SUPPLEMENTARY LIST OF THE SOLIFUGAE, SCORPIONS AND PEDIPALPI OF THE KRUGER NATIONAL PARK

By

R. F. LAWRENCE

Natal Museum, Pietermaritzburg.

Since the publication of the original check list of the fauna of the Kruger National Park (Koedoe, N. 7: 30-39) in 1964, the total number of species has been increased by the addition of three forms of Solifuges from 37 to 40. In addition, the known distribution of many of the originally recorded species has been considerably extended by a large number of new locality records which are now listed in the following pages. The substantial body of new material was collected by Dr. U. de V. Pienaar and his staff of scientific workers and field rangers; a further small contribution was also made by the writer collecting at Malelane and Krokodilbrug in 1963 and 1964 respectively. Among the many rangers and students who at different times have made valuable contributions to this paper by their collecting activities, Mr. H. Braak, Mr. D. Ebson and Mr. E. Graupner must be especially mentioned.

SOLIFUGAE

Family Solpugidae Genus Zeriassa Pocock Zeriassa furcicornis Lawrence

Additional records: Shalungwa springs (N.16); Pafuri picnic place (N.5); Punda Milia Rest Camp (N.31).

Zeriassa transvaalensis Lawrence

Z. transvaalensis Lawrence 1964, Koedoe N.7, p. 31, figs. 1a-d. Additional records: Krokodilbrug (S.85); Malelane Rest Camp (S.104); Skukuza Rest Camp (S.7).

Genus Solpuga Licht Solpuga celeripes Hirst

Additional records: near Tshokwane (C.136); Pumbe Picket (C.52).

Solpuga sericea Pocock

Additional records: Saselandonga poort, Sandveld (N.20); Sabie Hoek (S.11). The two species, celeripes and sericea, are fairly closely allied; both are small diurnal species which rove in search of food during the hottest hours

of the day; they are both extremely fast moving and difficult to capture, climbing shrubs and small trees with ease and rapidity.

The description of Hirst's type was based on a single male specimen; a description of the female and a figure of the colour pattern of the head-plate

and chelicerea is given by Lawrence (1965, p.50, Fig. 1A).

A brief description of the habits and appearance of sericea is given by Lawrence (1963, p.2) based on specimens which were observed during the day time in considerable numbers along the margins of Msimbit forest (Androstachys Johnsonii) in the Nyandu Sandveld near Saselandonga poort.

Solpuga serraticornis Purcell.

S. serraticornis Purcell, 1899, Ann.S.Afr.Mus.1, p. 409, fig. 16. In Msimbit forest, 2 miles S. of WNLA camp, Eastern boundary, Pafuri area (N.6).

This is a new record for the Park.

Solpuga monteiroi Pocock

Additional record: Pafuri (N.6).

Solpuga spiralicornis Purcell

Additional records: Malelane rest camp (S.104), Shalungwa Springs area (N.16); Satara rest camp (C.71).

Solpuga strepsiceros Kraepelin

Mtsawu drift, Doispane road (S.3); Sitlabe dam (S.17), Sabipoort (S.47); Kroko-dilbrua (S.85).

A new record for the Park.

Genus Solpugopa Roewer Solpugopa conservatorum (Lawrence)

Solpugema conservatorum Lawrence 1963, Ann.Mag.Nat.Hist.(13)VI, p. 528, fias. 1a-e.

Additional records: Shangoni koppies (N.132); Nwanedzi dam (C.85); 6 miles NE of Skukuza (S.7), a 3 and 9 specimen in nest of Macrotermes swazii.

This species, described from a single male specimen, was listed under the genus Solpugema Roewer in the previous paper, Koedoe 7, p. 33, 1964, but has now been transferred to the genus Solpugopa Roewer.

The following is a description of the 9 from near Skukuza.

Colour. Chelicerae, headplate and appendages as in the σ , abdomen uniformly blackish brown with an olive green tinge both dorsally and at the sides; ventral surface similar only the genital segment a little lighter, dull brown; when dry the pleurites and sternites are seen to be clothed with silvery white hairs; malleoli without dark margination.

Spination. Headplate and chelicerae with setation as in the ${\mathscr C}$. Pedipalps shorter and much more slender than in ${\mathscr C}$, metatarsus near its distal apex with sparse weak cylinder bristles. Leg IV with a weakly developed mane

of long hairs.

Dentition. Dorsal jaw with the first anterior main tooth distinctly smaller than second, one large intermediate tooth; main series followed by 4 outer cheek

teeth, the last considerably smaller than the others which are subequal; inner cheek series consisting of 3 teeth, the middle much smaller than the others. Ventral jaw with the second main tooth large, the intermediate tooth joined to it. Both jaws rather weak. Stridulatory area with 8 very fine but distinct lamellae, the ventral much shorter than the dorsal ones.

Dimensions: Width of headplate 5, length of chelicerae 7.5, pedipalp 17.5, total length 26 mm.

Genus Solpugiba Roewer Solpugiba arenicola Lawrence

S. arenicola Lawrence 1963, Ann.mag.Nat.Hist.(13)VI, p. 53, figs. 1 f, g. Additional records: 2 miles S. of Tambye drift near Pafuri (N.4); Skukuza Rest Camp (S.7); Isweni firebreak, S. of Satara (C.93).

Solpugopa truncata Lawrence

S. truncata Lawrence 1966, Ann.Transv.Mus.XXVII, figs. 1a-c. (in press)).

The type \vec{o} was described from the Sandveld between Shalungwa and Maseya (N.16). It consists only of two complete chelicerae taken from the stomach of the lizard *Ichnotropis squamulosa*.

Family Daesiidae Genus Blossiola Roewer Blossiola laticosta Hewitt

Additional records: Pumbe picket (C.52); Punda Milia rest camp (N.31); Malelane rest camp, Pafuri picnic place (N.5); Krokodilbrug (S.85).

