

## AN ACCOUNT OF THE ODONATA OF MAHARASHTRA STATE, INDIA

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### INTRODUCTION

Order Odonata includes both damsel and dragonflies. Its larvae are aquatic and adults are winged once. Most of the Odonata species are found close to water bodies. Recently Prasad and Varshney (1995) have reported a total of 499 species of Odonata from India. The present paper reports the Odonata of Maharashtra. This study is based on the material present in the National Zoological Collections of the Zoological Survey of India, Calcutta and Pune. Earlier works dealing with Odonata of Maharashtra include Laidlaw (1917, 1919 and 1920), Fraser (1920, 1921, 1924, 1933, 1934 and 1936), Bhasin (1953), Mitra (1986) and Kulkarni and Prasad (In Press).

The present paper reports 46 species and subspecies, belonging to 27 genera under 8 families. The following 10 species/subspecies are reported for the first time here from the Maharashtra State :

1. *Agriocnemis femina* (Brauer)
2. *A. splendidissima* Laidlaw
3. *Lestes elatus* Hagen
4. *Libellago lineata lineata* (Burm.)
5. *Cyclogomphus wilkinsi* Fraser
6. *Cratilla lineata calverti* Foerster
7. *Orthetrum anceps* (Schn.)
8. *Diplacodes lefebvrei* (Rambur)
9. *Tramea limbata similata* (Rambur)
10. *T. virginia* (Rambur)

Taking other earlier reports into account, a total of 83 species and subspecies are thus known from the Maharashtra State. These are listed in an Appendix at the end of paper.

## SYSTEMATIC ACCOUNT

Order : ODONATA  
 Suborder : ZYGOPTERA  
 Superfamily : COENAGRIONOIDEA  
 Family : COENAGRIONIDAE  
 Genus : *Ceriagrion* Selys

1. *Ceriagrion coromandelianum* (Fabricius)

*Material examined* : 2 ♂♂, Khandala, Pune, 14.12.1980 coll. G. K. Srivastava.

*Distribution* :

*Present record* : Maharashtra, Pune (Khandala).

*Earlier record* : Throughout India, China, Malaysia, Myanmar, Nepal, Pakistan and Sri Lanka.

Genus : *Pseudagrion* Selys

2. *Pseudagrion decorum* (Rambur)

*Material examined* : 1 ♂, 3 ♀♀, Khanota Village, Indapur, Pune, 5.9.1989, coll. R. M. Sharma.

*Distribution* :

*Present record* : Maharashtra ; Pune (Khanota).

*Earlier record* : Throughout continental India, Myanmar, Nepal and Sri Lanka.

3. *Pseudagrion hypermelas* Selys

*Material examined* : 1 ♂, 1 ♀, Bordharan, Wardha, 3.1.1982, coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra, Wardha (Bordharan).

*Earlier record* : India (Bihar, Gujarat, Madhya Pradesh, Maharashtra, Punjab, West Bengal and Western Ghats).

#### 4. *Pseudagrion rubriceps rubriceps* Selys

*Material examined* : 1 ♀, Noshrapur Village, Pune, 18.11.1965, coll. R. N. Chopra ; 3 ♂♂, Pirangut, Pune, 5.8.1966, coll. R. N. Chopra and 2 ♀♀, Bordharan, Wardha, 2.1.1982, coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra : Pune (Noshrapur and Pirangut) and Wardha (Bordharan).

*Earlier record* : Throughout India, Formosa, Indo-China, Malaysia, Myanmar, Nepal and Taiwan.

#### Genus : *Aciagrion* Selys

#### 5. *Aciagrion occidentale* Laidlaw

*Material examined* : 2 ♂♂, Saha Village, Pune, 27.8.1988. coll. P. P. Kulkarni.

*Distribution* :

*Present record* : Maharashtra, Pune (Saha Village).

*Earlier record* : South India and Sri Lanka.

#### Genus : *Ischnura* Charp.

#### 6. *Ischnura aurora aurora* (Brauer)

*Material examined* : 1 ♂, Khed, Pune, 12. 12. 1980, coll. G. K. Srivastava ; 2 ♂♂, 1 ♀, Warwnad, Buldana, 7. 1. 1982, coll. A. K. Sanyal ; 1 ♀♀ Gondhonkher, Buldana, 10.1. 1982, coll. A. K. Sanyal and 6 ♂♂, 1 ♀♀, Harsul, Aurangabad, 12. 1. 1982. coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra, Pune (Khed), Buldana (Gondhonkher and Warwand) and Aurangabad (Harsul).

**Earlier record :** Throughout India, Australia, Indonesia, Malaysia, Myanmar, Nepal, New Guinea, Papua, Philippines, Sri Lanka and Sondaic Archipelago.

