

**The African members of the trap-door spider family  
Migidae (Araneae: Mygalomorphae) 1: the genus  
*Moggridgea* O. P. Cambridge, 1875**

by

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**ABSTRACT**

The genus *Moggridgea* (Araneae: Migidae) is revised. 31 valid species are recognised. The following new synonymies are proposed: *M. coegenensis* Purcell, 1903, *M. nigra* Purcell, 1903 and *M. latus* Tucker, 1917 with *peringueyi* Simon, 1903; *M. chirindaensis* Benoit, 1962 with *pymi* Hewitt, 1914; *Caedmon congener* O. P. Cambridge, 1903, *C. dubia* O. P. Cambridge, 1903, and *C. thoracica* O. P. Cambridge, 1903 with *quercina* Simon, 1903; and *Caedmon affinis* O. P. Cambridge, 1903 with *terricola* Simon, 1903. *Moggridgea seticoxa* Purcell, 1903 is considered a *nomen dubium*. Nine new species are described: *ampullata*, *anactenidia*, *eremicola*, *loistata*, *nesiota*, *socotra*, *tanypalpa*, *teresae* and *verruculata*. *Moggridgea* is monophyletic and belongs in the Paramiginae. The sister group is *Micromesomma*. A cladogram and key for *Moggridgea* species are provided. *Moggridgea* is known only from Africa and some surrounding islands.

**INTRODUCTION**

Among the arachnid groups largely or wholly restricted to the former Gondwanan continents of the southern hemisphere, the spider family Migidae has long commanded special interest (Pocock 1903, Legendre 1979, Platnick 1981) as a group with an essentially southern origin. There are recent reviews of the migid faunas of New Zealand (Wilton 1968), Argentina (Schiapelli & Gerschman de Pikelin, 1973), and Australia (Raven 1984), but the rich and diverse migid fauna of the African continent has received relatively little recent attention, and no revisionary work has been attempted. In this, the first in a series of papers on the family Migidae in the Afrotropical region, the large genus *Moggridgea* is revised and its relationships within the family are discussed.

*Moggridgea* was proposed in 1875 by the Rev. O. P. Cambridge for an arboreal trap-door spider from Uitenhage, South Africa (*M. dyeri*); the first migid to be described from Africa. Thirty one additional names were proposed in this genus by Karsch (1879), O. P. Cambridge (1889), Lenz (1889), Pocock (1897 1902), Purcell (1903 1904), Simon (1903b 1907), Hewitt (1913a 1913b 1913c 1914a 1914b 1915 1916 1919 1925), Tucker (1917), Lawrence (1928) and Benoit (1962). Of these, *M. meyeri* Karsch, 1879 is properly placed in *Stasimopus* Simon (Ctenizidae) (Purcell 1903:72), while *M. abrahami* O. P. Cambridge 1889, *M. tidmarshi* Lenz, 1889 and *M. stauntoni* Pocock, 1902 belong in the migid genus *Poecilomigas* Simon. In addition, four names proposed in the genus *Caedmon* O. P. Cambridge (*affinis*, *congener*, *dubia* and *thoracica*, all of O. P. Cambridge, 1903) belong in

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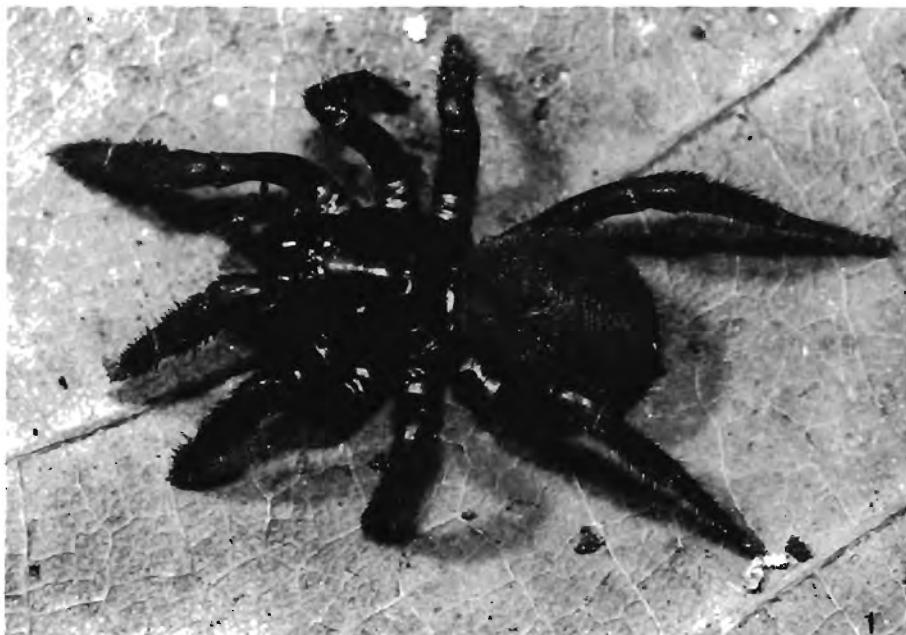


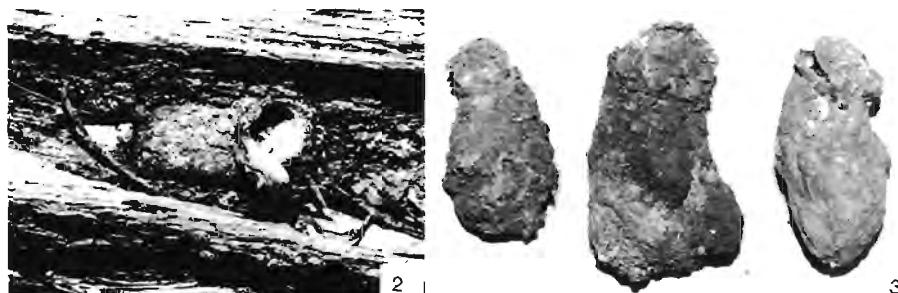
Fig. 1. *Moggridgea teresae* sp. n., female, 4.8 ×.

*Moggridgea*. Purcell (1903) presented a key to the Migidae of the Cape Colony and Hewitt (1915) presented a key to the Migidae of South Africa. This revision recognises 31 valid species, of which 9 are newly described. Eight species are known from both sexes, 20 from females, and 3 from males only.

Simon (1892:83) placed *Moggridgea* in his group Migeae on the basis of a simple, recurved thoracic fovea and cylindrical tibia III. At the same time Simon established the Myrtaleae (later Paramiginae) for those migids with a posterior median extension of the thoracic fovea and a deep, dorsal depression at the base of tibia III (Fig. 16). The first character was shown to be invalid by Hewitt (1913a), who described a *Moggridgea* with a well-developed posterior extension to the thoracic fovea, and questioned the distinctness of the groups Migeae and Myrtaleae (Hewitt 1913c:465). Raven (1985) recognised that a dorsal depression at the base of tibia III is present, at least in reduced form, in all *Moggridgea* (Figs 17–18). This character also occurs in the genera *Micromesomma* Pocock, *Paramigas* Pocock and *Thyropoeus* Pocock, all from Madagascar, and is otherwise absent from the Migidae or their sister-group, Actinopodidae. On the basis of this synapomorphy, Raven (1985) transferred *Moggridgea* to the Paramiginae.

#### NATURAL HISTORY

All Migidae are trap-door spiders, closing the entrance to their retreat with a hinged door. The retreats may be divided into two basic types, distinguished by the degree of excavation required in their construction: (1) a bag or sac-like nest, oval to pear-shaped (Fig. 3), constructed primarily of tough silk placed in a niche or



Figs 2-3. Nests of *Moggridgea teresae* sp. n. 2. Nest in situ on fallen tree, actual size. 3. Nests, 1.5 ×.

crevice in the substrate (Fig. 2), with a minimum of excavation required, and (2) a true, silk-lined tubular burrow, excavated in the substrate, usually terrestrial, with the length several times the diameter. Both types are found in *Moggridgea*, though the nest is far more common than the burrow. Data on the retreat are available for 16 species (details included under species descriptions):

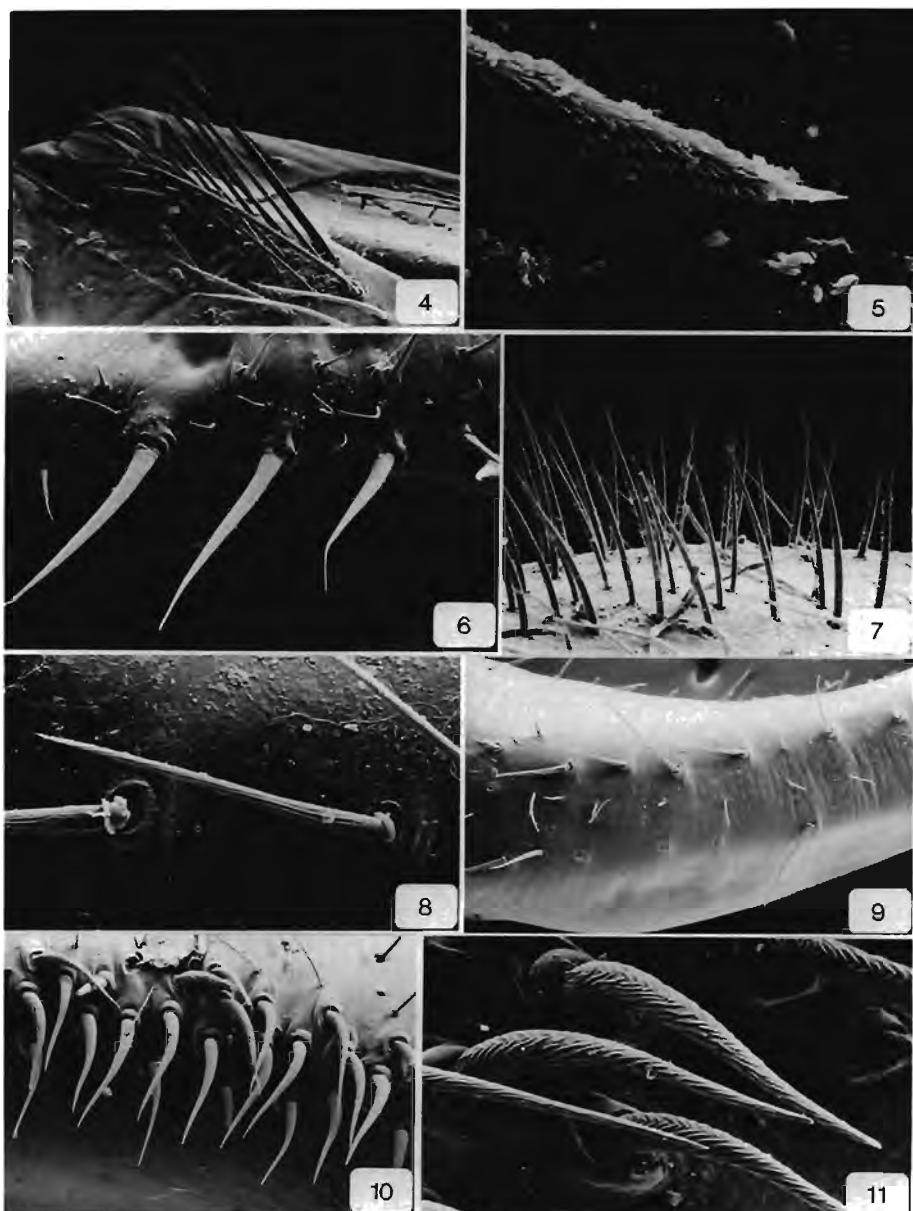
#### Nest building

*albimaculata, crudeni, dyeri, intermedia, microps, nesiota, paucispina, pseudo-crudeni, quercina, rupicola, rupicoloides, teresae.*

#### Burrowing

*mordax, peringueyi, terrestris, terricola.*

Construction of a nest requires little modification of the substrate, though the available cavity may be slightly enlarged or smoothed out. It is likely that the chelicerae, palpi, and first and second legs are used. Individuals often show wear on the fangs, tarsal claws, and setae and thorns on the coxae of the legs, suggesting that these appendages are used in excavation. Simon (1903a:878) suggested that the dorsolateral keels on the fang were used to enlarge cavities on the bark of trees. The lining of the nest is a tough, thick layer of silk on the surface of which are attached bits of bark, earth, detritus, moss or lichen, affecting excellent camouflage (Fig. 2). Many species have been recorded from trees, while a few have been found in crevices in rock. This appears to be facultative, as individuals of *M. intermedia* have been taken from similar nests on trees and in niches in rock walls. The excavation of a tubular burrow in hard soil or an adobe wall is remarkable in that the migids lack a rastellum of stout spines at the cheliceral apex such as that found in the Actinopodidae, Ctenizidae and Barychelidae. Presumably excavation takes place during the wet season when the substrate is softest. Burrowing has not been observed in *Moggridgea*, but presumably the activity is similar to that described by Todd (1945) for *Migas distinctus* from New Zealand. In this species the ventrolateral spines on the palpus and legs I and II are used in digging and fragments of earth are carried in the fangs. Burrowing species of *Moggridgea* often show wear on the patellar spinules, suggesting that these may serve in digging. The lids to *Moggridgea* retreats may be of a thin 'wafer' or thickened 'cork' type. There is typically a single door, and it is likely that the nests with two doors attributed to *M. dyeri* (Abraham, 1887) were constructed by *Poecilomigas*.



Figs 4–11. *Moggridgea* spp., females. 4, 10–11. *M. teresae* sp. n. 5, 9. *M. intermedia* Hewitt. 6, 7. *M. dyeri* Cambridge. 4. Patella I, erect ventral setae, 77 $\times$ . 5. Patellar seta, tip, 1033 $\times$ . 6. Femur II, ventral, stout setae, 38 $\times$ . 7. Metatarsus I, erect dorsal setae, 77 $\times$ . 8–11. Femur I, ventral. 8. Ordinary setae, 175 $\times$ . 9. Rows of ordinary setae, 38 $\times$ . 10. Thornlike setae, 53 $\times$ . 11. Thornlike setae, close-up, 189 $\times$ .

*Moggridgea* are found in a great variety of habitats, including cool-temperate and tropical wet forests, bushveld and savanna, karoo desert, fynbos, and true desert. It appears that the habitat preferences of individual species are narrow. More than one *Moggridgea* species may occur in sympatry, with as many as five occurring in the vicinity of Aicedale in South Africa.

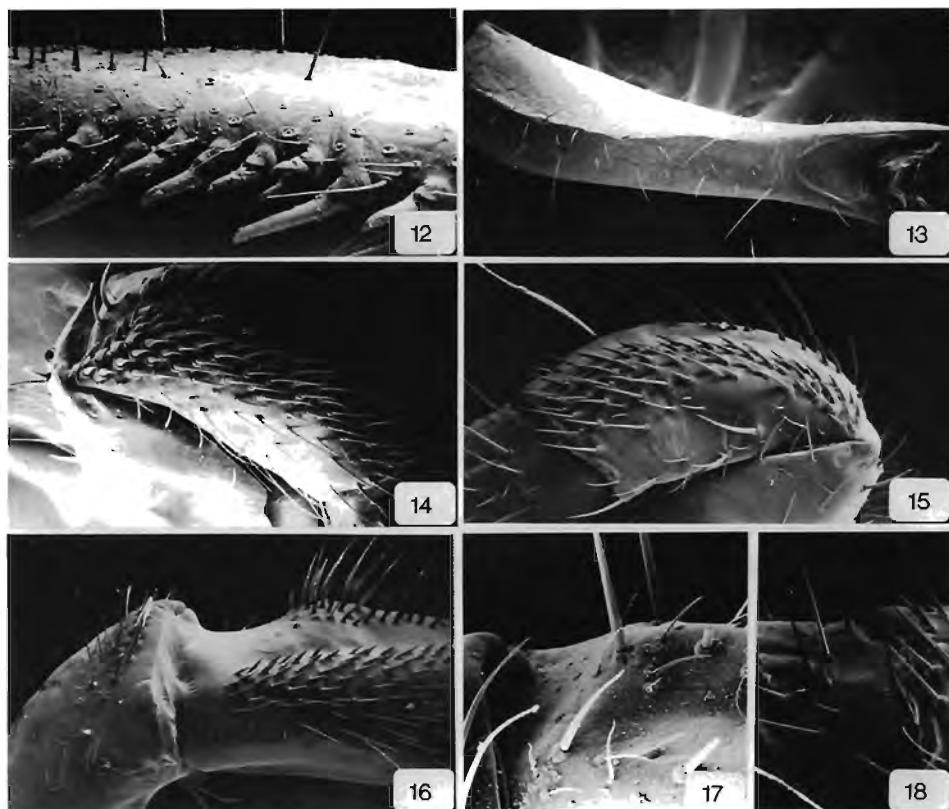
As is typical of mygalomorphs they are perennial, females continuing to moult after maturity. This leads to great variation in adult size (mature females from the same population of *teresae* sp. n. may differ in size by 60 %) and perhaps in other characters as well. Moult occurs in the nest—at least in *intermedia* the exuvium is cast out of the nest. Eggs are laid in the nest and the young remain with the mother for at least one post-hatching moult. Courtship and mating have not been observed. Mature males leave the nest and wander in search of females, and the sex-limited male characters (greater length of limbs, rearrangement of spination patterns, relatively greater size of the AME, scopulae) are related to this behaviour.

Little is known of the natural enemies of *Moggridgea*, though these are probably the same as for other spiders. Nests are occasionally found torn open, perhaps by birds. Barraclough (1984) records that a parasitic fly, *Astomella capensis* Schlinger (Diptera: Acroceridae), was collected from the nest of *crudeni* near Aicedale, South Africa.

Details of natural history are included under species descriptions.

#### MATERIALS AND METHODS

**General:** Descriptions are of a single representative specimen, noted at the beginning of the description, with the more important aspects of variation detailed subsequently. All measurements are in millimetres. Eyes are measured from above. Due to difficulties in consistently locating the margins of the domed, cuticular lens in heavily pigmented specimens, the AME diameter is expressed as that of the shiny tapetum. Ocular area abbreviations are standard for the Araneae. Illustrations of the cheliceral teeth are schematic, with the promarginal row on the right. Descriptions of the sternal sigilla refer to the concave regions on the sternum as viewed with oblique lighting rather than to any discoloured area surrounding these concavities. Coxal thorns are short, stout setae arranged in tight, proximal clusters on the coxae of the legs (Figs 23–26, 50). Measurement of legs and description of spination are as in Griswold (1985), except that where ventrolateral spines on legs I and II are in diagonal series (Figs 12, 65) these series are separated in the notation by a hyphen. Tarsal claw illustrations are schematic. Leg I claws always point left, leg IV right, and the anterolateral claw is on the left. Spermathecae were removed using fine needles, cleared for 12–16 hours in warm lactic acid, and temporarily mounted in lactic acid for examination with a Zeiss compound microscope. Spermathecal measurements were made as follows: length, from centre of base to apex of distal chamber; diameter, at the lower (proximal) level of the sclerotised band, and base width, distance between spermathecae along a line even with the lower level of the sclerotised band. Scanning electron micrographs were produced with a JEOL T-200 SEM. Spinnerets were critical-point-dried prior to examination. Illustrations were made with the aid of a drawing



Figs 12–18. Leg structure of Paramiginae. 12–15, 17–18. *Moggridgea* spp. 12. *M. peringueyi* Simon, female. 13–14. *M. pseudocrudeni* Hewitt. 13. Male. 14. Female. 15, 18. *M. crudeni* Hewitt, female. 17. *M. dyeri* Cambridge, female. 16. *Micromesomma cowani* Pocock, female. 12. Metatarsus I, anterolateral, 22  $\times$ . 13. Femur I, ventral carina, 15  $\times$ . 14–15. Patella IV, anterolateral, 22  $\times$ . 16–18. Junction of patella-tibia III, showing basal depression on tibia. 16. 15  $\times$ . 17. 44  $\times$ . 18. 32  $\times$ .

tube (camera lucida) on a Wild stereomicroscope and Zeiss compound and stereomicroscopes.

**Species concept:** A species is considered as a phenetically distinct set of specimens which are morphologically consistent over a geographic area. Practical criteria for specific distinctness are (1) uniqueness, (2) distinctness in sympatry, (3) possession of character values outside the range of variation occurring in similar species, and (4) concordant variation in suites of characters.

**Character variability:** *Moggridgea* species are variable. The source of this variability is unknown, but may be due in part to their perennial lifestyle. This leads to great variation in the size of mature individuals, and perhaps to variation in meristic character values and allometry as well. The range of variation here accepted for a character within a species is judged according to (1) intrapopulational variation and (2) clinal variation for that character, and (3) discordant variation in that character

relative to others. Several conspicuous characters, traditionally used in distinguishing *Moggridgea* species, may be variable.

1. Ocular area: The width of the OA relative to caput width may exhibit intrapopulational and geographic variation. In *peringueyi* (Figs 232, 248–249) this is partially clinal and partially discordant, with extreme values occurring in widely separated localities.

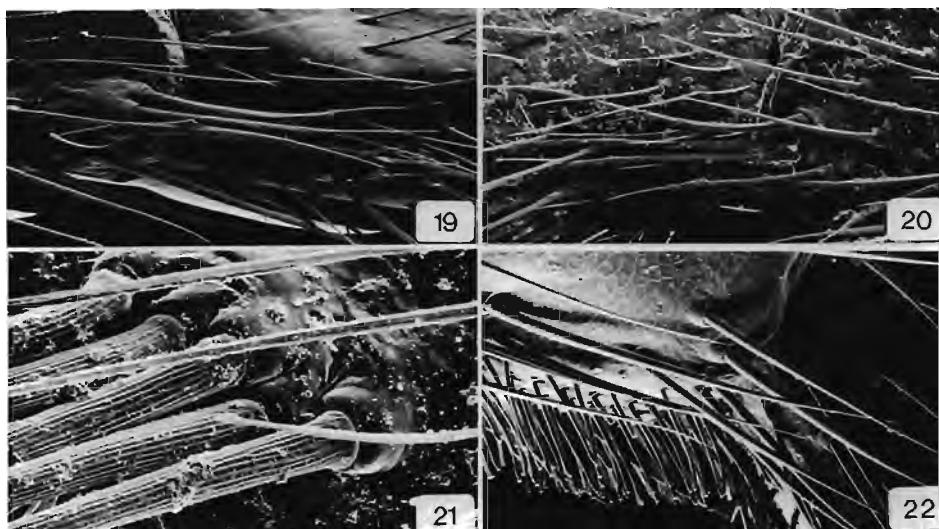
2. Relative diameters of ALE and AME: This character has been used in keys to *Moggridgea* species, but due to great intrapopulational variability its value is small. Within populations of both *paucispina* and *teresae* the ALE may range from slightly greater than to twice the diameter of the AME.

3. Thoracic fovea: The shape and presence or absence of a posterior projection, once considered of subfamilial importance (Simon 1892:83), may vary greatly within populations. Shape, degree of recurvature, and presence or absence of a posterior projection (Figs 106–116, 183–184, 325–329) is thus of little taxonomic value.

4. Coxal thorns: Within the species accepted in this study, coxal thorn counts show a great range. This meristic character is considered diagnostic only as part of a suite of discrete or meristic characters, coupled with the criterion of distinctness in sympatry.

5. Spermathecae: The shape of the spermathecal trunks, particularly whether straight or sinuate, may vary within populations (Figs 117–120). Length relative to diameter is more consistent, though it may be geographically discordant (Figs 236–246).

6. Male palpus: The palpal bulb is remarkably uniform among the known males of *Moggridgea*, and offers no diagnostic character. Rotation of the bulb against the tarsus varies between individuals. Specific differences are primarily in the relative length of segments and degree of expansion of the tibia.



Figs 19–22. *Moggridgea* spp., retrolateral comb at apex of metatarsus IV. 19. *M. crudeni* Hewitt, female, 79 $\times$ . 20. *M. peringueyi* Simon, female, 51 $\times$ . 21, 22. *M. pseudocrudeni* Hewitt. 21. Female, comb base, 258 $\times$ . 22. Male: absence of comb; ventral scopular hairs, 99 $\times$ .

## ACKNOWLEDGEMENTS

Specimens of *Moggridgea* and comparative material of Migidae and Actinopodiidae were loaned by the following institutions and individuals:

AM—Albany Museum, Grahamstown, South Africa, Dr F. Gess.

AMNH—American Museum of Natural History, New York, U. S. A., Dr N. Platnick.

BMNH—British Museum of Natural History, London, U. K., Mr P. Hillyard and Mr F. Wanless.

CAS—California Academy of Sciences, San Francisco, U. S. A., Dr W. Pulawski.

MCZ—Museum of Comparative Zoology, Cambridge, U. S. A., Dr H. Levi.

MNHN—Muséum National d'Histoire Naturelle, Paris, France, Drs M. Hubert and J. Heurtault.

MRAC—Musée Royal de l'Afrique Centrale, Tervuren, Belgium, Dr R. Jocqué.

SAM—South African Museum, Cape Town, South Africa, Dr V. Whitehead, Mrs C. Carr and Ms. M. Macpherson.

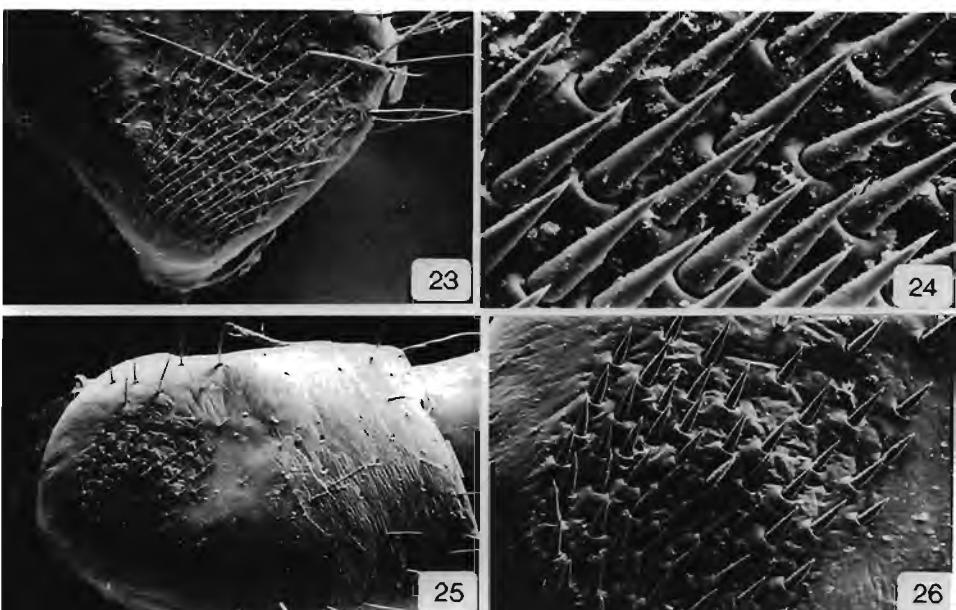
SMW—State Museum, Windhoek, Namibia, Mrs E. Griffin.

TM—Transvaal Museum, Pretoria, South Africa, Mr W. Haacke, Ms. L. Wessels and Dr S. Endrödy-Younga.

UCB—University of California, Berkeley, U. S. A., Dr E. Schlinger.

UMO—University Museum, Oxford, U. K., Mr M. Lansbury and Mr E. McGavin.

The remainder of the material is from the Natal Museum, Pietermaritzburg, South Africa (NM).



Figs 23–26. *Moggridgea pseudocrudeni* Hewitt, thorns at base of coxa II. 23–24. Female. 25–26. Male. 23. 51 ×. 24. 254 ×. 25. 43 ×. 26. 100 ×.

Other institutions abbreviated in the text are NCP, National Collection, Pretoria, South Africa, SMF, Forschungsinstitut Senckenberg, Frankfurt, W. Germany, and USNM, National Museum of Natural History, Washington D. C., U. S. A.

I am grateful to Drs N. Platnick, W. Pulawski, and E. Schlinger, Mr W. Haacke and Mrs E. Griffin for hospitality during visits to their respective institutions. Correspondence and discussion of migid taxonomy with Drs N. Platnick, R. Raven and B. Stuckenbergs and Mr P. Croeser proved most useful. Dr A. S. Dippenaar critically read and commented on a draft of the manuscript. Mr V. Bandu and Mr A. Bruton of the University of Natal, Pietermaritzburg, assisted with SEM work. Ms B. van Hoogdalem provided expert assistance in all phases of this project. Mrs P. Coville assisted with the plates. The various drafts of the manuscript were typed by Mrs S. O'Connell. Special thanks go to my wife, Teresa Meikle Griswold, for discovering and collecting new and rare *Moggridgea* and for caring for and photographing the living animals. This work was partially supported by a grant from the Council for Scientific and Industrial Research (C.S.I.R.), Pretoria. Fieldwork was made possible in part through permits from the Director-General of the Department of Environmental Affairs and the Natal Parks, Game and Fish Preservation Board, South Africa.

