

## Two new species of *Anyphops* Benoit, 1968 and description of the male of *A. amatolae* (Lawrence, 1940) (Aranei: Selenopidae)

### Два новых вида пауков рода *Anyphops* Benoit, 1968 и описание самца *A. amatolae* (Lawrence, 1940) (Aranei: Selenopidae)

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КЛЮЧЕВЫЕ СЛОВА: Aranei, Selenopidae, *Anyphops*, новые виды, самец *A. amatolae*, Афротропический регион.

ABSTRACT: Two new species of the genus *Anyphops* (Aranei: Selenopidae) are described and illustrated from Afrotropical region: *A. lochiel* sp.n. (from female only), *A. dulaceni* sp.n. (from the male only) and the male of *A. amatolae* (Lawrence, 1940) is described and details of genitalic structures of the female are given and illustrated by the first time.

РЕЗЮМЕ: Дано иллюстрированное описание двух новых видов пауков рода *Anyphops* (Aranei: Selenopidae) из Афротропического региона: *A. lochiel* sp.n. (только самка), *A. dulaceni* sp.n. (только самец). Также дано переописание самца и первописание самки *A. amatolae* (Lawrence, 1940).

#### Introduction

The family Selenopidae Simon, 1887 is represented by three genera (*Selenops* Latreille, 1819, *Anyphops* Benoit, 1968 and *Hovops* Benoit, 1968); and about 169 species and has a holotropical distribution pattern.

At present *Anyphops* is represented by 59 species from Afrotropical Region [Corronca, 1998 and Dippenaar-Schoeman & Jocqué, 1997]. *Anyphops* represents a heterogeneous group of flat spiders characterized by Benoit [1968] by the number of paired macrosetae disposed ventrally on tibiae I and II and metatarsi I and II, by the position of eyes and the shape of female and male genitalia [Corronca, 1996]. According with Benoit [1968] this genus can be divided into 4 major species group characterized by the presence of 4, 5, 6 or 7 pairs of ventral macrosetae on tibiae I–II.

In recent paper by Corronca [1998] on geographic distribution of *Anyphops* species from Cameroon, Zaire, Kenya, Namibia, Tanzania, Mozambique, South Africa and Madagascar, the percentage (77 %) of endemism was reduced to 42 %. Fifty of the 59 species are recorded only from South Africa with more than 30 % of them

known only from their type locality and the majority from only one sex.

About four years ago, I began to revise afrotropical selenopids. The objective of this paper is to describe two new species of *Anyphops*, *A. lochiel* sp.n. and *A. dulaceni* sp.n. The male of *A. amatolae* (Lawrence, 1940) is described and details of genitalic structures of the female are given and illustrated by the first time.

#### Material and methods

Specimens used during the study were made available by the following institutions: SAM — South African Museum, Cape Town, South Africa; NCA — National Collection of Arachnida, Pretoria, South Africa and TM — Transvaal Museum, Pretoria, South Africa.

Palpi and epigyna were dissected and clarified in lactic acid (90 %) for 15 to 20 minutes in a double boiler and mounted separately on an excavated glass slide, in lactic acid or lactophenol. Study of the genitalia ducts was made as in Sierwald [1989]. The male palps were described using the terminology of Coddington [1990]. The female genitalia were described as in Sierwald [1989]. New species were identified on basis of genital characters. Measurements are in millimeters and the format of abbreviations used follows Platnick and Shadab [1975].

