

Two new species of *Cyrioctea* from Southern Africa with a note on sexual dimorphism in the genus (Araneae, Zodariidae)

Norman I. PLATNICK & Rudy JOCQUÉ

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Two new species of the Gondwanian zodariid genus *Cyrioctea* are described, *C. marken* from South Africa and *C. griswoldorum* from Namibia. Sexual dimorphism is apparently pronounced in the Afrotropical species.

Deux nouvelles espèces de Cyrioctea de l'Afrique australe avec une note sur le dimorphisme sexuel dans le genre. (Araneae, Zodariidae). - Deux espèces inédites du genre Gondwanien *Cyrioctea* sont décrites: *C. marken* de l'Afrique du Sud et *C. griswoldorum* de la Namibie. Le dimorphisme sexuel paraît prononcé chez les représentants Afrotropicaux.

Key words: Araneae, spiders, Zodariidae, *Cyrioctea*

N. I. Platnick, Department of Entomology, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024 USA.- R. Jocqué, Section Invertebrates, Koninklijk Museum voor Midden-Afrika, B-3080 Tervuren, Belgium

INTRODUCTION

The spider genus *Cyrioctea* Simon has recently been the subject of several studies (Platnick, 1986; Platnick & Griffin, 1988; Jocqué, 1991) indicating that the group has a Gondwanian distribution and constitutes the sister group of the remaining members of the large family Zodariidae.

To date, four species of the genus are known from Chile (*C. spinifera* Nicolet, *C. cruz* Platnick, *C. calderoni* Platnick, *C. mauryi* Platnick), one from Argentina (*C. aschaensis* Schiapelli & Gerschman), one from Queensland (*C. raveni* Platnick & Griffin), and three from Namibia (*C. whartoni* Platnick & Griffin, *C. hirsuta* Platnick & Griffin, *C. namibensis* Platnick & Griffin); all are thought to inhabit dunes and other sandy habitats. Both sexes are known for three of the

South American species; the African species are represented by males from central and western Namibia, and a female from northern Namibia.

All measurements are in mm.

DESCRIPTIONS

Cyrioctea marken n. sp.

(Figs. 1-4)

Type

Male holotype taken in loose sand of rocky koppie near Elsrus, Marken, northwestern Transvaal, South Africa (May 26, 1990; M. Filmer, L. Prendini), deposited in Koninklijk Museum voor Midden-Afrika (MRAC 172493).