#### TAXONOMY

##### Family MIGIDAE Simon

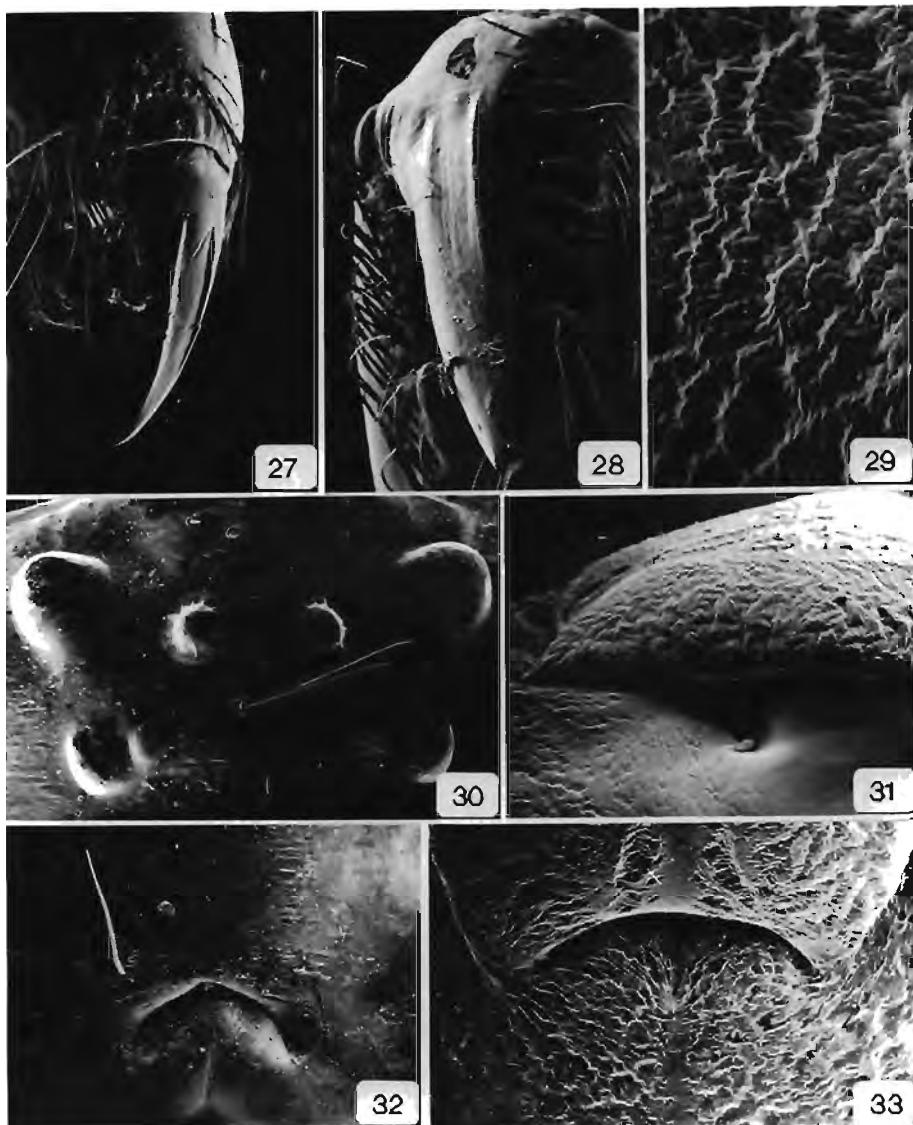
**Diagnosis:** Mygalomorph spiders with dorsolateral keels on fang (Figs 27–28), fang furrow with row of teeth on both margins (Fig. 28), rastellum absent; pedipalpal coxa without serrula; 8 eyes in 2 rows, ocular area broad, at least 0,40 width caput (Fig. 30); thoracic fovea transverse, recurved (Figs 32–33) to rarely straight; 1 pair of sternal sigilla; 3 claws, superior with 1 row of teeth (Figs 34, 39); 4 spinnerets, apical segment of PLS domed (Figs 46–47).

##### Genus *Moggridgea* O. P. Cambridge

*Moggridgea* O. P. Cambridge, 1875:319. Roewer, 1942:191. Bonnet, 1957:2971. Type-species by monotypy, *Moggridgea dyeri* O. P. Cambridge, 1875.

**Diagnosis:** Groups of erect, lamellate setae (Fig 4–5) beneath patellae I, II, IV (and rarely III) present; spines on tarsi I–IV absent. A group of stout, elongate setae beneath femur II (Fig. 6), and an apical preening comb on metatarsus IV (Figs 19–21) usually present.

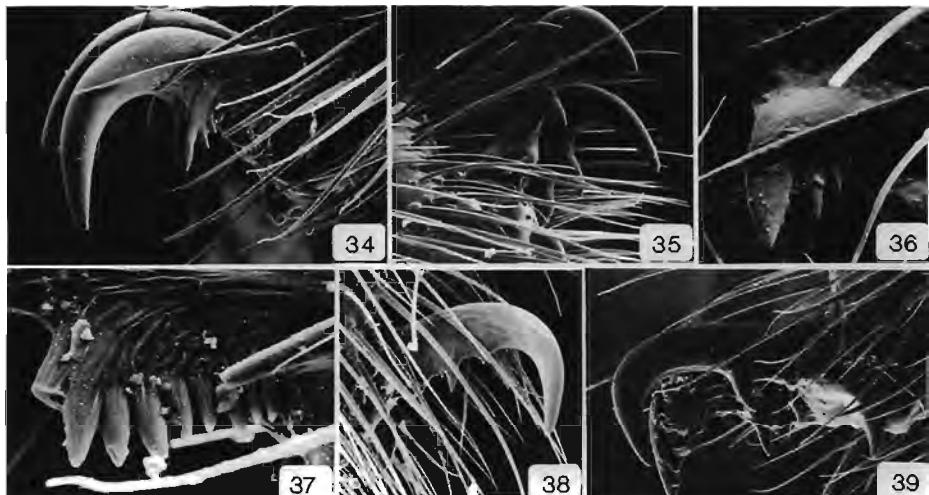
**Description:** Medium sized mygalomorphs, 5–25 mm in length. Strongly sexually dimorphic. Sparsely setose to glabrous. Cuticle smooth (♀) to scaly (♂). Carapace smooth in ♀, striate to rugose (Fig. 29) in ♂, usually with distinct pits (Figs 31, 49, 62) at lateral margins of caput; ocular area 0,42–0,86 width caput; thoracic fovea 0,12–0,40 width carapace, with or without posterior longitudinal groove. Cuspules (socketed, blunt macrosetae: Figs 352, 359) present on labium and pedipalpal coxa of ♀, present or absent in ♂. Sternum 1,07–1,47 times longer than wide. Leg formula 4123; length coxa IV 0,58–0,98 width sternum; usually with stiff, erect setae dorsally on metatarsi I, II (Figs 7, 65); tibia III with weak (Fig. 18) to strong



Figs 27-33. *Moggridgea* spp., general characters. 27, 29, 31, 33. *M. pseudocrudeni* Hewitt. 28, 30, 32. *M. dyeri* Cambridge, female. 27. Fang, dorsal,  $26 \times$ . 28. Fang, dorsal, and cheliceral teeth,  $38 \times$ . 29. Carapace sculpturing of male,  $80 \times$ . 30. Ocular area,  $26 \times$ . 31. Male, lateral view of raised caput with lateral pit,  $26 \times$ . 32, 33. Thoracic lobeae, dorsal. 32.  $26 \times$ . 33. Male,  $104 \times$

(Fig. 86) dorsobasal depression; ♀ with rows of ventrolateral spines, often in diagonal series (Figs 12, 65, 336) on tibia and metatarsi I and II. Thorns (socketed, acutely pointed macrosetae, usually with finely striate surface sculpture: Figs 23-26) present or absent on coxae I-III. Scopulae present in ♂, absent in ♀. Trichobothria, dorsal: tibiae with basal, diverging rows, metatarsi with distal row expanding into apical group, palpal tarsus with distal row, tarsi I (Fig. 40) and II

with several curving, transverse rows covering dorsum and sides, tarsi III and IV with median bands; trichobothrial base (Figs 41–42) distally embedded, smooth to weakly corrugiform. Tarsal organ oval to round, weakly domed, with concentric ridges (Figs 43–44). Posterior lateral spinnerets (Figs 45–46) 3 segmented, basal segment longest, median and distal about equal in length, basal segment length 1.20–2.40 times diameter, 1.00–2.30 times length posterior median spinnerets; PLS with ventral median band of spigots on median, dense apical group on distal segment (Fig. 48); PMS with 3–5 apical spigots. ♂ without clasping spines or apophyses; palpus without spines. Bulb fairly uniform, connected to tarsus by small proximal lobe, distal lobe kidney shaped, with slender, simple reflexed embolus; rotation of bulb relative to tarsus varies between individuals. Spermathecae paired, simple, unbranched, with expanded distal chamber usually lacking pores, spermathecal walls partially sclerotised.



Figs 34–39. *Moggridgea* spp., females, tarsal claws. 34–35. *M. dyeri* Cambridge. 36. *M. peringueyi* Simon. 37–38. *M. breyeri* Hewitt. 39. *M. pseudocrudeni* Hewitt. 34. II, 87 ×. 35. IV, 64 ×. 36. I, basal tooth, 148 ×. 37. I, basal tooth, 312 ×. 38. IV, 67 ×. 39. I, 87 ×.

*Misplaced and uncertain names:* *Moggridgea meyeri* Karsch, 1879 belongs to *Stasimopus* Simon (Ctenizidae) (according to Purcell 1903:72), and *M. abrahami* O. P. Cambridge, 1889, *M. tidmarshi* Lenz, 1889, and *M. stauntoni* Pocock, 1902 belong in the migid genus *Poecilomigas* Simon. *Moggridgea seticoxa* Purcell, 1903, based on very young juveniles, is considered a *nomen dubium*.

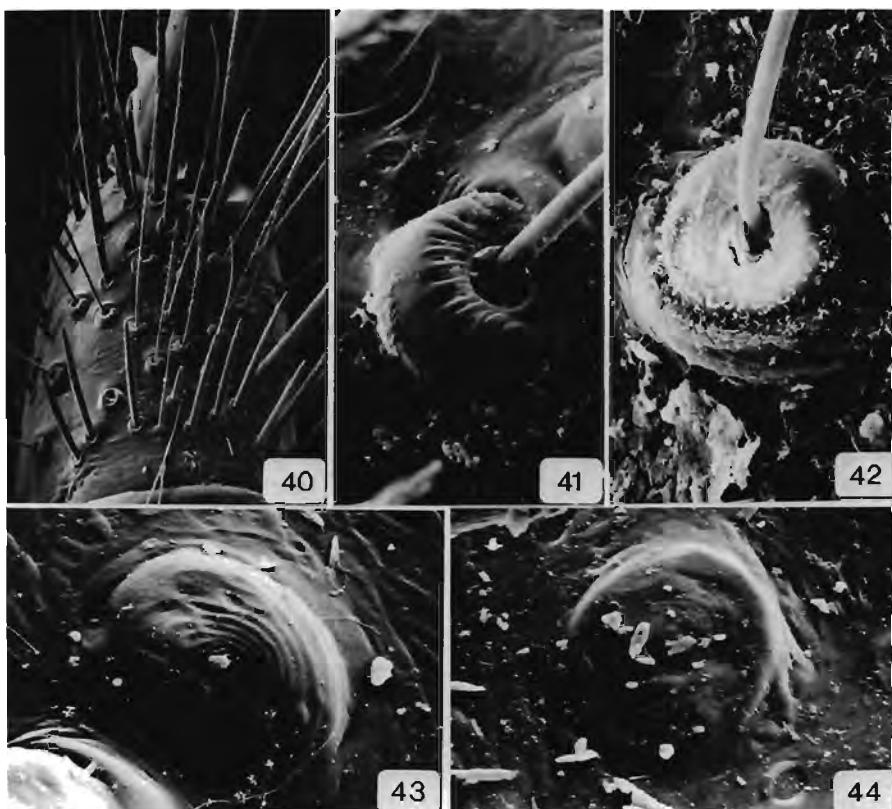
#### Key to species of *Moggridgea*

The utility of this key is limited in that most species are known only from one sex: 20 only from the female (*albimaculata*, *ampullata*, *anactenidia*, *breyeri*, *crudeni*, *dyeri*, *leipoldii*, *loistata*, *microps*, *mordax*, *occidua*, *pallida*, *paucispina*, *purpurea*, *pymi*, *ruplicoloides*, *socotra*, *terrestris*, *verruculata* and *whytei*), 3 only from the male

(*clypeostriata*, *eremicola* and *tanypalpa*) and 8 from both sexes (*intermedia*, *nesiota*, *peringueyi*, *pseudocrudeni*, *quercina*, *rupicola*, *teresae* and *terricola*).

1	Females .....	2
—	Males .....	29
2(1)	Pair of setae just anterior to thoracic fovea (Figs 32, 49) .....	3
—	No setae just anterior to thoracic fovea .....	7
3(2)	Thoracic fovea nearly straight, central portion absent; carapace dark, area surrounding thoracic fovea pale (Fig. 49); in profile carapace raised, height at fovea/carapace width > 0,38, thoracic declivity steep (Fig. 51) .....	
		<b>albimaculata</b>
—	Thoracic fovea recurved, entire; coloration of foveal region not contrasting (Figs 130, 197); carapace height at fovea/carapace width > 0,35, thoracic declivity gentle .....	4
4(3)	Coxa I with 15 or more thorns (Fig. 132) .....	<b>dyeri</b>
—	Coxa I with fewer than 10 thorns or thorns on coxa I absent .....	5
5(4)	Sternal sigilla central, closer than length or distance from sternal margin (Fig. 335); diameter of ALE greater than 2,2 times AME .....	<b>socotra</b>
—	Sternal sigilla lateral, distance between them greater than length or distance from sternal margin; diameter ALE less than twice AME .....	6
6(5)	Spermathecae slender, length/width > 8 (Fig. 77) .....	<b>nesiota</b>
—	Spermathecae relatively stout, length/width < 6 (Fig. 56) .....	<b>whytei</b>
7(2)	At least 1 coxa with thorns .....	8
—	Coxae lacking thorns .....	18
8(7)	Thorns on coxae I, II and III .....	9
—	Thorns absent from coxa I .....	11
9(8)	Carapace with small, pointed tubercle laterad of thoracic fovea (Fig. 87); tibia III with well-developed, shiny basal depression (Fig. 86); basal tooth of anterolateral STC I serrate (Fig. 37) .....	<b>breyeri</b>
—	Sides of carapace smooth, lacking tubercle; tibia III basal depression weakly developed or absent; basal tooth of STC I simple or bifid .....	10
10(9)	Patella IV with broad band of setae grading into numerous spinules at base (Fig. 14); coxae with numerous thorns, I, II with > 50, III usually with > 30, (Fig. 269); carapace with bold, contrasting markings (Fig. 267); clypeus usually angular .....	<b>pseudocrudeni</b>
—	Patella IV with narrow band of setae and few spinules at base (Fig. 15); coxa I with fewer than 50 thorns, III usually with < 30 (Fig. 103); clypeus usually rounded .....	<b>crudeni</b>
11(8)	Coxa II with thorns .....	12
—	Coxa II lacking thorns .....	16
12(11)	Spermathecae relatively short, widely separated at base, length/base width 1,0 or less (Figs 58, 83); thoracic fovea without posterior longitudinal groove .....	13
—	Spermathecae long, slender, usually sinuate; base narrow, length/base width 1,1 or more (Figs 117, 124); thoracic fovea usually with posterior longitudinal groove .....	14

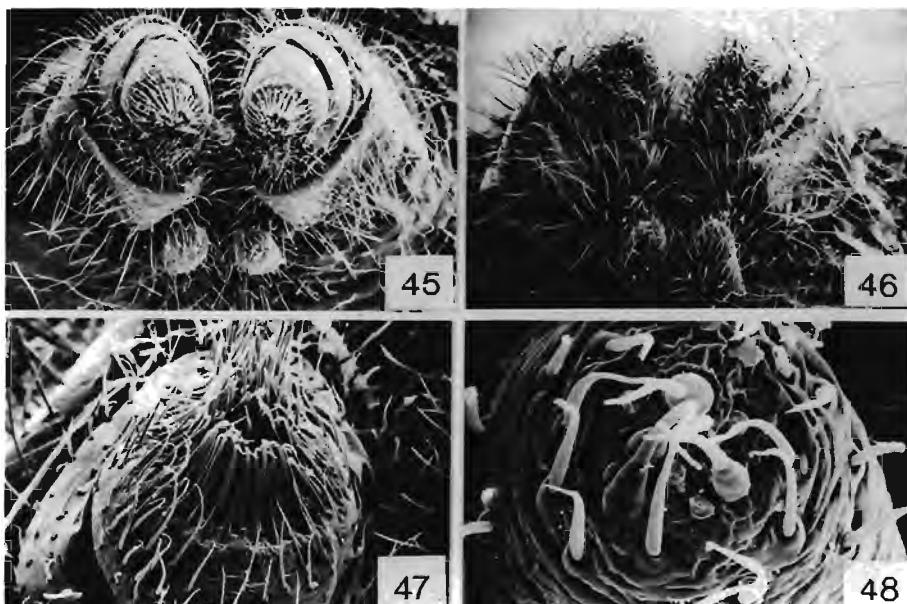
- 13(12) Sternal sigilla narrow (Fig. 194); STC I basal tooth serrate (Fig. 195); diameter ALE/AME > 2,2; coxae II, III each with more than 12 thorns .... **mordax**
- Sternal sigilla nearly round (Fig. 287); STC I basal tooth simple or bifid (Fig. 288); diameter ALE/AME > 1,8; coxae II, III each with fewer than 10 thorns ..... **pymi**
- 14(12) Abdomen marked with dorsal pattern of chevrons breaking into spots posteriorly and laterally (Fig. 324) ..... **rupicoloides**
- Abdomen uniformly dark dorsally (Fig. 311), or with faint, pale chevrons on dark background ..... 15
- 15(14) Coxae II, III each with fewer than 25 thorns (Fig. 313); ocular area broad, width AER/caput > 0,67 (Fig. 311); PER recurved; patella IV with anterolateral band of slender setae (Fig. 315) ..... **rupicola**
- Coxae II, III each with more than 50 thorns (Fig. 371); ocular area narrow, width AER/caput < 0,57 (Fig. 376); PER nearly straight; setal band on patella IV with at least 20 spinules at base (Fig. 375) ..... **terrestris**
- 16(11) Spermathecae bottle-shaped, diameter at base nearly twice that of distal bulb (Figs 61, 80) ..... **ampullata**
- Spermathecae cylindrical or increasing in diameter distally ..... 17
- 17(16) Distance between sternal sigilla less than half length (Fig. 166); basal tooth of STC I serrate (Fig. 167); band of cuspules on pedipalpal coxae narrowed distally; spermathecae slender, sinuous (Fig. 60) ..... **leipoldti**
- Distance between sternal sigilla greater than length (Fig. 382); basal tooth of STC I simple or bifid (Fig. 380); broad band of cuspules on pedipalpal coxae; spermathecae straight, usually stout (Figs 297–300) ..... **terricola**
- 18(7) Sternal sigilla narrow-oval, length/width > 2,1 ..... 19
- Sternal sigilla nearly round, pear-shaped, or irregular, length/width < 2,0 ..... 21
- 19(18) Carapace and legs pale yellow-white, with strongly contrasting dark markings extending from thoracic fovea to lateral pits and encompassing ocular area and clypeus (Fig. 220) and forming dorsal longitudinal bands on distal half of femora ..... **pallida**
- Carapace and legs yellow-brown to dark, without contrasting markings as described above ..... 20
- 20(19) Venter of legs I, II with thin, curved setae, longer than height of segment (Fig. 280), setae beneath femur II undifferentiated; thoracic fovea broad, width/length > 4,0 (Fig. 282); sclerotised region of spermathecae a narrow band at base of distal chamber (Fig. 226) ..... **purpurea**
- Venter of legs I, II without slender, curved setae (Fig. 255), stout setae beneath femur II; thoracic fovea strongly recurved, width/length < 2,2 (Figs 232, 247); spermathecae sclerotised for half of length (Figs 236, 238) ..... **peringueyi**
- 21(18) Cuspules present on coxa I (Figs 357, 397) ..... 22
- Coxa I without cuspules ..... 23
- 22(21) Femora I, II with ventral bands of short, thorn-like setae (Figs 10–11, 358); sternum without cuspules ..... **teresae**



Figs 40-44. *Moggridgea* spp., females, tarsus I. 40, 41. *M. crudeni* Hewitt. 42. *M. breyeri* Hewitt. 43. *M. dyeri* Cambridge. 44. *M. peringueyi* Simon. 40. Dorsal, trichobothrial pattern, 103 $\times$ . 41-42. Trichobothrial base, 767 $\times$ . 43-44. Tarsal organ. 43. 767 $\times$ . 44. 500 $\times$ .

- Femur I with scattered slender setae on venter, II with row of 5 long, stout setae; cuspules present on sternum (Fig. 397) ..... ***verruculata***
- 23(21) Venter of femur I with rows of thorn-like setae (Fig. 290); sternal sigilla pear-shaped or irregular, (Fig. 294) ..... ***quercina***
- Femur I with slender setae only (Figs 8, 9); sternal sigilla nearly round 24
- 24(23) Sternal sigilla separated by more than 3,3 times diameter (Fig. 214); legs (Fig. 213) and carapace (Fig. 219) with contrasting markings ..... ***occidua***
- Sternal sigilla separated by less than 3,2 times diameter; carapace and leg markings obscure ..... 25
- 25(24) Metatarsus IV apex without well-defined preening comb of setae on common base (Fig. 74); sternal sigilla separated by about 3 times diameter (Fig. 71); thoracic fovea relatively long, width less than twice length (Fig. 69) ..... ***anactenidia***
- Metatarsus IV apex with distinct preening comb of setae on common base (Figs 19, 230); thoracic fovea more than twice as wide as long; sternal sigilla usually separated by less than 3 times diameter ..... 26

- 26(25) Preening comb of two setae (Fig. 230); width ocular area/caput > 0,65 (Fig. 227) ..... *paucispina*
- Preening comb of 3 or more setae (Fig. 182); width ocular area/caput < 0,63 ..... 27
- 27(26) Spermathecae short, broad, length/width < 4,2, angled toward centre (Fig. 160) ..... *intermedia*
- Spermathecae slender, length/width < 4,5 ..... 28
- 28(27) Spermathecae widely separated at base (Fig. 161), length/base width < 0,85 ..... *loistata*
- Spermathecal base narrow, width less than spermathecae length (Figs 185–186) ..... *microps*
- 29(1) At least one coxa with thorns (Fig. 274) ..... 30
- Coxae without thorns, though setal patches (Fig. 259) may be present ..... 32
- 30(29) Thorns on coxae I–III, at least 30 on each (Fig. 274) ..... *pseudocrudeni*
- Thorns absent from coxa I, fewer than 20 on III ..... 31
- 31(30) Thorns on coxae II, III (Fig. 317); PME smaller than PLE (Fig. 316) ..... *rupicola*
- Thorns absent from coxa II (Fig. 387), PME larger than PLE (Fig. 383) ..... *terricola*
- 32(29) Femur I evenly rounded, non-carinate ..... 33
- Femur I carinate ventrally (Fig. 13) ..... 35
- 33(32) Labium and pedipalpal coxa with cuspules (Fig. 366); leg I (Fig. 364), II scopulae extending proximad on to apex of metatarsus ..... *teresae*



Figs 45–48. Spinnerets of *Moggridgea dyeri* Cambridge, female. 45. Posterior, 23 $\times$ . 46. Ventral, 23 $\times$ . 47. Posterior lateral, left, apex with ring of spigots, 73 $\times$ . 48. Posterior median, left, apex with spigots, 232 $\times$ .

- Cuspules absent; leg I, II scopulae restricted to tarsi ..... 34
- 34(33) Palpus long (Fig. 342), femur length/carapace width > 0,9; PME larger than PLE (Fig. 348) ..... **tanypalpa**
- Palpus short (Fig. 205), femur length/carapace width < 0,7; PME smaller than PLE ..... **nesiota**
- 35(32) Leg IV without scopula (Fig. 309) ..... **quercina**
- Tarsus, metatarsus IV with scopula ..... 36
- 36(35) STC I, II basal tooth serrate (Fig. 262) ..... **peringueyi**
- STC I, II basal tooth simple or bifid ..... 37
- 37(36) Sternal sigilla narrow-oval (Fig. 136); carapace low, height at thoracic fovea equal to caput height (Fig. 144) ..... **eremicola**
- Sternal sigilla oval to round; caput raised (Figs 98, 155), height at least 1,5 times height at thoracic fovea ..... 38
- 38(37) Clypeus strongly striate (Fig. 93); PME larger than PLE; metatarsus I lacking strong spines (Fig. 92) ..... **clypeostriata**
- Clypeus nearly smooth (Fig. 154); PME smaller than PLE; metatarsus I with many strong spines (Fig. 151) ..... **intermedia**

*Moggridgea albimaculata* Hewitt

Figs 49–52, 55; Map 1

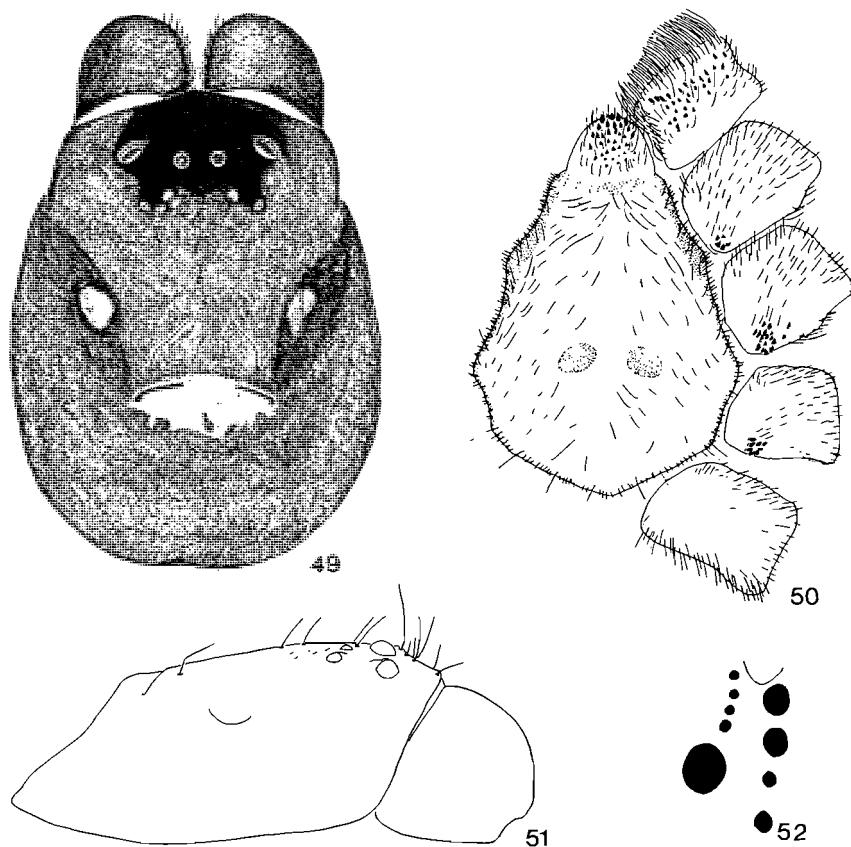
*Moggridgea albimaculata* Hewitt, 1925:277 (lectotype ♀, 2795, here designated, and paralectotype ♀, Sekororo, South Africa, TM). Roewer 1942:191; Bonnet 1957:2972.

Diagnosis: ♀ with thoracic fovea nearly straight (Fig. 49), central portion absent; carapace dark, area surrounding fovea pale, high, fovea height greater than 0,38 carapace width (Fig. 51).

Female (lectotype): Total length 12,93. Carapace and legs dark chestnut brown, venter, coxae, and trochanters yellow-brown; pale yellow-white surrounding thoracic fovea, clypeus dark; ocular area with black pigment surrounding AME and between ALE and PER. Abdomen dark grey, pale over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 49) 5,60 long, 4,67 wide, 1,71 high, raised (Fig. 51), height at thoracic fovea 0,385 width carapace; glabrous, with few marginal setae; lateral pits shallow. Caput wide, 0,82 width carapace, nearly flat (Fig. 51), height at OA equal to height at fovea; pair of long setae anterior to fovea, median longitudinal row of 3 and few lateral setae behind PER, 2 long setae between PME, 3 large and 15 small setae on clypeus; clypeus long, 0,86 length OA, margin angled. Thoracic fovea very broad, width 0,385 carapace, 5,75 times length, nearly straight, central portion obscure, posterior projection absent.

Ocular area 0,56 width caput, 2,25 times wider than long; AER 2,03 wide, procurved, 1,235 times width PER, ALE diameter 1,33 times AME; PER 1,65 wide, recurved, length PME 0,83 PLE; OA 0,90 long. Ratio of eyes: AM:AL:PM:PL, 1,8:2,4:1:1,2; PME nearly round. Distances between eyes: AM-AL 0,355, AM-AM 0,16, AM-PM 0,26, AL-PL 0,48, PM-PM 0,71, PM-PL 0,16. Ocular quadrangle 1,52 times wider than long, narrowed anteriorly, posterior 1,39 times anterior.



Figs 49–52. *Moggridgea albimaculata* Hewitt, lectotype female. 49. Carapace, dorsal. 50. Venter. 51. Carapace, lateral. 52. Cheliceral teeth.

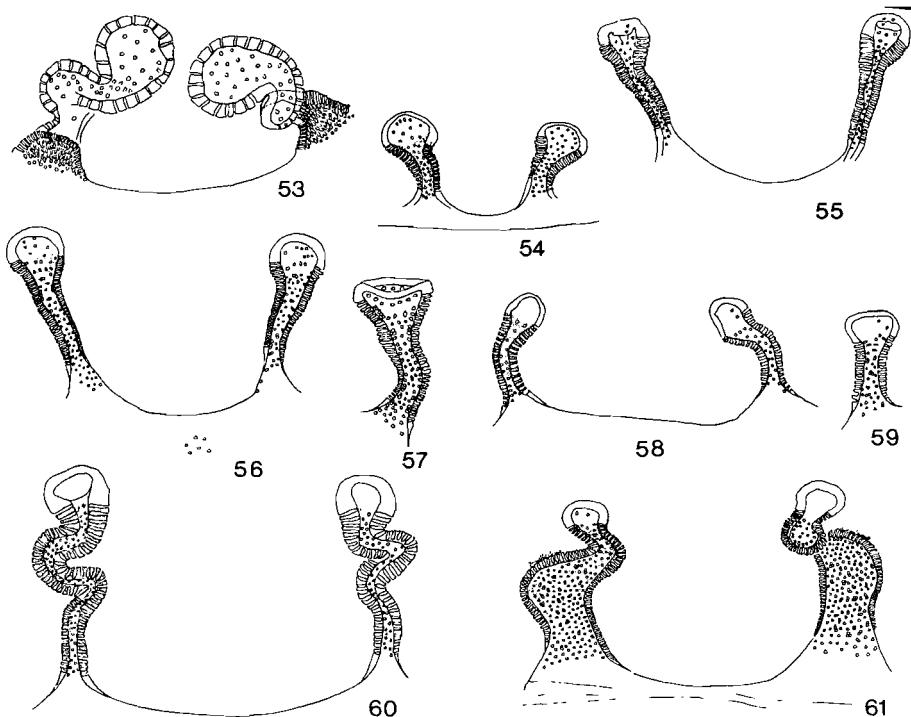
Sternum (Fig. 50) 3,71 long, 3,32 wide, margin weakly sinuate between coxae, sparsely setose except along margin; sigilla nearly round, length 1,3 times width, small, 0,135 width sternum, central, distance between 0,44 distance to margin. Labium 0,97 long, 1,03 wide, apex rounded, with 37 short cuspules. Pedipalpal coxa 1,45 long, 1,26 wide, rectangular, with 30 cuspules in broad median band. Chelicera 1,20 long, promargin of fang furrow (Fig. 52) with 4 teeth, retromargin with 4 small and 1 very large tooth; fang short, stout.