### 7. *Ischnura senegalensis* (Rambur)

**Material examined :** 1 ♂, 1 ♀, Lone near Mula Mutha River, Pune, 13.12.1980, coll. G. K. Srivastava.

**Distribution :**

**Present record :** Maharashtra, Pune (Lone).

**Earlier record :** Throughout India, Africa, Indonesia, Japan, Malaysia, Myanmar, Philippines and Sri Lanka.

**Genus :** *Agriocnemis* Selys

### 8. *Agriocnemis femina* (Brauer)

**Material examined :** 1 ♂, Shivajinagar, Pune, 14. 5. 1962, coll. B. K. Haldar.

**Distribution :**

**Present record :** Maharashtra, Pune (Shivajinagar).

**Earlier record :** India (Assam, West Bengal and South Andaman Islands), Annam, China, Indonesia Lombok, Myanmar, North Celebes, Philippines, Singapore, and Sri Lanka.

**Remarks :** It is recorded for the first time from Maharashtra,

### 9. *Agriocnemis pygmaea* (Rambur)

**Material examined :** 1 ♀, Colaba, Poddipur, 4. 12. 1980, coll. G. K. Srivastava ; 1 ♂, 2 ♀ ♀, Khed, Pune, 12. 12. 1980, coll. G. K. Srivastava, 5 ♂ ♂, 2 ♀ ♀, Thane, Kalyan, 4. 1. 1981, coll. G. K. Srivastava ; 3 ♂ ♂, 2 ♀ ♀, Thane, Kalyan, 5. 1. 1981, coll. G. K. Srivastava ; 1 ♂, Warwad, Buldana, 7. 1. 1982, coll. A. K. Sanyal ; 1 ♂, 2 ♀ ♀, Gondhonker, Buldana, 10. 1. 1982, coll. A. K. Sanyal ; 1 ♂, 1 ♀, Harsul, Aurangabad, 12. 1. 1982, coll. A. K. Sanyal and 2 ♂ ♂, Ellora, Aurangabad, 14. 1. 1982, coll. A. K. Sanyal.

**Distribution :**

**Present record :** Maharashtra : Kalyan (Thane) Aurangabad (Ellora and Harsul), Buldana (Gondhonkher and Harsul). Warwnad, Colaba (Polddipur) and Pune (Khed).

**Earlier record :** Throughout India, Afghanistan, Australia, Bangladesh, China, Hongkong, Indonesia, Japan, Kampuchea, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Papua, Seychelles, Singapore, Sri Lanka, Taiwan and Thailand.

**10. Agriocnemis splendidissima Laidlaw**

**Material examined :** 1 ♂, 1 ♀, Thane, Kalyan, 4. 1. 1981, coll. G. K. Srivastava.

**Distribution :**

**Present record :** Maharashtra ; Kalyan (Thane).

**Earlier record :** India (Madhya Pradesh, South India and West Bengal).

**Remarks :** It is recorded for the first time from Maharashtra.

**Family :** PLATYCNEMIDIDAE

**Genus :** Copera Kirby

**11. Copera marginipes (Rambur)**

**Material examined :** 2 ♂♂, 2 ♀♀, Lone, Pune, 13. 12. 1980, coll. G. K. Srivastava ; 3 ♀♀, Khandala, Pune, 14. 12. 1980, coll. G. K. Srivastava ; 3 ♂♂, Hinghui, Wardha, 4. 1. 1982, coll. A. K. Sanyal ; 2 ♂♂, 1 ♀, Wanravira, Wardha, 5. 1. 1982, coll. A. K. Sanyal and 3 ♂♂, Gondhonkher, Buldana, 10. 1. 1982, coll. A. K. Sanyal.

**Distribution :**

**Present record :** Maharashtra ; Buldana (Gondhonkher), Pune, (Khandala and Lone) and Wardha (Hinghui and Wanravira).

**Earlier record :** India (Assam, Bihar, Chandigarh, Madhya Pradesh, Maharashtra, Rajasthan, South Andaman Islands, West Bengal, Western Ghats and Western Himalaya), Indonesia, Malaysia, Myanmar, Nepal, Sri Lanka and Thailand.

Family : PROTONEURIDAE

Genus : Disparoneura Selys

12. *Disparoneura quadrimaculata* (Rambur)

*Material examined* : 1♂, Ambe Nali near Pratapgarh, Satara, 29. 5. 1976, coll. B. K. Tikader.

*Distribution* :

*Present record* : Maharashtra : Satara (Ambe Nali).

*Earlier record* : India (Central India, Delhi, Uttar Pradesh and Western Ghats).

