

Coccorchestes Thorell newly described from Australia (Araneae: Salticidae)

Charles E. Griswold

Natal Museum,
237 Loop Street,
Pietermaritzburg 3201,
Natal, South Africa

Introduction

All previously described species of the genus *Coccorchestes* Thorell are known from New Guinea or immediately adjacent islands (the Aru Islands and New Britain). At the time of its description, *Coccorchestes* Thorell, 1881 included four new species: *C. rufipes*, *subhirsutus*, *tarsalis* and *blendae*, of which *rufipes* was made the type species. All were from the collections of Beccari and D'Albertis from New Guinea and the Aru Islands. Proszynski (1971) in his revision of the Coccorchestinae, placing particular emphasis on the female genitalia, described three new species and considered *C. subhirsutus* and *tarsalis* as junior synonyms of *C. rufipes*. Subsequently, Balogh (1979, 1980), placing special emphasis upon the spination of legs I and II, described 34 new species, bringing the total number of species in this genus to 39.

A new species from Australia may now be added to the list of known *Coccorchestes*. Presumably this species, known from northern Queensland, is a remnant of a widespread biota common with New Guinea during the Pleistocene when the sea levels were lower, but the full biogeographic implications of this discovery must await a phylogenetic revision of this genus.

The phylogenetic position of the genus *Coccorchestes* is obscure. Proszynski (1971) expressed misgivings as to whether the Coccorchestinae constitute a natural taxon, because of variability in the genitalia and cheliceral dentition among the genera included. Although the sister group relationship of *Coccorchestes* remains unknown, the configuration of the male and female genitalia suggests placement in the subfamily Euophryinae (*sensu* Proszynski, 1976), a group especially rich in genera in the Australasian and Neotropical regions.

All measurements and ratios in this description follow Proszynski (1971).

Coccorchestes ferreus, new species

Type: Female holotype from Iron Range, Queensland, Australia (August 1949, N. L. H. Krauss), to be deposited in the Queensland Museum.

Etymology: The specific name is from the Latin, "ferreus", meaning "of iron".

Diagnosis: *Coccorchestes ferreus* may be recognised by the form of the epigynum (Fig. 1) and the spination of legs I and II. This species keys to *tapini* in Balogh (1980), but the form of the female genitalia is quite different. The epigynum resembles most closely *C. karimui* and *C. fluviatilis* Balogh, 1980, but may be readily distinguished from these species by the spination of legs I and II, and also from the former in having the circular depressions of the epigynum much wider in relation to the width of the epigynal plate and in having the copulatory canal more evenly curved, and from the latter in having the copulatory openings located near the anterior margin of the epigynal plate.

Female: Cephalothorax shiny brown; carapace armoured with oval pits on dorsum, on sides transverse lines of tubercles extend to lower margin and onto clypeus anteriorly; 40 pegs on posterior margin

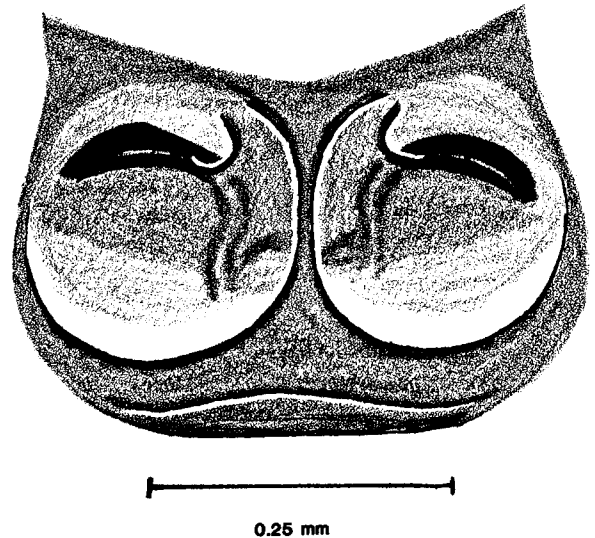


Fig. 1: *Coccorchestes ferreus*, n. sp., Epigynum, ventral view.