Etymology

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

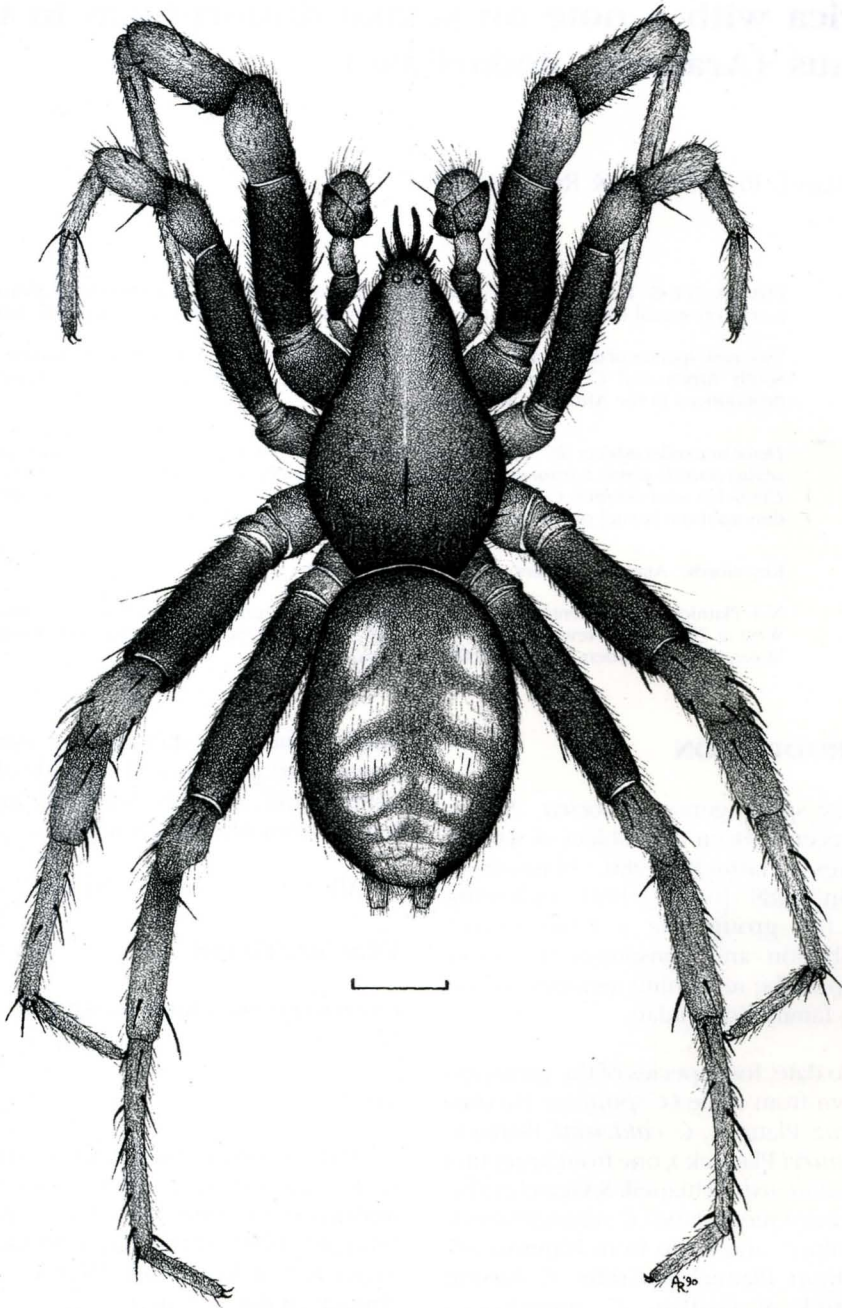


Fig. 1. - *Cyrioctea marken* spec. nov., male, dorsal view (scale = 1 mm).

Diagnosis

Males of this species can be recognized easily by the prolaterally directed spur on the palpal median apophysis (Fig. 3).

Male

Total length (not including ocular spines) 6.30. Carapace 3.30 long, 2.03 wide, almost diamond-shaped, notably narrowed in front (Fig. 1), chestnut brown, with eight ocular spines (of which inner four are enlarged). Eye sizes and interdistances: AME 0.04, ALE 0.09, PME 0.06, PLE 0.08; AME-AME 0.20, AME-ALE 0.01, PME-PME 0.16, PME-PLE 0.14, ALE-PLE 0.23; MOQ length 0.50, front width 0.28, back width 0.28. Sternum with long posterior extension (Fig. 2). Femur II 2.18 long; leg segments unmodified; spination: femora: I d1-1-0, p0-1-1, r1-1-1; II d1-1-0, p0-0-1, r1-1-1; III d1-1-0, p0-0-1, r0-0-1; IV d1-1-0, p0-1-1, r0-1-1; patellae: I v0-0-1p; III d1-0-1, p0-0-3, r0-1-0; IV d0-0-0, p0-0-0, r0-1-0; tibiae: I p0-2-0, v2-1p-2, r0-2-1; II p1-1-1, v2-2-2, r1-1-1; III d2-0-1, p2-2-0, v2-0-2, r0-1-1; IV d1-0-1, p1-1-1, v2-2-2, r0-1-1; metatarsi: I p0-0-1, v2-2-2, r0-0-0; II p0-1-2, v2-1r-2, r0-1-1; III d0-1-0, p1-2-2, v2-1p-2, r1-1-1; IV d1-1-1, p1-2-2, v0-2-2, r1-2-2. Abdominal dorsum dark gray with two paramedian rows of white spots almost forming chevrons posteriorly; venter gray with two large white paramedian spots behind epigastric furrow. Palpal tibia with bifid retrolateral apophysis (Fig. 3); tegulum prolonged basally, median apophysis with prolaterally directed spur (Fig. 4).