Coxae I–III with proximal groups of thorns (Fig. 50): I 4–5, II 15–17, III 6–7; coxae, trochanters, and legs sparsely setose. Femur II with ventral row of 6–7 stout setae; patella III with scattered anterolateral setae, apical spine present; tibia III basal depression equal to 0,17 length segment; patella IV with broad anterolateral band of fine setae; metatarsus IV preening comb of 2 stout setae. Spination: palpus, tibia v2, tarsus v22; leg I, tibia v22222, metatarsus v2222221; leg II, tibia v21222, metatarsus v2221212; leg III, patella a1 (apical), metatarsus v2 (apical); leg IV,

tibia v1 (apical), metatarsus al (apical); tarsi lacking ventral spinules. Basal teeth of superior tarsal claws: leg I 1–2, II–IV, simple. Leg measurements:

	I	II	III	IV	Palpus
Femur	4,47	3,13	2,73	3,47	2,07
Patella	2,07	2,00	1,80	2,07	1,06
Tibia	2,00	1,87	1,67	2,33	1,20
Metatarsus	1,73	1,67	1,53	2,00	—
Tarsus	0,93	1,06	1,27	1,40	1,20
Total	11,20	9,73	9,00	11,27	5,53

Abdomen 6,53 long, 4,87 wide. Spermathecae (Fig. 55) slender, length 7,8 times diameter, straight, expanded distally, base width equal to length; pores numerous, occur in distal chamber, sclerotised band from distal chamber nearly to base.



Figs 53–61. Spermathecae of Paramiginae. 53. *Micromesomma cowani* Pocock. 54–61. *Moggridgea* spp. 54. *M. dyeri* Cambridge (Fort Brown). 55. *M. albimaculata* Hewitt (lectotype). 56–57. *M. whytei* Pocock. 56. Kenya. 57. type, l. 58–59. *M. mordax* Purcell. 58. Lectotype. 59. St. Helena Bay, r. 60. *M. leipoldti* Purcell, type. 61. *M. ampullata* sp. n., holotype.

Male: Unknown.

Natural history: Arboreal; the type series was collected on a tree.

Distribution (Map 1): Known only from the type locality in the escarpment area of eastern Transvaal, South Africa.

Material examined: SOUTH AFRICA: Transvaal: Sekororo, about 35 mi. SSW Leydsdorp, 2 ♀ (lectotype, paralectotype), xii.1922, G. van Dam (TM).

**Moggridgea ampullata** sp. n.

Figs 61–68, 80; Map 5

**Etymology:** L. *ampulla*, or bottle, referring to the shape of the spermathecae.

**Diagnosis:** Spermathecae (Fig. 61) unique, diameter at base nearly twice that of distal bulb; coxa III with basal patch of thorns (Fig. 64).

**Female (holotype):** Total length 19,2. Carapace and legs yellow-brown, chelicerae red-brown, venter yellow-white; clypeus and ocular area red-brown, longitudinal band from behind PER narrowed to fovea; fovea pale; red-brown radial bands extending from fovea along caput margin, laterally, and posteriorly. Ocular area with black pigment surrounding AME, behind ALE, and anterior to PME–PLE. Abdomen dark grey on dorsum and sides with anterodorsal pair of white spots, venter pale.

Carapace (Fig. 62) 8,13 long, 7,60 wide, 1,71 high, height at fovea 0,23 width carapace; margin with a few small setae; lateral pits long. Caput 0,73 width of carapace, sloping (Fig. 68), height at OA 1,57 times height at fovea; median longitudinal row of 4 setae and a few scattered small setae, 3 large and 4 small setae between PME, 5 large and 8 small setae on clypeus; clypeus long, 0,67 length OA, margin evenly curved. Thoracic fovea 0,24 carapace width, broad, width 3,785 times length, angled from centre; posterior extension absent; carapace swollen behind fovea.

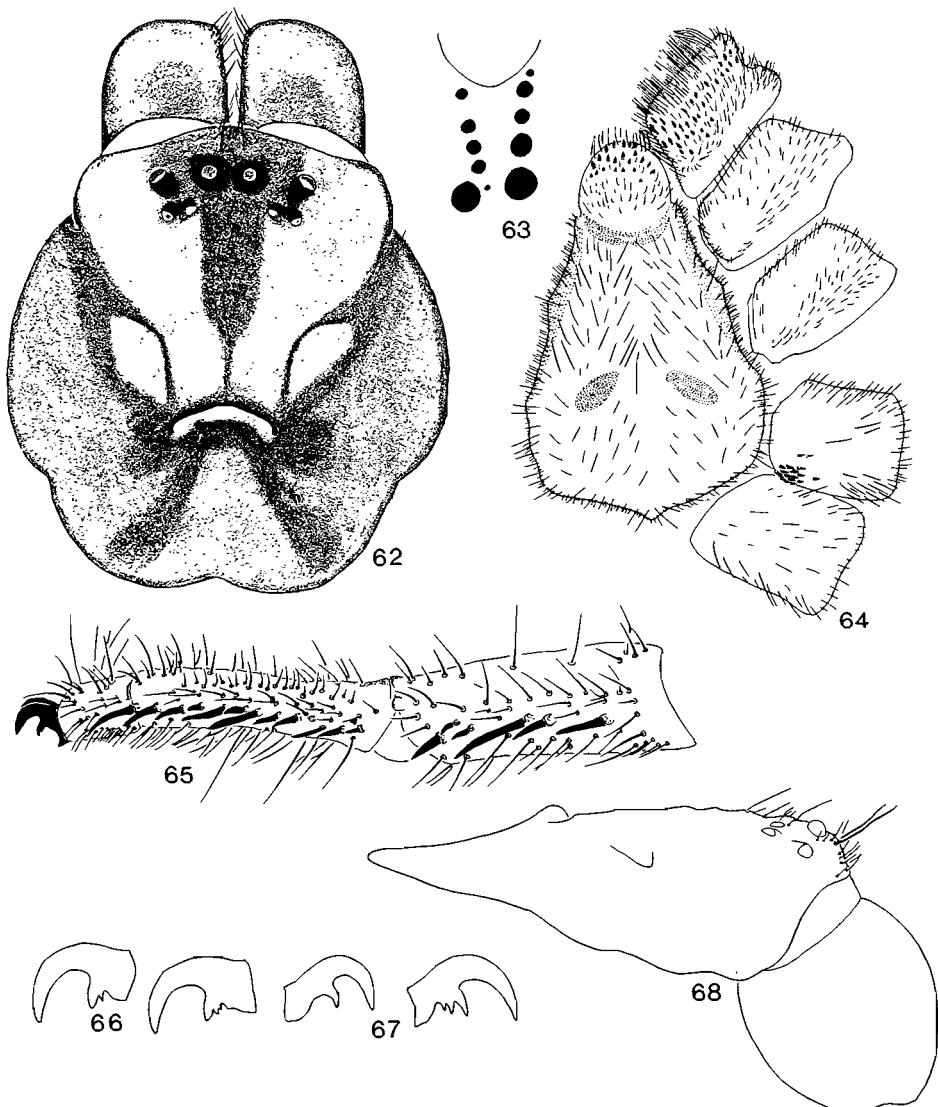
Ocular area narrow, 0,55 width caput, 2,72 times wider than long; AER 2,90 wide, slightly recurved, 1,17 times width PER, diameter ALE 1,55 times AME; PER 2,48 wide, nearly straight, PME and PLE of equal length; OA 1,06 long. Ratio of eyes: AM:AL:PM:PL, 1:1,55:1,22:1,22; PME narrow oval. Distances between eyes: AM–AL 0,71, AM–AM 0,39, AM–PM 0,55, AL–PL 0,42, PM–PM 1,23, PM–PL 0,13. Ocular quadrangle 1,77 times wider than long, narrowed anteriorly, posterior 1,77 times anterior.

Sternum (Fig. 64) 4,71 long, 4,06 wide, margin slightly sinuate, setose; sigilla elongate oval, length about 2 times width, 0,25 width sternum, distance between equal to distance from margin. Labium 1,68 long, 1,61 wide, apex rounded, with 22 pointed cuspules. Pedipalpal coxa 2,52 long, 1,87 wide, trapezoidal, 31–36 pointed cuspules in central band. Chelicera 2,07 long, promargin of fang furrow (Fig. 63) with 4 small and 1 large teeth, retromargin with 4 small and 1 large teeth, 1 denticle.

Basal patch of 17–19 thorns on coxa III (Fig. 64); coxae, trochanters, and legs finely setose. Femur II with 18–20 stout spines in 2 ventral rows; patella III with broad band of stout setae, 2 apical spines; tibia III with strong basal depression equal to 0,18 length segment; patella IV with anterolateral band of slender setae; metatarsus IV preening comb of 5 setae. Spination: palpus, tibia a1v11, tarsus v212; leg I (Fig. 65), patella v1 (apical), tibia v22–22–21–2121–111, metatarsus v22222–2222–222a1; leg II, tibia v221–22221–2–1111r1, metatarsus v22221–22–2211–211; leg III, patella a2 (apical), metatarsus v1 (apical); leg IV, tibia v11, metatarsus v1 (apical); tarsi III, IV with ventral spinules. Basal teeth of superior tarsal claws: leg I (Fig. 66), II 2–3, leg III 2, leg IV (Fig. 67) 1–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	5,13	4,80	3,80	5,33	3,33
Patella	3,13	3,00	2,73	3,40	1,87
Tibia	3,07	2,93	2,40	3,73	2,13
Metatarsus	3,07	3,00	2,53	3,80	—
Tarsus	1,27	1,33	1,87	2,13	2,07
Total	15,67	15,06	13,33	18,39	9,40

Abdomen 10,53 long, 7,93 wide. Spermathecae (Figs 61, 80) distinctive, widely spaced, base width 1,1 times length, sinuate, tapering abruptly from base to distal



Figs 62–68. *Moggridgea ampullata* sp. n., holotype female. 62. Carapace, dorsal. 63. Cheliceral teeth. 64. Venter. 65. Tibia-tarsus I, anterolateral. 66. STC I. 67. STC IV. 68. Carapace, lateral.

bulb, width at base twice width of distal bulb; pores numerous, frequently in groups, may be present in distal bulb; sclerotised band short, restricted to neck.

Variation (type series): Total length 12,67–19,20, carapace length 5,40–8,13, width 4,87–7,60, height 0,97–1,71; ocular area 0,54–0,58 width caput, 2,61–2,74 times wider than long; diameter ALE 1,47–2,0 times AME, PLE 1–1,33 times PME. Clypeus with 10–18 setae. Labium with 15–22, pedipalpal coxa with 30–38 cuspules, coxa III with 14–19 thorns; metatarsal comb of 4–5 setae; tibia I with 6–8 pairs, metatarsus I with 9–12 pairs of ventrolateral spines.

Male: Unknown.

Distribution (Map 5): Known only from the type locality in the southwestern Cape Province, South Africa.

Material examined: SOUTH AFRICA: *Cape*: Piketberg, 4 ♀ (holotype, 2 paratypes, AM; 1 paratype, NM).

#### **Moggridgea anactenidia sp. n.**

Figs 69–76; Map 2

Etymology: Gr. *an-* without, *ctenos* comb; refers to the absence of a distinct metatarsal preening comb.

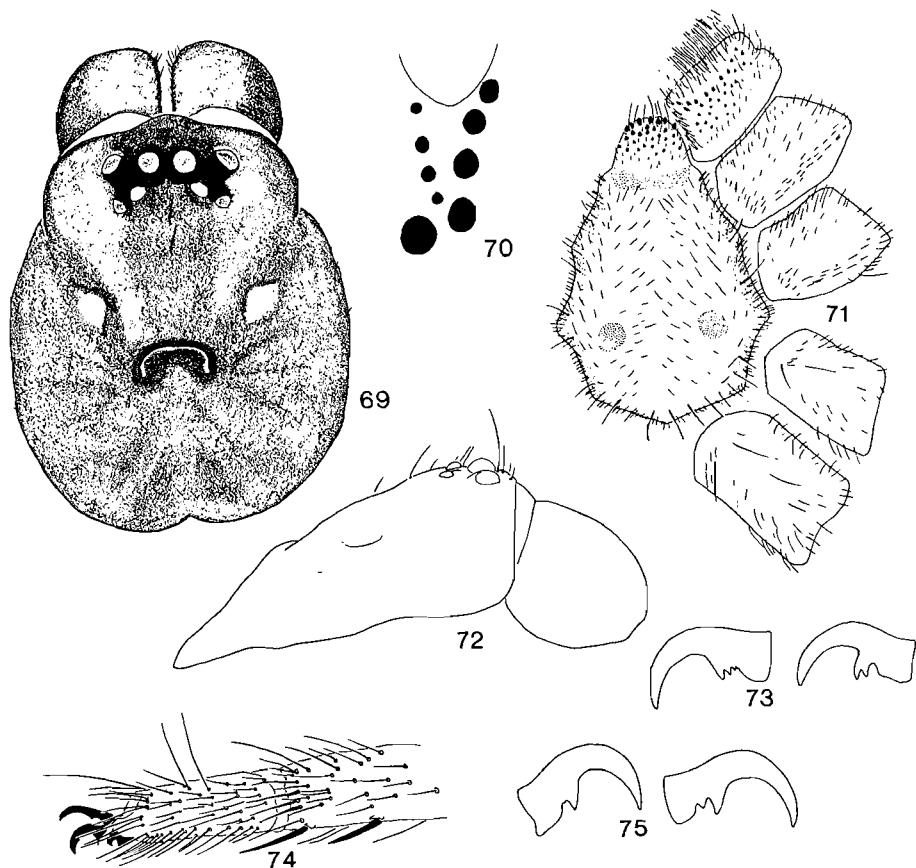
Diagnosis: ♀ without distinct metatarsal preening comb (Fig. 74); sternal sigilla nearly round, separated by 2,18 times diameter (Fig. 71); thoracic fovea (Fig. 69) straight along anterior margin, long, width only 1,5 times length; coxal thorns absent.

Female (holotype): Total length 14,13. Carapace, chelicerae, and legs brown, venter, coxae, and trochanters yellow-brown; dark at sides and posteriorly on carapace and forming faint, dorsal, longitudinal bands on femora; ocular area with black pigment surrounding AME and extending between ALE and PER; abdomen dark purple-brown on dorsum and sides, yellow-white ventrally.

Carapace (Fig. 69) 5,00 long, 4,20 wide, 1,58 high, relatively high, height at fovea 0,39 width carapace; glabrous; lateral pits small, shallow. Caput 0,76 width of carapace, gently sloping (Fig. 72), height at OA 1,18 times height at fovea; median row of 3 setae behind OA, 2 large and 2 small setae between PME, and 3 large and 9 small setae on clypeus; clypeus 0,31 length OA, rounded anteriorly. Thoracic fovea 0,22 width of carapace, nearly straight along anterior margin with sides sharply recurved, long, width 1,5 times length, posterior extension absent.

Ocular area 0,58 width caput, 1,6 times wider than long; AER 1,81 wide, straight, 1,19 times width PER, AME large, ALE diameter 1,11 times AME; PER 1,52 wide, recurved, PME length 1,49 times PLE; OA 1,13 long. Ratio of eyes: AM:AL:PM:PL, 1,5:1,67:1,5:1, PME oval. Distances between eyes: AM-AL 0,23, AM-AM 0,19, AM-PM 0,13, AL-PL 0,32, PM-PM 0,55, PM-PL 0,10. Ocular quadrangle 1,565 times wider than long, narrowed anteriorly, posterior 1,565 times anterior.

Sternum (Fig. 71) 3,00 long, 2,61 wide, margin sinuate between coxae, setose; sigilla round, small, diameter 0,12 width sternum, lateral, distance between 2,18 times distance from margin. Labium 0,81 long, 0,84 wide, anterior margin



Figs 69–75. *Mogridgea anactenidia* sp. n., holotype female. 69. Carapace, dorsal. 70. Cheliceral teeth. 71. Venter. 72. Carapace, lateral. 73. STC I. 74. Tarsus and apex of metatarsus IV, retrolateral. 75. STC IV.

rounded, with 30 blunt cuspules. Pedipalpal coxae 1,65 long, 1,00 wide, rectangular, apical angle blunt, with 33 cuspules in broad central band. Chelicera 1,00 long, promargin of fang furrow (Fig. 70) with 4 teeth, retromargin with 4 small and 1 large teeth.

Coxae without thorns; coxae, trochanters, and legs sparsely setose. Femur II with ventral row of 5–6 stout setae; patella III with scattered stout anterolateral setae, spinules and apical spine absent; tibia III with shallow basal depression equal to 0,2 length of segment; patella IV with narrow anterolateral band of slender setae; metatarsus IV without distinct preening comb (Fig. 74). Spination: palpus, tibia v11, metatarsus v221; leg I, tibia v2121221, metatarsus v221–222–2; leg II, tibia v2212121, metatarsus v221–2212; leg III, tibia v2 (apical), metatarsus v1 (apical); leg IV, tibia v2 (apical), metatarsus v11; tarsi without ventral spinules.

Basal teeth of superior tarsal claws: leg I (Fig. 73) 2–3, leg II 1–2, leg III 2, leg IV (Fig. 75) 2–3. Leg measurements:

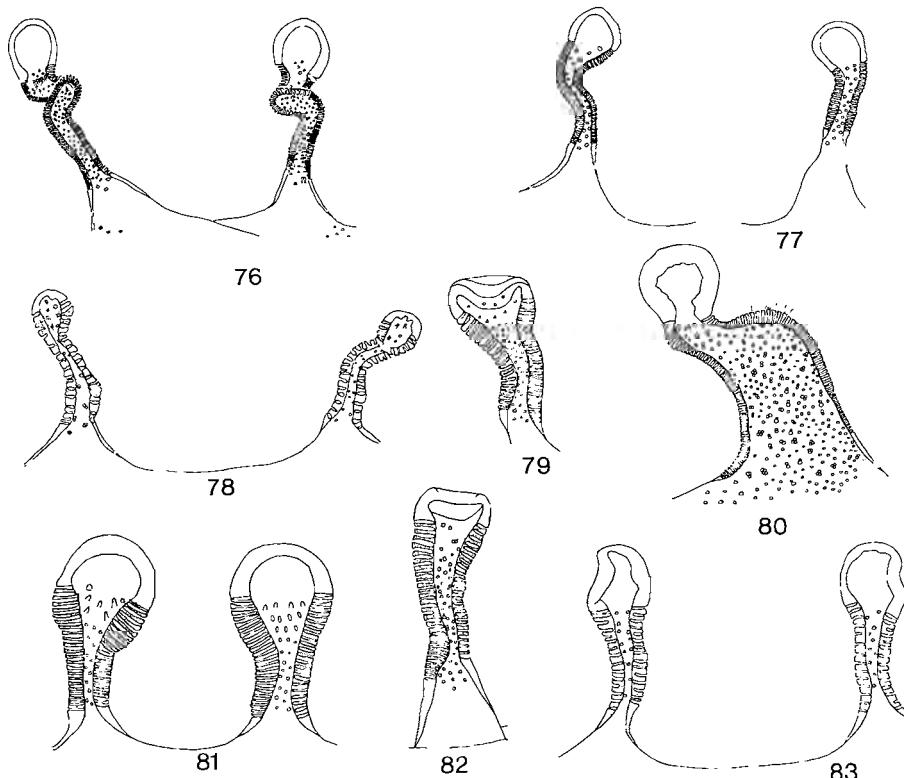
	I	II	III	IV	Palpus
Femur	3,33	3,07	2,47	3,60	2,00
Patella	2,00	1,93	1,67	2,07	1,07
Tibia	2,07	1,87	1,80	2,53	1,40
Metatarsus	1,80	1,80	1,73	2,40	—
Tarsus	1,00	1,00	1,33	1,40	1,30
Total	10,20	9,67	9,00	12,00	5,80

Abdomen 9,20 long, 6,53 wide. Spermathecae (Fig. 76) with base relatively narrow, base width 0,82 spermathecae length; twisted, slender, length 7,23 times width; distal chamber without pores, sclerotised band extending from distal chamber nearly to base.

Male: Unknown.

Distribution (Map 2): Known only from the type locality in Cameroun, West Africa.

Material examined: CAMEROUN: Foumban ( $5^{\circ}43'N$ : $10^{\circ}50'E$ ), ♀ (holotype 15790), el. 1150 m, 2.xi.1966, Ross & Lorenzen (CAS).



Figs 76–83. Spermathecae of *Moggridgea* spp. 76. *M. anactenidia* sp. n., holotype. 77. *M. nesiota* sp. n., holotype. 78. *M. socotra* sp. n., holotype. 79. *M. whytei* Pocock, r. (Botswana). 80. *M. ampullata* sp. n., paratype, l. 81. *M. verruculata* sp. n., holotype. 82. *M. loistata* sp. n., holotype, r. 83. *M. pymi* Hewitt, type.

*Moggridgea breyeri* Hewitt

Figs 37–38, 42, 84–89, 159; Map 4

*Moggridgea breyeri* Hewitt, 1915:89, fig. 1 (4 ♀, lectotype 2802, and paralectotypes, here designated, Gravelotte, South Africa, TM, 1 paralectotype, AM). Bonnet, 1957:2972.  
*M. beyeri* (lapsus), Roewer, 1942:191.

**Diagnosis:** ♀ carapace with small, pointed tubercle (Figs 84, 87) laterad of thoracic fovea; basal tooth of STC I strongly serrate (Fig. 37); coxae I, II, III with thorns (Fig. 89).

**Female (lectotype):** Total length 12,80. Carapace, chelicerae, coxae, trochanters and legs yellow-brown, sternum and labium yellow-white; dark brown around thoracic fovea, along margins of caput, and forming median longitudinal band on caput, narrowed before fovea; ocular area with black pigment surrounding AME, posterior to ALE and anterior to PLE. Abdomen pale grey, unmarked.

Carapace 5,13 long, 4,33 wide, 0,77 high, thoracic region very low, height at fovea 0,18 width carapace; small, pointed tubercle laterad of fovea; glabrous, with few marginal setae; lateral pits deep. Caput 0,77 width carapace, cephalic region high, height at OA 2,2 times height at fovea; median and lateral rows of 2 setae posterior to ocular area, 2 small and 2 large setae between PME, 3 large and 2 small setae on clypeus; clypeus 0,23 length OA, margin rounded in centre. Thoracic fovea broad, 0,24 width carapace, sharply angled, width 3 times length, posterior projection weak.

Ocular area narrow, 0,46 width caput, 2,09 times wider than long; AER 1,48 wide, straight, 1,28 times width PER, ALE large, diameter 2,18 times AME; PER 1,16 wide, straight, length PME 0,85 PLE; OA 0,71 long. Ratio of eyes: AM:AL:PM:PL, 1:2,18:1,09:1,27; PME oval, posterior and lateral edges straightened. Distances between eyes: AM-AM 0,29, AM-AL 0,32, AM-PM 0,27, AL-PL 0,48, PM-PM 0,58, PM-PL 0,13. Ocular quadrangle 1,2 times wider than long, narrowed anteriorly, posterior 1,5 times anterior.

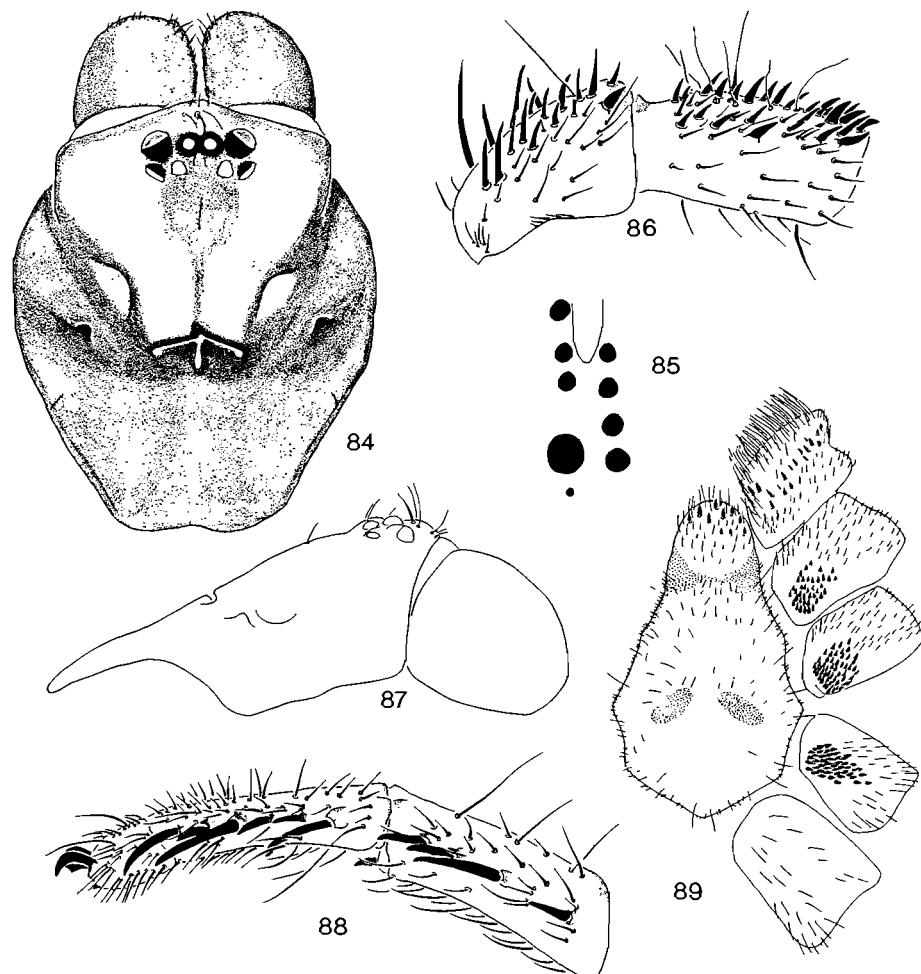
Sternum (Fig. 89) 3,13 long, 2,39 wide, margin sinuate between coxae, sparsely setose; sigilla oval, length 1,5 times width, 0,23 width sternum, central, distance between 0,83 distance from margin. Labium 0,90 long, 0,935 wide, apex bluntly curved, with 14 blunt cuspules. Pedipalpal coxa 1,32 long, 1,06 wide, trapezoidal, apical angle acute, with 23–24 slender cuspules in median band. Chelicera 0,93 long, promargin of fang furrow (Fig. 85) with 4 teeth, retromargin with 3 small and 1 large teeth; fang short, stout.

Coxae I–II with thorns (Fig. 89): I 55, II 61, III 47; coxae, trochanters, and legs sparsely setose. Femur II with 12 stout setae in 2 ventral rows; patella III (Fig. 86) with narrow anterolateral band of stout setae, short apical spine present, ventroapical patch of lamellate setae; tibia III with deep basal depression equal to 0,22 length of segment, (Fig. 86) dorsal rows of spinules, densest apical; spinules dorsally on metatarsus, tarsus III; patella IV with narrow anterolateral band of setae, about 20 short spinules at base; metatarsus IV preening comb of 2–3 setae. Spination: palpus, tibia v11, tarsus v12; leg I, patella v1 (apical), tibia v22–211–2, metatarsus v222–11–2; leg II, tibia v21212, metatarsus v222112; leg III, patella a1 (apical); leg IV, tibia v1 (apical), metatarsus v1 (apical); tarsi I–III with ventral

spinules. Basal teeth of superior tarsal claws: leg I (Fig. 37), II serrate, III, IV (Fig. 38) 1–2. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,00	2,67	2,07	3,13	2,07
Patella	1,87	1,80	1,47	2,00	1,00
Tibia	1,80	1,60	1,53	2,07	1,07
Metatarsus	1,80	1,67	1,33	2,13	—
Tarsus	0,80	0,87	0,87	1,07	1,13
Total	9,27	8,61	7,27	10,40	5,27

Abdomen 7,13 long, 5,33 wide. Spermathecae (Fig. 159) with base broad, 1,13 times length, slender, length 7,5 times diameter, cylindrical, slightly sinuate distally; pores numerous, occur in distal chamber; sclerotised band extending from distal chamber to base.



Figs 84–89. *Moggridgea breyeri* Hewitt, paralectotype females. 84. Carapace, dorsal. 85. Cheliceral teeth. 86. Patella-tibia III, anterolateral. 87. Carapace, lateral. 88. Tibia-tarsus I, anterolateral. 89. Venter.

Variation: Total length 12,80–14,40; carapace length 4,93–5,13, width 4,33–4,60, height 0,67–0,90; caput 0,75–0,81 width carapace, height at OA 2,11–2,60 times height at fovea, ocular area 0,425–0,46 width caput, clypeus 0,23–0,50 length OA; PLE rarely smaller than PME. Thoracic fovea usually with deep posterior projection (Fig. 84), rarely absent. Labium with 10–18 and pedipalpal coxa with 17–26 cuspules, coxa I with 37–55, II 50–63, and III 43–47 thorns. Sternal sigilla (Fig. 89) oval to narrow oval, length 1,4–2,2 times width, central to lateral, distance between 0,615–2,0 times distance from margin. Leg I (Fig. 88) tibia with 4–5 pairs, metatarsus with 4–6 pairs ventrolateral spines, metatarsal preening comb of 2–4 setae.

Male: Unknown.

Distribution (Map 4): Escarpment area of eastern Transvaal, South Africa.

Material examined: SOUTH AFRICA: *Transvaal*: Gravelotte, near Leydsdorp, 5 ♀ (lectotype, 3 paralectotypes TM, paralectotype AM), 28.i.1915, G. van Dam & H. Breyer, ♀, 7.vii.1917, G. van Dam (TM), ♀ (AM); Mamoranga, Letaba R., 25 mi. N Gravelotte, ♀, 12.vi.1917, G. van Dam (TM).

#### *Moggridgea clypeostriata* Benoit

Figs 90–99; Map 2

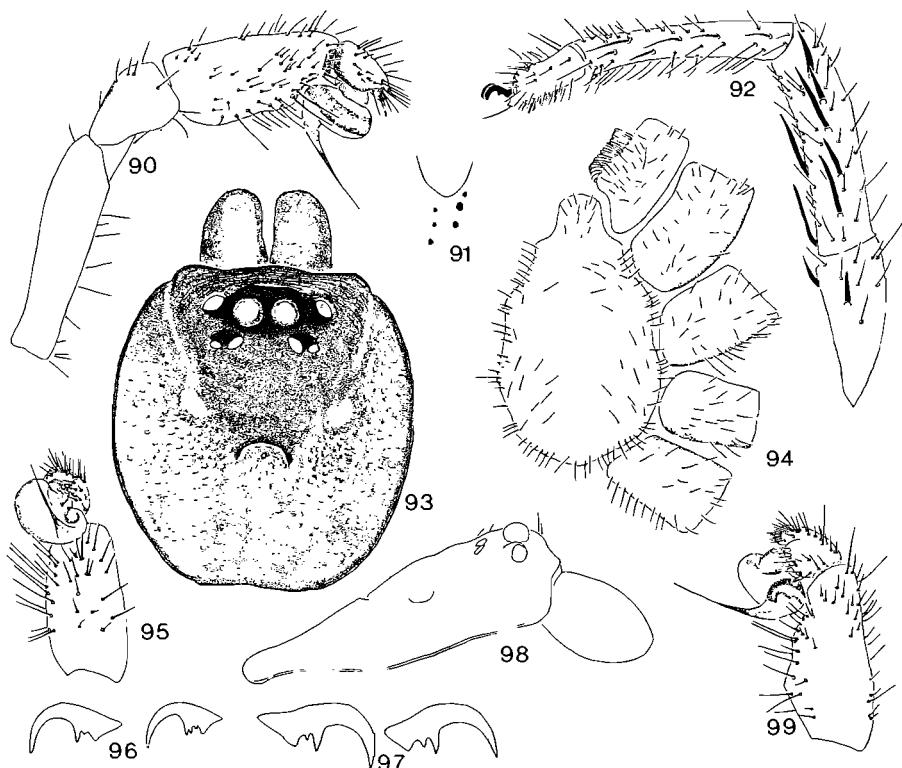
*Moggridgea clypeostriata* Benoit, 1962:281, figs 6–8 (holotype ♂, 122562, Lubumbasha, Zaïre, MRAC). Brignoli, 1983:121.

