genus : ***Agriocnemis*** Selys, 1877

3. *Agriocnemis femina* (Brauer) 1868.

4. *Agriocnemis splendidissima* Laidlaw, 1919.

Subfamily : PSEUDAGRIONINAE

Genus : ***Ceriagrion*** Selys, 1876

5. *Ceriagrion coromandelianum* (Fabricius) 1798.

Family : PLATYCNEMIDIDAE

Subfamily : PLATYCNEMIDINAE

Genus : ***Copera*** Kirby, 1890

6. *Copera marginipes* (Rambur) 1842

Family : PROTONEURIDAE

Subfamily : DISPARONEURINAE

Genus : ***Disparoneura*** Selys, 1860

7. *Disparoneura quadrimaculata* (Rambur) 1842.

Genus : ***Prodasineura*** Cowley, 1934

8. *Prodasineura verticalis* Selys, 1860.

Family : CALOPTERYGIDAE

Subfamily : CALOPTERYGINAE

Genus : ***Vestalis*** Selys, 1853

9. *Vestalis apicalis apicalis* Selys, 1873.

10. *Vestalis gracilis gracilis* (Rambur) 1842.

Family : CHLOROCYPHIDAE

Genus : ***Libellago*** Selys, 1840

11. *Libellago lineata* (Burmeister) 1839.

Genus : **Rhinocypha** Rambur, 1842

12. *Rhinocypha bisignata* Hagen in Selys, 1853.

Suborder : ANISOPTERA  
 Superfamily : LIBELLULOIDEA  
 Family : LIBELLULIDAE  
 Subfamily : SYMPETRINAE

Genus : **Diplacodes** Kirby, 1889

13. *Diplacodes trivialis* (Rambur) 1842.

Genus : **Brachythemis** Brauer, 1868

14. *Brachythemis contaminata* (Fabricius) 1793.

Genus : **Neurothemis** Brauer, 1867

15. *Neurothemis intermedia intermedia* (Rambur) 1842.

Subfamily : LIBELLULINAE

Genus : **Orthetrum** Newman, 1833

16. *Orthetrum luzonicum* (Brauer) 1868.

17. *Orthetrum pruinatum neglectum* (Rambur) 1842.

18. *Orthetrum sabina sabina* (Drury) 1770.

Subfamily : PALPOPLEURINAE

Genus : **Palpopleura** Rambur, 1842

19. *Palpopleura sexmaculata sexmaculata* (Fabricius) 1787.

Subfamily : TRAMEINAE

Genus : **Pantala** Hagen, 1861

20. *Pantala flavescens* (Fabricius) 1798.

Subfamily : TRITHEMISTINAE

Genus : **Trithemis** Brauer, 1868

21. *Trithemis aurora* (Burmeister) 1839

22. *Trithemis festiva* (Rambur) 1842

Superfamily : AESHNOIDEA

Family : AESHNIDAE

Subfamily : AESHNINAE

Genus : **Gynacantha** Rambur, 1842

23. *Gynacantha bayadera* Selys, 1891.

## SYSTEMATIC ACCOUNT

Order : ODONATA

Suborder : ZYGOPTERA

Superfamily : CALOPTERYGOIDEA

Family : CALOPTERYGIDAE

Subfamily : CALOPTERYGINAE

Genus : *Vestalis* Selys, 1853

### 1. *Vestalis apicalis apicalis* Selys, 1873

1873. *Vestalis apicalis*, Selys, Bull. Acad. Belg., (2) 36: 612.

1934. *Vestalis apicalis apicalis*, Fraser, *Fauna Brit. India, Odon.* 2 : 128-130.

*Material examined* : 1 female, 6.iv.2009, Pawaneshwara Temple and around, Coll: P.D.Rane.

*Distribution*: India : Assam, Eastern Ghats, North East India, Western Ghats, West Bengal.

*Elsewhere* : Myanmar, Thailand.

### 2. *Vestalis gracilis gracilis* (Rambur) 1842

1842. *Calopteryx gracilis*, Rambur, *Ins. Neurop.*, :224.

1934. *Vestalis gracilis gracilis*, Fraser, *Fauna Brit. India, Odon.*, 2 : 126-128.

1988. *Vestalis gracilis gracilis* Prasad & Varshney. *Rec. zool. Surv. India, Occ. Paper No.*, 110: 13-14.