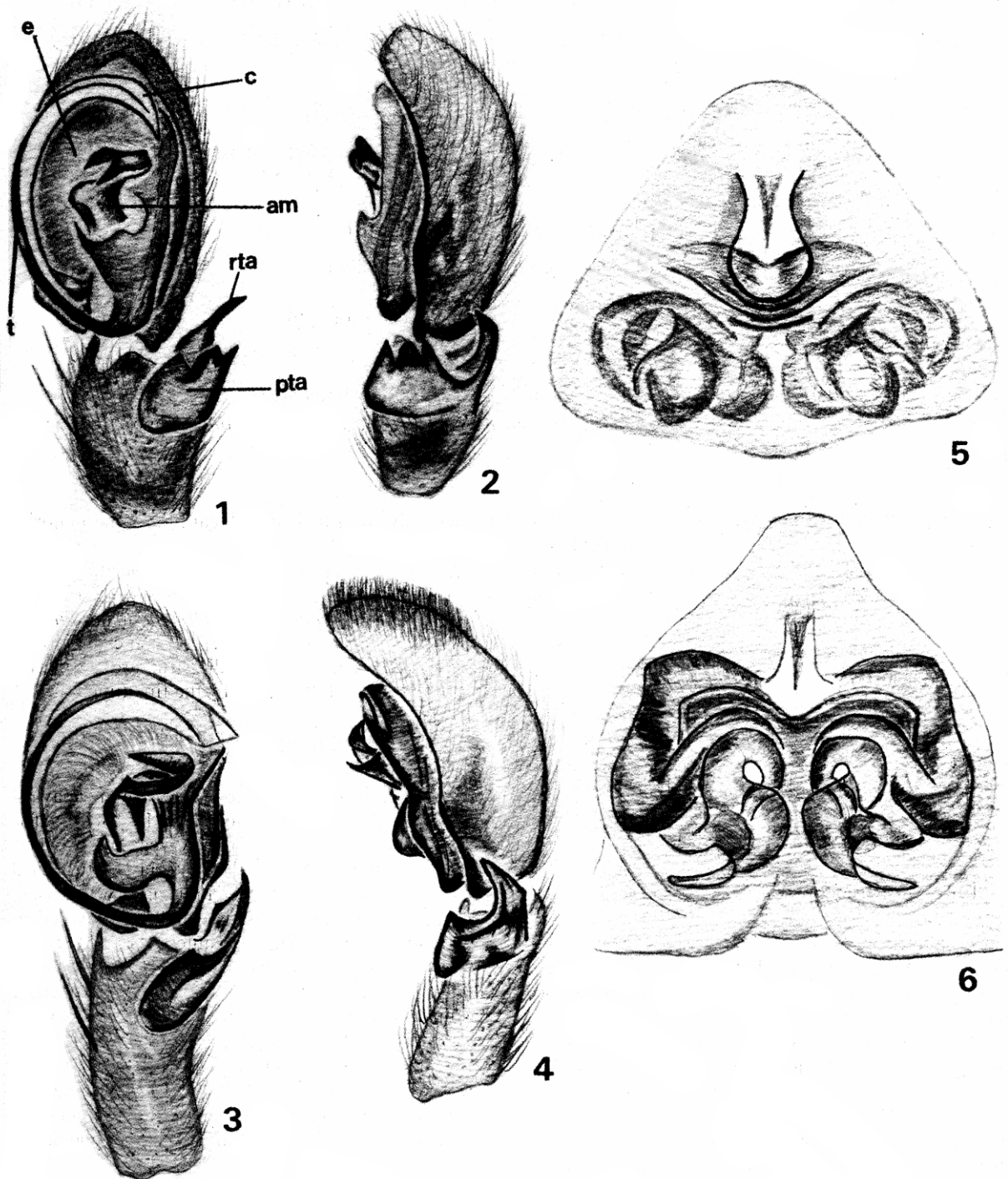
#### *Anyphops dulaceni* sp.n.

Figs 1–2.

TYPE Male holotype from SE of Kaika, NW Bechuana, Namibia, 24/11/61, W. Haecker col., in TM 9087.