Diagnosis: ♂ coxae without thorns, labium and pedipalpal coxae without cuspules (Fig. 94); femur I with ventral carina; leg IV with scopula; STC I basal tooth bifid (Fig. 96); sternal sigilla nearly round (Fig. 94); clypeus strongly striate (Fig. 93); metatarsus I (Fig. 92) without strong spines.

Male (holotype): Total length 7,33. Carapace and chelicerae dark red-brown, paler laterad of ocular area; black pigment between AER and PER. Venter, coxae, and trochanters yellow-brown. Palpus with femur yellow-brown, patella to tarsus pale yellow-brown. Legs yellow-brown, unmarked. Abdomen dark grey on dorsum, grey on sides and pale yellow-white ventrally, white over book-lungs.

Carapace (Fig. 93) 3,20 long, 2,87 wide, 0,65 high, height at thoracic fovea 0,23 carapace width; glabrous; strongly rugose laterally, weakly rugose posteriorly; lateral pits small, indistinct. Caput broad, 0,74 width carapace, clearly demarcated, inclined laterally and posteriorly (Fig. 98), height at OA 1,5 times height at fovea; sides rugose, weakly striate-rugose posteriorly, nearly smooth laterad of OA; 1 pair setae behind, 3 setae anterior to AME; clypeus 0,53 length OA, steep, strongly transverse-striate, margin straight. Thoracic fovea small, 0,18 width carapace, evenly curved, width 2,72 times length, with posterior pit.

Ocular area narrow, 0,59 width caput, 2,3 times wider than long; AER 1,26 wide, slightly procurved, 1,19 times width PER, AME large, diameter ALE 1,13 times AME; PER 1,06 wide, slightly recurved, length PME 1,25 times PLE; OA 0,55 long. Ratio of eyes: AM:AL:PM:PL, 1,625:1,75:1,25:1; PME oval, straightened along posteromedian margin. Distance between eyes: AM–AL 0,1, AM–AM 0,13, AM–PM 0,1, AL–PL 0,29, PM–PM 0,42, PM–PL 0,05. Ocular quadrangle 1,35 times wider than long, slightly narrowed anteriorly, posterior 1,045 times anterior.



Figs 90–99. *Moggridgea clypeostriata* Benoit, holotype male. 90, 95, 99. Left palpus. 90. Femur-tarsus, retrolateral. 91. Cheliceral teeth. 92. Patella-tarsus I, anterolateral. 93. Carapace, dorsal. 94. Venter. 95. Tibia-tarsus, ventral. 96. STC I. 97. STC IV. 98. Carapace, lateral. 99. Tibia-tarsus, anterolateral.

Sternum (Fig. 94) 2,10 long, 1,58 wide, margin nearly entire, sparsely setose; sigilla nearly round, length 1,2 times width, small, length 0,12 width sternum, lateral, distance between 2,8 times distance from margin. Labium 0,45 long, 0,52 wide, apex rounded, without cuspules. Pedipalpal coxa 1,10 long, 0,61 wide, trapezoidal, proximal angle produced, without cuspules. Chelicera 0,60 long, promargin of fang furrow (Fig. 91) with 1 denticle, 2 small teeth, retromargin with denticle.

Femur I 1,045, tibia I 0,72, femur IV 1,02, tibia IV 0,77 width carapace. Coxae without thorns, setal patches near bases of II, III; coxae, trochanters, and legs sparsely setose. Femur I with ventral carina, II convex; patellae III, IV with scattered anterolateral setae; metatarsus IV straight, cylindrical, apical comb indistinct. Scopulae: divided, very weak beneath tarsus I (Fig. 92), weak beneath tarsus II; weak, entire beneath tarsus and distal third of metatarsus III; weak, entire beneath tarsus and distal half of metatarsus IV. Spination: leg I (Fig. 92), patella a1v1, tibia v22224, metatarsus v11 (weak); leg II, tibia a11v111 (weak), metatarsus v11. Basal teeth of superior tarsal claws: leg I (Fig. 96) 1–2, II 2–3, III–IV (Fig. 97) 2. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,00	2,67	2,07	2,93	2,03
Patella	1,53	1,40	1,17	1,40	0,935
Tibia	2,07	1,87	1,40	2,20	1,71
Metatarsus	2,13	1,93	1,47	1,93	—
Tarsus	0,87	0,93	0,93	1,27	0,645
Total	9,60	8,80	7,04	9,73	5,32

Palpus (Figs 90, 95, 99) with femur 0,70, tibia 0,59 width carapace; femur 3,15, tibia 2,65 times length tarsus; tibia height 0,45 length; bulb width 1,1 times tarsus length, embolus slender, length 1,545 times bulb width.

Abdomen 3,53 long, 2,67 wide; dorsum and sides with rows of slender, attenuate setae.

Female: Unknown.

Distribution (Map 2): Known only from the type locality in Katanga, Zaïre.

Material examined: ZAÏRE: Shaba (Katanga): Lubumbasha (Elizabethville), ♂ (holotype), 25.ix.1959, C. Seydel (MRAC).

### *Moggridgea crudeni* Hewitt

Figs 15, 18, 19, 40, 41, 100–120; Map 3

*Moggridgea crudeni* Hewitt, 1913a:47 (lectotype ♀, and 3 paratypes, here designated, Aicedale, South Africa, AM). Roewer, 1942:191. Bonnet, 1957:2972.  
*M. c. transversa* Hewitt, 1919:213 (lectotype and 7 paratypes, here designated, Woodfields Krantz, South Africa, AM).

Synonymy: *Moggridgea crudeni* and *transversa* were separated primarily on the basis of the form of the thoracic fovea, a character found to be highly variable within populations of this species and others. In the form of the clypeus, setation of patella IV, and number of coxal thorns the type series of these names are in agreement. Two specimens at the Transvaal Museum labelled '*Moggridgea crudeni* cotypes' are actually *Moggridgea rupicola* Hewitt, 1913.

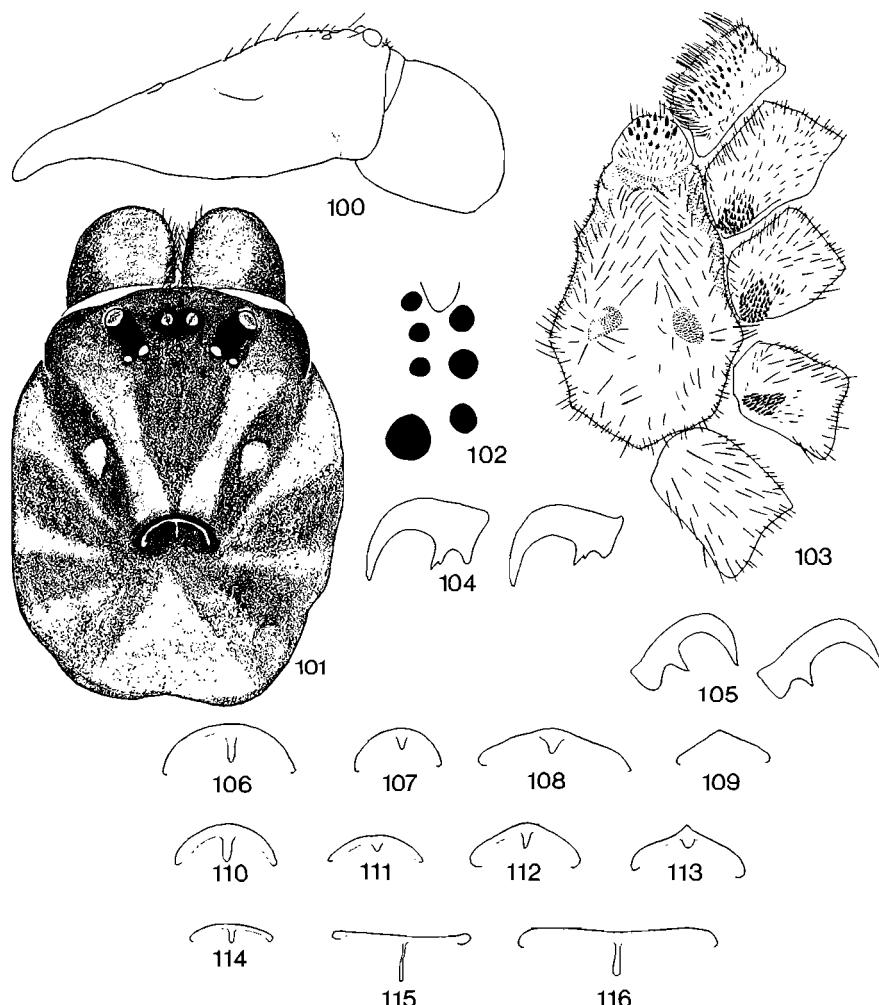
Diagnosis: ♀ with thorns on coxae I–III, with fewer than 50 thorns on I, usually fewer than 30 on III (Fig. 103); patella IV with a narrow anterolateral band of setae (Fig. 15) and at most several proximal spinules; carapace markings usually obscure (Fig. 101) without setae anterior to fovea; clypeus rounded (Fig. 101), and spermathecae slender, sinuate (Figs 117–120). Nests are furnished with a door with a smooth margin (Hewitt 1919:210). Distinct in sympatry from *pseudocrudeni*.

Female (lectotype): Total length 13,33. Carapace (Fig. 101) red-brown, lighter posteriorly, faint dark bands radiating from fovea along caput margin, laterally, and posterolaterally; caput with dark band behind PER, narrowed before fovea; ocular area with black pigment surrounding AME and between ALE and PER. Chelicerae red-brown, venter, coxae and legs yellow-brown; patella-tibia III dusky laterally. Abdomen grey, with faint dark chevrons dorsally fusing posterodorsally, yellow-white over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 101) 5,13 long, 4,33 wide, 1,23 high, height at fovea 0,26 width carapace; glabrous; lateral pits small, shallow. Caput 0,77 width carapace, inclined, height at OA 1,82 times height at fovea; median row of long setae and lateral rows of short setae behind PER, 2 long and 2 short setae between PME, 1 large and 8

small setae on clypeus; clypeus 0,31 length OA, margin gently curved. Thoracic fovea (Fig. 101) 0,19 width carapace, evenly recurved, width 2,56 times length, posterior projection present.

Ocular area broad, 0,65 width caput, 2,62 times wider than long; AER 1,97 wide, straight, 1,23 times width PER, diameter ALE 1,87 times AME; PER 1,48 wide, recurved, length PME 1,25 times PLE. Ratio of eyes: AM:AL:PM:PL, 1,5:2,5:1,25:1; PME oval. Distances between eyes: AM-AL 0,45, AM-AM 0,13, AM-PM 0,26, AL-PL 0,39, PM-PM 0,77, PM-PL 0,08. Ocular quadrangle 1,79 times wider than long, narrowed anteriorly, posterior 1,89 times anterior.



Figs 100-116. *Moggridgea crudeni* Hewitt, female. 100, 103. Paralectotype. 101-102, 104-105. Lectotype. 100. Carapace, lateral. 101. Carapace, dorsal. 102. Cheliceral teeth. 103. Venter. 104. STC I. 105. STC IV. 106-116. Variation in thoracic fovea. 106-109. Type series. 110-111. Alice Daley. 112-113. Port Alfred. 114-116. Zuurberg (paratypes of *M. crudeni transversa* Hewitt).

Sternum 3,39 long, 2,35 wide, margin sinuate between coxae, setose; sigilla 0,145 width sternum, oval, length 1,5 times width, distance between 1,23 times distance from margin. Labium 0,84 long, 0,97 wide, apex curved, with 12 cuspules. Pedipalpal coxa 1,61 long, 0,97 wide, trapezoidal, apical angle acute, with 23 cuspules in median band. Chelicera 1,00 long, promargin of fang furrow (Fig. 102) with 3, retromargin with 3 small, 1 large teeth.

Coxae I–III with thorns: I 40, II 52, III 20; coxae, trochanters, and legs setose. Femur II with 22 stout setae in 2 ventral rows; patella III with narrow band of anterolateral setae and small apical spine; tibia III with shallow basal depression equal to 0,20 length segment; patella IV with narrow anterolateral band of setae and 10–12 proximal spinules; metatarsus IV preening comb of 3 setae. Spination: palpus, tibia v12, tarsus v222; leg I, patella v1 (apical), tibia v22221, metatarsus v22222; leg II, patella v1 (apical), tibia v22212, metatarsus v2121222; leg III, patella a1 (apical); leg IV, tibia a1 (apical), metatarsus a1 (apical). Basal teeth of superior tarsal claws: I (Fig. 104) 1–2, II 2, III 1–2, IV (Fig. 105) 1. Leg measurements:

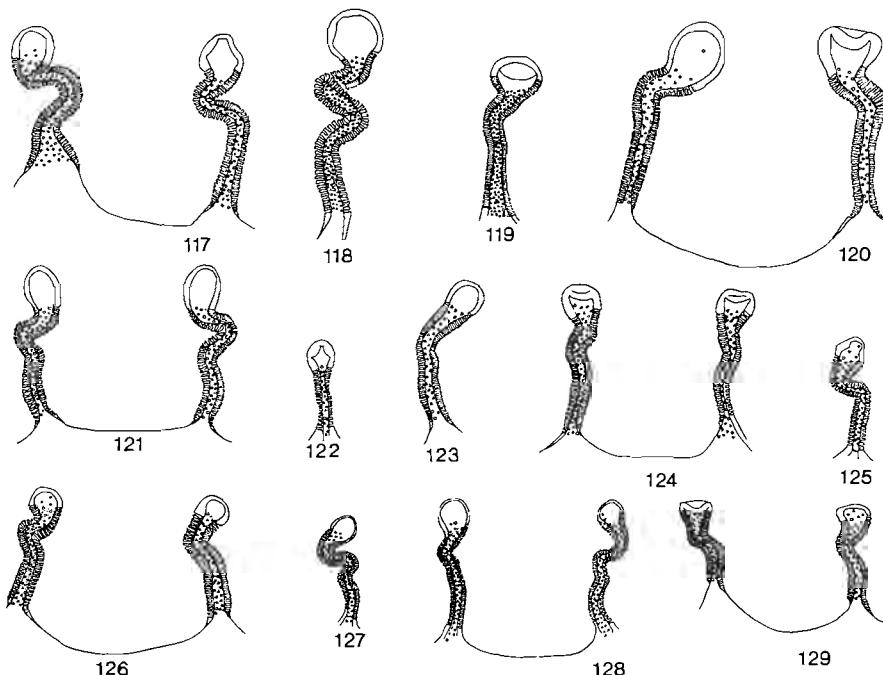
	I	II	III	IV	Palpus
Femur	3,33	3,07	2,53	3,20	2,07
Patella	2,00	1,93	1,67	2,00	1,00
Tibia	2,00	1,73	1,73	2,40	1,20
Metatarsus	1,80	1,60	1,47	2,27	—
Tarsus	1,00	1,07	1,27	1,67	1,13
Total	10,13	9,40	8,64	11,54	5,40

Abdomen 7,07 long, 4,93 wide. Spermathecae sinuate, cylindrical with expanded distal chamber, length 10,0 times diameter, base narrow, width 0,90 spermatheca length; pores dense, absent from distal bulb, sclerotised band extends from distal chamber to base.

Variation: A fairly homogeneous species except for the form of the thoracic fovea, which may vary greatly both within and between populations. Total length 8,13–13,33. Carapace markings more or less obscure, abdomen grey with dark dorsal chevrons to dark grey with chevrons pale. Carapace 3,40–5,13 long, 2,80–4,33 wide, 0,71–1,23 high, height at fovea 0,25–0,27 width carapace; caput 0,75–0,77 width carapace, height at OA 1,47–1,82 times height at fovea (Fig. 100); ocular area broad, 0,62–0,65 width caput, diameter ALE 1,23–2,0 times AME, length PME 0,90–1,14 times PLE. Clypeus 0,31–0,48 length OA, straight, curved, to weakly projecting. Thoracic fovea (Figs 106–116) highly variable, straight, weakly to strongly recurved, evenly curved to sharply angled in centre, posterior projection elongate to absent. Sternal sigilla (Fig. 103) 0,14–0,19 width sternum, length 1,3–1,9 times width, distance between 1,0–1,35 times distance from margin; coxae I with 27–46, II with 31–67, III with 19–35 thorns; patella IV with 0–14 proximal spinules (Fig. 15). Spermathecae (Figs 117–120) weakly to strongly sinuate, length 8,0–11,0 times diameter, base width 0,69–0,95 spermatheca length, pores rarely present in distal chamber.

Male: Unknown. The specimen described as the male of this species (Hewitt 1919:212) is properly assigned to *pseudocrudeni*.

Natural history: A rupicolous, nest-building species. Cruden (1916:607–608)



Figs 117–129. Spermathecae of *Moggridgea* spp. 117–120. *M. crudeni* Hewitt. 117–118. Paralectotypes. 119. Port Alfred, r. 120. Zuurberg (*M. c. transversa* Hewitt, paralectotype). 121–123. *M. pseudocrudeni* Hewitt. 121. Paralectotype. 122. Avontuur, r. 123. Dassieklip, r. 124–125. *M. rupicola* Hewitt. 124. Paralectotype. 125. Howison's Poort, l. 126–127. *M. terrestris* Hewitt, Aicedale. 128, 129. *M. rupicoloides* Hewitt. 128. Paralectotype. 129. Somerset East.

described both the nests of this species and the subsequently described *pseudocrudeni* under the heading *M. crudeni*. Hewitt (1919:210–211) discusses the differences between these species in detail. The nests are made in earth-filled cracks and cavities in rocks, closed with an oval door having an evenly rounded rim.

Distribution (Map 3): Eastern Cape Province, South Africa.

Material examined: SOUTH AFRICA: Cape: Aicedale, 4 ♀ (lectotype, 3 paralectotypes of *crudeni*), 4 ♀, many fragmentary ♀ (AM), ♀, vi.1916, ♀, x.1917, F. Cruden (AM); Port Alfred, 15 ♀ (AM); Woodfields Krantz, near Zuurberg Hotel, 8 ♀ (*crudeni transversa* cotypes) (AM).

#### *Moggridgea dyeri* O. P. Cambridge

Figs 6, 7, 17, 28, 30, 32, 34–35, 43, 45–48, 54, 130–133; Map 1

*Moggridgea dyeri* O. P. Cambridge, 1875:319, figs 1a-f, 2a-c (type ♀ Uitenhage, South Africa, UMO). Roewer, 1942:191. Bonnet, 1957:2972.

Diagnosis: ♀ carapace with pair of setae just anterior to thoracic fovea (Fig. 130); coxae I–III with thorns (Fig. 132), more than 15 on I; thoracic fovea recurved, entire (Fig. 32); carapace height at fovea less than 0,31 carapace width, caput inclined (Fig. 133); AER strongly procurved (Figs 30, 130).

Female (type): Total length 12,53. Carapace dark red-brown, with dark brown median band behind AER, narrowed before fovea; ocular area with black pigment encompassing eyes; clypeus dusky, with oval, pale mark anteromesad of ALE. Chelicerae red-brown. Legs and palpi yellow-brown to red-brown, unmarked, patellae-tibiae darkest. Abdomen dark grey, pale over book-lungs and anterior to epigastric furrow.

Carapace 5,67 long, 4,93 wide, 0,90 high, height at fovea 0,19 width carapace; glabrous; lateral pits small, deep. Caput 0,76 width carapace, inclined, height at OA 1,63 times height at fovea; pair of long setae at anterior margin of fovea, median row of 2 setae, 2 long, 2 small setae between PME, 1 large, 8 small setae on clypeus; clypeus 0,36 length OA, margin slightly curved. Thoracic fovea 0,20 width carapace, slightly angled in centre, broadened laterally, width 2,72 times length, with small posterior pit.

Ocular area narrow, 0,55 width caput, 2,81 times wider than long; AER 2,00 wide, strongly procurved, 1,25 times width PER, diameter ALE 1,83 times AME; PER 1,61 wide (left PLE atrophied), slightly recurved, length PME 0,70 PLE; OA 0,90 long. Ratio of eyes: AM:AL:PM:PL, 1:1,83:1:1,42; PME oval, with narrow mesal tapetum. Distances between eyes: AM-AL 0,31, AM-AM 0,29, AM-PM 0,19, AL-PL 0,48, PM-PM 0,58, PM-PL 0,16. Ocular quadrangle 1,58 times wider than long, narrowed anteriorly, posterior 1,30 times anterior.

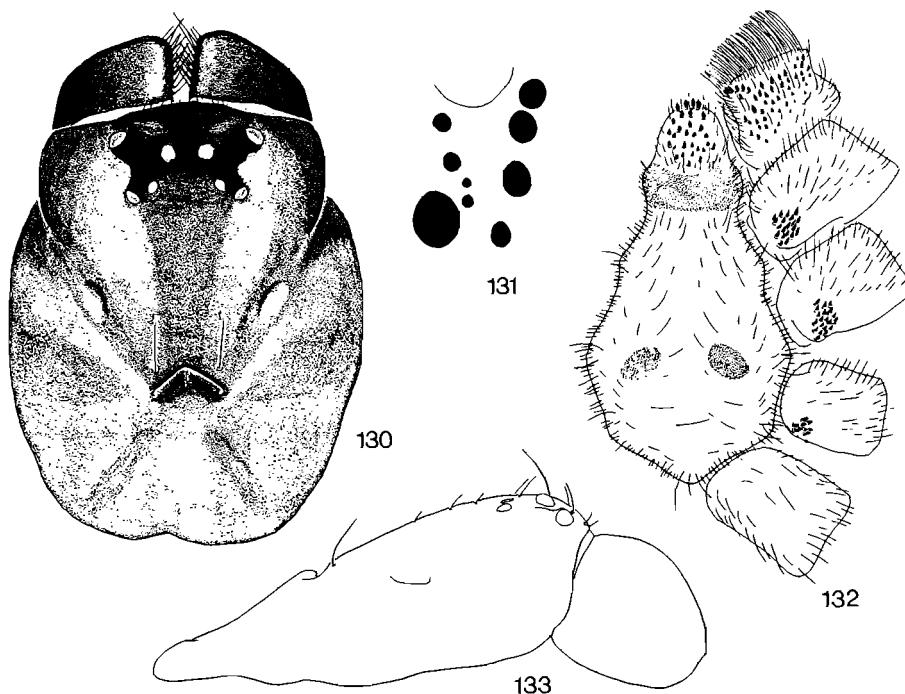
Sternum 3,61 long, 2,77 wide, margin weakly sinuate between coxae, sparsely setose. Sigilla oval, length 1,63 times width, 0,21 width sternum, distance between 1,28 times distance from margin. Labium 1,42 long, 1,03 wide, apex rounded, with 35 short, pointed cuspules. Pedipalpal coxa 1,52 long, 1,19 wide, trapezoidal, apex weakly produced, 48 cuspules in broad median band. Chelicera 0,80 long.

Coxae I-III with thorns: I 16-17, II 19-21, III 7-8. Coxae, trochanters, and legs sparsely setose. Femur II with ventral row of 7-8 stout setae; patella III with narrow anterolateral band of setae and short apical spine; tibia III with basal depression equal to 0,18 length segment; patella IV with narrow anterolateral band of fine setae; metatarsus IV apical comb of 3 setae. Spination: palpus, tibia v11, tarsus v12; leg I, patella v1 (apical), tibia v22121212, metatarsus v2222122; leg II, tibia v222212, metatarsus v222-2212; leg III, patella a1 (apical). Basal teeth of superior tarsal claws: leg I, II 1-2, III, IV 1. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,87	3,20	2,67	3,40	2,40
Patella	2,20	2,07	1,73	2,20	1,20
Tibia	2,27	2,07	1,87	2,40	1,47
Metatarsus	2,00	1,93	1,67	2,27	—
Tarsus	0,93	1,07	1,20	1,47	1,20
Total	11,27	10,34	9,14	11,74	6,27

Abdomen 7,67 long, 5,40 wide. Spermathecae (Grahamstown ♀) stout, length 3,10 times diameter, broadened distally, straight; base width about equal to spermatheca length; pores numerous, continuing into distal chamber, sclerotised band extending from distal chamber to base.

Variation: Total length 7,33-13,60; carapace (Fig. 130) 3,40-5,67 long, 2,80-4,93 wide, 0,645-1,16 high; height at fovea 0,19-0,25 width carapace. Caput 0,76-0,83



Figs 130–133. *Moggridgea dyeri* Cambridge, female (Fort Brown). 130. Carapace, dorsal. 131. Cheliceral teeth. 132. Venter. 133. Carapace, lateral.

width carapace, height at OA 1,40–1,63 times height at fovea (Fig. 133). Ocular area (Fig. 30) 0,51–0,56 width caput, 1,75–2,21 times wider than long; diameter ALE 1,40–1,83 times AME, length PME 0,60–0,75 PLE. Clypeus 0,36–0,40 length OA, with 6–10 seta, margin straight to rounded. Thoracic fovea (Figs 32, 130) 0,20–0,33 width carapace, posterior projection usually absent, rarely weakly developed. Labium with 25–39, pedipalpal coxa with 34–48 cuspules. Cheliceral fang furrow (Fig. 131) with 2–4 small, 1 large teeth on retromargin, 4 teeth on promargin. Sternal sigilla (Fig. 132) 0,15–0,225 width sternum, length 1,45–1,88 times width, distance between 1,60–3,21 times distance from margin. Superior tarsal claws I, II (Fig. 34) with 1–3, III, IV (Fig. 35) with 1–2 basal teeth. Tibia I with 5–6, metatarsus I with 5–7 pairs of ventrolateral spines. Spermathecae (Fig. 54) stout, length 3,5–4,07 times diameter, base width 0,90–1,0 spermatheca length.

Male: Unknown.

Natural history: An arboreal, nest-building species. The nest has been described in detail by O. P. Cambridge (1875:321, figs 2a–c) and Abraham (1887:40), and the latter author has reported certain of the spider's habits. The nest is tubular, usually less than 4 cm in length, about 5 times longer than wide, with a single, hinged door fitting over the nearly circular opening of the nest. The nest is well camouflaged with bits of bark and other debris. The door is of both the 'cork and wafer' type (O. P. Cambridge 1875:321), thick in the centre corresponding to the diameter of

the tube, and thin around the margin concealing the edge of the nest opening. The nest is built in cracks and crevices in tree bark. Movement between and occupation of empty nests occurs (Abraham 1887:42) and doors may be modified to suit the size of the occupant—it is likely, though, that nests with 2 doors (Abraham 1887:42) may be made by *Poecilomigas*, also common on trees in the Grahamstown

area. Abraham (1887:42–43) states that eggs are laid in a small silken bag at the bottom of the nest, and the young remain in the mother's nest for several months.

**Distribution (Map 1):** Eastern parts of South Africa.

**Material examined:** SOUTH AFRICA: *Cape*: Port Elizabeth, ♀, 13.ii.1928, F. Cruden (AM), 2 ♀, J. Paterson (AM); Sidbury ( $33^{\circ}25'S; 26^{\circ}10'E$ ), 5 ♀ (AM); Dunbrody, ♀ (AM); Port Alfred, ♀, H. Barber (AM); Three Sisters, near Port Alfred, 2 ♀, H. Barber (AM); Alice, 10 ♀, 14.v.1926, C. Wilmot (AM); Garfield, Alice, 6 ♀, 19.vi.1926, C. Wilmot (AM); Fort Brown, Andries Vosloo Kudu Reserve ( $33^{\circ}07'S; 26^{\circ}37'E$ ), ♀, 28.xii.1981, P. Croeser (NM); Somerset East, Oaks, 2 ♀, 1.iv.1914 (AM); Redhouse, ♀, i.1913, J. Paterson (AM); Assegai River Farm ( $33^{\circ}25'S; 26^{\circ}20'E$ ), 6 ♀, F. Cruden (AM); Uitenhage, ♀ (type, UMO), ♀ (BMNH), 5 ♀, F. Cruden (AM); Grahamstown, ♀ (NM), 4 ♀, x.1912, K. Graham (AM), 2 ♀ (AM), ♀, 'found on a tree', 30.ix.1918, G. van Dam (TM); Birmingham, New Farm, near Grahamstown, ♀ (AM); Tootabi, Schönland, near Grahamstown, ♀, 1897 (SAM). *Natal*: Harding, 2 ♀, G. Kenneth (MRAC).

### **Moggridgea eremicola sp. n.**

Figs 134–144; Map 4

**Etymology:** Gr. *eremia*, desert.

**Diagnosis:** ♂ venter without cuspules or thorns (Fig. 136); femur I with ventral carina; metatarsus, tarsus IV with scopula (Fig. 134); basal tooth of STC I bifid (Fig. 142); sternal sigilla narrow oval (Fig. 136).

**Male (holotype):** Total length 7,73. Carapace red-brown, dusky near lateral margin and in ocular area; black pigment surrounding AME and between ALE and PER; PME with shiny silver tapetum in anterior two thirds. Chelicerae yellow-brown, pedipalpus and legs dark yellow-grey, unmarked. Sternum, labium, and pedipalpal coxae pale. Abdomen with white subcuticular deposit dorsally, sides yellow-brown, venter yellow-white in centre, over book-lungs and anterior to epigastric furrow.