Superfamily : LESTOIDEA

Family : LESTIDAE

Genus : Lestes Leach

13. *Lestes elatus* Hagen

*Material examined* : 1♂, Kaiga near Malhapur, 4. 1. 1972, coll. S. K. Gupta.

*Distribution* :

*Present record* : Maharashtra : Malhapur (Kaiga).

*Earlier record* : India (Karnataka, Orissa and Peninsular India) and Sri Lanka.

14. *Lestes viridulus* Rambur

*Material examined* : 2♀♀, Chinchani, Satara, 14. 1. 1972, coll. K. S. Pradhan.

*Distribution* :

*Present record* : Maharashtra : Satara (Chinchani)

*Earlier record* : Throughout India and Thailand.

Superfamily : CALOPTERYGOIDEA

Family : CHLOROCYPHIDAE

Genus : *Libellago* Selys

**15. *Libellago lineata lineata* (Burmeister)**

*Material examined* : 2♂♂, Lone, Mula Mutha river bank, Pune, 13.12.1980, Coll. G. K. Srivastava ; 2♂♂, Hinghui, Wardha, 4.11.1982, Coll. A. K. Sanyal and 4♂♂, Wanravira, Wardha, 5.1.1982, coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra, Pune (Lone), Wardha (Hinghui and Wanravira).

*Earlier record* : India (Andaman Islands, Assam, Meghalaya, North India and West Bengal), Indonesia, Penang, Thailand and throughout Sundaic Archipelago.

*Remarks* : It is recorded for the first time from Maharashtra.

Suborder : ANISOPTERA

Superfamily : AESHNOIDEA

Family : COMPHIDAE

Genus : *Cyclogomphus* Selys

**16. *Cyclogomphus wilkinsi* Fraser**

*Material examined* : 1♂, Moshi, Pune, 6.10.1966, coll. B. S. Lamba.

*Distribution* :

*Present record* : Maharashtra : Pune (Moshi).

*Earlier record* : India (Karnataka).

*Remarks* : It is recorded for the first time from Maharashtra.

**Genus : Macrogomphus Selys****17. Macrogomphus annulatus (Selys)**

*Material examined* : 1 ♂, University Campus, Pune, 14.8.1964, coll. B. K. Haldar and 1 ♀ University Campus, Pune, 18.8.1964, coll. B. K. Haldar.

*Distribution* :

*Present record* : Maharashtra : Pune (University Campus).

*Earlier record* : India (Maharashtra).

**Genus : Paragomphus Cowley****18. Paragomphus lineatus (Selys)**

*Material examined* : 1 ♂, Kalyan River, Mahabaleshwar, Satara, 19.1.1965, coll. B. S. Lamba and 1 ♂, 2 ♀ ♀, Moshi, Pune, 6.10.1966, coll. B. S. Lamba.

*Distribution* :

*Present record* : Maharashtra : Pune (Moshi) and Satara (Kalyan River).

*Earlier record* : India (Bihar, Haryana, Himachal Pradesh, Maharashtra, Meghalaya, Orissa, Sikkim, South India, Uttar Pradesh, and West Bengal), Myanmar and Nepal.

**Genus : Ictinogomphus Cowley****19. Ictinogomphus rapax (Rambur)**

*Material examined* : 1 ♂, Saha Village, Indapur, Pune, 22.8.1988, coll. P. P. Kulkarni, 1 ♂, Khanota Village, Indapur, Pune, 5.9.1989, coll. R. M. Sharma and 1 ♂, Old Bhigwan, Indapur, Pune, 22.9.90, coll. R. M. Sharma.

*Distribution* :

*Present record* : Maharashtra : Pune, (Old Bhigwan, Khanota and Saha Village, Indapur).

*Earlier record* : Throughout India, Malaysia, Myanmar, Nepal and Sri Lanka.



Family : AESHNIDAE

Genus : *Anax* Leach

20. *Anax guttatus* (Burmeister)

*Material examined* : 1 ♀ University Campus Pune, 3.7.1975, coll. C. B. Prasad.

*Distribution* :

*Present record* : Maharashtra : Pune (University Campus).

*Earlier record* : Throughout India, Indonesia, Malaysia, Micronesia, Myanmar, Nepal, North Australia, Samoa Island, Seychelles, Sri Lanka and Taiwan.

21. *Anax immaculifrons* Rambur

*Material examined* : 1 ♂, Sinha Gad fort, Pune, 3.6.1965, coll. B. K. Tikader and 1 ♀, old Bhigwan Village, Indapur, Pune, 22.9.1990, coll. M. S. Pradhan.

*Distribution* :

*Present record* : Maharashtra : Pune (Bhigwan Village and Sinha Gad).

