

TAXONOMIC STUDIES OF DRAGONFLIES FROM TAHSIL SIRONCHA

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Abstract :

For present studies dragonflies were collected from various areas of Tahsil Sironcha. Examination and identification of dragonflies revealed the occurrence of eight species among three families; five species of Libellulidae Leach, two species of Gomphidae Rambur, and one species of family Aeshnidae Rambur.

Key words: Taxonomy, dragonflies, Tahsil Sironcha, Libellulidae, Gomphidae Rambur, Aeshnidae Rambur.

Introduction :

Dragonflies are very valuable insects and the knowledge of the fauna is important for decision making about environmental protection and crop management (Rowe, 2003). Odonata have been reported from all continents except Antarctica and are typically concentrated in warmer, tropical habitats (Boyd, 2005). According to Trueman and Rowe (2001), approximately 6500 named species of Odonata have been described so far from all over the world. Yousaf (1972) explored first time the fauna of dragonfly of Pakistan and identified 46 species of dragonflies. After this no comprehensive survey of the country was carried out, only survey of different parts of the country was done resulting into 61 anisoptrous species. The number of Odonata species known from Pakistan (110) is little low with respect to Bangladesh (114), Sri Lanka (116), Nepal (172) and India (499) (Mitra, 2006). Keeping in view the importance of the dragonflies Odonatological survey of Tahsil Sironcha is under taken.

Materials and methods :

Examination and identification of dragonflies was carried out by camera. For habitus images the canon camera was used.

Results :

In present study the dragonflies of Tahsil Sironcha revealed the occurrence of eight species among three families. Five species of Libellulidae Leach, 1815; *Bradinopyga geminate* (Rambur, 1842) Granite Ghost, *Pantala flavescens* (Fabricius 1798) Wandering Glider, *Orthetrum pruinosum* (Burmeister 1839) Crimson-tailed Marsh Hawk, *Diplacodes trivialis* (Rambur, 1842) Ground Skimmer, *Rhyothemis variegata* (Linnaeus, 1763) Common Picture Wing. Two species of Gomphidae Rambur, 1842, *Ictinogomphus rapax* Rambur, 1842, Common Clubtail, *Paragomphus lineatus* (Selys, 1850) Common Oartail. One species of family Aeshnidae Rambur, 1842, *Anax parthenope* (Selys, 1839) Blue tailed Brown Darner.

Taxonomy :

Order: Odonata Fabricius, 1793

Suborder: Anisoptera Selys, 1854

Superfamily: Libelluloidea Leach, 1815

Family: Libellulidae Leach, 1815

Bradinopyga geminata (Rambur, 1842) (Granite Ghost)

Libellula geminate Rambur 1842, Ins. Nevrop.: 90

Identification. A medium sized grayish dragonfly. Dark brown spots on outer margins of forewings and hindwings. Grey thorax and abdomen is sprinkled with grey, black and white stripes.

Pantala flavescens (Fabricius, 1798) (Wandering Glider)

Pantala flavescens Fabricius 1798, Ent. Syst. Suppl.: 285

Identification. A medium sized golden yellow coloured dragonfly. Dark brown band on abdomen slightly starting from base, becomes thicker towards the end. Inner margins of hindwing with golden yellow stripe.

Identification. Medium sized dragonflies with reddish tones of body, inner margin of hindwing with big patch of

dark yellow colour. ***Orthetrum pruinosum*** (Burmeister, 1839) Crimson-tailed Marsh Hawk
Orthetrum pruinosum Burmeister 1839, Handb Ent., Berlin 2, Odonata, 2: 840

Identification. A medium sized with thorax dark brown and abdomen dark reddish. Females are dull ochre in

overall colouration. Eyes grayish blue below and bluish black above. Cerci sharply pointed with row of spots. ***Diplacodes trivialis*** (Rambur, 1842) (Ground Skimmer)

Libellula trivialis Rambur 1842, Ins. Nevrop.: 115

Identification. A small sized, greenish yellow, with black markings. Hindwing with yellow spots at base of the

wing. ***Rhyothemis variegata*** (Linnaeus, 1763) (Common Picture Wing)

Libellula variegata Linnaeus 1763, Amoenitates Acad., 6: 412

Identification. A medium sized dragonfly with metallic green thorax and yellow and brown marked wings with

large conspicuous spots (flutters like a butterfly). Eyes are dark reddish brown from above. Superfamily: Gomphioidea Rambur, 1842 Family: Gomphidae Rambur, 1842

Ictinogomphus rapax Rambur, 1842 (Common Clubtail)

Ictinogomphus rapax Rambur 1842, Ins. Nevrop.: 190

Identification. A small sized black dragonfly with bluish grey and bright yellow markings on thorax and abdomen. Lateral leaf like porch at eighth abdominal segment. ***Paragomphus lineatus*** (Selys, 1850) (Common Oartail)

Gomphus lineatus Selys 1850, Rev. Odon.: 386



Figs. 1-8. 1) *Bradinopyga geminate* (Rambur, 1842), 2) *Pantala flavescens* (Fabricius, 1798), 3) *Orthetrum pruinatum* (Burmeister, 1839), 4) *Diplacodes trivialis* (Rambur, 1842), 5) *Rhyothemis variegata* (Linnaeus, 1763), 6) *Ictinogomphus rapax* Rambur, 1842, 7) *Paragomphus lineatus* (Selys, 1850), 8) *Anax parthenope* (Selys, 1839).