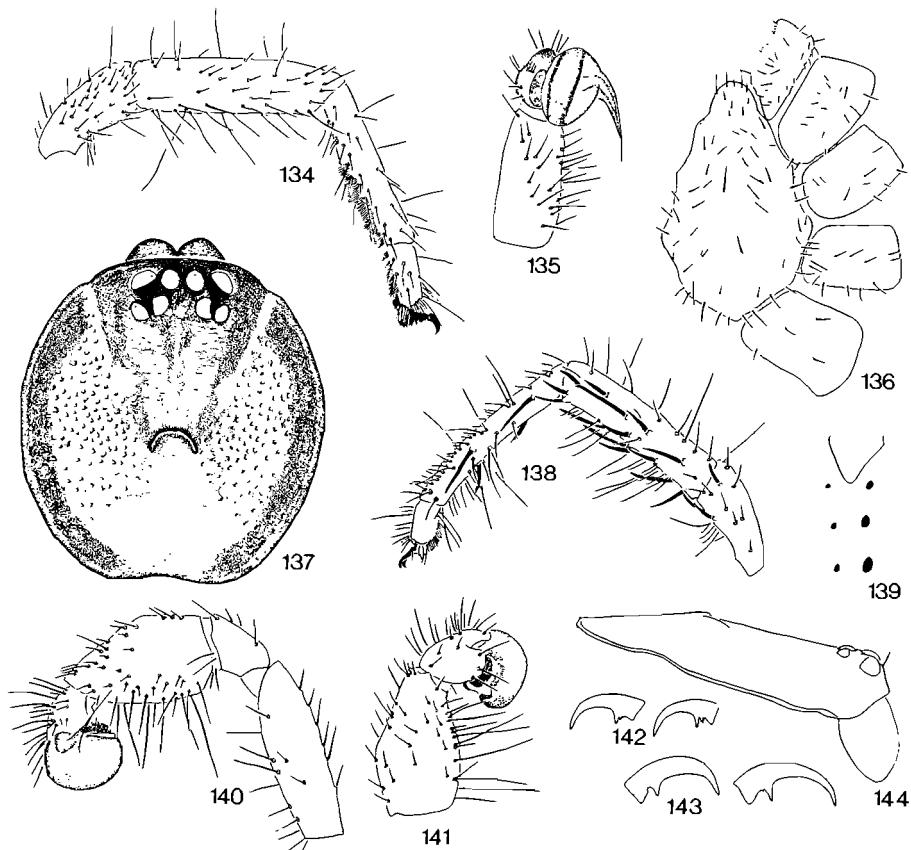
Carapace (Fig. 137) 3,53 long, 3,40 wide, 0,90 high, height at thoracic fovea 0,27 carapace width; glabrous; weakly rugose laterally and posteriorly; lateral pits broad, very shallow. Caput 0,61 width carapace, weakly demarcated, low, flat (Fig. 144), height at OA no greater than height at thoracic fovea; weakly transverse-striate posteriorly, smooth laterad of OA; glabrous, 1 setae behind PER, 2 between PM, and 1 anterior to AM; clypeus 0,33 length OA, weakly striate, margin nearly straight. Thoracic fovea small, width 0,15 width carapace, evenly recurved, width 3 times length, posterior projection absent.

Ocular area narrow, 0,59 width caput, 2,03 times wider than long; AER 1,18 wide, straight, 1,07 times width PER, diameter ALE 2 times AME; PER 1,10

wide, slightly recurved, length PME about equal to PLE; OA 0.58 long. Ratio of eyes: AM:AL:PM:PL, 1:2:1.4:1.5; PME trapezoidal with large anterior tapetum. Distances between eyes: AM-AL 0.10, AM-AM 0.13, AM-PM 0.08, AL-PL 0.16, PM-PM 0.29, PM-PL 0.065. Ocular quadrangle 1.47 times wider than long, narrowed anteriorly, posterior 1.69 times anterior.

Sternum (Fig. 136) 2.26 long, 1.74 wide, margin sinuate between coxae, sparsely setose; sigilla narrow, length 4 times width, small, length 0.22 width sternum, lateral, distance between 1.93 times distance to margin. Labium 0.42 long, 0.48 wide, margin rounded, cuspules absent. Pedipalpal coxa 1.00 long, 0.58 wide, trapezoidal, proximal angle produced, apex blunt, cuspules absent. Chelicera 0.33 long, pro- and retromargins of fang furrow (Fig. 139) with 3 teeth; fang slender, narrowed before base.

Femur I 0.94, tibia I 0.8, femur IV 1.12, tibia IV 0.96 width carapace. Coxae without thorns; coxae, trochanters, and legs sparsely setose, tibiae-tarsi I, II with long hairs. Femur I venter with double carina, II convex; patella III with



Figs 134-144. *Moggridgea eremicola* sp. n., holotype male. 135, 140, 141. Left palpus. 134. Patella-tarsus IV, anterolateral. 135. Tibia-tarsus, ventral. 136. Venter. 137. Carapace, dorsal. 138. Patella-tarsus I, anterolateral. 139. Cheliceral teeth. 140. Femur-tarsus, retrolateral. 141. Tibia-tarsus, anterolateral. 142. STC I. 143. STC IV. 144. Carapace, lateral.

anterolateral row of spinelike setae, tibia without basal depression; patella IV with scattered anterolateral setae; metatarsus IV straight (Fig. 134), laterally expanded distally, apical comb of 2 elongate setae. Scopulae: weak, divided beneath tarsi I (Fig. 138), II; weak, entire beneath tarsus III; dense, entire beneath tarsus and distal half of metatarsus IV. Spination: palpus, femur d1111; leg I, femur d11111, patella a1v21, tibia a1111v2322r111, metatarsus v222; leg II, femur d111r11, patella a1v3, tibia a1111v32332, metatarsus v22121; leg III, femur d111a11r1, patella d11r1; leg IV, femur d1111a11, tibia v11. Basal teeth of superior tarsal claws: leg I (Fig. 142), II 1–2, III, IV (Fig. 143) simple. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,20	3,00	2,47	3,40	1,63
Patella	1,60	1,57	1,27	1,67	0,88
Tibia	2,27	2,00	1,73	2,73	1,33
Metatarsus	2,67	2,33	1,87	2,33	—
Tarsus	0,80	0,93	1,07	1,27	0,72
Total	10,54	9,83	8,41	11,40	4,56

Palpus (Figs 135, 140–141) with femur 0,48, tibia 0,39 width carapace; femur 2,26, tibia 1,84 length tarsus; tibia height 0,58 length; bulb width equal to tarsus length; embolus with base thickened, length 1,22 times bulb width.

Abdomen 4,00 long, 3,00 wide; dorsum and sides sparsely covered with rows of slender, attenuate setae.

Female: Unknown.

Distribution (Map 4): Known only from the type locality in the central Namib desert.

Material examined: NAMIBIA: Dome Gorge, Rössing Mine (22°31'S:14°52'E), ♂ (holotype 38092), 'preservative pitfall trap', 11.iii–9.iv.1985, E. Griffin (SMW).

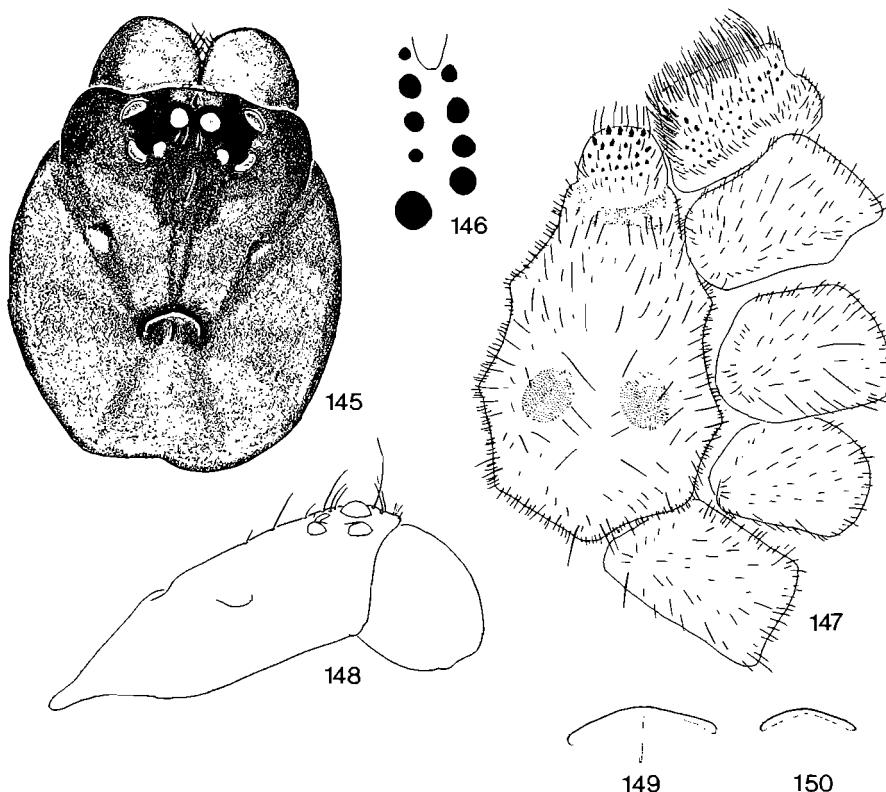
#### *Moggridgea intermedia* Hewitt

Figs 5, 8–9, 145–158, 160; Map 3

*Moggridgea intermedia* Hewitt, 1913b:433 (type ♀, 2803, Knysna, South Africa, TM). Roewer, 1942:191. Bonnet, 1957:2972.

Diagnosis: ♀ spermathecae short, broad, length less than 4,2 times diameter (Fig. 160); sternal sigilla nearly round (Fig. 147), separated by less than 2,0 times diameter; femur I with slender setae on venter (Figs 8, 9); coxae without thorns. ♂ without cuspules or coxal thorns (Fig. 156); femur I with ventral carina; tarsus, metatarsus IV with scopula; sternal sigilla broadly oval, length less than 1,6 times width (Fig. 156); metatarsus I with at least 6 pairs of spines (Fig. 151).

Female (Diepwalle Forest Station): Total length 9,87. Carapace grey-brown, dark along lateral margin and around fovea, pale spots in and behind fovea; caput dusky on clypeus, ocular area, and in median band behind PER narrowed before fovea; black pigment surrounding AME, behind ALE, and between PME–PLE. Chelicerae grey-brown, venter yellow-brown. Coxae and trochanters grey-brown, legs grey to grey-brown, unmarked, femora palest. Abdomen dark grey on dorsum and sides, venter grey-brown, pale over book-lungs and anterior to epigastric furrow.



Figs 145–150. *Moggridgea intermedia* Hewitt, female. 145, 148, 150. Diepwalle. 146–147. Type. 148. Krantzhoek. 145. Carapace, dorsal. 146. Cheliceral teeth. 147. Venter. 148. Carapace, lateral. 149, 150. Variation in thoracic foveae.

Carapace (Fig. 145) 4,60 long, 4,00 wide, 1,13 high, height at fovea 0,29 width carapace; glabrous; lateral pits small, shallow. Caput 0,77 width carapace, gently sloping (Fig. 148), height at OA 1,34 times height at fovea; median row of 3 setae behind OA, 1 setae behind PLE, 2 between PME, 1 large and 9 small on clypeus; clypeus 0,3 length OA, margin recurved at sides, straight in centre. Thoracic fovea 0,18 width carapace, angled in centre and at sides, width 2,5 times length, with weak, disconnected posterior projection.

Ocular area 0,55 width caput, 2,22 times wider than long; AER 1,65 wide, straight, 1,13 times width PER, diameter ALE 1,57 times AME; PER 1,45 wide, recurved, length PME 0,6 PLE; OA 0,74 long. Ratio of eyes: AM:AL:PM:PL, 1,17:1,83:1:1,67; PME small, oval, with tapetum. Distances between eyes: AM-AL 0,24, AM-AM 0,19, AM-PM 0,23, AL-PL 0,26, PM-PM 0,58, PM-PL 0,10. Ocular quadrangle 1,35 times wider than long, narrowed anteriorly, posterior 1,35 times anterior.

Sternum 2,74 long, 2,23 wide, margin weakly sinuate between coxae, setose; sigilla nearly round, large, length 0,22 sternal width, distance between equal to distance from margin. Labium 0,81 long, 0,81 wide, apex bluntly curved, with 15

cuspules. Pedipalpal coxa 1,35 long, 0,97 wide, trapezoidal, apical angle weakly produced, with 20–22 cuspules in broad median band. Chelicera 0,60 long, promargin of fang furrow with 4 teeth, retromargin with 4 small and 1 large tooth.

Coxae without thorns; coxae, trochanters, and legs setose. Venter of femur I with rows of short, slender setae (Figs 8, 9); femur II with 2 ventral rows of 7–8 stout setae; patella III with anterolateral band of stout setae and apical spine; tibia III with basal depression equal to 0,21 length segment; patella IV with narrow anterolateral band of fine setae; metatarsus IV preening comb of 4 setae. Spination: palpus, tibia a1v2, tarsus v212; leg I, tibia v22–212–211, metatarsus v212–2121–212; leg II, tibia v222–1222, metatarsus v22–2221–1; leg III, patella a1 (apical); leg IV, metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I 1–2, II 2, III–IV 1. Leg measurements:

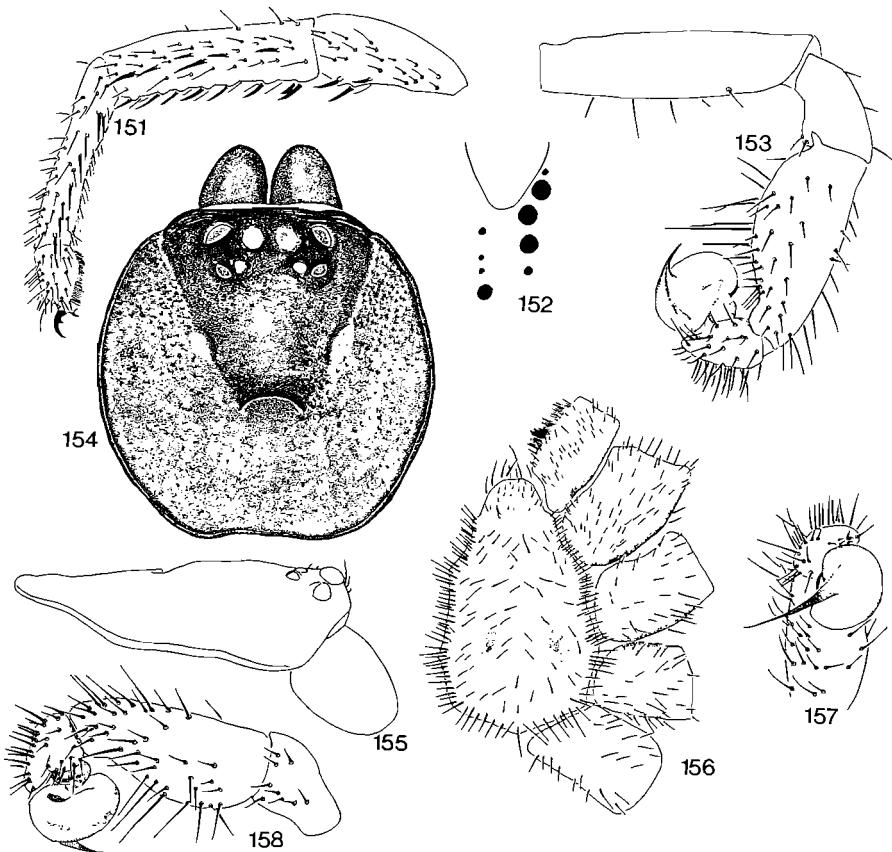
	I	II	III	IV	Palpus
Femur	2,93	2,60	2,20	3,20	1,73
Patella	1,80	1,67	1,47	1,80	0,93
Tibia	1,87	1,67	1,53	2,20	1,07
Metatarsus	1,53	1,40	1,40	2,07	—
Tarsus	1,20	1,47	1,20	1,40	1,07
Total	9,33	8,81	7,80	10,67	4,80

Abdomen 5,47 long, 4,07 wide. Spermathecae short, broad, expanded distally, mesally inclined, sclerotised band extending from distal chamber nearly to base.

Variation: Total length 7,73–16,0; carapace grey-brown to dark red-brown; carapace length 3,80–6,33, width 3,40–5,60, height 0,74–1,55; caput (Fig. 145) 0,76–0,78 width carapace, height at OA 0,225–0,29 height at fovea (Fig. 148), ocular area 0,54–0,575 width caput, clypeus 0,2–0,43 length OA; diameter ALE 1,28–1,57 times AME, PLE 0,91–1,87 times PME. Thoracic fovea (Figs 149–150) evenly recurved to angled, width 2,5–4 times length, posterior projection present or absent. Labium with 15–22, pedipalpal coxa with 20–36 cuspules. Sternal sigilla (Fig. 147) medium to large, diameter 0,21–0,27 sternum width, nearly round, length 1,3–1,59 width, distance between 1–1,6 times distance from margin. Tibia and metatarsus I with 5–8 pairs of ventrolateral spines. Spermathecae (Fig. 160) with length 3,85–4,16 times diameter, 0,77–0,95 width base; pores dense, present or absent in distal chamber. The type specimen from Knysna is damaged, lacking the distal portions of legs I, IV.

Male (Diepwalle Forest Station): Total length 9,60. Carapace very dark red-brown, unmarked. Chelicerae red-brown, dusky laterally; labium and pedipalpal coxa red-brown, sternum and coxae yellow-brown. Legs and palpi red-brown, tarsi yellow-brown, unmarked. Abdomen dark grey on dorsum and sides, pale grey on venter, yellow-white over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 154) 4,47 long, 4,47 wide, 0,48 high, low, height at fovea 0,18 width carapace; punctate-rugose; glabrous; lateral pits small, indistinct. Caput 0,67 width carapace, raised slightly, margin indistinct, sloping (Fig. 155), height at OA 1,61 times height at fovea; punctate-rugose; 1 pair setae between PME, 1 large and 2 small on clypeus; clypeus narrow, 0,27 length OA, weakly striate, margin nearly straight. Thoracic fovea small, width 0,18 width carapace, evenly recurved, width 4,22 times length, posterior projection absent.



Figs 151–158. *Moggridgea intermedia* Hewitt, male, Diepwalle. 153, 157–158. Right palpus. 151. Patella-tarsus I, anterolateral. 152. Cheliceral teeth. 153. Femur-tarsus, retro-lateral. 154. Carapace, dorsal. 155. Carapace, lateral. 156. Venter. 157. Tibia-tarsus, ventral. 158. Tibia-tarsus, anterolateral.

Ocular area narrow, 0,59 width caput, width 2,41 times length; AER 1,71 wide, slightly procurved, 1,1 times width PER, diameter ALE 1,73 times AME; PER 1,55 wide, slightly recurved, PME small, length 0,60 PLE; OA 0,71 long. Ratio of eyes: AM:AL:PM:PL, 1,58:2,17:1:1,67; PME oval, with tapetum in anterior two-thirds. Distances between eyes: AM–AL 0,18, AM–AM 0,16, AM–PM 0,19, AL–PL 0,23, PM–PM 0,61, PM–PL 0,065. Ocular quadrangle 1,48 times wider than long, narrowed anteriorly, posterior 1,29 times anterior.

Sternum (Fig. 156) 2,74 long, 2,16 wide, margin sinuate between coxae, setose; sigilla oval, length 1,52 times width, small, 0,19 width sternum, distance between 1,12 times distance from margin. Labium 0,68 long, 0,74 wide, apex bluntly curved, without cuspules. Pedipalpal coxa 1,48 long, 0,74 wide, trapezoidal, proximal angle produced, without cuspules. Chelicera 0,60 long, promargin of fang furrow (Fig. 152) with 1 denticle, 4 teeth, retromargin with 3 small, 1 large teeth; fang slender.

Femur I 0,38, tibia I 0,61, femur IV 0,85, tibia IV 0,73 width carapace. Coxae

without thorns; coxae, trochanters, and legs sparsely setose. Femur I with ventral carina, II convex; patellae III, IV with anterolateral bands of slender setae; metatarsus IV straight, cylindrical, apical comb of 2 setae. Scopulae: dense, divided beneath tarsus I (Fig. 151), II: weak, entire beneath tarsus and apex of metatarsus III; dense, entire beneath tarsus and distal half of metatarsus IV. Spination: leg I (Fig. 151), patella v21, tibia a111111v222212221, metatarsus v22212241; leg II, patella v1, tibia a111v111111, metatarsus v2221121; leg III, tibia v2 (apical); leg IV, tibia v1 (apical). Basal teeth of superior tarsal claws: leg I 1–2, II 2, III 1, IV 1–2. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,73	3,33	2,87	3,80	2,29
Patella	2,07	2,00	1,67	2,00	1,16
Tibia	2,73	2,53	2,07	3,27	1,87
Metatarsus	2,53	2,40	2,00	2,80	—
Tarsus	1,07	1,00	1,13	1,47	0,645
Total	12,13	11,26	9,74	13,34	5,965

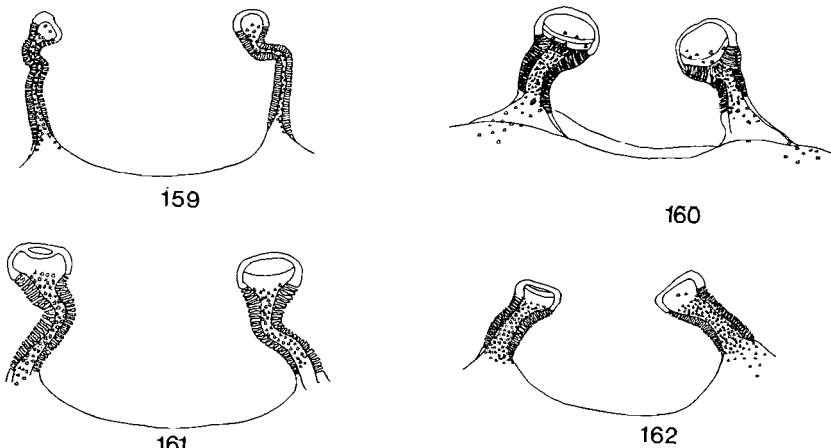
Palpus (Figs 153, 157, 158) with femur 0,53, tibia 0,43 width carapace; femur 3,55, tibia 2,9 times length tarsus; tibia swollen, height 0,44 length; bulb width 1,04 times tarsus length, embolus length 1,4 times bulb width.

Abdomen 4,87 long, 4,73 wide; dorsum and sides with rows of blunt setae.

Natural history: Collected from oval, silken nests with a single, wafer door. Non-terrestrial, building the nests on the trunks of trees, usually vertically oriented, or in cracks and crevices in rocky outcrops or stone walls, where they are usually horizontal. Nests are camouflaged to match the surrounding substrate, with bits of lichen, moss, and bark on tree trunks, and lichen and earth when in stone walls. Molted exuvia are ejected from the nest. Found only in wet forests.

Distribution (Map 3): Cool-temperate forest zone of the southern Cape Province, South Africa.

Material examined: SOUTH AFRICA: Cape: Knysna, ♀ (type) 21.v.1912, J. Rex



Figs 159–162. *Moggridgea* spp., spermathecae. 159. *M. breyeri* Hewitt, lectotype. 160. *M. intermedia* Hewitt, Krantzhoeck. 161. *M. loistata* sp. n., Houwhoek. 162. *M. teresae*, sp. n., holotype.

(TM); Krantzhoek, Harkerville State Forest, 22 km E Knysna (34°05'S:23°13'E), el. 700 ft, 2 ♀, 'coastal forest, nest on trunks of *Pterocelastrus*', 10.i.1985, T. Meikle Griswold (NM); Diepwalle Forest Sta., 22 km NE Knysna (33°57'S:23°10'E), el. 1 800 ft, ♂, 2 ♀, 'nests in niches in rock wall', 11.i.1985, T. Meikle Griswold (NM).

*Moggridgea leipoldti* Purcell

Figs 60, 163–168; Map 5

*Moggridgea leipoldti* Purcell, 1903:71 (type ♀, 3619, Clanwilliam–Van Rhynsdorp road, South Africa, SAM). Bonnet, 1957:2972.  
*M. leipoldti* (lapsus) Roewer, 1942:191.

Diagnosis: ♀ coxa III with basal patch of thorns (Fig. 166); spermathecae (Fig. 60) slender, sinuous.

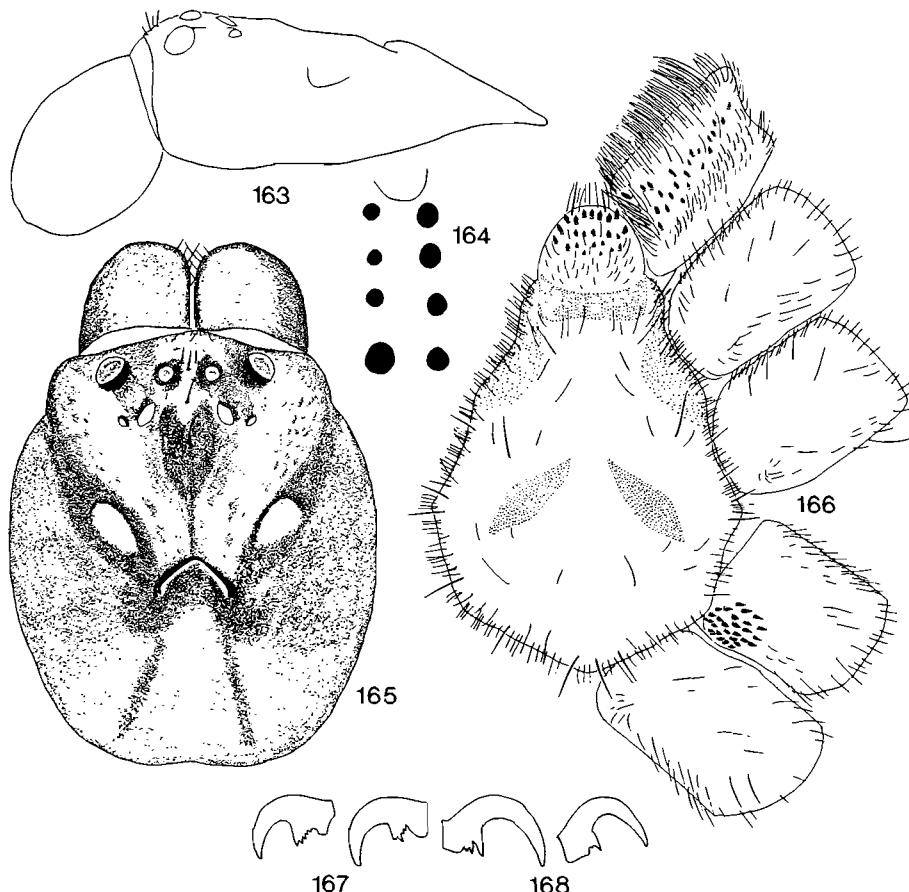
Female (type): Total length 18,0. Carapace pale yellow-brown, darker along margin of caput and around thoracic fovea, with pair of narrow, longitudinal bands posteriorly. Caput with red-brown longitudinal band behind PER, narrowed posteriad to fovea, sides mottled. Clypeus pale, darker anterior to ALE. Ocular area with thin ring of dark pigment surrounding each AME, dark behind ALE and on anterior margin of PME. Chelicerae red-brown. Venter and coxae pale yellow-white, trochanters, legs and palpi yellow-brown; faint longitudinal bands on dorsa of femora, patellae III, IV with dorsal pale band, metatarsi and tarsi I, II dusky. Abdomen faded, pale grey dorsally, white on venter.

Carapace (Fig. 165) 7,00 long, 6,53 wide, 1,77 high, height at fovea 0,28 carapace width; lateral pits deep. Caput 0,73 width of carapace, domed, gently sloping (Fig. 163), height at OA 1,24 times height at thoracic fovea; posteriorly lateral paired bands of 7 small setae, central row of 1 small and 1 large setae, 3 large and 4 small setae between PME, and 4 large and 12 small setae on clypeus; clypeus narrow, length 0,36 OA, margin rounded in centre. Thoracic fovea narrow, 0,18 carapace width, long, width 2,11 times length, sharply recurved, carapace swollen posteriorly.

Ocular area broad, 0,67 width caput, 2,285 times wider than long; AER 3,10 wide, procurved, 1,28 times width PER, diameter ALE 2,11 times AME; PER 2,42 wide, straight, length PME 1,785 times PLE; OA 1,35 long. Ratio of eyes: AM:AL:PM:PL, 1:2,11:1,78:1; PME elongate. Distances between eyes: AM–AL 0,645, AM–AM 0,29, AM–PM 0,39, AL–PL 0,55, PM–PM 1,00, PM–PL 0,1. Ocular quadrangle 1,69 times wider than long, narrowed anteriorly, posterior 1,93 times anterior.

Sternum (Fig. 166) 4,26 long, 3,81 wide, margin sinuate between coxae, setose laterally; sigilla narrow, tapering at each end, length 2,38 times width, large, length 0,24 width sternum, distance between 0,76 distance to margin. Labium 1,32 long, 1,29 wide, apex rounded, with 23 cuspules. Pedipalpal coxae 2,52 long, 1,77 wide, trapezoidal with acute apical projection, 24 cuspules in central band. Chelicera 1,60 long, promargin of fang furrow (Fig. 164) with 4 teeth, retromargin with 3 small and 1 large teeth.

Coxa III with basal patch of 24–27 thorns (Fig. 166), others sparsely setose. Femur I with 3, II with 5–7 stout ventral setae; patella III with narrow anterolateral



Figs 163–168. *Moggridgea leipoldti* Purcell, type female. 163. Carapace, lateral. 164. Cheliceral teeth. 165. Carapace, dorsal. 166. Venter. 167. STC I. 168. STC IV.

band of stout setae, apical spine present; tibia III with weak basal depression equal to 0,14 length; patella IV with broad anterolateral band of slender setae, few spinules at base; metatarsus IV apical preening comb of 4 setae. Spination: palpus, tibia v1, tarsus v22; leg I, patella v1 (apical), tibia v2121–12122, metatarsus v2221–21–212–1; leg II, patella v1 (apical), tibia v221–2122, metatarsus v212–211–221; leg III, patella a1 (apical); leg IV, metatarsus v1 (apical); tarsi III, IV with ventral spinules. Basal teeth of superior tarsal claws: leg I serrate (Fig. 167), II–IV (Fig. 168) 2–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	5,00	4,47	3,73	5,13	3,27
Patella	3,07	2,93	2,47	3,20	1,73
Tibia	3,07	2,60	2,47	3,67	1,87
Metatarsus	3,20	3,07	2,53	3,87	—
Tarsus	1,20	1,13	1,53	2,53	1,87
Total	15,54	14,20	12,73	18,40	8,74

Abdomen 9,60 long, 8,33 wide. Spermathecae (Fig. 60) widely spaced, base width 1,095 times length, long, length 8,75 times width; sinuous, distal chamber without pores, sclerotised band extending from base of distal chamber to spermathecal base.

Male: Unknown.

Distribution (Map 5): Known only from the type locality in the western Cape, South Africa.

Material examined: SOUTH AFRICA: *Cape*: road from Clanwilliam to Van Rhynsdorp, ♀ (type), xii.1897, C. Leipoldt (SAM).

### **Moggridgea loistata sp. n.**

Figs 82, 161, 169–176; Map 5

Etymology: Gr. *loisthos*, that which is left behind.

Diagnosis: Coxae I–IV of ♀ without thorns or cuspules; sternal sigilla nearly round (Fig. 171), length less than 1,5 times width, separated by less than 1,80 times diameter; metatarsus IV with apical comb of 4 setae; spermathecae (Figs 82, 161) widely separated at base, length less than 0,85 base width.