*Earlier record* : India (Bihar, Chandigarh, Eastern Ghats, Maharashtra, Sikkim, West Bengal and Western Himalaya), British Isles across to Europe, Central Asia and Southwards to Central Africa and North Morocco,

Family : LIBELLULIDAE

Genus : *Cratilla* Kirby

22. *Cratilla lineata calverti* Foerster

*Material examined* : 1 ♀, Moshi, Nasik, 26.9.1973, coll. M. B. Rao.

*Distribution* :

*Present record* : Maharashtra : Nasik (Moshi).

*Earlier record* : India (Orissa, Uttar Pradesh and Western Ghats), Indonesia, Malaysia, Myanmar, New Guinea, Philippines, Sri Lanka and Sundaic Archipelago,

*Remarks* : It is recorded for the first time from Maharashtra,

Genus : **Orthetrum Newman**

**23. Orthetrum anceps (Schneider)**

*Material examined* : 1 ♂, Lonewala, Pune, 16.10.1965, coll. B. S. Lamba and 1 ♂, Vadgaon Village, Pune, 11.5.66, coll. B. S. Lamba.

*Distribution* :

*Present record* : Maharashtra : Pune (Lonewala and Vadgaon Village).

*Earlier record* : India (Himachal Pradesh), Asia Minor, North African Coast, Pakistan and Persia.

*Remarks* : It is recorded for the first time from Maharashtra.

**24. Orthetrum glaucum (Brauer)**

*Material examined* : 1 ♂, Lonewala, Pune, 9.11.1963, coll. B. K. Tikader.

*Distribution* ;

*Present record* : Maharashtra : Pune (Lonewala).

*Earlier record* : Throughout India, Indonesia, Malaya Archipelago Nepal, Papua, Philippines, Sri Lanka and South China.

**25. Orthetrum pruinatum neglectum (Rambur)**

*Material examined* : 1 ♂, Lone near Mula Mutha River bank, Pune, 13.12.1980, coll. G. K. Srivastava ; 1 ♂, 1 ♀ Matheran, Colaba, 17.12.1980, coll. G. K. Srivastava ; 1 ♀, Ambenali, Satara, 21.12.1980. coll. G. K. Srivastava, and 1 ♂, Hinghui, Wardha, 4.1.1982, coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra : Colaba (Matheran), Satara (Ambenali), Pune (Lone) and Wardha (Hinghui).

*Earlier record* : Throughout India, Afghanistan, Bangladesh, China, Hongkong, Indonesia, Japan, Laos, Malaysia, Myanmar, Nepal, Singapore, Sri Lanka, Taiwan, Thailand and Vietnam,

26. *Orthetrum sabina sabina* (Drury)

*Material examined* : 1 ♂, Khed, Pune, 12.12.1980, coll. G. K. Srivastava ; 1 ♂, Lone near Mula Mutha river, Pune, 13.12.1980, coll. G. K. Srivastava and 1 ♂, Osmanabad, 19.1.1982, coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra : Osmanabad and Pune (Khed and Lone).

*Earlier record* : Throughout India, Afghanistan, Algeria, Angola, Australia, China, Cyprus, Egypt, Honkong, Indonesia, Iraq, Iran, Israel, Japan, Laos, Malaysia, Micronesia, Myanmar, Nepal, Oman, Papua, Philippines, New Guinea, Qatar, Saudi Arabia, Samoa Islands, Sudan, Singapore, Somalia, Sri Lanka, Taiwan, Thailand, Tunisia, Turkey and Vietnam.

27. *Orthetrum taeniolatum* (Schneider)

*Material examined* : 1 ♂, Khed, Pune, 12.12.1980, coll. G. K. Srivastava, 1 ♂, Lone near Mula Mutha river, Pune, 13.12.1990, coll. G. K. Srivastava ; 1 ♂, Lingamall Falls, Mahabaleshwar, 23.12.1980, coll. G. K. Srivastava ; 1 ♂, Hinghui, Wardha, 4.1.1982, coll. A. K. Sanyal and 1 ♂, Upla Osmanabad, 19.1.1982, coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra : Mahabaleswar (Lingamall falls), Osmanabad (Upla), Pune (Khed and Lone) and Wardha (Hinghui).

*Earlier record* : Throughout India, Nepal and Countries bordering Mediterranean Sea.

Genus : *Potamarcha* Karsch

28. *Potamarcha congener* (Rambur)

*Material examined* : 2 ♀♀, Bhokhodhar, Niphod, Nasik, 3.10.1973, coll. M. B. Rao.

*Distribution* :

*Present record* : Maharashtra : Nasik (Bhokhodhar).