*Material examined* : 2 males, 1 female, 12.xii.2007, on the way Surangi gate to Pawaneshwara Temple, Compt. No. 20, Coll: S.G.Patil; 1 female, 3.iii.2009, Naniwale Pond near Kalainwadi dam, Coll: A.S.Mahabal; 1 female, 6.iv.2009, Pawaneshwar Temple and around, Coll: P.D.Rane; 2 males, 1 female, 7.iv.2009, Ugwaidevi Temple and around, Coll: P.D.Rane; 3 males, 1 female, 20.ii.2010, Samburkund and around, Coll: S.S. Talmale.

*Distribution* : India: Assam, Bihar, Maharashtra, West Bengal.

*Elsewhere* : Myanmar, Thailand, Vietnam.

Family : CHLOROCYPHIDAE

Genus: *Libellago* Selys, 1840

### 3. *Libellago lineata* (Burmeister) 1839

1839. *Calopteryx lineata* Burmeister, *Handb. Ent.* 2: 826.

1840. *Libellago lineata* Selys, *Mon. Lib. Eur.* p. 200.

1934. *Libellago lineata lineata*, Fraser, *Fauna Brit. India, Odon.* 2: 60-63.

*Material examined* : 1 male, 8.iv.2009, Bhagwati River and around, Coll: P.D.Rane; 1 male, 22.ii.2010, Waghacha Pani and around, Coll: S.S. Talmale.

*Distribution* : India: Assam, Arunachal Pradesh, Dehra Dun, Manipur, Maharashtra, Rajasthan, Tripura.

*Elsewhere*: Borneo, China, Java, Formosa, Myanmar, Nepal, Philippines, Thailand, Vietnam.

Genus: ***Rhinocypha*** Rambur, 1842

4. ***Rhinocypha bisignata*** Hagen in Selys, 1853

1853. *Rhinocypha bisignata*, Selys, *Bull. Acad. Belg.* 20(Annexe) *Syn. Calopt.* : 214.

*Material examined* : 3 females, 5.iv.2009, Waghacha Pani and around, Coll: P.D.Rane; 1 male, 1 female, 8.iv. 2009, Bhagwati River and around, Coll: P.D. Rane; 1 male, 21.ii.2010, Naniwale (Hasane) and around, Coll: S.S. Talmale; 1 female, 22.ii.2010, Waghacha Pani and around, Coll: S.S. Talmale.

*Distribution*: India: Orissa, Maharashtra (Mumbai, Khandala,), Central India, South India(Cochin, Coorg, Nilgiris, Palnis, Silent Valley).

Superfamily : COENAGRIONOIDEA

Family : COENAGRIONIDAE

Subfamily : AGRIOCNEMIDINAE

5. ***Agriocnemis femina*** (Brauer) 1868

1868. *Agriocnemis (Ischnura) femina*, Brauer, *Verh. Zool. Bot. Wein.* **18**: 554.

1877. *Agriocnemis incisa*, Selys, *Bull. Acad. Belg.* (2) **43**: 143; 149.

1933. *Agriocnemis femina*, Fraser, *Fauna Brit. India, Odon.* **1**: 402-404.

1975. *Agriocnemis femina*, Mitra, *j. Zool. Soc. India, B.S. Chauhan Com. Vol.* p. 406.

*Material examined* : 1 male, 19.i.2008, Radhanagari W.L.S. (Kolhapur), Coll: P.P.Kulkarni.

*Distribution* : India: Assam (Dibrugarh, Goalpara, N.E. Assam), Great Nicobar, Manipur, Maharashtra, West Bengal.

*Elsewhere* : Australia, Bangladesh, Cuba, China, Formosa, Myanmar, New Guinea, Philippines, Singapore, Thailand, Vietnam.

6. ***Agriocnemis splendidissima*** Laidlaw, 1919

1919. *Agriocnemis splendidissima* Laidlaw, *Rec. Indian Mus.*, **16**: 180-182.

1933. *Agriocnemis splendidissima*, Fraser, *Fauna Brit. India, Odon.*, **1** : 392-394.

*Material examined* : 1 female, 3.iv.2009, Sambarkund and around, Coll: P.D.Rane; 1 male, 1 female, 5.iv.2009, Waghacha Pani and around, Coll: P.D.Rane; 1 female, 22.ii.2010, Waghacha pani and around, Coll: S.S. Talmale.

