

## RESEARCH NOTE

### ON THE FEMALE OF *CRYPTOCELLUS GOODNIGHTI* (ARACHNIDA: RICINULEI)

The New World ricinuleid fauna includes two genera, *Cryptocellus* and *Pseudocellus*, occurring in South and North America, respectively, but showing broad sympatry within Central America. The 11 known Central American species of *Cryptocellus*, reviewed by Platnick & Shadab (1981a, b), belong to the *centralis* group, which also extends into Colombia. Of the 11 Central American species, four have been known only from males.

Among a shipment of ricinuleids collected in Costa Rica by Dr. Allen M. Young and recently sent to me for study by Dr. Joan P. Jass of the Milwaukee Public Museum (MPW) were adults of two species. One male of *C. fagei* Cooke & Shadab was taken in a rotten banana stem in cacao at Finca La Lola, near Siquirres (10°06'N, 83°22'W), Limón, Costa Rica on August 9, 1984, and is the first record of that species from Limón Province. Three other males, belonging to *C. goodnighti* Platnick & Shadab, were taken in rotten banana stem slices at Finca La Tigra, near La Virgen (10°24'N, 84°07'W), Heredia, Costa Rica from September 26-28, 1979 and on September 3, 1989. A single female taken at the same locality on September 15, 1978 appears to be the first known female of the latter species, and is described below. I thank Dr. Mohammad U. Shadab of the American Museum of Natural History for providing the illustrations.

*Cryptocellus goodnighti* Platnick & Shadab

Figs. 1, 2

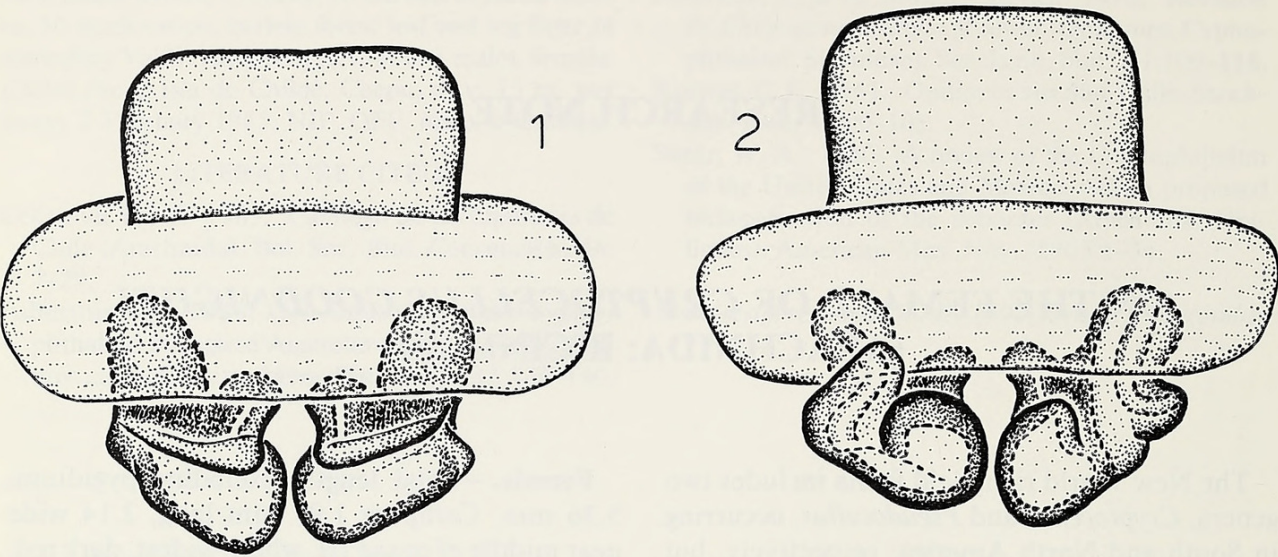
*Cryptocellus goodnighti* Platnick & Shadab, 1981a: 10.

**Diagnosis.**—Females can easily be distinguished from those of the other known *centralis* group species by their elongated, tripartite spermathecae (compare Figs. 1, 2 with the illustrations in Platnick & Shadab 1981a, b).

**Female.**—Total length, excluding pygidium, 5.36 mm. Carapace 1.97 mm long, 2.14 wide near middle of coxae III, where widest, dark red, lateral margins darkest, with small yellow translucent areas at margins opposite front of coxae II; surface coated with strong white setae, relatively uniform in length, with relatively few tubercles largely confined to longitudinal median depression, pair of oblique paramedian depressions occupying about one-fifth of carapace length, and posterior margin. Cucullus 0.94 mm long, 1.17 mm wide, dark red medially with slightly paler margins, bearing long white setae sparsest proximally, with tubercles largely restricted to distal margin; lateral lobes only very slightly protuberant. Left chelicera: movable finger concave posteriorly, not widened transversely, armed with 13 teeth, of which most proximal three, fifth, and tenth reduced to denticles, distal three slightly enlarged; fixed finger armed with five teeth of which most distal is much enlarged, three most proximal reduced to denticles. Sternal region with coxae I not meeting tritosternum; coxae II meeting for almost their entire length, their suture line almost three times as long as that of coxae III; coxae IV meeting along their median surfaces.

Abdomen 3.81 mm long, 1.39 wide near front of tergite 12, where widest, coloration as in carapace except for light orange articular membranes, white setae shorter than on carapace; tubercles restricted to transverse band on tergite 9, anterolateral depressions of median plates, corresponding depressions of sternites 11-13, posteromedian surface of median plate of tergite 11, and throughout length of median one-third of median plate of tergite 12; median plates of tergites 11-13 much wider than long. Pygidium with notch in posterior dorsal margin of basal segment, without notch in ventral margin.





Figures 1, 2.—*Cryptocellus goodnighti* Platnick and Shadab, female, posterior genital lip and spermathecae: 1, anterior view; 2, posterior view.

Palp orange, with first trochanter and tibia lightest; few tubercles on coxae and trochanters, base of femora with cluster of tubercles at base on retromargin; coxae each with two thick white setae posteriorly along inner margin. Leg formula 2431. Legs dark reddish brown with tarsi lightest, coated with thin, long, white setae, with few tubercles concentrated on ventral ridges of tibiae and dorsal ridges of metatarsi and tarsi. Leg measurements are given in Table 1. Second legs

slightly widened; femur I about twice, femur II about three times as long as wide. Tarsal claws large, evenly curved. Posterior genital lip and spermathecae as in Figs. 1, 2.

**Material Examined.**—Only specimens mentioned above (MPW).

**Distribution.**—Known only from northeastern Costa Rica.

Table 1.—Leg measurements.

Leg	I	II	III	IV	Palp
Coxa	0.66	1.13	0.96	0.90	0.40
Trochanter I	0.53	0.85	0.62	0.75	0.49
Trochanter II	—	—	0.57	0.56	0.41
Femur	1.20	1.98	1.39	1.53	1.01
Patella	0.75	1.21	0.90	0.87	—
Tibia	0.97	1.61	0.85	1.00	1.54
Metatarsus	1.09	1.73	1.09	1.18	—
Tarsus	0.49	1.60	0.77	0.90	0.23
Total	5.69	10.11	7.15	7.69	4.08

LITERATURE CITED

Platnick, N. I. & M. U. Shadab. 1981a. On Central American *Cryptocellus* (Arachnida, Ricinulei). American Mus. Novit., 2711:1–13.  
Platnick, N. I. & M. U. Shadab. 1981b. On the *Cryptocellus centralis* group (Arachnida, Ricinulei). Bull. American Mus. Nat. Hist., 170:18–22.

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