*Earlier record* : India (Bihar, Himachal Pradesh, Kerala, Madhya Pradesh,

Maharashtra, Manipur, Meghalaya, Nagaland, Orissa, South Andaman Islands, Tamil Nadu, Tripura, Uttar Pradesh, West Bengal and Western Ghats), Australia, Indonesia, Malaysia, Myanmar, Nepal, Papua, Philippines, Sri Lanka and Taiwan.

Genus : **Acisoma Rambur**

29. **Acisoma panorpoides panorpoides Rambur**

*Material examined* : 1 ♂, Khandala, Pune, 24. 1. 1966, coll. M. S. Mani.

*Distribution* :

*Present record* : Maharashtra : Pune (Khandala).

*Earlier record* : India (Arunachal Pradesh, Assam, Bihar, Chandigarh, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Orissa, Punjab, Rajasthan, South India, Uttar Pradesh and West Bengal), China, Indonesia, Japan, Malyan Archipelago, Myanmar, Nepal, Philippines, Singapore, Sri Lanka and Thailand.

Genus : **Brachythemis Brauer**

30. **Brachythemis contaminata (Fabricius)**

*Material examined* : 1 ♀, Khed, Pune, 12. 12. 1980, coll. G. K. Srivastava ; 2 ♂ ♂, 1 ♀, Lone near Mula Mutha River, Pune, 12. 12. 1980, coll. G. K. Srivastava, 1 ♀, Khandala, Pune, 14. 12. 1980, coll. G. K. Srivastava and 1 ♀, Osmanabad, 17. 1. 1983, coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra : Osmanabad and Pune (Khandala, Khed and Lone).

*Earlier record* : Throughout India, China, Indonesia, Malaysia, Myanmar, Nepal, Philippines, Singapore, Sri Lanka, Taiwan and Thailand.

Genus : **Bradinopyga Kirby**

31. **Bradinopyga geminata (Rambur)**

*Material examined* : 1 ♂, Ambenali, Satara, 21. 12. 1980, coll. G. K. Srivastava.

*Distribution :*

*Present record :* Maharashtra ; Satara (Ambenali).

*Earlier record :* India (Bihar, Central India, Haryana, Maharashtra, Orissa, Peninsular India, Rajasthan, Uttar Pradesh and West Bengal), Myanmar and Sri Lanka.

**Genus : Crocothemis Brauer**

**32. Crocothemis Servilia Servilia (Drury)**

*Material examined :* 3 ♂♂, Khed, Pune, 12. 12. 1980, coll. G. K. Srivastava ; 1 ♂, Lone, Mulla Mutha River, Pune 13. 12. 1980, coll. G. K. Srivastava, 2 ♀♀, Matheran, Colaba, 17. 12. 1980, coll. G. K. Srivastava ; 1 ♂, Lingamall falls, Mahabaleshwar, Satara, 23. 12. 1980, coll. G. K. Srivastava ; 1 ♂, Gondhonkher, Buldana, 10. 1. 1982, coll. A. K. Sanyal and 1 ♀, Upla, Osmanabad, 18. 1. 1982. coll. A. K. Sanyal.

*Distribution :*

*Present record :* Maharashtra, : Buldana (Gondhonkher), Colaba (Matheran), Osmanabad (Upla), Pune (Khed and Lone) and Satara (Lingamall falls).

*Earlier record :* Throughout India, Australia, China, Iraq, Indonesia, Japan, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka and Sundaic Archipelago.

**Genus : Diplacodes Kirby**

**33. Diplacodes lefebvri (Rambur)**

*Material examined :* 1 ♀, Hinghui, Wardha, 4. 1. 1982, coll. A. K. Sanyal.

*Distribution :*

*Present record :* Maharashtra : Wardha (Hinghui).

*Earlier record :* India (Chandigarh, Rajasthan and South India), Africa and Mesopotamia.

*Remarks :* It is recorded for the first time from Maharashtra.

### 34. *Diplacodes trivialis* (Rambur)

*Material examined* : 1 ♀, Lone, Pune, 13. 12. 1980, coll. G. K. Srivastava, 4♂♂, Matheran, Colaba, 17. 12. 1980, coll. G. K. Srivastava ; 1♂, Old Mahabaleshwar, Satara, 20. 12. 1980, coll. G. K. Srivastava ; 2♂♂, Kalyan. Thane, 4. 1. 1981, coll. G. K. Srivastava ; 1♂, Thane, 5. 1. 1981, coll. G. K. Srivastava ; 1♂, Harsul, Aurangabad, 12. 1. 1982, coll. A. K. Sanyal ; 1♀ Chharini, Aurangabad, 12. 1. 1982, coll. A. K. Sanyal ; 3♂♂, 1♀, Osmanabad, 17. 1. 1982, coll. A. K. Sanyal and 1♀, Ellora, Aurangabad, 14. 1. 1982, coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra : Aurangabad (Chharini, Ellora and Harsul), Colaba (Matheran), Pune (Lone), Satara (Old Mahabaleshwar) and Thane (Kalyan).