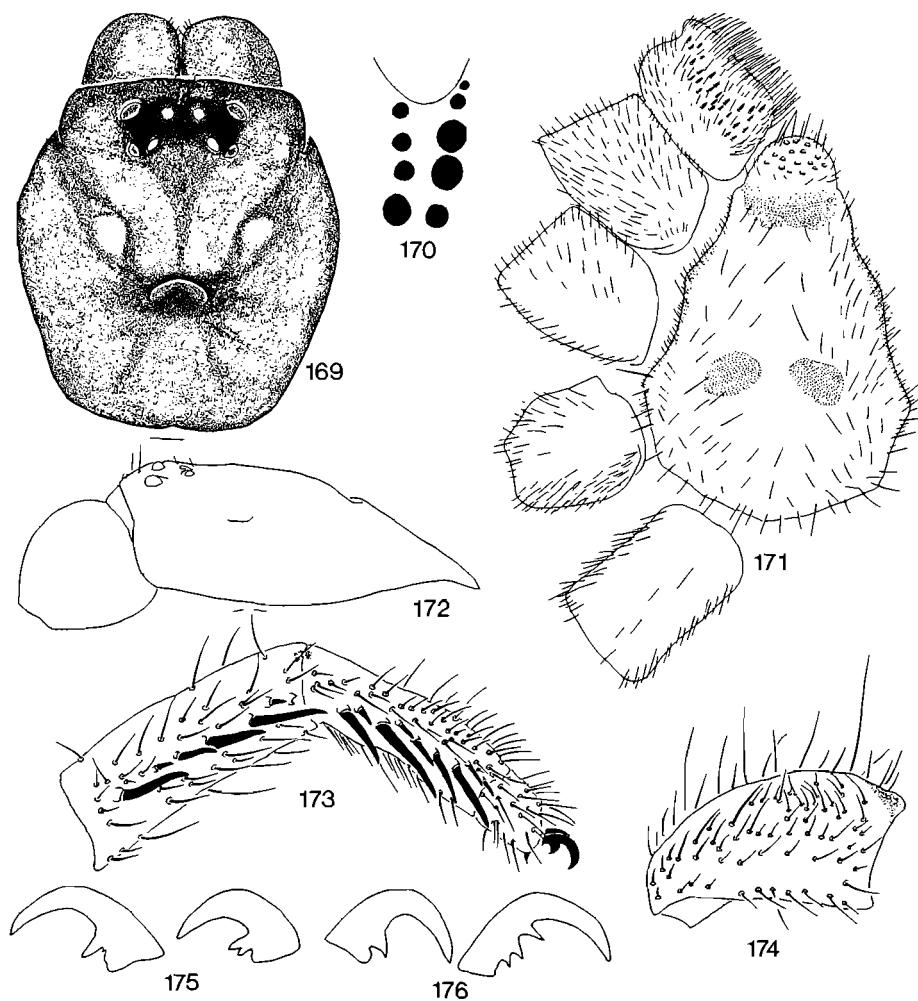
Female (holotype): Total length 9,73. Carapace red-brown, darker around fovea and on caput; dark median band behind PER, narrowed before fovea; black pigment surrounding AME, and between ALE and PER. Chelicerae red-brown, venter, coxae, and trochanters yellow-brown. Legs yellow-brown to red-brown, distal portion of tibiae to tarsi I, II dusky, femora and patellae III, IV with narrow dorsal median longitudinal dark band. Abdomen dark grey, paler on venter.

Carapace (Fig. 169) 4,47 long, 4,00 wide, 1,42 high, height at fovea 0,37 width carapace; glabrous; lateral pits small, deep. Caput 0,78 width carapace, convex, height at OA 1,18 times height at fovea; 2 setae in median row behind PER, 2 large, 4 small between PME, 1 large, 6 small setae on clypeus; clypeus length 0,41 OA, straight in centre. Thoracic fovea small, 0,18 width carapace, evenly recurved, width 3,60 times length, posterior projection absent.

Ocular area 0,52 width caput, 2,27 times wider than long; AER 1,61 wide, straight, 1,14 times width PER, diameter ALE 1,43 times AME; PER 1,42 wide, slightly recurved, length PME 1,08 times PLE; OA 0,71 long. Ratio of eyes: AM:AL:PM:PL, 1:1,43:1,08:1; PME oval, with circular tapetum. Distances between eyes: AM-AL 0,29, AM-AM 0,19, AM-PM 0,23, AL-PL 0,29, PM-PM 0,58, PM-PL 0,11. Ocular quadrangle 1,55 times wider than long, narrowed anteriorly, posterior 1,55 times anterior.

Sternum 2,74 long, 2,23 wide, weakly sinuate between coxae, setose; sigilla small, length 0,16 width sternum, nearly round, length 1,28 times width, distance between equal to distance from margin. Labium 0,81 long, 0,90 wide, apex curved, with 23 cuspules. Pedipalpal coxa 1,32 long, 0,97 wide, rectangular, with 26 cuspules in broad median band. Chelicera 0,73 long, promargin of fang furrow with 4 teeth, retromargin with 3 small, 1 large teeth.

Coxae without thorns; coxae, trochanters, and legs sparsely setose. Femur II with 3–4 stout ventral setae; patella III with narrow anterolateral band of stout setae and small apical spine; tibia III with shallow basal depression equal to 0,15



Figs 169–176. *Moggridgea loistata* sp. n., female. 169. Holotype. 170–176. Houwhoek. 169. Carapace, dorsal. 170. Cheliceral teeth. 171. Venter. 172. Carapace, lateral. 173. Tibia-tarsus I, anterolateral. 174. Patella IV, anterolateral. 175. STC I. 176. STC IV.

length segment; patella IV (Fig. 174) with narrow anterolateral band of slender setae; metatarsus IV with apical comb of 4 setae. Spination: palpus, tibia v11, tarsus v22; leg I, tibia v221–22–22, metatarsus v222–222–12; leg II, tibia v221–222, metatarsus v221–122–2; leg III, patella a1 (apical); leg IV, metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I (Fig. 175) 2, II 1–2, III 1, IV (Fig. 176) 1–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,27	2,80	2,40	3,13	1,97
Patella	1,80	1,73	1,47	1,80	1,00
Tibia	1,87	1,67	1,40	2,20	1,27
Metatarsus	1,73	1,60	1,40	1,87	—
Tarsus	0,60	0,80	1,13	1,40	1,20
Total	9,27	8,60	7,80	10,40	5,44

Abdomen 5,80 long, 3,88 wide. Spermathecae (Fig. 82) slender, length about 7 times diameter, straight, slightly broadened distally, base width 1,20 times spermatheca length; pores numerous, absent from distal chamber, sclerotised band extends from distal chamber two-thirds distance to base.

Variation: Total length 9,47–15,20; carapace 4,00–6,07 long, 3,40–5,33 wide, 1,26–1,42 high. Caput 0,75–0,84 width carapace, height at fovea 0,25–0,38 width carapace, height at OA 1,18–1,42 times height at fovea (Fig. 172). Ocular area 0,53–0,56 width caput, 2,27–2,58 times wider than long; diameter ALE 1,43–1,80 times AME, length PME 1,08–1,43 times PLE. Thoracic fovea 0,17–0,19 width carapace, width 2,00–3,60 times length, evenly recurved to angled. Labium with 16–23, pedipalpal coxa with 21–28 cuspules; sternal sigilla (Fig. 171) length 1,28–1,42 times width, 0,16–0,195 width sternum, distance between 0,83–1,11 times distance from margin. Cheliceral retromargin (Fig. 170) with 4–5 teeth. Tibia and metatarsus I (Fig. 173) with 6–7 pairs of ventrolateral spines. Spermathecae (Figs 82, 161) straight to sinuate, length 4,46–7,00 times diameter, base width 1,20–1,40 times spermatheca length.

Male: Unknown.

Distribution (Map 5): Southwestern Cape Province, South Africa.

Material examined: SOUTH AFRICA: Cape: Stellenbosch, 3 ♀ (holotype, 1 paratype, AM, 1 paratype, NM); Houwhoek, ♀, vii.1910, R. Lightfoot (SAM).

### *Moggridgea microps* Hewitt

Figs 177–190; Map 3

*Moggridgea microps* Hewitt, 1915:90 (type ♀, 2789, Malelane, South Africa, TM). Roewer, 1942:191. Bonnet, 1957:2972.

*Moggridgea quercina*, Tucker, 1917 (not *quercina* Simon, 1903):79.

Note: This species has been frequently confused with *M. quercina* Simon along the Indian Ocean coast.

Diagnosis: Coxae I–IV of ♀ without thorns or cuspules; sternal sigilla nearly round, length 0,87–1,57 times width (Fig. 179), separated by less than 2,7 times diameter, usually less than 1,5 times; metatarsus IV with apical comb of 3–4 setae (Fig. 182); spermathecae (Figs 185–190) sinuous, slender, length greater than 6 times diameter, base narrow, width less than spermathecae length.

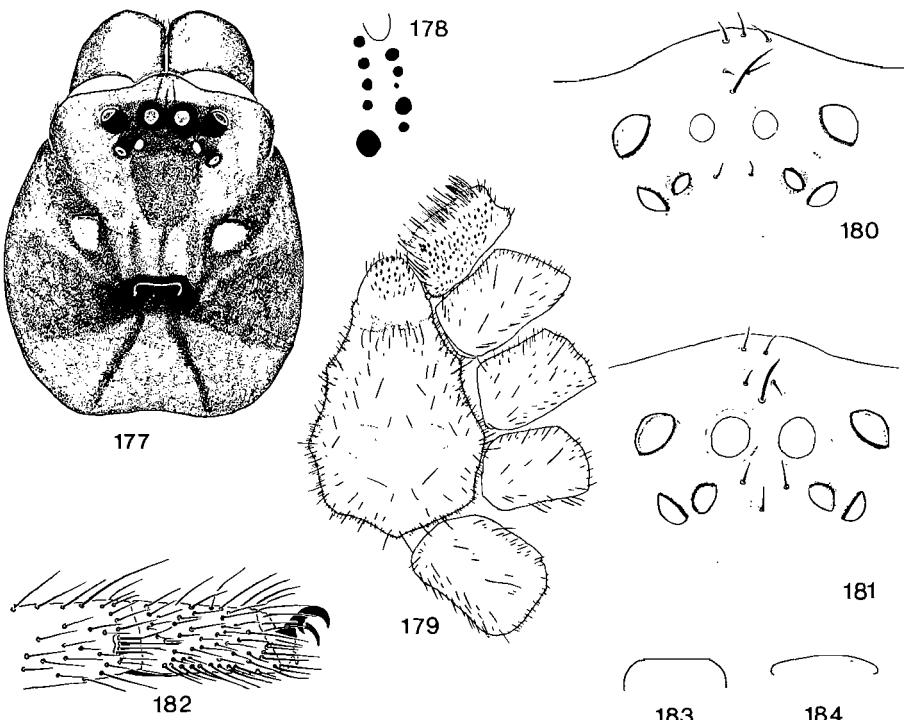
Female (type): Total length 17,33. Carapace red-brown, yellow-brown posteriorly and on clypeus, dark around fovea; caput with broad dark band behind PER, narrowed and ending before fovea; ocular area with black pigment surrounding each AME, posterior to ALE, and anterior to PME and PLE. Sternum, labium, and coxae yellow-brown, trochanters yellow-brown shading to dark distally. Chelicerae and legs red-brown, paler laterally on femora and at apices of tibiae, yellow longitudinal mark dorsally on patellae of palpus, III, and IV. Dorsum and sides of abdomen dark grey, paler ventrally, yellow-grey over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 177) 7,33 long, 6,20 wide, 1,94 high, height at fovea 0,32 width carapace; glabrous, with few posterior submarginal setae; lateral pits deep. Caput

0.76 width carapace, convex, height at OA 1.58 times height at fovea; row of 2 setae behind PER, 2 long setae between PME, and 3 large, 3 small setae on clypeus; clypeus broad, 0.66 length OA, margin strongly curved, projecting. Thoracic fovea 0.25 width carapace, straight, sharply recurved at sides, width 3.50 times length, with sinuous posterior projection.

Ocular area 0.58 width caput, 2.37 times wider than long; AER 2.68 wide, straight, 1.185 times width PER, diameter ALE 1.09 times AME; PER 2.26 wide, recurved, length PME 0.70 PLE; OA 1.32 long. Ratio of eyes: AM:AL:PM:PL, 1.31:1.44:1.1:1.125; PME broadly oval. Distances between eyes: AM-AL 0.48, AM-AM 0.19, AM-PM 0.29, AL-PL 0.52, PM-PM 1.03, PM-PL 0.23. Ocular quadrangle 1.55 times wider than long, narrowed anteriorly, posterior 1.28 times anterior.

Sternum (Fig. 179) 4.26 long, 3.77 wide, weakly sinuate between coxae, submarginally setose; sigilla large, length 0.21 sternum width, round, distance between 0.83 distance from margin. Labium 1.48 long, 1.35 wide, apex rounded, with 24 stout cuspules. Pedipalpal coxa 2.32 long, 1.58 wide, rectangular, with 44-53 cuspules in broad median band. Chelicera 1.33 long, promargin of fang furrow (Fig. 178) with 5 mixed teeth, retromargin with 4 small, 1 large teeth.



Figs 177-184. *Moggridgea microps* Hewitt, female. 177-179, 182. Type. 180. East London. 181. Malelane. 183-184. Port St. Johns. 177. Carapace, dorsal. 178. Cheliceral teeth. 179. Venter. 180-181. Variations in ocular area. 182. Metatarsus-tarsus IV, retrolateral, with comb. 183-184. Variation in thoracic foveae.

Coxae without thorns; coxae, trochanters, and legs sparsely setose. Femur II with 6–7 stout setae in 2 ventral rows; patella III with narrow anterolateral band of stout setae; tibia III with basal depression equal to 0,21 length segment; patella IV with narrow anterolateral band of slender setae; metatarsus IV with apical comb of 4 setae (Fig. 182). Spination: palpus, tibia v12, tarsus v121; leg I, tibia v21–21–222–211, metatarsus v2221–2222–21; leg II, tibia v22–21–222–2, metatarsus v222–2221–2; leg IV, tibia a1 (apical), metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I 1–2, II–IV 1. Leg measurements:

	I	II	III	IV	Palpus
Femur	5,20	4,53	3,80	5,00	3,07
Patella	3,00	2,93	2,40	3,07	1,53
Tibia	3,00	2,87	2,53	3,60	1,87
Metatarsus	2,73	2,53	2,40	3,40	—
Tarsus	1,13	1,33	1,60	2,00	1,73
Total	15,06	14,19	12,73	17,07	8,20

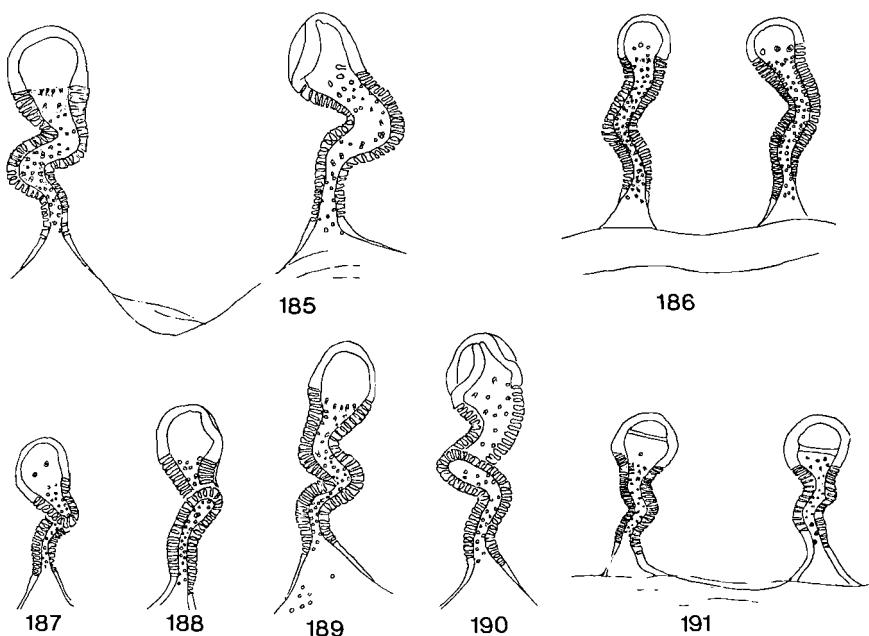
Abdomen 9,07 long, 6,67 wide. Spermathecae (Fig. 185) sinuous, slightly broadened distally, length 8,50 times diameter, base narrow, width 0,79 spermatheca length; pores sparse, absent from distal chamber, sclerotised band extending from distal chamber nearly to base.

Variation: A variable species, particularly in the form of the thoracic fovea and size and position of the sternal sigilla. The type is by far the largest specimen. Total length 7,07–17,33; carapace 3,13–7,33 long, 2,93–6,20 wide, 1,03–1,94 high, height at fovea 0,32–0,36 width carapace. Caput sloping to convex, height at OA 1,20–1,58 times height at fovea; ocular area (Figs 177, 180–181) 0,55–0,63 width caput, diameter ALE 1,0–1,45 times AME, length PME 0,70–1,0 PLE; clypeus 0,47–0,78 length OA, margin weakly curved to projecting. Thoracic fovea (Figs 177, 183–184) 0,18–0,25 width carapace, nearly straight to recurved, width 2,80–6,67 times length, posterior projection rarely present. Labium with 12–34, pedipalpal coxa with 17–46 cuspules; pedipalpal coxa rectangular to trapezoidal. Sternal sigilla small to large, length 0,12–0,23 width sternum, nearly round, length 0,87–1,57 times width, central to lateral, distance between 0,81–2,28 times distance from margin. Tibia I with 5–7, metatarsus I with 6–8 pairs of ventrolateral spines; anterolateral setal band on patella IV narrow to broad; metatarsus IV apical comb (Fig. 182) of 3–4 setae. Spermathecae (Figs 185–190) usually strongly sinuous, pores rarely present in distal chamber; length 6,30–9,30 times diameter, base width 0,57–0,84 spermatheca length.

Male: Unknown.

Natural history: An arboreal, nest-building species. Hewitt (1915:90) describes the type as being from a nest on the trunk of a large tree, in company with many abandoned nests. A nest of this species from Durban, Natal (incorrectly determined as *quercina* in Tucker, 1917:79) on a mahogany Umkalila tree was described as well camouflaged with lichen and bark, large enough for the spider to turn in, with a single, strongly-built door with a bevelled edge.

Distribution (Map 3): Bushland and forest in South Africa from the Transvaal lowveld to the Indian Ocean coast of the eastern Cape.



Figs 185–191. Spermathecae of *Moggridgea* spp. 185–190. *M. microps* Hewitt. 185. Type. 186. Swaziland. 187. East London, l. 188. Port St. Johns, l. 189. Eshowe, r. 190. Durban, r. 191. *M. paucispina* Hewitt, type.

Material examined: SOUTH AFRICA: Transvaal: Malelane, ♀ (type), ♀, 24.ii.1915, A. Roberts (TM); Imperial Mine, Louw's Creek, ♀, iii.1920, A. Roberts (TM); Sterkspruit, Barberton, 2 ♀, 6.vi.1916, A. Roberts (TM). Natal: Zululand, Eshowe, 2 ♀ (AM); St Lucia, ♀, 23.xi.1985, J. Doyen (NM); Durban, ♀, x.1915, W. Bell Marley (SAM); Port Shepstone, ♀, ii.1957, N. Krauss (AMNH). Cape: East London, 8 ♀ (AM). TRANSKEI: Umzimvubu (Port St Johns), 3 ♀, ii.1921, M. Wagner (TM). SWAZILAND: Wyldesdale, 25.v.1916, A. Roberts, ♀ (AM), 2 ♀ (TM).

#### *Moggridgea mordax* Purcell

Figs 58–59, 192–196; Map 5

*Moggridgea mordax* Purcell, 1903:69, Figs 1a, b, (lectotype, 12405, and 3 paralectotype ♀, here designated, Montagu, South Africa, SAM). Roewer, 1942:191. Bonnet, 1957:2972.

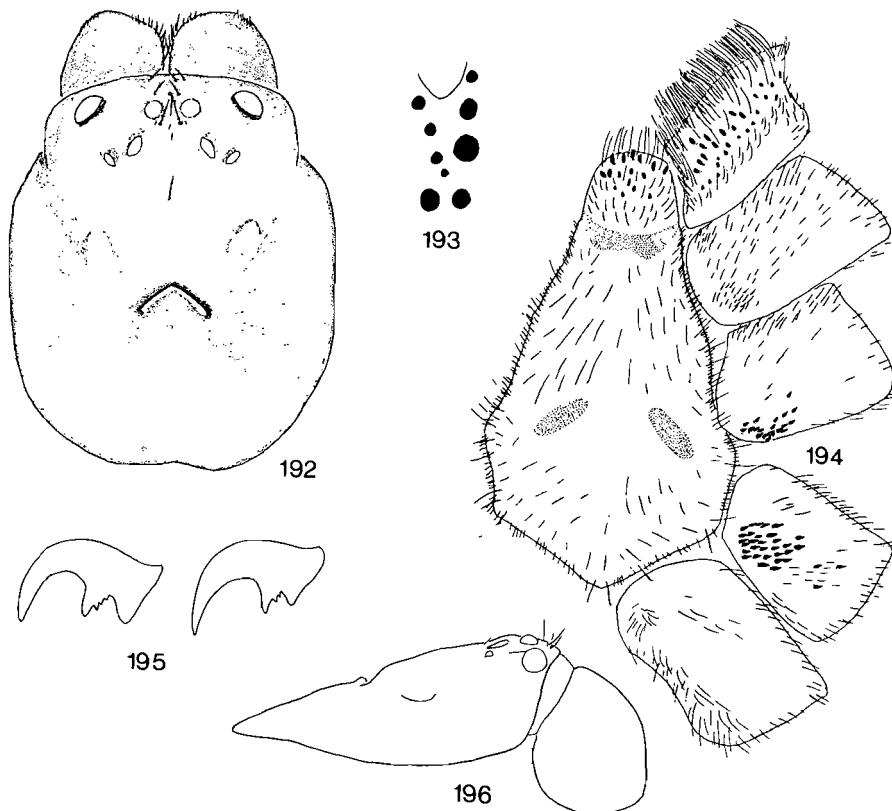
Diagnosis: ♀ coxae II, III each with more than 12 thorns (Fig. 194), sternal sigilla narrow; spermathecae relatively short, widely separated at base, base width greater than or equal to spermatheca length (Figs 58–59); basal tooth of STC I serrate (Fig. 195).

Female (lectotype): Total length 13.60. Specimen badly faded, translucent. Carapace orange-brown, slightly darker around thoracic fovea; legs and palpi orange-brown, unmarked. Venter and abdomen pale. Purcell (1903) describes fresh specimens as having carapace, chelicerae, and limbs 'reddish yellow' to 'olivaceous yellow' and the dorsum and sides of the abdomen 'olivaceous black'.

Carapace (Fig. 192) 6,40 long, 5,53 wide, 1,45 high, height at fovea 0,22 width carapace; glabrous, with small setae along lateral margin; lateral pits small, deep. Caput broad, 0,81 width carapace, sloping (Fig. 196), height at OA 1,64 times height at fovea; glabrous, with 1 large median seta, 2 large and 8 small setae between PME, 3 large and 8 small setae on clypeus; clypeus narrow, 0,2 length OA, margin nearly straight. Thoracic fovea 0,22 width carapace, slightly angled in centre, width 2,64 times length, posterior projection absent.

Ocular area broad, 0,75 width caput, 2,55 times wider than long; AER 3,29 wide, slightly procurved, width 1,34 times PER, ALE large, diameter 2,375 times AME; PER 2,45 wide, recurved, length PME 1,22 times PLE; OA 1,29 long. Ratio of eyes: AM:AL:PM:PL, 1:2,375:1,375:1,125; PME narrow oval. Distances between eyes: AM-AL 0,71, AM-AM 0,26, AM-PM 0,39, AL-PL 0,61, PM-PM 0,97, PM-PL 0,23. Ocular quadrangle 1,175 times wider than long, strongly narrowed anteriorly, posterior 1,81 times anterior.

Sternum (Fig. 194) 4,00 long, 3,03 wide, margin weakly sinuate between coxae, setose; sigilla narrow oval, length 2,62 times width, small, length 0,19 width sternum, distance between 1,31 times distance to margin. Labium 1,26 long, 1,26



Figs 192-196. *Moggridgea mordax* Purcell, female. 192, 194-195. Lectotype. 193, 196. Paralectotype. 192, Carapace, dorsal. 193. Cheliceral teeth. 194. Venter. 195. STCI. 196. Carapace, lateral.

wide, apex bluntly curved, with 16 blunt cuspules. Pedipalpal coxa 2,10 long, 1,42 wide, trapezoidal, apical angle strongly produced, with 31–34 cuspules in median band. Chelicera 1,20 long, promargin of fang furrow with 4 teeth, retromargin with 3 small and 1 large teeth.

Coxae II, III with thorns (Fig. 194): II 20–23, III 33–41; coxae, trochanters, and legs setose. Femur I with row of 7, II with 13–16 stout, elongate setae in 2 ventral rows; patella III with anterolateral band of stout, spinelike setae, apical spine present; tibia III with basal depression equal to 0,15 length segment; patella IV with broad anterolateral band of short setae and basal spinules; metatarsus IV with apical comb of 4 setae. Spination: palpus, tibia v11, tarsus v22; leg I, tibia v2211–221–21, metatarsus v222–22–21–22; leg II, tibia v221–221–21, metatarsus v221–2211–2; leg III, patella a1 (apical), metatarsus v2 (apical); leg IV, metatarsus a1 (apical); tarsi III, IV with ventral spinules. Basal teeth of superior tarsal claws: leg I (Fig. 195) 2–3, II 2, III 1–2, IV 1–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	4,33	3,80	3,33	4,33	2,93
Patella	2,80	2,67	2,40	2,87	1,73
Tibia	3,07	2,40	2,27	3,40	1,60
Metatarsus	2,73	2,67	2,27	3,47	—
Tarsus	0,93	1,00	1,53	1,87	1,73
Total	13,86	12,54	11,27	15,94	7,99

Abdomen 7,18 long, 5,33 wide. Spermathecae (Fig. 58) with base broad, twice spermatheca length, cylindrical, length 4,5 times diameter; pores sparse, present or absent in distal chamber, sclerotised band extending from distal chamber to base.

Variation: Total length 13,60–17,60; carapace 4,87–6,40 long, 4,87–5,53 wide, 0,97–1,55 high; caput 0,75–0,81 width carapace, height at OA 1,3–1,7 times height at fovea; ocular area 0,7–0,75 width caput, 2,42–2,71 times wider than long; diameter ALE 1,7–2,4 times AME, length PME 1,22–1,83 times PLE. Thoracic fovea evenly recurved to slightly angled in centre, width 2,11–2,64 times length. Sternal sigilla 0,19–0,23 width sternum, length 2,4–2,7 times width. Venter with 17–18 labial cuspules, 25–37 cuspules on pedipalpal coxa, coxa II with 16–26, III with 29–41 thorns. Fang furrow (Fig. 193) with 3–5 teeth on retromargin. Metatarsus IV comb with 3–4 setae; tibia I with 5–9, metatarsus I with 8–11 pairs of ventrolateral spines. Spermathecae (Figs 58, 59) cylindrical to expanded distally, slender to stout, length 3,2–4,6 times diameter, base width 1,73–1,98 times spermatheca length.

Male: Unknown.

Natural history: A terrestrial, burrowing species. Purcell (1903:70–81, figs 1a–b) describes the nests and eggsacs in detail. The burrow is cylindrical, inclined, 10,0–11,5 cm deep, silk-lined. The mouth of the burrow is broadened, diameter 3–5 mm greater than the burrow. The lid is D-shaped, thick, flat, thin along the margins, and slightly raised above the substrate so as to resemble ‘a detached piece . . . of earth . . . loosened from the cracked surface of the ground’ (Purcell 1903:71). Eggsacs were discovered at the end of November, one of which contained 65 eggs.

Distribution (Map 5): Southwestern Cape Province, South Africa.

Material examined: SOUTH AFRICA: *Cape*: Hot Springs, Montagu, 4 ♀ (lectotype, paralectotypes), 22.xi.1902, W. Purcell (SAM); St Helena Bay (3218CC), ♀, 18.ii.1981, V. Branco (SAM).

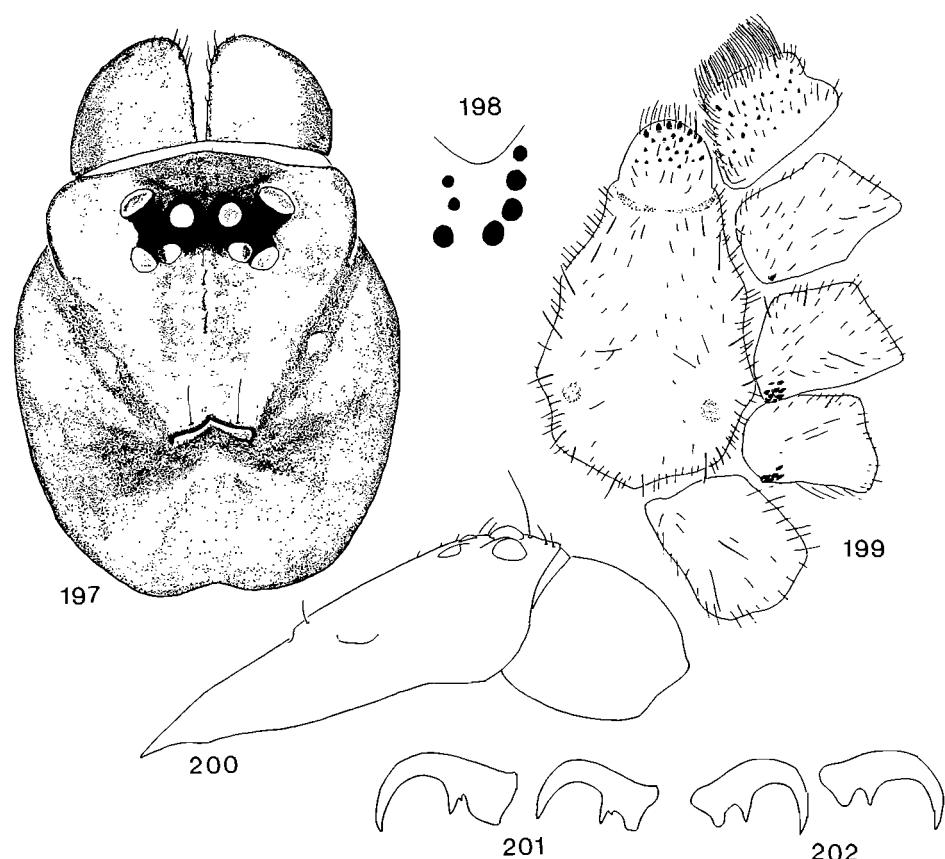
**Moggridgea nesiota sp. n.**

Figs 77, 197–212; Map 1

Etymology: Gr. *nesos*, island.