Female

Unknown.

Other Material Examined

None.

***Cyrioctea griswoldorum* n. sp.**

(Figs. 5-9)

Types

Male holotype from Luderitzbucht, 23°35'S, 15°10'E, Namibia (Oct. 8, 1984; C. Griswold, T. Meikle-Griswold), and female allotype dug from burrow at Punta Diaz, Luderitz Bay, same coordinates (Oct. 10, 1984; C. Griswold, T. Meikle-Griswold), deposited in the Natal Museum.

Etymology

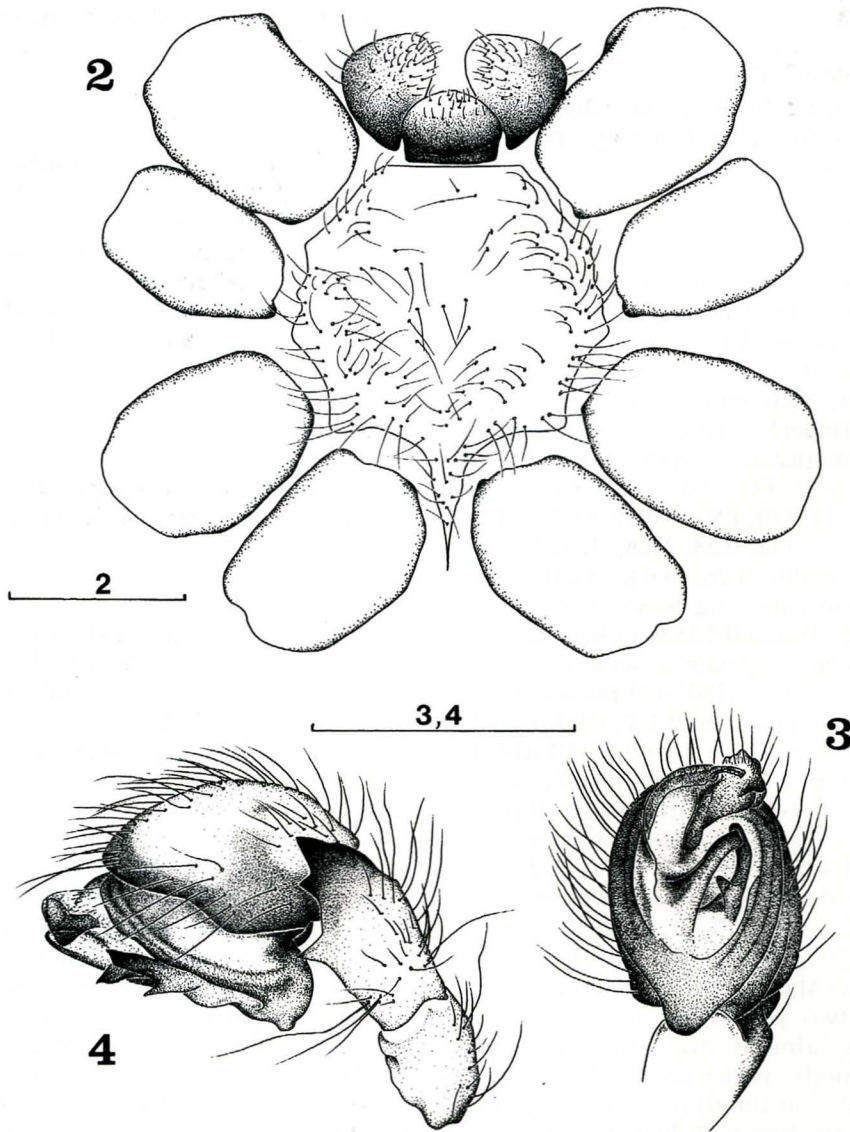
The specific name is a patronym in honor of the collectors of the types.

Diagnosis

Males of this species can be recognized by the small, sharply pointed tooth accompanying the retrolateral tibial apophysis (Fig. 5), females by the squared epigynal septum (Fig. 9).