*Earlier record* : Throughout India, Australia, China, Fiji, Hongkong, Indonesia, Japan, Laos, Malaysia, Myanmar, Nepal, Papua, Philippines, New Guinea, Solomon Islands, Seychelis, Sri Lanka, Taiwan, Thailand and Vietnam.

### Genus : *Neurothemis* Brauer

### 35. *Neurothemis fulvia* (Drury)

*Material examined* : 1♂, Law college compound, Pune, 5.10.1961, coll. K. A. Kashid and 1♂, Matheran, Colaba, 17.12.1980, coll. G. K. Srivastava.

*Distribution* :

*Present record* : Maharashtra : Colaba (Matheran) and Pune (Law college compound).

*Earlier record* : Throughout India, Australia, China, Hongkong, Indonesia, Iraq, Kampuchia, Laos, Malaysia, Myanmar, Nepal, Philippines, Seychelles, Sri Lanka, Taiwan and Thailand.

### 36. *Neurothemis intermedia intermedia* (Rambur)

*Material examined* : 1♂, Pune, 5.4.1962, coll. R. N. Chopra.

*Distribution* :

*Present record* : Maharashtra : Pune.

*Earlier record* : Throughout India, Bangladesh, China, Malaysia, Myanmar, Nepal, and Sri Lanka.

### 37. *Neurothemis tullia tullia* (Drury)

*Material examined* : 4 ♂ ♂ Kharagvasala, Pune, 17.11.1974, coll. C.B. Prasad.

*Distribution* :

*Present record* : Maharashtra : Pune (Kharagvasala).

*Earlier record* : India (Bihar, Himachal Pradesh, Orissa, South India, Uttar Pradesh and West Bengal), China, Thailand and West Malaysia.

### Genus : *Trithemis* Brauer

### 38. *Trithemis aurora* (Burmeister)

*Material examined* : 2 ♀ ♀, Khed, Pune, 12.12.1980, coll. G. K. Srivastava ; 1 ♂, Lone, Pune, 13.12.1980, coll. G. K. Srivastava ; 1 ♂, 1 ♀, Ambenali, Satara, 21.12.1980, coll. G. K. Srivastava ; 3 ♀ ♀, Polddipur, Colaba, 21.12.1980, coll. G. K. Srivastava ; 2 ♀ ♀, Bardharan, Wardha, 2.1.1982, coll. A. K. Sanyal ; 2 ♀ ♀, Wanravira, Wardha, 5.1.1982, coll. A. K. Sanyal ; 2 ♂ ♂, 4 ♀ ♀ Rajpur, Buldana, 8.1.1982, coll. A. K. Sanyal and 1 ♂, Upla, Osmanabad, 18.1.1982, coll. A. K. Sanyal.

*Distribution* :

*Present record* : Maharashtra : Buldana (Rajpur), Colaba (Polddipur), Osmanabad, (Upla), Pune (Khed and Lone), Satara (Ambenali) and Wardha (Bordharan and Wanravira).

*Earlier record* : Throughout India, China, Hongkong, Indonesia, Japan, Kampuchea, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Thailand and Vietnam.

### 39. *Trithemis festiva* (Rambur)

*Material examined* : 1 ♂, Khed, Pune, 12.12.1980, coll. G. K. Srivastava ; 2 ♂ ♂, Khandala, Pune, 14.12.1980, coll. G. K. Srivastava ; 3 ♂ ♂, Matheran, Colaba, 17.12.1980, coll. G. K. Srivastava ; 1 ♂, 1 ♀, Polddipur, Colaba, 21.12.1980, coll. G. K. Srivastava ; 3 ♂ ♂. Lingamall falls, Mahabaleshwar, Satara, 23.12.1980, coll. G. K. Srivastava ; 2 ♂ ♂,

Bordharan, Wardha, 2.1.1982, coll. A. K. Sanyal; 1♂, 1♀, Wanravira, Wardha, 5.1.1982, coll. A. K. Sanyal; 1♂, Rajpur, Buldana, 8.1.1982, coll. A. K. Sanyal and 1♂, Gondhonkher, Buldana, 10.1.1982, coll. A. K. Sanyal.

*Distribution :*

*Present record :* Maharashtra, Buldana (Gondhonkher and Rajpur), Colaba (Matheran and Polddipur), Pune (Khandala and Khed), Satara (Lingamall falls) and Wardha (Bordharan and Wanravira).