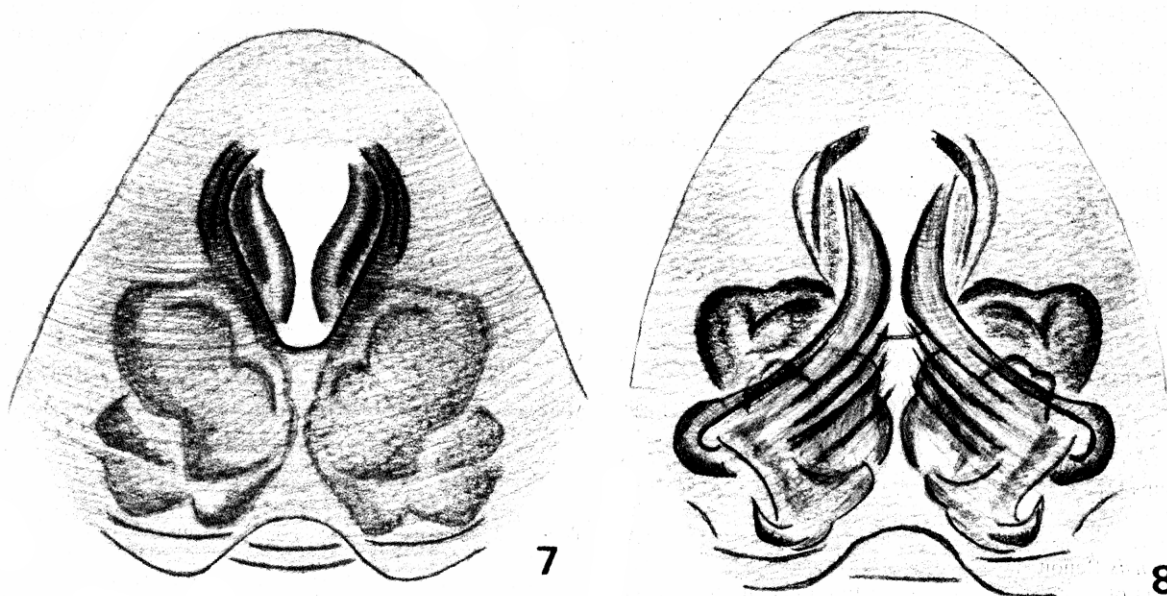
ETYMOLOGY. The specific name is an arbitrary combination of letters.

DIAGNOSIS. *A. dulaceni* sp.n. belongs to species groups with 5 paired of ventral macrosetae on tibiae I–II (= sub-group B2 [Lawrence, 1940]). This new species shares with *A. hewitti* (Lawrence, 1940) the presence of a prolateral tibial apophysis



Figs 1-6. *Anyphops dulaceni* sp.n. (1-2) and *A. amatolae* (Lawrence) (3-6): 1, 3 — left palp, ventral view; 2, 4 — left palp, detail of tibial and median apophysis; 5 — epigynum, ventral view; 6 — vulva. Abbreviations: am — median apophysis; c — conductor; e — embolus; pta — prolateral tibial apophysis; rta — retrolateral tibial apophysis; t — tegulum.

Рис. 1-2. *Anyphops dulaceni* sp.n. (1-2) и *A. amatolae* (Lawrence) (3-6): 1, 3 — левый палец, вентрально; 2, 4 — левый палец, детали строения выроста голени и срединного выроста; 5 — эпигина, вентрально; 6 — вульва. Сокращения: ам — срединный вырост; с — кондуктор; е — эмболюс; рта — пролатеральный вырост голени; рта — ретролатеральный вырост голени; т — тегурум.



Figs 7-8. *Anyphops lochiel* sp.n.: 7 — epigynum, ventral view; 8 — vulva.  
Рис. 7-8. *Anyphops lochiel* sp.n.: 7 — эпигина, вентрально; 8 — вульва.

with three branches (Figs 1-2). These branches are short and slender in *A. hewitti* than in *A. dulaceni* and retrolateral tibial apophysis is different in form and longer than the prolateral one in the new species. Tibia of the pedipalp of *A. dulaceni* is short than the tarsi (Fig. 2), although it is little longer than tarsi in *A. hewitti*.

