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ODONATA COLLECTED BY THE SHIPLAKE COLLEGE TREKKING SOCIETY EXPEDITION TO NEPAL IN 1984

G.S. VICK

"Crossfields", Little London, Basingstoke, Hampshire, RG26 5ET, United Kingdom

Abstract — A total of 66 spp. was collected from 23 localities. *Ischnura carpentieri* Fraser, *Pseudagrion microcephalum* (Ramb.), *Burmagomphus hasimaricus* Fraser and *Rhyothemis plutonia* Sel. have not previously been recorded from Nepal.

Introduction

A team of 12 masters and boys trekked from Gurkha (1140 m) in Central Nepal northwards to the Rupina La Pass (3760 m) and then followed the Chuli Khola Valley to Ngyak and Chumje, whence the Buri Gandaki River was followed downstream to Benighat on the highway from Kathmandu to Pokhara. The trek lasted from July 7 to August 4 and covered about 160 km. It had been intended to travel further north and complete a circuit of Manaslu and Himalchuli but permission was refused by the authorities. A list of collecting localities is given below. Sites A to E were small streams encountered on the first part of the trek through scattered remnants of the warm-temperate forest. Site F was a stream flowing through alpine meadows near the lake at Dudh Pokhari before the Rupina La and Site G was *Rhododendron* Forest beside the Chuli Khola (including adjacent meadows). Sites H to K were streams flowing into the Buri Gandaki with, locally, good remnants of sub-tropical forest.

In addition to the specimens collected on the trek, many were taken by myself (also a member of staff of Shiplake College); localities visited were in the Kathmandu Valley, primarily in the superb remnant of warm temperate forest around Godavari but also in the vicinity of the Siwapuri Dara to the north of the valley. I also visited Pokhara and concentrated on Phewa Tal. Further very useful material was supplied by Colin Smith and by Lt. Col. Mike Allen of the British Embassy staff in Kathmandu.

All of the material was collected in 1984.

Localities visited

(A-K) by Shiplake College Buri Gandaki Expedition, and (L-W) by Colin Smith (CS), Lt. Col. M.G. Allen (MGA) and Graham Vick (GSV):

A: Dorandi Khola, 1000 m, 11-VII
B: Songa, 600 m, 12-VII
C: Labsi, 1200 m 13-VII
D: Kusuna, 1500-1800 m, 14-VII
E: Bhanjyang, 2300 m, 15-VII
F: Dudh Pokhari, 4100 m, 23-VII
G: Chumje, 3200 m, 25-VII
H: Jagat to Uva, 850-760 m, 28-VII
I: Kharlok, 730-670 m, 29-30-VII
J: Syamrang to Arughat Bazaar, 600-480 m, 30-VII, 1-VIII
K: Sallentar to Rukhatum, 450-410 m, 2-3-VIII
L: Pokhara-Rupakot Tal, 700 m, 10-11-VI, CS leg.
M: Pokhara-Phewa Tal, 915 m, 13-14-VI, CS leg. and 18-22-VII, GSV leg.
N: Pokhara-Devi's Falls, 900 m, 19-VII, GSV leg.
O: Pokhara-Phikri Khola, 855 m, 14-VII, CS leg.
P: Kathmandu Valley-Godavari and Pulchowki, 1560-1820 m, 9-17-VII, GSV leg.
Q: Kathmandu Valley-Buddhanilkhantha and Tare Bhir, 1480 m, 10-VII, GSV leg.
R: Kathmandu Valley-Okhreni and Siwapuri

Dara, 1800 m, 14-VII, GSV leg.
S: Kathmandu Valley-Bhaktapur, Surgabanak, 1340 m, 2-VII, MGA leg.
T: Kathmandu-British Embassy gardens, 1450 m, 27-VII, MGA leg.
U: Western Nepal-Bardia, 300 m, 2-V, MGA leg.
V: Terai-Royal Chitwan National Park, 200 m, no date, MGA leg.
W: Eastern Nepal-Dharan Bazaar and district, VI, MGA leg.

Species collected

Those asterisked (*) are new for Nepal.

Calopterygidae — *Caliphaea confusa* Hag.: P,R — *Neurobasis c. chinensis* (L.): P,W; — *Vestalis g. gracilis* (Ramb.): O.

Chlorocyphidae — *Libellago l. lineata* (Burm.): M; — *Rhinocypha quadrimaculata* Sel.: K,W; — *R. unimaculata* Sel.: J,Q,W.

Euphaeidae — *Anisopleura lestoides* Sel. P,W; — *Bayadera indica* (Sel.): W.

Chlorolestidae — *Megalestes major* Sel. P,R.

Coenagrionidae — *Ceriagrion cerinomelas* Lieft.: P; — *C. coromandelianum* (Fabr.): V; — *Ischnura aurora* (Br.): N; — *I. carpentieri* Fr.*: P; — *I. forcipata* Morton: P; — *I. rufostigma* Sel.: M; — *Pseudagrion rubriceps* Sel.: M; — *P. microcephalum* (Ramb.)*: M.