*Earlier record :* Throughout India, Afghanistan, China, Cyprus, Hongkong, Indonesia, Irag, Kampnchia, Laos, Malaysia, Myanmar, Nepal, Papua, Philippines, New Guinea, Singapore, Sri Lanka, Taiwan, Thailand, Turkey and Vietnam.

40. *Trithemis kirbyi kirbyi* Selys

*Material examined :* 1♂, Pune, 18.11.1961, coll. R. N. Chopra.

*Present record :* Maharashtra, Pune.

*Earlier record :* India (Himachal Pradesh, Maharashtra, South India and Uttar Pradesh) and Sri Lanka.

41. *Trithemis Pallidinerivis* (Kirby)

*Material examined :* 1♂, Sambhaji Park, Pune, 13.5.1961, coll. K. A. Kashid and 1♀, Pune University Campus, Pune, 21.8.1961, Coll. B. K. Haldar.

*Distribution :*

*Present record :* Maharashtra : Pune (Shambhaji Park, Pune and Puna University Campus).

*Earlier record :* Throught India, Malaysia, Myanmar, Nepal, Philippines, Singapore, Sri Lanka, Taiwan and Thailand.

Genus : *Rhyothemis* Hagen

42. *Rhyothemis variegata variegata* (Linn.)

*Material examined :* 1♀, Pune, 23. 11. 1960, coll. M. M. Chatterjee and 1♀, Pune, 5. 4. 1962, coll. R. N. Chopra.



*Distribution :*

*Present record :* Maharashtra : Pune.

*Earlier record :* Throughout India, Malaysia, Myanmar, Nepal and Sri Lanka.

**Genus : Pantala Hagen**

**43. Pantala flavescens (Fabricious)**

*Material examined :* 1 ♀, Lane, Mulla Mutha River, Pune, 12. 12. 1980, coll. G. K. Srivastava ; 1 ♀, Khed, Pune, 13. 12. 1980, coll. G. K. Srivastava and 2 ♂ ♂, 1 ♀, Matheran, Colaba, 18. 12. 1980, coll. G. K. Srivastava.

*Distribution :*

*Present record :* Maharashtra : Colaba (Matheran) and Pune (Khed and Lone).

*Earlier record :* Circumtropical and subtropical in distribution : Throughout India, China, Indonesia, Malaysia, Micronesia, Morocco, Myanmar, Sri Lanka and Thailand.

**Genus : Tramea Hagen**

**44. Tramea basilaris burmeisteri Kirby**

*Material examined :* 1 ♂, Khandala, Pune, 14. 12. 1980, coll. G. K. Srivastava.

*Distribution :*

*Present record :* Maharashtra : Pune (Khandala).

*Earlier record :* India (Bihar, Central India, Himachal Pradesh, Kerala, Maharashtra, Meghalaya, Nilgiri Hills, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh), Malaysia and Nepal.

**45. Tramea limbata similata (Rambur)**

*Material examined :* 1 ♂, Kharagvasala, Pune, 18. 9. 1965, coll. R. N. Chopra and 1 ♂, Pune University Campus, Pune, 6. 9. 1967, coll. B. K. Haldar.

*Distribution :*

*Present record :* Maharashtra : Pune (Kharagvasala and Pune University Campus).

*Earlier record* : India (South India), Nepal and Sri Lanka.

*Remarks* : It is recorded for the first time from Maharashtra.

#### 46. *Tramea virginia* (Rambur)

*Material examined* : 2 ♂♂, Matheran, Colaba, 17. 12. 1980, coll. G. K. Srivastava.

*Distribution* :

*Present record* : Maharashtra : Colaba (Matheran).

*Earlier record* : India (Bihar, Himachal Pradesh, Jammu & Kashmir, Tamil Nadu and Uttar Pradesh), China, Indonesia, Micronesia, Myanmar, South Japan, Taiwan and Thailand.

*Remarks* : It is recorded for the first time from Maharashtra.

### APPENDIX

#### A CONSOLIDATED LIST OF THE ODONATA OF MAHARASHTRA

Order : ODONATA

Suborder : ZYGOPTERA

Superfamily : COENAGRIONOIDEA

Family : COENAGRIONIDAE

1. *Ceriagrion Cerinorubellum* (Brauer)
2. *Ceriagrion Coromandelianum* (Fabricius)
3. *Ceriagrion Olivaceum* Laidlaw
4. *Pseudagrion decorum* (Rambur)
5. *Pseudagrion hypermelas* Selys
6. *Pseudagrion rubriceps rubriceps* Selys
7. *Cercion malayanum* (Selys)
8. *Aciagrion hisopa-hisopa* Selys
9. *Aciagrion hisopa Krishna* Fraser
10. *Aciagrion occidentale* Laidlaw

