

PREVIOUSLY UNRECORDED ODONATA FROM SALT RANGES AND SIND IN PAKISTAN

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Abstract – Based on 238 specimens in the National Zoological Collection at Zoological Survey of India, 28 spp. are for the first time recorded from Salt Ranges and 11 spp. from Sind.

Introduction

The Salt Ranges lie between the valleys of the Indus and Jhelum rivers, in the northern part of the Punjab region of Pakistan, located in the quadrangle of 71°-74° E and 30°-35° N, with an approximately E-W strike. They derive their name from extensive deposits of rock salt. The region has a steep face towards the South and slopes gently to the Potwar Plateau in the North (WADIA, 1944).

A collection of 238 Odonata specimens is present in the National Zoological collection at the Zoological Survey of India, Kolkata. They were brought together from the provinces of Punjab and Sind in undivided India, now in Pakistan, during the summer, rainy and winter seasons in the period 1927-1932 by Drs. B. Prasad, B.N. Chopra, S.L. Hora and H.S. Pruthi.

Earlier records

There is no definite record of Odonata of Salt Ranges of Pakistan. KHALIQ & YOUSUF (1992, 1993a, 1993b) reported *Agriocnemis pygmaea* (Ramb.), *Ischnura aurora* (Br.), *I. forcipata* Morton, *I. senegalensis* (Ramb.), *Rhodischnura nursei* (Morton), *Ceriagrion cerinorubellum* (Br.), *C. coromandelianum* (Fabr.) and *Pseudagrion hypermelas* Sel. from Kallar Kahar and *P. rubriceps* Sel. from Choua, Saidan Shah, but it is not clear whether they studied fauna of Salt Ranges or of any part of the surrounding area. FRASER (1933-1936) and MITRA (2002) recorded *Pseudagrion laidlawi* Fraser,

Rhodischnura nursei (Morton), *Anormogomphus kiritschenkoi* Bart., and *Selysiothemis nigra* (Vander L.) from Sind and *Zygonyx torrida isis* Fraser from Salt Ranges.

Present records

The specimens were compared with those from other parts of the Indian subcontinent in the collection of the Zoological Survey of India and with the descriptions provided by FRASER (1933-1936). They do not show any variation of characters of taxonomic importance.

The listing follows the system of DAVIES & TOBIN (1984, 1985). The locality data are given as stated on the printed labels.

Upon the transfer of the type species of the genus *Cercion* to *Erythromma* (WEEKERS & DUMONT, 2004), all oriental species of the former *Cercion* are now referable to the new genus, *Paracercion*.

COENAGRIONIDAE

– *Agriocnemis p. pygmaea* (Rambur)

1♂, Kallar Kahar Salt Range, Punjab, 20/23-X-1930; 1♂, Namshara Salt Range, 22-IV-1931.

KHALIQ & YOUSUF (1992) reported it from Kallar Kahar.

– *Paracercion calamorum dyeri* (Fraser)

1♂, 1♀, Kallar Kahar Salt Range, Punjab, 20/23-X-1930.

– *P. malayanum* (Selys)

1♀, Kallar Kahar Salt Range, Punjab, 20/23-X-1930.

– *Enallagma c. cyathigerum* (Charpentier)

1♀, Shah Hasan, Sind, --XI-1927.

– *E. parvum* Selys

1♂, Shah Hasan, Sind, --XI-1927; 1♂, Choa, Saidan Shah Salt Range, Punjab, 1-V-1931;