Platycnemididae — *Calicnemia c. carminea* Lieft.: H,I,J; — *C. eximia* (Sel.): H,J,W; — *C.* sp.: I; — *C. nipalica* Kimmins: M; — *C. pulverulans* (Sel.): M,P,S,W; — *Coeliccia renifera* (Sel.): K,P,S.

Protoneuridae — *Prodasineura autumnalis* (Fr.): M.

Gomphidae — *Anisogomphus occipitalis* (Sel.): J,L,P,Q; — *Burmagomphus hasimaricus* Fr.*: M; — *Ictinogomphus rapax* (Ramb.): M; — *Onychogomphus biforceps* (Sel.): D,R; — *O. bistrigatus* (Hag.): P; — *O. duaricus* Fr.: W; — *Paragomphus lineatus* (Sel.): W; — *Temnogomphus bivittatus* (Sel.): H,P,T.

Aeshnidae — *Anaciaeschna donaldi* Fr.: P; — *Anax nigrofasciatus nigrolineatus* Fr.: P.

Cordulegastridae — *Anotogaster nipalensis* Sel.: E,P; — *Chlorogomphus selysi* Fr.: P; — *Neallogaster latifrons* (Sel.): F.

Corduliidae — *Macromia m. moorei* Sel.: M.

Libellulidae — *Acisoma p. panorpoides* Ramb.: J,L; — *Brachythemis contaminata* (Fabr.): L,M; — *Brachydiplax sobrina* (Ramb.): M; — *Crocothemis servilia* (Dru.): A,B,D,H,J, K,P,R; — *Diplacodes nebulosa* (Fabr.): N,X; — *D. trivialis* (Ramb.): A,J,M,N; — *Neurothemis fulvia* (Dru.): A,B,L,M,O,P,R,S,T; — *N. t. tullia* (Dru.): L; — *Orthetrum glaucum* (Br.): B,H,J,N,P,W; — *O. japonicum internum* McL.: G; — *O. luzonicum* (Br.): A,B,J,L; — *O. pruinosum neglectum* (Ramb.): B,H,J,K,O,M, U,W; — *O. sabina* (Dru.): B,J,M,N,Q,U,W; — *O. taeniolatum* (Schneider); D,R,V; — *O. t. triangulare* (Sel.): A,E,J,O,P,Q; — *Orthetrum* sp.: V; — *Palpopleura sexmaculata* (Fabr.): A,H,J,P; — *Pantala flavescens* (Fabr.): D,I,J, K,U,V; — *Potamarcha obscura* (Ramb.): W; — *Pseudotramea prateri* Fr.: A; — *Rhyothemis triangularis* Kirby: L; — *R. v. variegata* (L.): L,V; — *R. plutonia* Sel.*: L,V; — *Sympetrum commixtum* (Sel.): P; — *Tramea basilaris burmeisteri* Kirby: A,W; — *Trithemis aurora* (Burm.): H,L,M,P,U; — *T. festiva* (Ramb.): H,J,O,Q; — *Urothemis s. signata* Ramb.): L.

Notes on certain species

Specimens taken at Phewa Tal, Pokhara have been identified as *Ischnura rufostigma* Sel. by comparison with descriptions in FRASER (1933-36) and with a specimen, also from Phewa Tal (10-IV-1954 leg. J. Quinlan), standing under this name in the BM Coll. The ♂ anal appendages and the ♂ abdominal markings (segs 8-10 marked with black, without a blue dorsal spot) are very similar to Fraser's descriptions.

The above record of *Pseudagrion microcephalum* (Ramb.) also appears to be new for Nepal. The material agrees fairly well with the description in FRASER (1933-36) but the anal appendages of the males are slightly different. However, the holdings in the BM Coll. suggest that there is some variation in this respect and our Nepalese material lies within this range.

The *Calicnemia* species were identified using the key of LIEFTINCK (1984). As this key only covers males, all records above are based upon this sex only. Females collected could be tentatively determined as *C. carminea, C.eximia* and *C. pulverulans* by their general resemblance to males of these taxa but one female specimen taken at Kharlok (site I) in the Buri Gandaki Valley was quite distinct from these. A

determination of this specimen would be unwise with the literature available at present.

The specimens of *Burmagomphus hasimaricus* Fraser were given to us by C. Smith and identified as such by comparison with material in the BM Coll. The previously published record of *B. pyramidalis* by SMITH (1978), also from Phewa Tal, is almost certainly an error for *B. hasimaricus*.

Neallogaster latifrons (Sel.) was identified using characters given by ASAHINA (1982). It is worth mentioning that the single specimen seen, a teneral female, was taken in alpine meadows at Dudh Pokhari at 4100 m.

Only larvae and exuviae of *Macromia moorei* Selys were obtained and no adults were seen. The material was determined by comparison with specimens taken by T.B. Fletcher at Shillong, Assam in 1924 standing under this name in the BM Coll. It is the only *Macromia* known from Nepal.

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