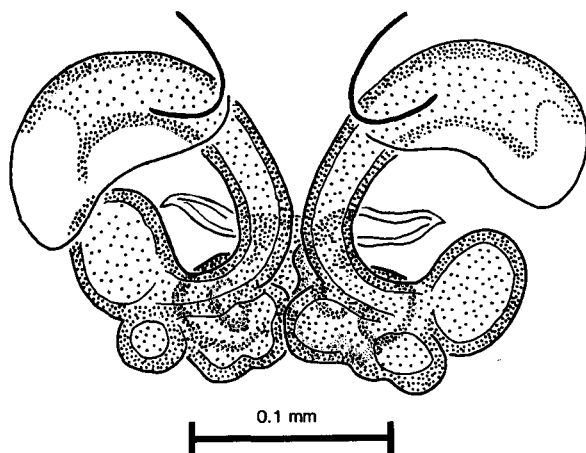


Fig. 2: *Coccorchestes ferreus*, n. sp., spermathecae, cleared, ventral view.

of carapace. Chelicerae brown, lighter at tip; labium and endites brown only at bases, yellowish at tips; sternum brown; coxae I and II pale to white, III and IV brown; trochanters brown. Abdomen grey, covered dorsally with shiny, brown scutum; scutum smooth, without setae. Legs with femur, patella and tibia dark brown; leg I with basitarsus brown and telotarsus pale; legs II to IV with basitarsus and telotarsus pale, dark only at base of basitarsus and at basitarsus-telotarsus joint; legs generally without scales, except for strong longitudinal bands of white scales dorsally on femora I and IV, and scattered white scales on dorsal surface of femur II. Tibia I with 2-2 spines below, basitarsus I with 2-2 spines below, tibia II with 1-1 posteroventral spines, basitarsus II with 1 proximal, posteroventral spine. Palpus dark brown. Leg formula 4123. *Measurements* (mm): length cephalothorax = 1.42; width ocular field I = 1.1; width ocular field III = 1.11; height cephalothorax = 1.07; length ocular field I = 0.66; length ocular field III = 0.66; length abdomen = 1.5; length abdominal scutum = 1.36; total length = 3.0; leg measurements (F + P + T + bt + tt = total):

leg I (0.785 + 0.31 + 0.385 + 0.36 + 0.36 = 2.2); leg II (0.71 + 0.3 + 0.33 + 0.33 + 0.36 = 2.03); leg III (0.7 + 0.27 + 0.31 + 0.36 + 0.33 = 1.97); leg IV (1.0 + 0.29 + 0.44 + 0.485 + 0.33 = 2.54). *Ratios*: length ocular field/length cephalothorax = 0.46; width ocular field I/width ocular field III = 1.0; length ocular field/width ocular field I = 0.6; height cephalothorax/length cephalothorax = 0.61. *Female genitalia*: Epigynum as in Fig. 1; circular depressions broad in relation to width of epigynal plate, copulatory openings located near anterior border; spermathecae as in Fig. 2, copulatory canal long, evenly curved.

Male: Unknown.

Material examined: Only the holotype.

Acknowledgements

I wish to thank Dr Norman I. Platnick for his hospitality while I studied at the American Museum of Natural History, Dr Jerszy Proszynski for correspondence and discussion concerning salticid taxonomy, and Drs Evert I. Schlinger and Edward J. Rogers Jr for comments on the manuscript. Work at the AMNH was supported by a Theodore Roosevelt Memorial Fellowship from the American Museum of Natural History.

References

- BALOGH, P. 1979: New species of Papuan Attidae (Araneae). *Acta zool.hung.* **25**(3-4): 213-219.
- BALOGH, P. 1980: The genus *Coccorchestes* Thorell, 1881 (Araneae: Attidae). *Acta zool.hung.* **26**(1-3): 61-88.
- PROSZYNSKI, J. 1971: Redescription of type-species of genera of Salticidae (Aranei), VIII-X. Revision of the subfamily Coccorchestinae. *Annls zool.Warsz.* **28**(9): 153-182.
- PROSZYNSKI, J. 1976: Studium systematyczno-zoogeograficzne nad rodzina Salticidae (Aranei) Regionów Palearktycznego i Nearktycznego. *Wyzsza Szkola Pedagogiczna w Siedlcach Rozprawy* **6**: 1-260.
- THORELL, T. 1881: Studi sui ragani malesi e papuani. III. *Annali Mus.civ.Stor.nat.Giacomo Doria* **17**: 1-720.