11. *Actagrion pallidum* Selys
12. *Enallagma parvum* Selys
13. *Ischnura senegalensis* (Rambur)
14. *Ischnura aurara aurora* (Brauer)
15. *Agriocnemis femina* (Brauer)
16. *Agriocnemis pieris* Laidlaw
17. *Agriocnemis pygmaea* (Rambur)
18. *Agriocnemis splendidissima* Laidlaw

Family : PLATYCNEMIDIDAE

19. *Copera marginipes* (Rambur)

Family : PLATYSTICTIDAE

20. *Protosticta gravelyi* Laidlaw

Family : PROTONEURIDAE

21. *Disparoneura quadrimaculata* (Rambur)
22. *Elatoneura nigerrima* (Laidlaw)

Superfamily : LESTOIDEA

Family : LESTIDAE

23. *Lestes elatus* Hagen
24. *Lestes umbrinus* Selys
25. *Lestes viridulus* Rambur

Superfamily : CALOPTERYGOIDEA

Family : CALOPTERYGIDAE

26. *Neurobasis chinensis chinensis* (Linn.)

Family : CHLOROCYPHIDAE

27. *Rhinocypha (Heliocypha) bisignata* (Selys)
28. *Libellago lineata indica* (Fraser)
29. *Libellago lineata lineata* (Burmeister)

Suborder : ANISOPTERA

Superfamily : AESHNOIDEA

Family : GOMPHIDAE

30. *Burmagomphus pyramidalis pyramidalis* Laidlaw
31. *Cyclogomphus heterostylus* Selys

32. *Cyclogomphus vesiculosus* Selys
33. *Cyclogomphus wilkinsi* Fraser
34. *Cyclogomphus ypsilon* Selys
35. *Macrogomphus annulatus* (Selys)
36. *Microgomphus torgatus* (Selys)
37. *Microgomphus verticalis* (Selys)
38. *Paragomphus lineatus* (Selys)
39. *Gomphidia t-nigrum* (Selys)
40. *Ictinogomphus rapax* (Rambur)

Family : AESHNIDAE

41. *Anax guttatus* (Burmeister)
42. *Anax immaculifrons* (Rambur)
43. *Hemianax ephippiger* (Burmeister)
44. *Gynacantha bayadera* Selys

Superfamily : LIBELLULOLDEA

Family : CORDULIIDAE

45. *Hemicordulia asiatica* Selys
46. *Epothemia frontalis frontalis* Selys
47. *Macromia flavicincta* Selys

Family : LIBELLULIDAE

48. *Tetrathemis platyptera* Selys
49. *Brachydiplax sobrina* (Rambur)
50. *Cratilla lineata calverti* Foerster
51. *Lathricista asiatica asiatica* (Fobricius)
52. *Orthetrum anceps* (Schneider)
53. *Orthetrum chrysis* (Selys)
54. *Orthetrum glaucum* (Brauer)
55. *Orthetrum luzoulcum* (Brauer)
56. *Orthetrum pruinosum neglectum* (Rambur)
57. *Orthetrum sabina sabina* (Drury)
58. *Orthetrum taeniolatum* (Schneider)

59. *Potamarcha congener* (Rambur)
60. *Acisoma panorpoides panorpoides* (Rambur)
61. *Brachythemis contaminata* (Fabr.)
62. *Paopopleura sexmaculata sexmaculata* (Fabricius)
63. *Bradinopyga geminata* (Rambur)
64. *Crocothemis servilia servilia* (Drury)
65. *Diplacodes lefebvrei* (Rambur)
66. *Diplacodes nubulosa* (Fabricius)
67. *Diplacodes trivialis* (Rambur)
68. *Neurothemis fulvia* (Drury)
69. *Neurothemis intermedia intermedia* (Rambur)
70. *Neurothemis tullia tullia* (Drury)
71. *Trithemis aurora* (Burmeister)
72. *Trithemis festiva* (Rambur)
73. *Trithemis kirbyi kirbyi* (Selys)
74. *Trithemis pallidinervis* (Kirby)
75. *Rhyothemis variegata variegata* (Linn.)
76. *Hydrobasileus croceus* (Brauer)
77. *Pantala flavescens* (Fabricius)
78. *Tramea basilarts burmeisteri* Kirby
79. *Tramea limbata similata* (Rambur)
80. *Tramea virginia* (Rambur)
81. *Tholymis tillarga* (Fabricius)
82. *Zyxomma petiolatum* Rambur
83. *Urothemis signata signata* (Rambur)

#### SUMMARY

A total of 46 species and sub-species of Odonata belonging to 27 genera under 8 families are studied from Maharashtra State, of which 10 are new records for Maharashtra. Notes on the distribution are given under each species and sub-species. An appendix showing a consolidated list of 83 sub-species so far known from Maharashtra is appended.

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