Male

Total length (not including ocular spines) 4.61. Carapace 2.25 long, 1.39 wide, almost diamond-shaped, notably narrowed in front, dark chestnut brown, with six ocular spines (of which inner four are enlarged). Eye sizes and interdistances: AME 0.05, ALE 0.06, PME 0.05, PLE 0.07; AME-AME 0.11, AME-ALE 0.01, PME-PME 0.11, PME-PLE 0.08, ALE-PLE 0.15; MOQ length 0.29, front width 0.21, back width 0.21. Sternum with long, extremely narrow posterior extension. Femur II 1.43 long; leg segments unmodified; spination: femora: I, II d1-0-0, p0-0-1, r0-1-1; III d0-0-0, p0-0-1, r0-1-1; IV d1-1-0, p0-1-1, r0-1-1; patellae: III d1-1-1, p0-0-3, r0-1-0; IV d0-0-0, p0-1-2, r0-1-0; tibiae: I p0-0-1, v1r-1r-2, r0-0-1; II p1-0-1, v1r-1r-2, r0-0-1; III d1-1-1, p1-1-1, v0-0-2, r0-1-1; IV d1-0-0, p1-0-1, v1p-2-2, r0-1-1; metatarsi: I v0-0-2; II p0-1-1, v0-1r-2, r0-1-1; III d0-1-1, p1-1-2, v0-2-2, r1-1-2; IV d0-1-1, p1-2-2, v2-0-2, r1-2-2.