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Identification. A small sized yellow dragonfly with black and brown markings. Males with lateral oar like expansion at eighth and ninth segments.

Superfamily: Aeshnoidea Rambur, 1842

Family: Aeshnidae Rambur, 1842

Anax parthenope (Selys, 1839) (Blue tailed Brown Darner)

Aeschna parthenope Selys 1839, Bull. Acad. Belg. 6(2): 389

Identification. Large sized dragonfly with thorax brown and eyes green. The abdomen greenish brown with blue band at top of the abdomen.

Discussion :

The major collection was made around Sironcha is a Village and Tehsil in Gadchiroli District of Maharashtra. In India, a tehsil is a sub-division of a district that is responsible for the administration and revenue collection of a particular area within the district. It is an important part of the local governance structure, and plays a crucial role in the development and administration of its local community.

According to census 2011 information the sub-district code of Sironcha Block (CD) is 04063. Total area of sironcha tehsil is 1,257 km² including 1,253.89 km² rural area and 2.71 km² urban area.

Bradinopyga geminate (Rambur, 1842) is commonly found near small water collection areas and found in rural environment, huge swarms of *Pantala flavescens* (Fabricius, 1798) can be seen just before and after monsoon. *Crocothemis servilia* (Drury, 1770) is frequently found in rivers, big wells and standing water. Males of *Orthetrum pruinatum* (Burmeister 1839) are very conspicuous and could be seen perched on shrubs, stones etc. *Diplacodes trivialis* (Rambur, 1842) is one of the common dragonflies fields and lawn, it flies at 1 meter above the ground.. *Rhyothemis variegata* (Linnaeus, 1763) is easily mistaken for a butterfly, water bodies and bare twigs are commonly perched by *Ictinogomphus rapax* Rambur, 1842. *Paragomphus lineatus* (Selys, 1850) and *Anax parthenope* (Selys, 1839) are commonly found near rivers, ponds and lakes.

References :

- Boyd, S. (2005). Damselflies and dragonflies. Scientific Illustration Major. Univ. of Georgia, Athens. <http://www.discoverlife.org/nh/tx/insecta/odonata>
- Burmeister, H. (1839). *Handbuch der Entomologie. Zweiter Band. Besondere Entomologie. Zweite Abtheilung. Kaukerfe. Gymnognatha.* (Zweite Hälfte; vulgo Neuroptera)., Enslin, Berlin 755-1050.
- Drury D. (1770). *Illustrations of Exotic Entomology, figures and description of foreign insects.* Published by, Henry G. Bohn 4, New York Street, Covent Garden, London. Volume 1: 112, 113.
- Fabricius, J.C. (1793) *Entomologia systematica emendata et aucta. Secundum classes, ordines, genera, species adjectis synonymis, locis, observationibus, descriptionibus.* Tome 2. Christ. Gottl. Proft, Hafniae, viii + pp. 519
- Fabricius, J. C. (1798) *Supplementum entomologiae systematicae.* Proft et Storch, Hafniae 1-572.
- Fraser, F. C. (1934). *The Fauna of British India Including Ceylon and Burma.* Vols. 2, Today and Tomorrow's Printers and Publishers. New Dehli-5.
- Khaliq, A. (1990). *Taxonomic studies on Zygoptera (Odonata) of Pakistan.* Ph.D. Thesis, Deptt. Entomol., Univ. Agric., Faisalabad.
- Leach, W. E. (1815) *Entomology.* In Brewster, D. [ed.] *The Edinburgh Encyclopaedia.* Edinburgh: William Blackburn Vol. 9 (reprint 1830) 57-172.
- Linnaeus, C (1763) *Centuria insectorum rariorum.* (Also in *Amoenitates academicae* 6: 384-415, 1763.) –Dissertation (respondent: B.Johansson), Upsala.
- Mitra, A. (2006). Current Status of the Odonata of Bhutan: A Checklist with Four New Records. *Bhu. J. RNR.*,2 (1):136 – 143.
- Rambur, J.P. (1842) *Histoire Naturelle des Insectes, Névroptères.* Librairie encyclopédique de Roret. *Fain etThunot*, Paris, pp. xviii + 534.
- Rowe, R. (2003). Dragonflies: Behaviour and Ecology of Odonata. *Australian J. Entomol.* 42 (2), 210–211



- Selys-Longchamps, M. E. de. (1839) Descriptions de deux nouvelles espèces d'Aeschna du sous-genre Anax (Leach.). Bulletin Academie royale Belgique Serie 1 6 (10): 386-393.
- Selys-Longchamps, M. E. de. (1850) Revue des odonates ou Libellules d'Europe. *Mémoires de la Société Royale des*
- Selys-Longchamps, M. E. de. (1854). Synopsis des Gomphines. Bulletin de l'Académie royale des Sciences de Belgique 21:23-114.
- Subramanian, K.A. (2005). Dragonflies and Damselflies of India-A field guide. http://en.wikipedia.org/wiki/List_of_odonates_of_India
- Trueman, J.W.H. and R.J. Rowe (2001). Odonata (Dragonflies and damselflies). <http://tolweb.org/tree?group=Odonata&contgroup=Pterygota>.

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