*Distribution* : Throughout India.

*Elsewhere* : Australia, China, Indonesia, Myanmar, Nepal, Philippines, Papua, Sri Lanka, Singapore.

Subfamily : PSEUDAGRIONINAE

7. *Pseudagrion hypermelas* Selys, 1876

1876. *Pseudagrion hypermelas*, Selys, *Bull. Acad. Belg.* (2) 42: 519.

1933. *Pseudagrion hypermelas*, Fraser, *Fauna Brit. India, Odon.* 1: 289-292.

*Material examined* : 1 female, 20.ii.2010, Sawarai Sada cave and around, Coll: S.S. Talmale; 1 male, 20.ii.2010, Sambarkund and around, Coll: S.S. Talmale.

*Distribution* : India: Bihar, Maharashtra (Mahabaleshwar, Pune), Punjab, West Bengal.

8. *Pseudagrion rubriceps* Selys, 1876

1876. *Pseudagrion rubriceps*, Selys, *Bull. Acad. Belg.* (2) 42: 510.

1933. *Pseudagrion rubriceps*, Fraser, *Fauna Brit. India, Odon.*, 1: 296-299.

1988. *Pseudagrion rubriceps*, Prasad and Gosh, *Rec. zool. Surv. India*, 85(2): 201.

1995. *Pseudagrion rubriceps*, Prasad and Varshney, *Oriental Ins.* 29: 389.

*Material examined* : 1 male, 8.iv.2009, Bhagwati River and around, Coll: P.D.Rane.

*Distribution* : India: Assam, Bihar, Chandigarh, Karnataka, Kerala, Madhya Pradesh, Maharashtra (Nagpur, Pune), Meghalaya, Orissa, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, West Benagal,

*Elsewhere* : Bangladesh, China, Formosa, Indonesia, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Thailand, Taiwan.

*Remarks* : Mainly found in plains but also recorded from Ootakmund Nilgiris, 7250' and Coorg 4000' elevations.

Subfamily : PSEUDAGRIONINAE

Genus : *Ceriagrion* Selys, 1876

9. *Ceriagrion coromandelianum* (Fabricius) 1798

1798. *Agrion coromandalium*, Fabricius, *Entr. Syst. Suppl.* : 287.

1933. *Ceriagrion coromandelianum*, Fraser, *Fauna Brit. India, Odon.* 1: 315-316.

*Material examined* : 1 male, 20.ii.2010, Sambarkund and around, Coll: S.S. Talmale.

*Distribution* : Throughout India.

*Elsewhere* : Indonesia, Myanmar, Malaysia, South China, Sri Lanka.

*Remarks* : Recorded as a very common species from Estuarine areas of Eastern India (Prasad and Gosh, 1988). Breeds in weedy ponds and tanks and may be found for the greater part of the year on the banks.

Family : PLATYCNEMIDIDAE

Subfamily : PLATYCNEMIDINAE

Genus : *Copera* Kirby, 1890

10. *Copera marginipes* (Rambur) 1842

1842. *Platycnemis marginipes* Rambur *Ins. Neurop.* : 240

1993. *Copera marginipes*, Fraser, *Fauna Brit. India. Odon.*, 1 : 192-197.

*Material examined* : 2 male, 8.iv.2009, Bhagwati River and around, Coll: P.D.Rane; 1 male, 2 females, 23.ii.2010, Malewadi Dam site and around, Coll: S.S. Talmale; 1 male, 5.iv.2009, Waghacha Pani and around, Coll: P.D.Rane; 1 male, 8.iv.2009, Bhagwati River and around, Coll: P.D.Rane.

*Distribution*: India: Assam, Bihar, Chandigarh, Madhya Pradesh, Maharashtra (Lone, Pune, Khandala, Hingoli, Wardha, Gondhokher, Buldana, Amravati), Rajasthan, South Andaman Islands, West Bengal, Western Ghats and Western Himalayas.

*Elsewhere*: Indonesia, Malaysia, Nepal, Sri Lanka and Thailand.