This is by far the commoner of the two species of *Blossiola* and occurs in considerable numbers throughout the Park; it is a nocturnal species, almost all the specimens being captured at night by means of a collecting lamp. *B. singularis*, the other species of *Blossiola* inhabiting the Park, seems on the other hand to be extremely rare, being represented by only the single of type specimen from near Punda Milia.

Genus Biton Karsch Biton transvaalensis Lawrence

Additional records: Letaba rest camp (N.247); Saselandonga poort (N.20); Nwambiya Pan, Nyandu Sandveld (N.46).

The species has been found feeding on termites which attack the dry or decaying trunks of fallen Acacia trees, Acacia tortilis and A. xanthophloea.

SCORPIONS

Family Buthidae Genus Buthus Leach Buthus trilineatus (Peters)

Additional records: Saselandonga poort (N.20); Sandveld N of Mahlakuza (N.28); Shalungwa Springs (N.16); Godleni near Krokodilbrug (S.74); Sabipoort (S.47).

Genus Parabuthus Pocock Parabuthus triradulatus Hewitt

Additional record: Pumbe picket (C.52).

Parabuthus transvaalicus Purcell

Additional records: Punda Milia (N.31); Godleni near Krokodilbrug (S.74); Eastern boundary (S.107); Lower Sabi (S.33).

Genus Pseudolychas Kraepelin Pseudolychas pegleri pegleri (Purcell)

Additional record: Skabenkop (S.35).

Genus Uroplectes Peters Uroplectes olivaceus Pocock

Additional records: Malelane Rest camp (S.104); Lower Sabi (S.33); Godleni near Krokodilbrug (S.74); Gomondwane (S.71); Hippo pool near Krokodilbrug (S.97); Eastern boundary (S.107); Sabi poort (S.47).

Uroplectes flavoviridis Peters

Additional record: Eastern boundary between Saselandonga poort and Mahlakuza (N.36).

Uroplectes formosus formosus Pocock

Additional record: Sabi river bank, 3 miles E. of Skukuza (S.7).

Uroplectes vittatus (Thorell)

Additional record: Tsumane windmill (N.130).

Uroplectes carinatus (Pocock)

Additional records: Olifantspoort area (C.3); Lower Sabi (S.33).

Family Scorpionidae

Genus Opisthophthalmus C. L. Koch Opisthophthalmus glabifrons (Peters)

Additional records: Punda Milia (N.31); Malelane Rest Camp (S.104); Gomondwane (S.71).

Opisthophthalmus ecristatus Pocock

Fairly common in sandy veld at Saselandonga poort (N.20); Punda Milia (N.31).

The species seems to be limited to regions with sandy soils, both sexes making deep burrows at a rather steep angle.

Genus Opisthacanthus Peters
Opisthacanthus chrysopus Peters

Additional records: Pumbe picket (C.52); Lower Sabi, 7 miles on the road to Skukuza, under bark of Ficus (S.32).

Opisthacanthus laevipes Pocock

Additional records: Sabipoort (S.47); eastern boundary (S.107); Lower Sabi (S.33); Malelane Rest Camp (S.104); Godleni, near Krokodilbrug (S.74).

This is the largest of all the Opisthacanthus species found in Southern Africa; it is a highly adaptable form, found equally in sandy regions (Male-

lane) and under flakes or slabs of rock (Krokodilbrug); burrows obeserved at Malelane in sand were almost vertical and about 12 inches deep.

The species seems to prey largely on the spirostrpetid millipede *Doratogonus flavifilis* since substantial midden heaps composed of the disarticulated body rings of this millipede are often seen just inside the mouths of the burrows. At the Hippo pool near Krokodilbrug, a large female was observed holding an immature *flavilis* in one of the pedipalps and inserting its sting between the somites; the fact that the millipede was secreting copiously from the odoriferous glands at the sides of the body seemed to have no deterrent effect.

Genus Cheloctonus Pocock Cheloctonus jonesi Pocock

Additional records: Malelane Rest Camp (S.104); Nyandu Sandveld (N.46); Pumbe picket (C.52); Punda Milia (N.31); Gomondwane (S.71).

Pedipalpi (Amblypygi) Genus Damon C. L. Koch Damon variegatus (Perty)

Additional records: Olifantspoort area (C.3); north of Mahlakuza pan (N.28); Sabipoort (S.47); eastern boundary (S.107); Krokodilbrug (S.74); Malelane rest camp (S.104).

BIBLIOGRAPHY

(A short list of general reference works will be found in Koedoe, No. 7, p. 39, 1964)
 Lawrence, R. F. (1955) — Solifugae, Scorpions and Pedipalpi, with checklists and keys to South African families, genera and species. S.Afr. Animal Life, Vol. 1: 152-162, Lund University.
 —— (1963) — The Solifugae of South West Africa. Cimbebasia, 8: 1-28.
 —— (1963^a) — New Solifugae from the Kruger National Park, South Africa. Ann.

- Mag. Nat. Hist. (ser. 13) 6: 529-535.
- —— (1964) Four New South African Solifugae (Arachnida). Jour. ent. Soc. S.Afr., 26(2): 355-365.
- —— (1964^a) The Solifugae Scorpions and Pedipalpi of the Kruger National Park. Koedoe, 7: 30-39.
- —— (1965) Some new or little known Solifugae from Southern Africa. Proc. Zool. Soc. Lond., 144(1): 47-59.
- —— (1966) The Myriopoda of the Kruger National Park. Zoologica Africana, 2(2): 225-262.
- —— (1966^a) A contribution to the Solifugid Fauna of Southern Africa (Arachnida).

 Ann. Transv. Mus., XXVII (in press).