Diagnosis: ♀ with pair of setae anterior to thoracic fovea (Fig. 157), thoracic fovea recurved; sternal sigilla (Fig. 199) small, length 0,16 sternum width, lateral; spermathecae (Fig. 77) slender, length more than 8 times diameter. ♂ without ventral thorns or cuspules (Fig. 209), femur I convex ventrally (Fig. 208); palpus relatively short, femur length less than 0,7 carapace width (Fig. 205).

Female (holotype): Total length 6,67. Carapace grey-brown, darker along margin, around thoracic fovea and along margin of caput; caput with broad median dark band between OA and fovea, mottled on sides, clypeus and anterior margin dark; ocular area with black pigment between eyes. Chelicerae grey-brown, venter, coxae, and trochanters pale yellow-grey. Legs and palpi grey-brown, pale apical annuli on patellae-metatarsi, linear infuscations ventrally on femora I, II, laterally on femora III, IV and patellae-metatarsi I–IV. Abdomen purple-grey dorsally, grey on sides and venter.



Figs 197–202. *Moggridgea nesiota* sp. n., holotype female. 197. Carapace, dorsal. 198. Cheliceral teeth. 199. Venter. 200. Carapace, lateral. 201. STC I. 202. STC IV.

Carapace (Fig. 197) 2,73 long, 2,47 wide, 0,81 high, height at fovea 0,34 carapace width; glabrous; lateral pits small, shallow. Caput 0,78 width carapace, gently sloping (Fig. 200), height at OA 1,48 height at fovea; pair of long setae anterior to fovea, median longitudinal row of 4 setae behind PER, 1 pair between PME, clypeus with 1 large, 9 small setae; clypeus 0,35 length OA, margin weakly curved. Thoracic fovea broad, 0,24 width carapace, sharply angled in centre, width 3,6 times length, posterior projection absent.

Ocular area 0,60 width caput, 2,06 times wider than long; AER 1,13 wide, strongly procurved, 1,17 times width PER, diameter ALE 1,78 times AME; PER 0,97 wide, recurved, length PME 0,92 PLE; OA 0,55 long. Ratio of eyes: AM:AL:PM:PL, 1:1,78:1,11:1,33; PME slightly oval, with median tapetum. Distances between eyes: AM-AL 0,145, AM-AM 0,16, AM-PM 0,1, AL-PL 0,16, PM-PM 0,32, PM-PL 0,03. Ocular quadrangle 1,26 times wider than long, narrowed anteriorly, posterior 1,21 times anterior.

Sternum (Fig. 199) 1,74 long, 1,39 wide, margin sinuate between coxae, sparsely setose; sigilla round, small, length 0,09 sternum width, lateral, distance between 6,5 times distance from margin. Labium 0,58 long, 0,58 wide, apex bluntly curved, with 22 blunt cuspules. Pedipalpal coxa 0,81 long, 0,61 wide, trapezoidal, apical angle weakly produced, with 26 small cuspules. Chelicera 0,47 long, promargin of fang furrow (Fig. 198) with 4, retromargin with 3 teeth; fang short, broad, blunt.

Coxae I-III with thorns (Fig. 199): I 1, II 8-9, III 4-5; coxae, trochanters, and legs sparsely setose. Femur II with ventral row of 4-5 stout setae; patella III with narrow anterolateral band of stout setae, apical spine present; tibia III with weak basal depression equal to 0,12 length segment; patella IV with narrow anterolateral band of fine setae; metatarsus IV apical preening comb indistinct. Spination: palpus, tibia v11, tarsus v22; leg I, tibia v12122, metatarsus v22222; leg II, tibia v2122, metatarsus v22212; leg III, patella a1 (apical). Basal teeth of superior tarsal claws: leg I (Fig. 201) 2, II-IV (Fig. 202) 1. Leg measurements:

	I	II	III	IV	Palpus
Femur	2,20	1,80	1,47	1,93	1,33
Patella	1,17	1,07	0,93	1,20	0,67
Tibia	1,13	1,00	1,00	1,20	0,73
Metatarsus	1,00	0,93	0,87	1,27	—
Tarsus	0,60	0,60	0,80	0,93	0,67
Total	6,10	5,40	5,07	6,53	3,40

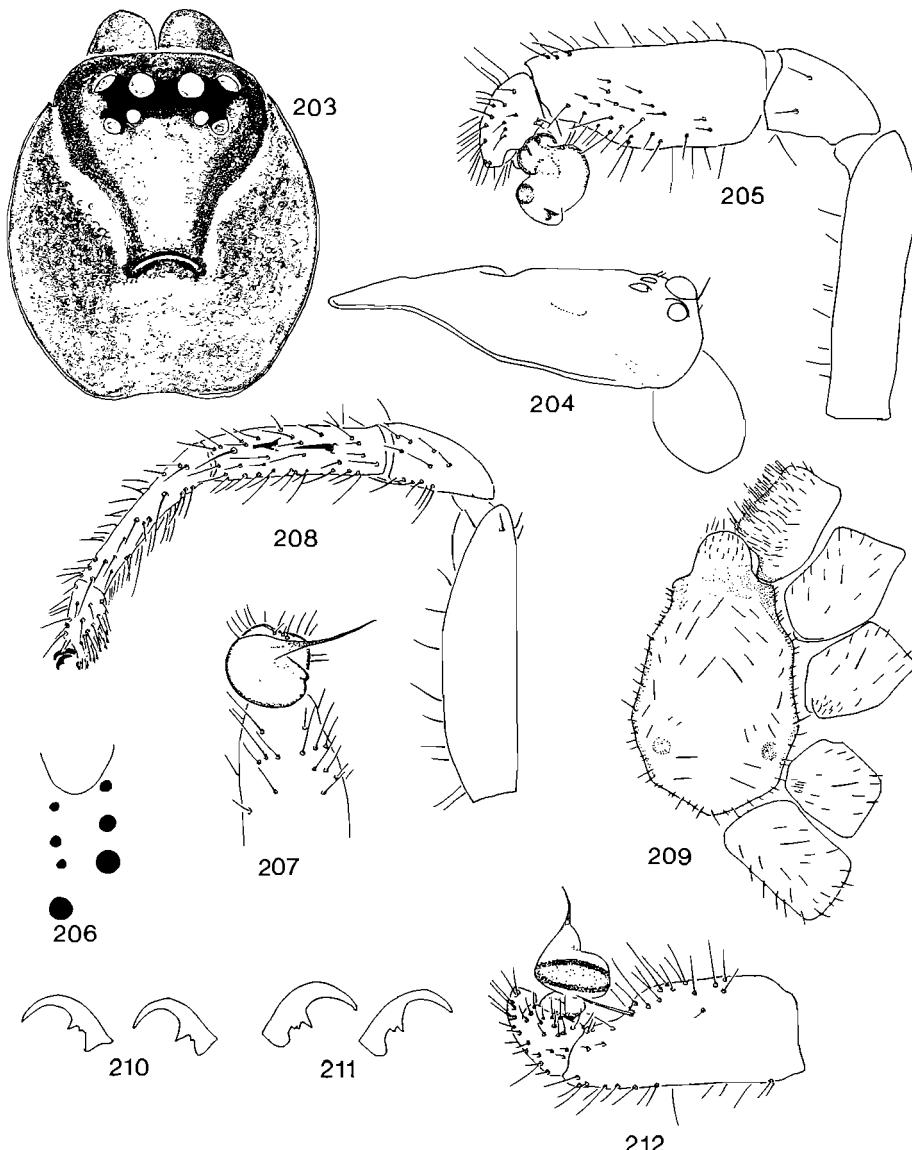
Abdomen 3,93 long, 2,80 wide. Spermathecae (Fig. 77) slender, slightly expanded distally, length 6,9 times diameter, sinuate to straight, base width equal to spermatheca length; pores sparse, absent from distal chamber, sclerotised band extending from distal chamber nearly to base.

Male (paratype): Total length 5,07. Markings as in ♀ except caput without dark median band, markings of legs faint, palpus with patella-tarsus pale yellow-white.

Carapace (Fig. 203) 2,07 long, 2,00 wide, 0,48 high, height at thoracic fovea 0,25 width carapace; weakly rugose; glabrous; lateral pits broad, shallow, indistinct. Caput 0,67 width carapace, weakly demarcated, sides raised, gently sloping (Fig. 204), height at OA 1,33 times height at fovea; weakly transverse-striate between PER and fovea, sides smooth; pair of setae between PME, 1 anterior to AME; clypeus 0,5 length OA, margin straight. Thoracic fovea broad, 0,25 width carapace, weakly angled in centre, width 3,25 times length, posterior projection absent.

Ocular area broad, 0,725 width caput, 2,42 times wider than long; AER 0,935

wide, straight, 1.11 times width posterior, AME large, diameter ALE 0.83 AME; PER 0.84 wide, recurved, length PME 0.64 PLE; OA 0.39 long. Ratio of eyes: AM:AL:PM:PL, 1.71:1.43:1:1.57; PME nearly round. Distances between eyes: AM-AL 0.065, AM-AM 0.13, AM-PM 0.065, AL-PL 0.16, PM-PM 0.34, PM-PL 0.065. Ocular quadrangle 1.42 times wider than long, slightly narrowed anteriorly, posterior 1.06 times anterior.



Figs 203-212. *Moggridgea nesiota* sp. n., paratype male. 205, 207, 212. Left palpus. 203. Carapace, dorsal. 204. Carapace, lateral. 205. Femur-tarsus, retrolateral. 206. Cheliceral teeth. 207. Tibia-tarsus, ventral. 208. Femur-tarsus I, anterolateral. 209. Venter. 210. STC I. 211. STC IV. 212. Tibia-tarsus, anterolateral.

Sternum (Fig. 209) 1,39 long, 1,06 wide, margin nearly entire, with sparse lateral setae; sigilla round, small, length 0,125 width sternum, lateral, distance between 7,2 times distance from margin. Labium 0,39 long, 0,39 wide, apex rounded, without cuspules. Pedipalpal coxa 0,71 long, 0,45 wide, trapezoidal, proximal angle very weak, without cuspules. Chelicera 0,40 long, promargin of fang furrow (Fig. 206) with 3 teeth, retromargin with 3 small, 1 large teeth; fang short, stout.

Femur I 1,035, tibia I 0,665, femur IV 1,0, tibia IV 0,735 times width carapace. Coxae without thorns (Fig. 209); coxae, trochanters, and legs very sparsely setose. Femora I, II convex ventrally, non-carinate; patellae III, IV with few anterolateral setae; metatarsus IV straight, cylindrical, without apical comb. Scopulae: very weak beneath tarsi I (Fig. 208), II, only a few scopular setae beneath tarsi III, IV. Spination: leg I (Fig. 208), tibia v11; otherwise without true spines. Basal teeth of superior tarsal claws: leg I (Fig. 210) 1, II, III 1–2, IV (Fig. 211) 2–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	2,07	1,80	1,47	2,00	1,40
Patella	1,07	0,93	0,80	1,00	0,60
Tibia	1,33	1,27	0,93	1,47	1,07
Metatarsus	1,33	1,20	0,93	1,33	—
Tarsus	0,60	0,60	0,73	0,80	0,47
Total	6,40	5,80	4,86	6,60	3,54

Palpus (Figs 205, 207, 212) with femur 0,66, tibia 0,53 width carapace; femur 2,73, tibia 2,2 times tarsus length; tibia swollen, height 0,49 length; bulb with ectal cusp, width 0,86 tarsus length, embolus expanded at base, elongate, length 1,76 times bulb width.

Abdomen 2,40 long, 1,73 wide; dorsum and sides with rows of attenuate setae.

Natural history: Arboreal.

Distribution (Map 1): Known only from the Comoro Islands.

Material examined: COMOROS: Moheli: Iconi Lake, ♀ (holotype, 160798), from bark, 17.xi.1983, R. Jocqué (MRAC); Miringoni, St Antoine, ♂ (paratype, 160830), 7.xi.1983, R. Jocqué (MRAC).

### *Moggridgea occidua* Simon

Figs 213–219; Map 2

*Moggridgea occidua* Simon, 1907:219 (type ♀, 22141, Isle Principe, West Africa, MNHN). Roewer, 1942:191. Bonnet, 1957:2973.

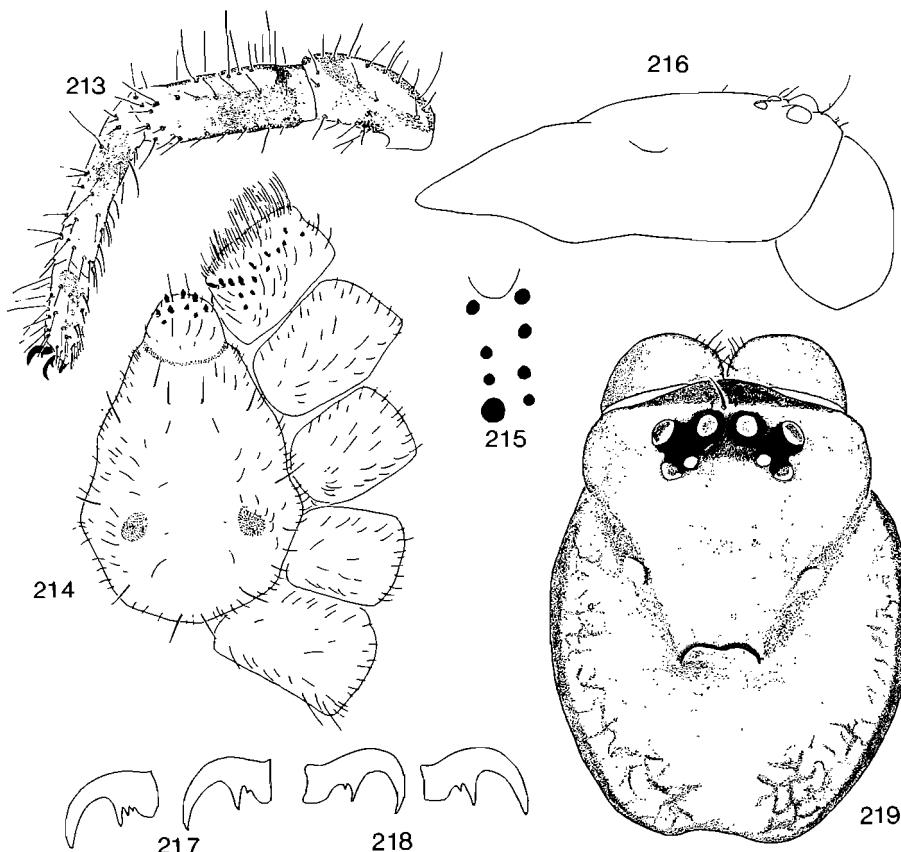
Diagnosis: ♀ distinctively marked, clypeus and margin of carapace dark and integument of posterior thoracic region mottled (Fig. 219). Femora with narrow dorsal longitudinal and broad lateral dark bands; coxae without thorns; sternal sigilla oval (Fig. 214), distant, separated by more than 3,3 times diameter; metatarsal preening comb of three setae.

Female (type): Total length 6,13. Carapace (Fig. 219) red-brown, slightly darker laterad of caput, margin dark and mottled on lateral and particularly posterior surface. Caput with narrow dark band extending from between PME halfway to fovea; black pigment surrounding AME, filling area between ALE, PME, and PLE. Clypeus dark brown from margin to between AME, red-brown anterior to ALE. Chelicera red-brown, venter, coxae, trochanters, and base colour of palpi

and legs yellow-brown. Palpus with antero- and posterolateral maculations on patella and tibia. Femora dark laterally and ventrally with pale, distal-directed triangle on posterior surface and narrow longitudinal band on dorsum; patellae to metatarsi dark laterally, tibiae dark ventrally and with basal annulus and dorsal longitudinal band for basal half (Fig. 213); tarsus IV with posterolateral maculation. Abdomen mottled grey to purple on dorsum and sides, venter pale, areas over book-lungs white.

Carapace (Fig. 219) 2,73 long, 2,27 wide, 0,61 high, height at fovea 0,28 carapace width; lateral pits shallow. Caput 0,79 width of carapace, gently sloping (Fig. 216), height at OA 1,26 times height at thoracic fovea; longitudinal row of 2 setae behind OA, pair of setae between PME, and 1 large and 3 small setae on clypeus; clypeus 0,54 OA length, margin obtuse. Thoracic fovea broad, 0,235 carapace width, short, width 4,14 times length, straight in centre, posterior extension absent.

Ocular area broad, 0,555 width caput, 2,5 times length OA; AER 0,97 wide, slightly recurved, 1,15 times width PER, diameter ALE 1,33 times AME; PER



Figs 213-219. *Moggridgea occidua* Simon, type female. 213. Patella-tarsus IV, retrolateral. 214. Venter. 215. Cheliceral teeth. 216. Carapace, lateral. 217. STC I. 218. STC IV. 219. Carapace, dorsal.

0,84 wide, recurved, PME 0,75 diameter PLE; OAL 0,39. Ratio of eyes: AM:AL:PM:PL, 1,5:2,0:1:1,33; PME nearly round. Distances between eyes: AM-AL 0,13, AM-AM 0,08, AM-PM 0,13, AL-PL 0,13, PM-PM 0,355, PM-PL 0,05. Ocular quadrangle 1,54 times wider than long, narrowed anteriorly, posterior 1,22 times anterior.

Sternum (Fig. 214) 1,68 long, 1,39 wide, margin weakly sinuate, sparsely setose; sigilla nearly round, length 1,3 times width, small, length 0,23 sternum width, lateral, distance between 2,5 times distance to margin. Labium 0,45 long, 0,52 wide, apex bluntly rounded, with 9 pointed cuspules. Pedipalpal coxa 0,77 long, 0,58 wide, nearly rectangular with weak apical projection, 15-17 cuspules in narrow median band. Chelicera 0,53 long, promargin of fang furrow with 4 teeth, retromargin with 3 small and 1 large teeth (Fig. 215).

Coxae without thorns, weakly setose. Femur II with 4-5 stout setae below; patella III with narrow anterolateral band of 15-20 short, spinule-like setae, apical spine present; tibia III basal depression equal to 0,2 length; patella IV with scattered anterolateral setae; metatarsus IV preening comb of 3 setae. Spination: palpus, tibia v2, tarsus v22; leg I, tibia v22212, metatarsus v22-22-2; leg II, tibia v22, metatarsus v22212; leg III, patella a1 (apical); leg IV, metatarsus v1 (apical); tarsi without ventral spinules. Basal teeth of superior tarsal claws: I (Fig. 217), II 1-2, III 1, IV 2 (Fig. 218). Leg measurements:

	I	II	III	IV	Palpus
Femur	1,93	1,67	1,47	1,87	1,20
Patella	1,00	1,00	0,87	1,13	0,60
Tibia	1,07	0,93	0,93	1,33	0,67
Metatarsus	1,00	0,93	0,93	1,27	—
Tarsus	0,67	0,67	0,73	0,87	0,73
Total	5,67	5,20	4,93	6,47	3,20

Abdomen 3,20 long, 2,4 wide. Spermathecae not examined (permission to dissect the genitalia was refused).

Male: Unknown.

Distribution (Map 2): Known only from the type locality, the Isle Principe in the Gulf of Guinea, West Africa.

Material examined: Isle Principe, Gulf of Guinea, type, ♀ (MNHN).

### *Moggridgea pallida* Hewitt

Figs 220-225; Map 4

*Moggridgea pallida* Hewitt, 1914a:150 (type ♀, 2793, Kraikluft, Namibia, in TM). Roewer, 1942:191. Bonnet, 1957:2973.

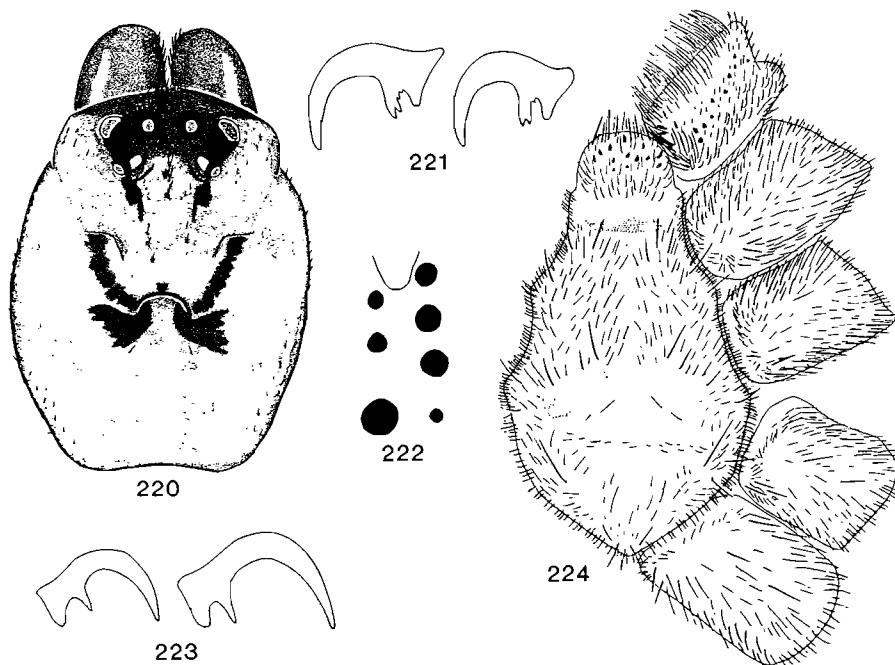
Diagnosis: ♀ distinctively marked, carapace and legs yellow-white, strongly contrasting dark markings extending from thoracic fovea to lateral pits (Fig. 220), encompassing ocular area and clypeus, and forming dorsal longitudinal bands on distal halves of femora; coxae without thorns, sternal sigilla narrow (Fig. 224).

Female (type): Total length 15,20. Carapace, venter and legs with base colour pale yellow-white; carapace with brown markings at sides of fovea, forming small

patches posteriorly and narrow band extending anteriad along caput margin to lateral pits (Fig. 220). Caput brown on clypeus and ocular area, dark band and spots extending posteriad from PME; black pigment surrounding each AME, behind ALE, and between PME-PLE. Femora with light brown, paired longitudinal bands on dorsa of distal halves; patellae I-IV and tibiae I, II yellow-brown on dorsa and sides, mottled ventrally; metatarsi and tarsi I, II red-brown. Abdomen shrivelled, apparently pale.

Carapace (Fig. 220) 7.87 long, 6.33 wide, 1.45 high, low, height at fovea 0.19 width; lateral pits shallow; scattered short setae near lateral margins, pair behind fovea. Caput 0.76 width of carapace, gently sloping, height at OA 1.67 times height at fovea; 3 rows of short setae between fovea and ocular area, 10 setae between PME and behind AME, 5 large and 25 small setae on clypeus, and scattered small setae laterad of ALE; clypeus 0.49 length OA, margin bluntly curved. Thoracic fovea 0.19 carapace width, 2.36 times length, evenly recurved, width 2.36 times length, posterior extension absent.

Ocular area 0.625 width caput, 2.3 times wider than long; AER 2.90 wide, slightly procurved, 1.27 times PER, ALE diameter 1.7 times AME; PER 2.29 wide, slightly recurved, length PME 1.11 times PLE; OA 1.26 long. Ratio of eyes: AM:AL:PM:PL, 1.11:1.89:1.11:1; PME oval. Distances between eyes: AM-AL 0.45, AM-AM 0.52, AM-PM 0.45, AL-PL 0.58, PM-PM 1.10, PM-PL 0.01. Ocular quadrangle 1.61 times wider than long, narrowed anteriorly, posterior 1.47 times anterior.



Figs 220-224. *Moggridgea pallida* Hewitt, type female. 220. Carapace, dorsal. 221. STC I. 222. Cheliceral teeth. 223. STC IV. 224. Venter.

Sternum (Fig. 224) 4,77 long, 3,71 wide, margin sinuate between coxae I-III, setose; sigilla elongate, tapering anteriorly, length 2,82 times width, large, length 0,495 width sternum, distance between 0,31 distance to margin. Labium 1,45 long, 1,45 wide, apex bluntly rounded, with 13 pointed cuspules. Pedipalpal coxae 2,26 long, 1,48 wide, trapezoidal, 13-17 small cuspules in central band. Chelicera 1,40 long, promargin of fang furrow (Fig. 222) with 3 large and 1 small teeth, retromargin with 2 small and 1 large teeth.

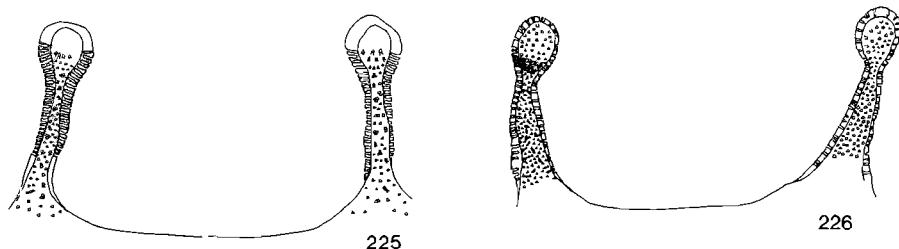
Coxae without thorns; coxae, trochanters, and lateral surfaces of legs setose. Femur I with 7-10, II with 9-14 stout ventral setae in double rows; patella III with broad anterolateral band of slender setae, apical spine present; tibia III with shallow basal depression equal to 0,18 length; patella IV with dense anterolateral covering of slender setae, spinules absent; metatarsus IV preening comb of 3 setae. Spination: palpus, tibia v11, metatarsus v212; leg I, patella v1 (apical), tibia v221-212-21, metatarsus v222-22-222-2; leg II, patella v1 (apical), tibia v22-21-211-2, metatarsus v221-212-221; leg III, patella a1 (apical), tibia v122, metatarsus v122; leg IV, tibia v111, metatarsus v2; tarsi III, IV with ventral spinules. Basal teeth of superior tarsal claws: leg I (Fig. 221) 2-4, II 2-3, III 2, IV (Fig. 223) 1.

#### Leg

measurements:

	I	II	III	IV	Palpus
Femur	5,67	5,13	4,00	5,46	3,20
Patella	3,20	2,87	2,67	3,40	1,73
Tibia	3,33	3,00	2,73	4,13	1,93
Metatarsus	3,40	3,27	2,87	4,93	—
Tarsus	1,27	1,27	1,87	2,20	1,93
Total	16,87	15,54	14,14	20,12	8,79

Abdomen badly shrivelled. Spermathecae (Fig. 225) widely spaced, base width 1,14 length, long and slender, length 7,5 times width; straight, distal chamber without pores, sclerotised band short, extending from distal chamber only 0,55 distance to base.



Figs 225-226. Spermathecae of *Moggridgea* spp. 225. *M. pallida* Hewitt, type. 226. *M. purpurea* Lawrence, type.

Male: Unknown.

Natural history: A brood of 15 juveniles was taken with the type ♀ in January.

Distribution (Map 4): Known only from the type locality in Great Namaqualand.

Material examined: NAMIBIA: Kraikluft, Namaqualand, ♀ (type), 15 young, 1 juv., 5 200 ft., 15.i.1913, P. Methulu (TM), juv., same data (AM).

*Moggridgea paucispina* Hewitt

Figs 191, 227–231; Map 3

*Moggridgea paucispina* Hewitt, 1916:205 (type ♀, 2797, Wonderboomoort, South Africa, TM); 1925:278. Roewer, 1942:191 (incorrectly cited as ♂). Bonnet, 1957:2973.

**Diagnosis:** ♀ with metatarsal preening comb of 2 setae (Fig. 230); sternal sigilla nearly round (Fig. 231); ocular area wide (Fig. 227), greater than 0,65 width caput; coxal thorns absent.

**Female (type):** Total length 17,07. Carapace, chelicerae, and legs dark brown, venter, coxae, and trochanters yellow-brown; dark maculations near carapace margins and on clypeus, ocular area, and middle of caput, sides of caput with reticulate dark markings. Ocular area with black pigment surrounding AME, behind ALE and anterior to PLE. Femora with dark lateral maculations, posterior distal-directed brown triangle, and narrow median longitudinal dorsal band; patellae-metatarsi dark laterally, dorsa of tibiae with faint median longitudinal dark bands. Abdomen dark grey on dorsum and sides, venter pale grey, yellow-white over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 227) 6,07 long, 7,00 wide, 1,45 high, height at fovea 0,43 carapace width; glabrous; lateral pits small, shallow. Caput 0,62 width carapace, gently sloping (Fig. 229), height at OA 1,22 times at fovea; 1 seta posterior to OA, 1 pair between PME and 2 pairs between PME and AER, 3 large and 3 small setae on clypeus; clypeus 0,48 length OA, margin angled. Thoracic fovea small, 0,15 width carapace, short, width 4,5 times length, anterior margin straight and sharply recurved at sides, posterior projection absent.

Ocular area broad, 0,70 width caput, 2,74 times wider than long; AER 2,74 wide, slightly recurved, 1,29 times width PER, diameter ALE 1,44 times AME; PER 2,13 wide, recurved, length PME equal to PLE. Ratio of eyes: AM:AL:PM:PL, 1,285:1,86:1:1; PME slightly oval. Distances between eyes: AM-AM 0,29, AM-AL 0,61, AM-PM 0,42, AL-PL 0,48, PM-PM 1,13, PM-PL 0,16. Ocular quadrangle 1,88 times wider than long, narrowed anteriorly, posterior 1,74 times anterior.