Family : PROTONEURIDAE

Subfamily : DISPARONEURINAE

Genus : *Disparoneura* Selys, 1860

11. *Disparoneura quadrimaculata* (Rambur) 1842

1842. *Argia quadrimaculata*, Ramb. *Ins. Neurop.* : 255.

1859. *Disparoneura quadrimaculata*, Selys, *Bull. Acad. Belg.*, (2) x, 446.

1931. *Chloroneura quadrimaculata*, Fraser, *Fauna Brit. India. Odon.*, 1 : 246-248.

1995. *Disparoneura quadrimaculata*, Prasad & Varshney. *Oriental Ins.*, 29: 494.

*Material examined* : 1 male, 5.iv.2009, Waghacha Pani and around, Coll: P.D.Rane; 1 female, 8.iv.2009, Bhagwati River and around, Coll: P.D.Rane.

*Distribution* : India: Central India, Delhi, Maharashtra, Uttar Pradesh and Western Ghats.

*Remarks* : Found in submontane areas. Mostly recorded up to 1, 500 elevation.

Genus: *Prodasineura* Cowley, 1934

12. *Prodasineura verticalis* Selys, 1860

1860. *Alloneura verticalis* Selys, *Bull. Acad. Belg.* (2) Vol. x, p. 453.

1890. *Disparoneura verticalis* Kirby, *Cat. Odon.* p. 134.

1907. *Disparoneura verticalis* Laid., *Fasc. Malay. (Odon.) pt. ii*, p. 14.

*Material examined* : 2 males, 8.iv.2009, Bhagwati River and around, Coll: P.D.Rane.

*Distribution* : India: Western Ghats: Maharashtra Tamil Nadu, Karnataka, Kerala.

*Elsewhere* : Borneo, Myanmar.

*Remarks* : Recorded for the first time from Maharashtra.

Suborder : ANISOPTERA

Superfamily : LIBELLULOIDEA

Family : LIBELLULIDAE

Subfamily : SYMPETRINAE

Genus: *Brachythemis* Brauer, 1868

13. *Brachythemis contaminata* (Fabricius) 1793

1793. *Libellula contaminata*, Fabricius, *Ent. Syst.*, 2: 382.

1936. *Brachythemis contaminata*, Fraser, *Fauna Brit. India, Odon.*, 3: 365-366.

*Material examined* : 1 female, 12.xii.2007, on the way Surangi gate to Pawaneshwara Temple, Compt. No. 20, Coll: S.G.Patil; 1 female, 20.ii.2010, Sawrai Sada Cave and around, Coll: S.S. Talmale.

*Distribution* : India: Bihar, East Himalaya, Himachal Pradesh, Madhya Pradesh, Maharashtra ( Melghat Tiger Reserve, Amravati, Osmanabad, Pune, Khandala, Khed, Lonavla, Tadoba-Andhari Tiger Reserve), West Bengal.

*Elsewhere* : China, Indonesia, Malaysia, Myanmar, Nepal, Philippines, Singapore, Sri Lanka and Thailand.

*Remarks* : It is common species in India and found in large numbers flying over water surface throughout the year.

Genus : *Diplacodes* Kirby, 1889

14. *Diplacodes trivialis* (Rambur) 1842

1842. *Libellula trivialis*, Rambur, *Ins. Neurop.*; 115.

1936. *Diplacodes trivialis*, Fraser, *Fauna Brit. India, Odon.*, 3: 336-338.

*Material examined* : 1 male, 11.xii.2007, Sambarkund bandhara and around, Coll: S.G.Patil; 1 male, 11.xii.2007, Sawarai Sada tank and around, Coll: S.G.Patil; 1 male, 12.xii.2007, on the way Surangi gate to Pawaneshwara Temple, Compt. No. 20, Coll: S.G.Patil; 1 female, 5.iv.2009, Waghacha Pani and around, Coll: P.D.Rane; 1 female, 7.iv.2009, Ugwaidevi Temple and around, Coll: P.D.Rane.

*Distribution* : Throughout India.

*Elsewhere* : Indonesia, Malaysia, Myanmar, Nepal, Sri Lanka, Thailand.

*Remarks* : Common species found throughout the year near water bodies and also in grassy vegetation and agricultural fields.

Genus : *Neurothemis* Brauer, 1867

15. *Neurothemis intermedia intermedia* (Rambur) 1842

1842. *Libellula intermedia*, Rambur, *Ins. Neurop* : 91.