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- 1♂, Bubak, Sind, 25-XI-1927.
 KHALIQ & YOUSUF (1993b) reported it from Kallar Kahar.
- *Ischnura a. aurora* (Brauer)
 2♂, Bubak, Sind, 25-XI-1927; 1♂, Choa, 10 miles from Khewra Salt Range, Punjab, 15/21-X-1930; 4♂, 2♀, Gandhara Reserve Forest, Choa, Saidan Shah Salt Range, Punjab, 25-IV-1931; 1♀, Choa, Saidan Shah Salt Range, Punjab, 26-IV-1931.
- *I. e. elegans* (Vander Linden)
 1♂, Bakhi, Murtaz Valley, Chitral NW Frontier Province, --VIII-1930; 1♂, Kallar Kahar Salt Range, Punjab, 20/23-X-1930.
- *I. forcipata* Morton
 1♀, Shah Hasan, Sind, --XI-1927; 1♀, Bubak, Sind, 25-XI-1927; Choa, Saidan Shah Salt Range, Punjab, 17-V-1930; 1♂, Choa, 10 miles from Khewra Salt Range, Punjab, 15/21-X-1930; 1♂, Sodi Salt Range, Punjab, 16-X-1930; 1♂, Saidan Shah Salt Range, Punjab, --IV-1931; 2♀, Salt Range, Punjab, 22-IV-1931; 28♂, 3♀, Choa, Saidan, Punjab, 25-IV-1931; 1♀, Choa, Saidan Shah Salt Range, Punjab, 26-IV-1931.
- *I. inarmata* Calvert
 1♀, Bubak, Sind, 25-XI-1927; 1♀, Kallar Kahar Salt Range, Punjab, 20/23-X-1930; 2♀, Saidan Shah Salt Range, Punjab, 20/23-X-1930; 2♀, Saidan Shah Salt Range, Punjab, 1-V-1932.
- *I. senegalensis* (Rambur)
 27♂, 7♀, Kallar Kahar Salt Range, Punjab, 20/23-X-1930; 2♀, Choa, Saidan Shah Salt Range, Punjab, 25-IV-1931.
 KHALIQ & YOUSUF (1993b) reported it from Kallar Kahar.
- *Rhodischnura nursei* (Morton)
 2♂, Bubak, Sind, 25&28-XI-1927; 3♀, Shah Hasan, Sind, --XI-1927; 2♀, Kallar Kahar Salt Range, Punjab, 20/23-X-1930; 1♂, Nam Shara Salt Range (ca 2000 feet), Punjab, 22-IV-1931; 1♀, Kallar Kahar Salt Range, Punjab, 8-IV-1932.
 KHALIQ & YOUSUF (1993b) reported it from Kallar Kahar.
- *Ceriagrion coromandelianum* (Fabricius)
 1♂, Shah Hasan, Sind, --XI-1927; 1♂, 2♀, Choa, 10 miles from Khewra Salt Range, Punjab, 15/21-X-1930.
- KHALIQ & YOUSUF (1993a) reported it from Kallar Kahar.
- *Pseudagrion decorum* (Rambur)
 1♂, Bubak, Sind, 25-XI-1927.
- *P. hypermelas* Selys
 1♀, Khewra Salt Range, Punjab, 24-IX-X-1930; 5♂, 1♀, Saidan Shah Salt Range, Punjab, 1-IV-1931; 2♂, Gandhara Nalla, Choa, Saidan Shah Salt Range, Punjab, 26-IV-1931.
- KHALIQ & YOUSUF (1993a) reported it from Kallar Kahar.
- *P. laidlawi* Fraser
 1♂, Bubak, Sind, 25-XI-1927; 1♀, Shah Hasan, Sind, --XI-1927; 1♀, Kallar Kahar Salt Range, Punjab, 20/23-X-1930; 1♂, Choa, Saidan Shah Salt Range, Punjab, 1-V-1931.
- *P. microcephalum* (Rambur)
 1♀, Shah Hasan, Sind, --XI-1927.
- PLATYCNEMIDIDAE
- *Copera marginipes* (Rambur)
 1♀, Salt Range, Punjab, 22-IV-1931; 1♀, Saidan Shah Salt Range, Punjab, 25-IV-1931.
- *Platycnemis dealbata* Selys
 1♀, Choa, Saidan Shah Salt Range, Punjab, 25-IV-1931; 1♂, Choa, 10 miles from Saidan Shah Salt Range, Punjab, 30-IV-1931.
- PROTONEURIDAE
- *Elatoneura tetrica* (Laidlaw)
 2♂, Choa, Saidan Shah Salt Range, Punjab, 25-IV-1931.
- GOMPHIDAE
- *Anormogomphus kiritschenkoii* Barteneff
 2♂, 2♀, Khewra Salt Range, 24-IX-1930.
- LIBELLULIDAE
- *Orthetrum anceps* (Schneider)
 1♂, Punjab, 5-X-1928.
- *O. b. brunneum* (Fonscolombe)
 1♂, Choa, 10 miles from Khewra Salt Range, Punjab, 26-IV-1931.
- *O. pruinosum neglectum* (Rambur)
 2♂, Choa, 10 miles from Khewra Salt Range, Punjab, 15/21-X-1930.
- *O. s. sabina* (Drury)
 3♂, 5♀, Shah Hasan, Sind, --XI-1927; 2♀, Kallar Khar Salt Range, Punjab, 20/23-X-1930.
- *O. taeniolatum* (Schneider)