**HOLOTYPE.** Total length 7.00. Carapace 3.10 long, 3.30 wide. Eyes and interdistances: AME 0.22, ALE 0.14, PME 0.22, PLE 0.26, AME-AME 0.12, AME-ALE 0.44, AME-PME 0.08, PME-PME 0.66, PME-PLE 0.34, PLE-PLE 1.54, ALE-ALE 1.45. Abdomen 3.70 long, 3.30 wide. Leg formula 4321. Leg lengths: I — femur 4.30, patella + tibia 5.20, metatarsus 3.50, tarsus 1.30, total 14.30, II — 4.80, 5.70, 3.90, 1.40, total 15.80; III — 4.80, 5.50, 4.00, 1.40, total 15.70; IV — 4.70, 5.40, 4.40, 1.60, total 16.10. Leg spination: femur I-IV p1-1-0, d1-1-1, r0-2-1; patella I-IV d0-1; tibia I v2-2-2-2-2, II p-1-0-0, v2-2-2-2-2, III-IV d0-0-1, v2-2-0; metatarsus I-II v2-2-2, III-IV v2-2-0. Carapace brown with lateral margins dark gray and with small and diffuse spots on dorsal portion along carapace grooves. Chelicerae brown with gray reticulate pattern. Femora I-IV with a prolateral band in all of its length and with three dorsal diffuse pale gray bands. Tibiae, metatarsi and tarsi yellow-gray. Abdomen, yellow-gray with a longitudinal dorsal middle yellow band reaching to the middle portion of the abdomen. Distal portion of the abdomen with a well marked pale yellow band around the spinnerets. Laterals of the abdomen with small dark gray points. Palp of the male as in Figs 1-2.

**FEMALE.** Unknown.

**MATERIAL EXAMINED.** Only the type.

*Anyphops amatolae* (Lawrence, 1940)  
Figs. 3-6.

**TYPE.** Female holotype from Hogsback, Amatola Mts, Cape Province, in SAM 2416 (examined).

**DIAGNOSIS.** *Anyphops amatolae* belongs to species groups with 6 paired of ventral macrosetae on tibiae I-II (= sub-group B3 [Lawrence, 1940]). Female of this species shares with *A. montanus* (Lawrence, 1940) and *A. tuckeri* (Lawrence, 1940) the form of the middle fields of the epigynum (Fig. 5), but in *A. amatolae* it is more elongated and less wide. The spermathecae form is very different from all those species of its species group and genus. Tibial apophysis of the male seems to *A. gilli* (Lawrence, 1940), but differ by the presence of a tooth on external margin of retrolateral tibial apophysis; by the length and form of median apophysis and wide distal portion of the conductor (Fig. 4).

**DESCRIPTION OF THE MALE** of the same holotype locality, in SAM B8285: Total length 9.90. Carapace 4.70 long, 5.20 wide. Eye sizes and interdistances: AME 0.23, ALE 0.18, PME 0.30, PLE 0.35, AME-AME 0.30, AME-ALE 0.58, AME-PME 0.13, PME-PME 0.88, PME-PLE 0.48, PLE-PLE 2.10, ALE-ALE 1.95. Abdomen 5.10 long, 3.80 wide. Leg formula 1243. Leg lengths: I — femur 7.50, patella + tibia 10.30, metatarsus 7.20, tarsus 2.60, total 27.60, II — 8.00, 9.90, 7.20, 2.10, total 27.20; III — 6.60, 8.10, 5.90, 2.10, total 22.70; IV — 7.40, 8.00, 6.90, 2.20, total 24.50. Leg spination: femur I p1-1-0, d1-1-1, r1-1-0; II p1-1-0, d1-1-1, r0-1-1; III p-1-1-0, d1-1-1, r1-1-1; IV p1-0-0, d1-1-1, r0-1-1; tibia I-II v2-2-2-2-2-2; III-IV v2-2-0; metatarsus I-II v2-2-2, III v2-2-0, IV v1-1-0. Carapace reddish-brown with dark gray lateral margins. More elongated red-brown chelicerae. Legs pale yellow. Femora I-IV with three diffuse pale gray dorsal bands and with a longitudinal prolateral gray band in femora I-II, too. Abdomen yellowish with a white transversal band in distal portion of the abdomen limited by a wide gray band. Rest of abdomen with a great amount of pale gray points. Palp of male as in Figs 3-4.