1936. *Neurothemis intermedia intermedia*, Fraser, *Fauna Brit. India, Odon.*, 3: 357-358.

*Material examined* : 2 females, 21.ii.2010, Naniwale (Hasane) and around, Coll: S.S. Talmale.

*Distribution* : India: Bihar, Himachal Pradesh, Kangra, Madhya Pradesh, Maharashtra (Mumbai, Deccan, Melghat Tiger Reserve, Amravati), Uttar Pradesh (Dehra Dun).

*Elsewhere*: China, Nepal, Myanmar, Sri Lanka, West Malaysia.

*Remarks*: Pattern of marking on wings differentiates this species from all others within the genus.

Subfamily : LIBELLULINAE

Genus : *Orthetrum* Newman, 1833

16. *Orthetrum luzonicum* (Brauer) 1868

1868. *Libellula luzonica* Brauer, *Verh. Zool.-bot. Ges. Wein*, **18**: 169, 732.

1936. *Orthetrum chryostigma luzonicum*, Fraser, *Fauna Brit. India, Odon.*, **3** : 298-300.

1976. *Orthetrum chryostigma luzonicum*, Singh & Prasad, *Rec. zool. Surv. India*, **70**: 21-38.

1995. *Orthetrum luzonicum*, Prasad & Varshney, *Oriental Ins.*, **29**: 409.

*Material examined* : 1 male, 20.ii.2010, Sawarai Sada cave and around, Coll: S.S. Talmale.

*Distribution* : Throughout India.

*Remarks* : Singh & Prasad (1976) noted some color difference than described by Fraser (1936).

17. *Orthetrum pruinorum neglectum* (Rambur) 1842

1842. *Libellula neglecta*, Rambur, *Ins. Neurop.*, : 86.

1936. *Orthetrum pruinorum neglectum*, Fraser, *Fauna Brit. India, Odon.*, **3** : 311-313.

*Material examined* : 1 male, 10.xii.2007, on the way to Dajipur to Hasane, Coll: S.G.Patil.

*Distribution* : India: Bihar, Himachal Pradesh, Maharashtra, Uttar Pradesh, Uttaranchal.

*Elsewhere* : Hong Kong, Nepal, Myanmar, Malaya, Sri Lanka, Thailand.

*Remarks* : Breeds in small tanks; also recorded from altitude of 7,250 from Ooty, Nilgiris. Variation in nodal index is recorded.

18. *Orthetrum sabina sabina* (Drury) 1770

1770. *Libellula sabina*, Drury, *III. Exot. Int.*, **1**: 114.

1936. *Orthetrum sabina*, Fraser, *Fauna Brit. India, Odon.*, **3** : 300-302.

1995. *Orthetrum sabina sabina*, Prasad and Varshney, *Oriental Ins.*, **29**: 409.

*Material examined* : 1 male, 3.iii.2009, Naniwale pond near Kalainwadi dam, Coll: A.S.Mahabal.

*Distribution* : India: Bihar, Himachal Pradesh, Maharashtra (Melghat Tiger Reserve, Amravati, Tadoba-Andhari Tiger Reserve, Chandrapur), Uttar Pradesh, Uttaranchal.

*Elsewhere* : Australia, Egypt, Iran, Iraq, Myanmar, Nepal, Sri Lanka, Thailand.

Subfamily : PALPOPLEURINAE

Genus : *Palpopleura* Rambur, 1842

19. ***Palpopleura sexmaculata sexmaculata*** (Fabricius) 1787

1787. *Libellula sexmaculata* Fabricius, *Mant. Ins.* 1: 338.

1936. *Palpopleura sexmaculata sexmaculata*, Fraser, *Fauna Brit. India. Odon.*, 3 :318-320.

*Material examined* : 1 male, 21.ii.2010, Naniwale (Hasane) and around, Coll: S.S. Talmale.

*Distribution* : India: Arunachal Pradesh, Assam, Manipur, Maharashtra, Mizoram, Nagaland, Sikkim, Tripura, Uttar Pradesh, Southern India( Kodai kanal, Palni, Nilgiris, Annaimalai, Cochin, Coorg),Tamil Nadu, West Bengal.

*Elsewhere* : Afghanistan, China, Hong Kong, Laos, Malaysia, Nepal, Sri Lanka, Thailand, Vietnam.