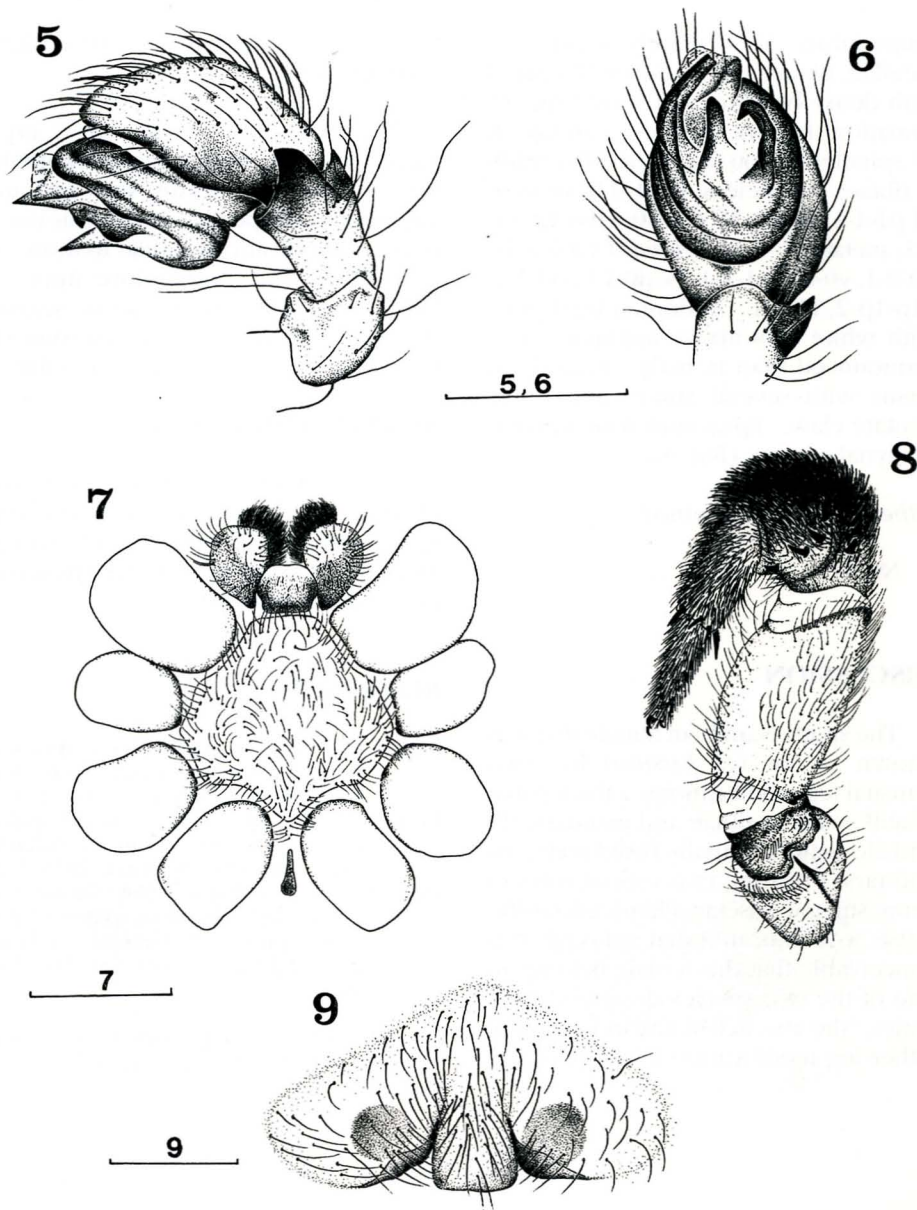


Figs. 2-4. - *Cyrioctea marken* spec. nov., male. (2) cephalothorax, ventral view, (3) left palp, ventral view, (4) left palp, retrolateral view (scale = 1 mm).

Abdomen shiny, dark gray except for white spot immediately above spinnerets. Palpal tibia with retrolateral apophysis bearing sharply pointed basal tooth (Fig. 5); tegulum not prolonged basally, median apophysis with prolaterally directed fold (Fig. 6).

Female

Total length (not including ocular spines) 9.16. Carapace 4.11 long, 2.44 wide, wider anteriorly than in male, light brown, with white lateral margins varying in width in undulating pattern, with eight ocular spines (of which inner



Figs. 5-9. - *Cyrioctea griswoldorum* spec. nov. (5) left male palp, retrolateral view, (6) same, ventral view, (7) female cephalothorax, ventral view, (8) female leg III, retrolateral view, (9) epigynum, ventral view (scales = 0.5 mm for 5, 6, 9; 1 mm for 7, 8).

four are largest). Eye sizes and inter-distances: AME 0.07, ALE 0.05, PME 0.07, PLE 0.09; AME-AME 0.23, AME-ALE 0.03, PME-PME 0.14, PME-PLE 0.23, ALE-PLE 0.27; MOQ length 0.49, front width 0.37, back width 0.28. Posterior sternal extension reduced anteriorly to patch of

only slightly sclerotized cuticle (Fig. 7). Femur II 1.61 long; all leg segments much shorter, thicker than in male, metatarsi and tarsi I almost fused, forming cone, coated dorsally with extremely short, thick macrosetae, ventrally with two rows of cuspule-like

setae; tibiae II-IV greatly shortened; patellae, tibiae, and metatarsi III coated with dense brush of stiff setae (Fig. 8); spination: femora spineless; patellae: I, IV spineless; II p0-0-2; III p 0-0-4, r0-0-2; tibiae: I spineless; II p1-0-0, v0-0-1r; III p1-1-1, r1-0-1; IV d1-0-0, v0-0-1p, r1-0-1; metatarsi: I spineless; II v0-0-2; III p0-0-1, v0-0-2, r1-1-1; IV d0-1-0, p0-1-2, v1p-1p-2, r1-1-1. Abdomen light gray, with white spot above spinnerets less pronounced than in male. Palp short, tarsus with several spines and finely dentate claw. Epigynum with squared epigynal septum (Fig. 9).

Other Material Examined

None.

DISCUSSION

The single Namibian female that was known so far (*C. hirsuta*) has two unusual leg modifications: a thick patch of stiff setae on tibiae and metatarsi III, and elongated, virtually fused metatarsi and tarsi I bearing two ventral rows of short, stiff macrosetae. Platnick & Griffin (1988:361) indicated that although it is conceivable that this female belongs to one of the two species described from males, "the absence of any indication of either leg modification in the males of

those species makes that possibility seem unlikely."

The male and female of *C. griswoldorum* n. sp. from southern Namibia were collected at nearby sites and are apparently conspecific. The female does have leg modifications similar to those of *C. hirsuta*, and it therefore appears likely that this conspicuous sexual dimorphism is typical of at least some of the Afrotropical species of *Cyrioctea*.

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