**FEMALE HOLOTYPE.** Described by Lawrence [1940]. Characters not mentioned in original description: Leg spination: femur I p1-1-0, d1-1-1, r1-1-0; II p1-0-0, d1-1-1, r1-1-

0; III p-1-0-0, d1-1-1, r1-1-1; IV d1-1-1, r0-0-1; tibia I-II v2-2-2-2-2-2; III v2-2-2, IV v1-0-0, r1-0-0; metatarsus I-II v2-2-2, III v2-2-0, IV v2-1-0. Coloration more dark than described by the male.

OTHER MATERIAL EXAMINED. SOUTH AFRICA: Cape Province, Hogsback, feb. 1933, R.F. Lawrence col., male and female, in SAM B8285.

DISTRIBUTION. Known only from Hogsback, Cape Province, South Africa.

*Anyphops lochiel* sp.n.

Figs. 7-8.

TYPE. Female holotype from Lochiel, Eastern Transvaal, South Africa, 12/11/1956, Martin col., in NCA 76/1862.

ETYMOLOGY. The specific name is a noun in apposition from the type locality.

DIAGNOSIS. *Anyphops lochiel* sp.n. belongs to species groups with 6 paired of ventral macrosetae on tibiae I-II (= sub-group B3 [Lawrence, 1940]). By the general form of the middle fields of the epigynum, *A. lochiel* seems closest to *A. kivuensis* Benoit, 1968 and *A. sponsae* (Lessert, 1933), but differs of them because it has not fused lateral lobes of the epigynum limited by a marked line. The particular form, more wide in anterior portion, of the middle fields of the epigynum, the general form of the copulatory ducts and swollen and lobed spermathecae (Figs 7-8), are very different of all *Anyphops* species.

HOLOTYPE. Total length 10.20. Carapace 4.50 long, 5.20 wide. Eyes sizes and interdistances: AME 0.20, ALE 0.18, PME 0.30, PLE 0.45, AME-AME 0.21, AME-ALE 0.58, AME-PME 0.13, PME-PME 0.75, PME-PLE 0.48, PLE-PLE 1.98, ALE-ALE 1.73. Abdomen 5.80 long, 4.70 wide. Leg formula: 2314. Leg lengths: I — femur 4.90, patella +tibia 6.20, metatarsus 3.30, tarsus 1.70, total 16.10, II — 5.40, 6.30, 3.70, 1.60, total 17.00; III — 5.20, 6.30, 3.70, 1.60, total 16.80; IV — 4.50, 5.30, 3.70, 1.40, total 14.90. Leg spination: femur I-IV p1-1-1, d1-1-1, r1-1-1; tibia I-II v2-2-2-2-2. III v2-2-0, IV d1-1-0, v1-2-2-0; metatarsus I-II v2-2-2, III v2-0-2; IV r-1-1-0, v2-0-2. Carapace pale orange-brown. Chelicerae reddish-brown with a gray distal V-like band. Legs yellowish with gray spots. Femora I-II with two, proximal and middle, black prolateral spots. Femora III-IV with two, middle and proximal, incomplete and diffuse gray rings. Tibiae I-IV with two incomplete gray rings; metatarsi and tarsi I-IV dark red-brown. Abdomen yellowish with gray spots. Middle-dorsal portion of the abdomen with three paired

dark spots limiting a pale longitudinal and central area. Laterals of the abdomen with small gray points. Epigynum and spermathecae as in Figs 7-8.

MALE. Unknown.

OTHER MATERIAL EXAMINED. SOUTH AFRICA: Transvaal, Blouberg near Pietersburg, (29/5/1988, S. Nesor col.), female, NCA 88/821.

DISTRIBUTION. Known only from Transvaal, South Africa.

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