Subfamily : TRAMEINAE

Genus : ***Pantala*** Hagen, 1861

20. ***Pantala flavescens*** (Fabricius) 1798

1798. *Libellula flavescens*, Fabricius, *Ent. Syst. Suppl.*, 285.

1936. *Pantala flavescens*, Fraser, *Fauna Brit. India, Odon.*, 3: 414-416.

*Material examined* : 1 male, 4.iii.2009, Sambarkund, Coll: A.S.Mahabal; 1 male, 3.iv.2009, Sambarkund and around, Coll: P.D.Rane.

*Distribution* : Circumtropical and subtropical in distribution; throughout India.

*Elsewhere* : China, Indonesia, Malaysia, Morocco, Myanmar, Sri Lanka, and Thailand.

*Remarks* : Common species, breeds in marshes and weedy tanks. Large number of specimens emerges out and takes to swarming from September to November/December.

Subfamily : TRITHEMISTINAE

Genus : ***Trithemis*** Brauer, 1868

21. ***Trithemis aurora*** (Burmeister) 1839

1839. *Libellula aurora* Burmeister, *Handb Ent.* 2: 859.

1936. *Trithemis aurora*, Fraser, *Fauna Brit. India, Odon.*, 3: 383-385.

*Material examined* : 2 females, 11.xii.2007, Sawarai Sada tank and around, compt. no. 46, Coll: S.G.Patil; 1 male, 19.i.2008, Waghacha Pani, Coll: S.G.Patil; 1 male, 20.i.2008, Sawarai Sada tank, Coll: P.P.Kulkarni; 1 male, 3.iii.2009, Naniwale pond near Kalainwadi dam, Coll: A.S.Mahabal; 2 males, 22.ii.2010, Waghacha Pani and around, Coll: S.S. Talmale.

*Distribution* : Throughout India.

*Elsewhere* : Indonesia, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka.

*Remarks* : It is a common species found near streams.

22. ***Trithemis festiva*** (Rambur) 1842

1842. *Libellula festiva*, Rambur, *Ins. Neurop*, 92

1936. *Trithemis festiva*, Fraser, *Fauna Brit. India, Odon.*, 3: 387-389.

*Material examined* :1 male, 19.i.2008, Waghacha Pani, Coll: S.G.Patil; 1 male, 20.ii.2010, Sawarai Sada cave and around, Coll: S.S. Talmale; 2 males, 21.ii.2010, Naniwale (Hasane) and around, Coll: S.S. Talmale.

*Distribution* : India: Assam, Bihar, Himachal Pradesh, Maharashtra (Khed, Pune, Matheran, Poladpur, Lingmal Falls, Mahabaleshwar, Bordharan, Wardha, Rajpur, Buldhana, Amaravati), Uttar Pradesh, West Bengal.

*Elsewhere* : Indonesia, Nepal, Myanmar, Philippines, Singapore, West Malaysia.

Superfamily : AESHNOIDEA

Family : AESHNIDAE

Subfamily : AESHNINAE

Genus : *Gynacantha* Rambur, 1842

### 23. *Gynacantha bayadera* Selys, 1891

1851. *Gynacantha bayadera*, Selys, *Ann. Mus. Civ. Stor (x) Nat. Giacomo Doria, Genova*, 30: 47.

1925. *Gynacantha lyttoni*, Fraser, *J Darjeeling Nat. Hist. Soc.*, 9: 31- 33.

1995. *Gynacantha bayadera*, Prasad & Varshney, *Oriental Ins.*, 29: 404.

*Material examined* : 1 female, 6.iv.2009, Pawaneshwar Temple and around, Coll: P.D.Rane.

*Distribution* : India: Karnataka, Maharashtra, Meghalaya, Orissa, Sikkim, West Bengal.

*Elsewhere* : Indochina, Myanmar, Malaysia.

### SUMMARY

Faunistic Survey of Radhanagari Wildlife Sanctuary, District Kolhapur was undertaken by the Zoological Survey of India, Western Regional Station, Pune. During this survey altogether 68 adult Odonates were collected and studied which comprise of 23 species in 17 genera, 7 families and 2 suborders. The family Libellulidae dominated the Odonata fauna of the National Park with 7 genera and 11 species.

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