- 2♂, Choa, Saidan Shah Salt Range, Punjab, 26-IV-1931.
- *Crocotthemis s. servilia* (Drury)
4♂, 4♀, Shah Hasan, Sind, –XI-1927; 2♀, Bubak, Sind, 25-XI-1927; 1♂, Khewra Salt Range, Punjab, 9-X-1930; 2♂, 1♀, Choa, 10 miles from Khewra Salt Range, Punjab, 15/21-X-1930; 1♂, Gandhara Nalla, near Forest Office, Choa, Saidan Shah Salt Range, Punjab, 20-IV-1931.
- *Diplacodes lefebvrei* (Rambur)
1♂, Kallar Kahar Salt Range, Punjab, 20/23-X-1930.
- *D. trivialis* (Rambur)
1♂, 1♀, Kallar Kahar Salt Range, Punjab, 15/21-X-1930; 1♂, Kallar Kahar Salt Range, Punjab, 20/23-X-1930.
- *Indothemis l. limbata* (Selys)
1♀, Saidan Shah Salt Range, Punjab, 1-V-1931.
- *Trithemis aurora* (Burmeister)
4♂, 1♀, Choa, 10 miles from Khewra Salt Range, Punjab, 15/21-X-1930; 2♂, Garden fruits and Mulberry, Choa, Saidan Shah Salt Range, Punjab, 20-IV-1931; 1♂, Salt Range, 26-IV-1931; 16♂, 1♀, Gandhara Nalla near Forest Office, Choa, Saidan Shah Salt Range, Punjab, 20-IV-1931; 1♂, Shah Salt Range, Punjab, 1-V-1931; 13♂, vegetation on the sides of Gandhara Nalla near the Forest Office, Choa, Saidan Shah Salt Range, Punjab, 26-V-1931.
- *T. festiva* (Rambur)
1♂, Choa, 10 miles from Khewra Salt Range, Punjab, 15/21-XI-1930; 2♂, Gandhara Nalla, Choa, Saidan Shah Salt Range, Punjab, 20-IV-1931; 1♂, Salt Range, 26-IV-1931; 2♂, Gandhara Nalla, Choa, Saidan Shah Salt Range, Punjab, 26-IV-1931; 4♂, Choa, Saidan Shah Salt Range, Punjab, 26-IV-1931.
- *T. pallidinervis* (Kirby)
1♂, 1♀, Bubak, Sind, 25-XI-1927; 2♂, 3♀, Shah Hasan, Sind, –XI-1927.
- *Palpopleura s. sexmaculata* (Fabricius)
4♂, 2♀, Choa, 10 miles from Khewra Salt Range, Punjab, 15/21-X-1930.

Discussion

Out of the above listed 33 species, including those recorded by KHALIQ & YOUSUF (1993a, 1993b), 28 species are first records from Salt Ranges and 11 from Sind. All are widely distributed in the Indian subcontinent.

In a way, the adaptability to the desert environment could be judged from the abundance of specimens represented in the collection, viz: *Ischnura forcipata* (39), *Trithemis aurora* (39), *Ischnura senegalensis* (36), *Crocotthemis s. servilia* (15), *Orthetrum s. sabina* (10), *Ischnura a. aurora* (10), *Trithemis festiva* (10), *Rhodischnura nursei* (9) and *Pseudagrion hypermelas* (by 9 specimens).

Since this material was brought together almost 8 decades ago, a fresh survey would be needed to bring to light the current status of the regional fauna.

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