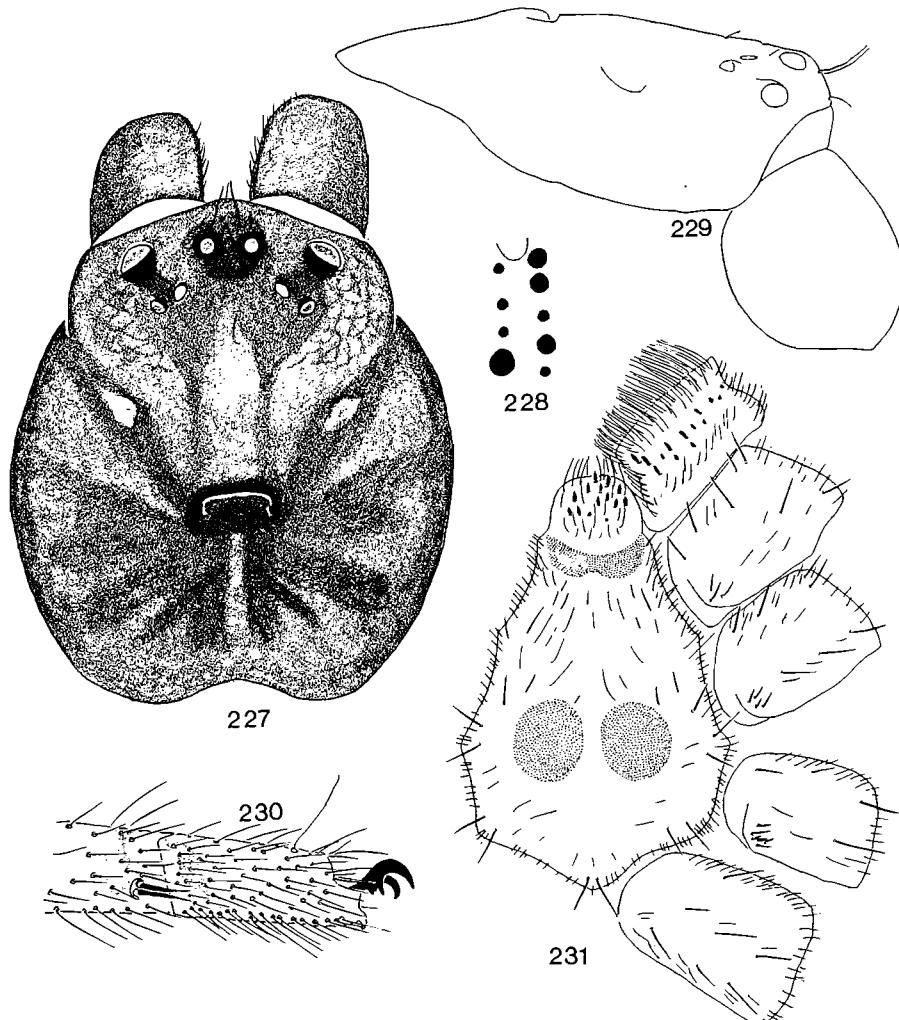
Sternum (Fig. 231) 3,97 long, 3,35 wide, margin sinuate between coxae, sparsely setose; sigilla large, length 0,32 width sternum, nearly round, distance between 0,42 distance to margin. Labium 1,15 long, 1,23 wide, apex bluntly curved, with 14 pointed cuspules. Pedipalpal coxa 2,00 long, 1,32 wide, trapezoidal, with 14–17 pointed cuspules in narrow median band. Chelicera 1,33 long, promargin of fang furrow (Fig. 228) with 5 small teeth, retromargin with 3 small and 1 large teeth; fang long, slender.

Coxae, trochanters, and legs sparsely setose, basal setal patches on coxae II, III (Fig. 231) may resemble thorns if broken off. Femora I, II with ventral rows of 9 stout setae; patella III with narrow anterolateral band of spinelike setae; tibia III with basal depression equal to 0,21 length segment; patella IV with narrow anterolateral band of stout setae; metatarsus IV preening comb of 2 setae (Fig. 230). Spination: palpus, tibia v11, tarsus v212; leg I, tibia v222–2222; metatarsus v222–41332; leg II, tibia v222–12212; leg IV, metatarsus a1 (apical); tarsus III with ventral spinules. Basal teeth of superior tarsal claws: leg I 1–2, II 1, III, IV 1–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	4,47	3,87	3,27	4,60	2,67
Patella	2,67	2,53	2,13	2,73	1,33
Tibia	2,53	2,40	2,13	3,07	1,73
Metatarsus	2,27	2,27	2,20	2,93	—
Tarsus	1,20	1,20	1,40	1,47	1,47
Total	13,14	12,27	11,13	14,80	7,17

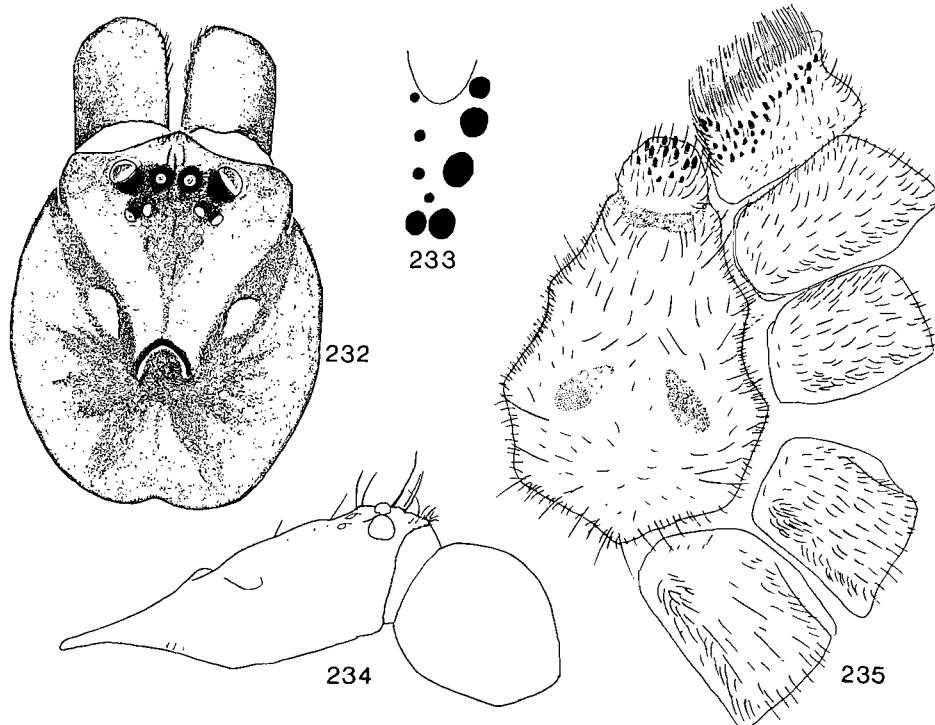
Abdomen 9,20 long, 5,67 wide. Spermathecae (Fig. 191) with base width equal to length, slender, length 6,5 times diameter, sinuate, expanded distally; pores sparse, absent from distal chamber; sclerotised band extending from distal chamber nearly to base.

Variation: Markings may be obscure. Total length 10,93–17,07, carapace length



Figs 227–231. *Moggridgea paucispina* Hewitt, type female. 227. Carapace, dorsal. 228. Cheliceral teeth. 229. Carapace, lateral. 230. Tarsus and apex of metatarsus IV, retrolateral, with comb. 231. Venter.

4,73–6,07, width 4,00–7,00, height 1,16–1,45; carapace length 0,86–1,25 width, height at fovea 0,3–0,43, width caput 0,62–0,71 carapace width. Ocular area 0,7–0,735 width carapace, 2,71–3,00 times wider than long; ALE diameter 1,44–2,17 times AME, PME length 1–1,16 times PLE; clypeus with 6–9 setae. Thoracic fovea 0,15–0,18 width carapace, evenly recurved to straight with sharply recurved sides, width 2,86–4,5 times length. Labium with 7–14, pedipalpal coxa with 14–22 cuspules. Sternal sigilla small to large, length 0,17–0,32 sternum width, central to lateral, distance between 0,32–0,95 distance to margin. Tibia I with 5–7, metatarsus I with 6–8 pairs of spines. Spermathecae with base width 1–1,42 times length, length 6,5–8,8 times diameter.



Figs 232–235. *Moggridgea peringueyi* Simon, type female. 232. Carapace, dorsal. 233. Cheliceral teeth. 234. Carapace, lateral. 235. Venter.

**Male:** The ♂ described by Hewitt (1916:205) has not been located and therefore is not included in the key. The description includes no details of femoral carinae, coxal thorns, or scopulae, and thus a diagnosis from other males is not attempted. Hewitt commented on the resemblance to *ruplicola*, and suggested that the form of the clypeus, where ‘the mesal portion just in front of the anteromedian eyes projects forwards fairly strongly’ is diagnostic for males of this species.

**Natural history:** Rupicolous, nest-building. According to the label, the type was collected in a ‘nest situated in a corner of an overhanging rock’.

**Distribution (Map 3):** Northern Transvaal, South Africa (specimens noted by

Hewitt (1925:278–279), from Leydsdorp and Barberton were not located, and cannot be positively identified).

Material examined: SOUTH AFRICA: Transvaal: Wonderboompoort, Pretoria, ♀ (type), 19.vi.1915, A. Roberts (TM), 13 ♀, 3.iv.1918, G. van Dam (AM), 4 ♀, xii.1921 (TM); Wolhuterskop, Rustenburg District, ♀, 5.v.1916, G. van Dam (MCZ).

*Moggridgea peringueyi* Simon

Figs 12, 20, 36, 44, 232–266; Map 7

*Moggridgea peringueyi* Simon, 1903b:23 (type ♀, 19274, Matjiesfontein, South Africa, MNHN). Bonnet, 1957:2973.

*Moggridgea coegensis* Purcell, 1903:71 (Type ♀, 5678, Coega, South Africa, SAM). Roewer, 1942:191. Bonnet, 1957:2972. *Syn. n.*

*Moggridgea nigra* Purcell, 1904:115 (lectotype ♀, 12762, and paralectotype ♀, here designated, Ashton, South Africa, SAM). Roewer, 1942:191. Bonnet, 1957:2973. *Syn. n.*

*Moggridgea latus* Tucker, 1917:81 (lectotype 150082a, and 11 paralectotype ♀, here designated, Caledon, South Africa, SAM). *Syn. n.*

*M. lata*: Tucker, 1920:486. Roewer, 1942:191. Bonnet, 1957: 2972.

*Moggridgea perigueyi*; (lapsus) Roewer, 1942:192.

Synonymy: The form of the thoracic fovea, venter, sternal sigilla, superior tarsal claws, and spermathecae clearly associate the types of the names *peringueyi*, *coegensis*, *nigra* and *latus*. The form of the ocular region varies clinally, while setation of coxa III varies discordantly.

Diagnosis: ♀ lacks coxal thorns (although a basal setal patch may be present on coxa III); sternal sigilla are narrow oval (Fig. 235); carapace markings are non contrasting (Figs 232, 247); femur II with ventral rows of stout setae; thoracic fovea strongly recurved (Figs 232, 247); basal teeth of STC I, II serrate (Figs 36, 253); spermatheca slender, sclerotised for more than half of length (Figs 236–246). ♂ lacks coxal thorns (Fig. 259), has femora I, II carinate ventrally, leg IV scopula extending under distal two thirds of metatarsus (Fig. 261), and STC I, II with the basal teeth serrate (Fig. 262).

Female (*peringueyi* type): Total length 19,33. Specimen somewhat faded. Carapace (Fig. 232) yellow-brown, darker around fovea and along margins of caput; dark band behind PER, narrowed before fovea; ocular area dusky, black pigment surrounding each AME, behind ALE, anterior to PME, PLE. Chelicerae, venter, coxae, and trochanters yellow-brown. Legs yellow-brown, metatarsi-tarsi I–III dusky, patella III with pale median dorsal mark. Abdomen dark grey on dorsum and sides, paler ventrally, yellow-white over book-lungs and anterior to epigastric furrow.

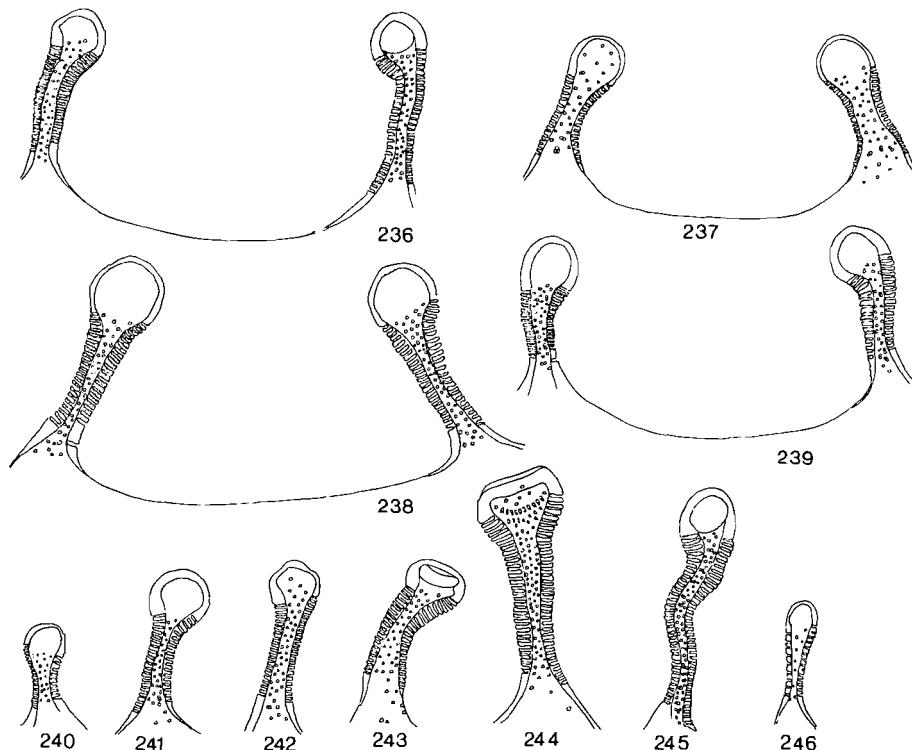
Carapace (Fig. 232) 6,13 long, 5,47 wide, 1,42 high, height at fovea 0,27 width carapace; glabrous, with scattered marginal setae; lateral pits shallow. Caput 0,74 width carapace, inclined (Fig. 234), height at OA 1,34 times height at fovea; median row of 2 long setae and lateral rows of small setae behind PER, 2 long, 2 short between PME, few small laterad of OA, and 3 large, 18 small setae on clypeus; clypeus 0,61 length OA, margin curved, projecting in centre. Thoracic fovea narrow, 0,15 width carapace, strongly recurved, width 1,70 times length, posterior projection absent.

Ocular area 0,58 width caput, 2,15 times wider than long; AER 2,29 wide, slightly procurved, 1,34 times width PER, diameter ALE 2,0 times AME; PER

1,71 wide, slightly recurved, length PME 0,75 PLE; OA 1,06 long. Ratio of eyes: AM:AL:PM:PL, 1,33:2,67:1:1,33; PME broadly oval. Distances between eyes: AM-AL 0,26, AM-AM 0,23, AM-PM 0,32, AL-PL 0,42, PM-PM 0,68, PM-PL 0,16. Ocular quadrangle 1,35 times wider than long, narrowed anteriorly, posterior 1,875 times anterior.

Sternum (Fig. 235) 4,10 long, 3,35 wide, margin sinuate between coxae, setose; sigilla large, 0,24 width sternum, narrow, length 2,17 times width, distance between equal to distance from margin. Labium 0,97 long, 1,13 wide, apex blunt, with 16 cuspules. Pedipalpal coxa 2,00 long, 1,35 wide, trapezoidal, apex acute, with 32 cuspules in narrow median band. Chelicera 1,87 long, promargin of fang furrow (Fig. 233) with 4 teeth, retromargin with 4 denticles and 1 tooth.

Coxae without thorns (Fig. 235); femur I with 10–15, II with 17–18 stout ventral setae; patella III with narrow anterolateral band of stout setae and small apical spine; tibia III with shallow basal depression equal to 0,22 length segment; patella IV with broad anterolateral band of slender setae, several basal spinules; metatarsus IV preening comb of 3–4 setae. Spination: palpus, tibia a1v1, tarsus v22; leg I, tibia v21–211–21–2211, metatarsus v2221–2221–21; leg II, tibia v2211–13–21, metatarsus v2221–21–32–21; leg III, patella a1 (apical); leg IV, metatarsus



Figs 236–246. Spermathecae of *Moggridgea peringueyi* Simon. 236. Caledon (*M. latus* Tucker, lectotype). 237. Beaufort West. 238. Uitenhage. 239. Ashton (*M. nigra* Purcell, lectotype). 240. Matjiesfontein, r. 241. Victoria West, r. 242. De Aar, r. 243. Cradock, r. 244. Port Alfred, l. 245. Redhouse, l. 246. Port Elizabeth, r.

a1 (apical); tarsi III, IV with ventral spinules. Basal teeth of superior tarsal claws: I, II serrate, III–IV 1–2. Leg measurements:

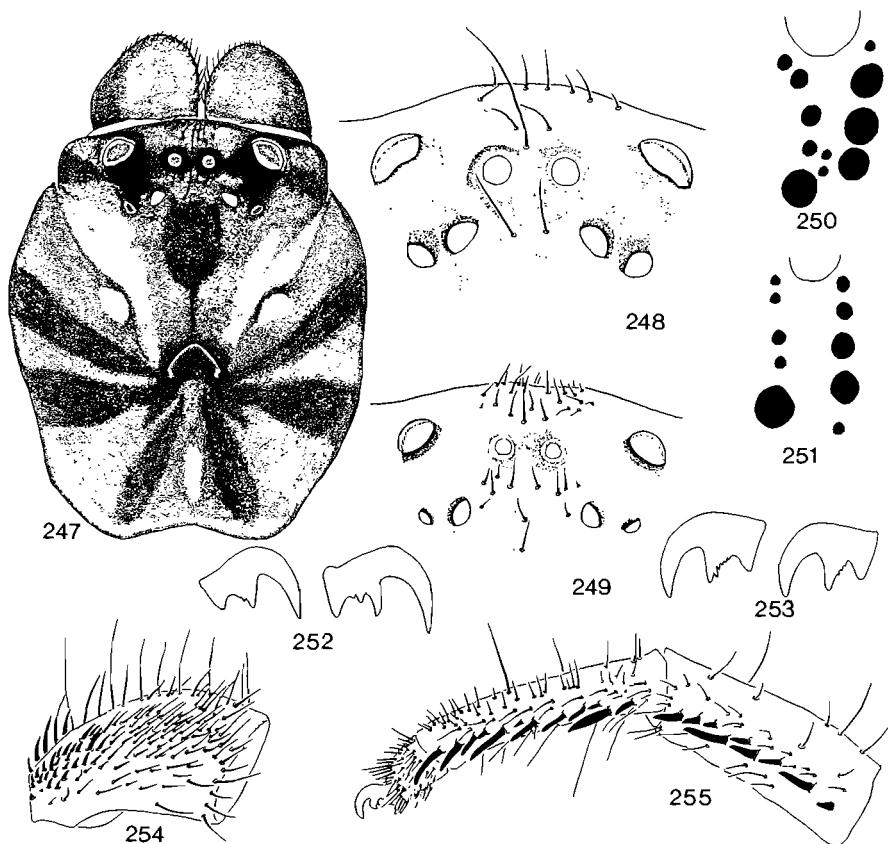
	I	II	III	IV	Palpus
Femur	4,60	4,00	3,20	4,67	2,73
Patella	2,67	2,60	2,27	2,73	1,53
Tibia	2,73	2,40	2,27	3,20	1,87
Metatarsus	2,73	2,60	2,20	3,40	—
Tarsus	1,13	0,87	1,47	2,00	1,53
Total	13,86	12,47	11,41	16,00	7,66

Abdomen 11,20 long, 7,20 wide. Spermathecae (Beaufort West specimen, Fig. 237) cylindrical, straight, mesally inclined, length 6,0 times diameter, base broad, 1,47 times spermathecae length; pores sparse, may occur in distal chamber, sclerotised band extends from distal chamber halfway to base.

Variation: A widespread and somewhat variable species, particularly in the dimensions of the ocular area and length of the spermathecae. Total length 11,33–24,80. Carapace yellow-brown (Fig. 232) to dark brown (Fig. 247), 5,13–11,87 long, 4,40–8,80 wide, 0,93–1,90 high, height at fovea 0,15–0,35 width carapace. Caput 0,70–0,78 width carapace, convex to inclined, height at OA 1,20–1,82 times height at fovea. Ocular area 0,51–0,78 width caput, variation apparently clinal, broadest in coastal eastern Cape (Fig. 247), broad in western Cape (Fig. 249), becoming narrower through western (Fig. 232) to northeastern (Fig. 248) Karoo; diameter ALE 2,0–2,83 times AME, length PME 0,59–1,33 times PLE. Clypeus 0,25–0,61 length OA, with 12–40 setae, margin projecting to nearly straight. Thoracic fovea (Figs 232, 247) 0,12–0,22 width carapace, width 1,57–2,20 times length. Sternal sigilla 0,19–0,32 width sternum, length 2,2–3,0 times width. Labium with 12–29, pedipalpal coxa with 16–50 cuspules; coxa III with or without (Fig. 235) basal patch of setae. Cheliceral fang furrow (Figs 233, 250–251) with 4–5 promarginal teeth, mesal denticles present (Fig. 250) or absent. Patella IV with (Fig. 254) or without spinules; leg I (Figs 12, 255) with 5–8 pairs of ventrolateral spines on tibia, 8–12 pairs on metatarsus; STC IV with 2–3 teeth (Fig. 252); metatarsus IV apical comb (Fig. 20) of 3–6 setae. Spermathecae relatively stout (Fig. 240), slender (Figs 237, 239, 241–246) to elongate (Figs 236, 238), length 4,5–10,0 times diameter, straight to slightly sinuate (Fig. 245), base broad, rarely less than, usually 1,0–2,0 times spermatheca length; pores sparse to dense, rarely present in distal chamber.

Male (Zwartkops): Total length 17,47. Carapace, chelicerae, and legs dark red-brown, somewhat lighter on caput and patellae-tibiae, unmarked. Sternum yellow-brown, mouthparts and coxae red-brown. Abdomen dark grey on dorsum and sides, paler ventrally, yellow-white over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 256) 7,20 long, 7,07 wide, 1,97 high, height at fovea 0,29 width carapace; strongly pitted-rugose, smoother posteriorly; glabrous; lateral pits absent. Caput 0,59 width carapace, weakly demarcated, raised, convex (Fig. 258), height at OA 1,18 times height at fovea; weakly striate; median row of 2 setae behind PER, 5 between PME, 1 anterior to AME. Clypeus broad, 0,72 length OA, striate, margin straight. Thoracic fovea small, 0,13 width carapace, strongly recurved, width 2,15 times length, posterior projection absent.



Figs 247-255. *Moggridgea peringueyi* Simon, females. 247, 254-255. Uitenhage. 248. De Aar. 249, 250. Caledon (*M. latus* Tucker, lectotype). 251. Ashton (*M. nigra* Purcell, lectotype). 252-253. Beaufort West. 247. Carapace, dorsal. 248, 249. Ocular area. 250-251. Cheliceral teeth. 252. STC IV. 253. STC I. 254. Patella IV, anterolateral. 255. Tibia-tarsus I, retrolateral.

Ocular area 0,64 width caput, 2,25 times wider than long; AER 2,61 wide, procurved, 1,14 times width PER, diameter ALE 1,70 times AME; PER 2,29 wide, slightly recurved, length PME 1,67 times PLE; OA 1,16 long. Ratio of eyes: AM:AL:PM:PL, 1,67:2,83:1,67:1, PME oval. Distances between eyes: AM-AL 0,52, AM-AM 0,35, AM-PM 0,35, AL-PL 0,61, PM-PM 1,03, PM-PL 0,16. Ocular quadrangle 1,33 times wider than long, narrowed anteriorly, posterior 1,60 times anterior.

Sternum (Fig. 259) 4,00 long, 3,61 wide, margin sinuate between coxae, sparsely setose; sigilla large, 0,34 width sternum, oval, length 1,60 times width, central, distance between 0,56 distance from margin. Labium 1,13 long, 0,97 wide, apex curved, with stout setae. Pedipalpal coxa 2,71 long, 1,45 wide, trapezoidal, apical and proximal angles produced, with slender and stout setae. Chelicera 1,60 long, promargin of fang furrow (Fig. 257) with 4 large teeth, retromargin with 4 small and 1 large teeth; fang slender, weakly curved.

Femur I 0,87, tibia I 0,54, femur IV 0,85, tibia IV 0,70 width carapace. Coxae without thorns, setal patch at base of coxa III (Fig. 259); coxae, trochanters, and legs sparsely setose. Femora I, II carinate ventrally; patellae III, IV (Fig. 261) with broad anterolateral bands of fine setae; metatarsus IV cylindrical, slightly bent (Fig. 261), with 4 separate setae at apex. Scopulae: dense, divided beneath tarsi I (Fig. 260), II; dense, entire beneath tarsus III; dense, entire beneath tarsus and distal two-thirds of metatarsus IV (Fig. 261). Spination: leg I (Fig. 260), femur d11r1, patella a1v21, tibia a11111111v2111221121, metatarsus v2221-2212-32; leg II, femur d11r1, patella v21, tibia a1111111v22121212, metatarsus v2221-2122-12; leg III, tibia v1 (apical), metatarsus v2 (apical); leg IV, femur d11, tibia v211, metatarsus v1 (apical). Basal teeth of superior tarsal claws: I (Fig. 262), II serrate, III 3-4, IV (Fig. 263) 2-3. Leg measurements:

	I	II	III	IV	Palpus
Femur	6,13	5,40	4,07	6,00	4,87
Patella	3,20	3,13	2,67	3,27	1,53
Tibia	3,80	3,60	3,33	4,93	4,07
Metatarsus	5,13	4,60	3,60	4,67	—
Tarsus	1,33	1,33	1,53	2,40	1,40
Total	19,59	18,06	15,20	21,27	11,87

Palpus (Figs 264-266) with femur 0,69, tibia 0,57 width carapace; femur 3,48, tibia 2,90 times length tarsus; tibia slightly swollen, height 0,31 length; bulb width 0,90 tarsus length, embolus long, slender, length 1,26 times bulb width.

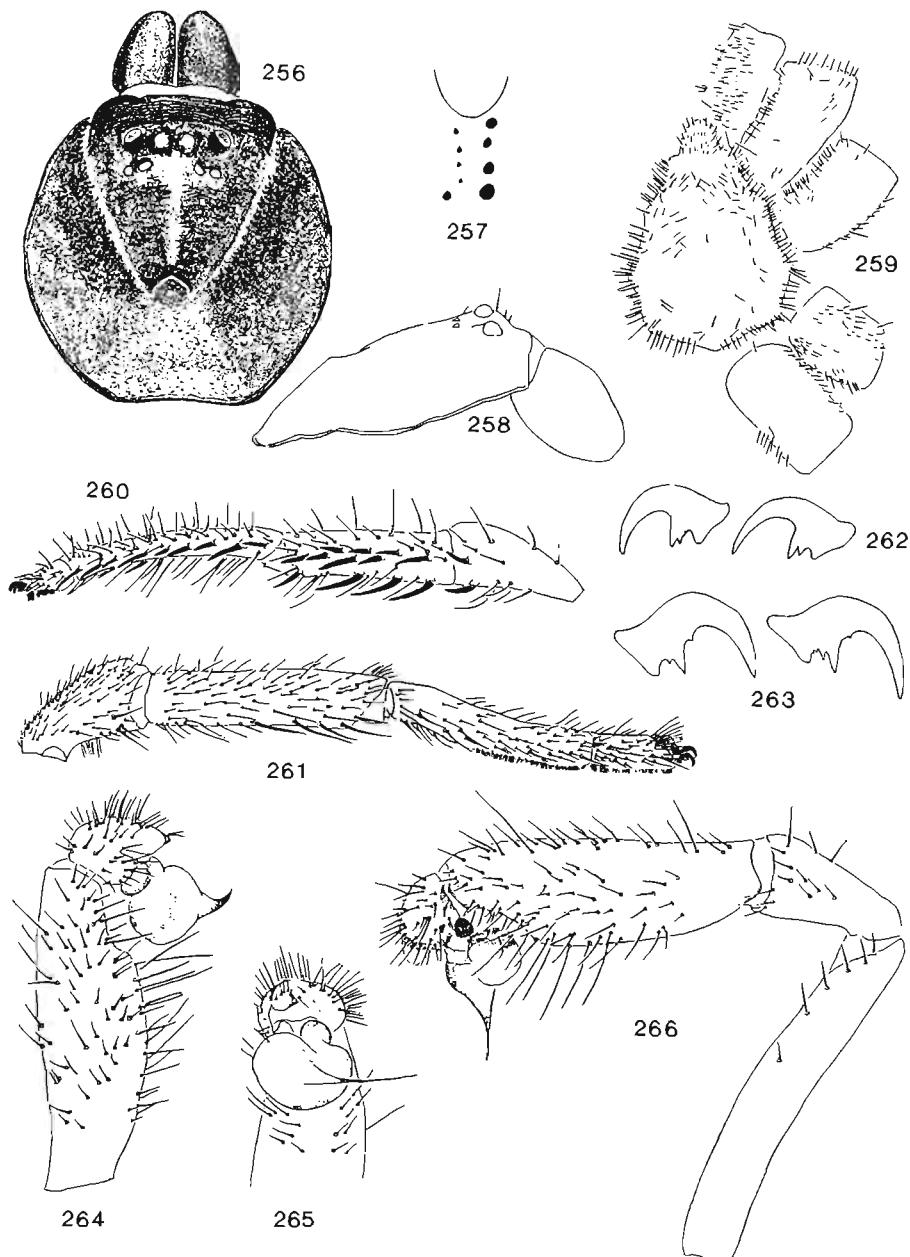
Abdomen 7,93 long, 5,54 wide; dorsum and sides with attenuate setae.

Variation: Total length 11,33-17,47; carapace 5,93-7,73 long, 5,67-7,53 wide, 1,35-2,16 high; height at fovea 0,25-0,30 width carapace. Caput 0,58-0,61 width carapace, height at OA 1,04-1,26 height at fovea. Ocular area 0,63-0,77 width caput, diameter ALE 1,70-2,28 times AME, length PME 1,09-1,67 times PLE. Sigilla 0,19-0,36 width sternum, oval to narrow oval. Scopulae may extend beneath apices of metatarsi I-III. Palpal femur 2,94-5,20, tibia 2,30-4,36 times length tarsus.

Natural history: A terrestrial or rupicolous, burrowing species. Cruden (1916:609, pl. 27a; *coegensis*) describes burrows as cylindrical, 10-16 cm deep, closed with thick, D-shaped lids which overlap the mouth. Burrows are found in the open veld, and the lids are frequently camouflaged by incorporating bits of grass or leaves. The types of both *nigra* Purcell (1904:115-116) and *latus* Tucker (1917:81) were taken from burrows in old mud walls. The nest of one of the former specimens was 5,0 cm long, 1,6 cm in diameter and 1 cm wide at the mouth, closed with a thick, D-shaped lid, and camouflaged with pebbles and mud. The nest was embedded vertically in the wall (Purcell, 1904:116). Simon (1903b:23) described the type of *peringueyi* as terricolous.

Distribution (Map 6): From southern Cape Province north through the Karoo, South Africa.

Material examined: SOUTH AFRICA: *Cape*: Matjiesfontein, ♀ (type, MNHN), 2 ♀, 1-3.xi.1905, W. F. Purcell (SAM); Beaufort West, 3 ♀, 26.x.1905, ♀, 29.x.1905, W. F. Purcell (SAM); Victoria West, 9 ♀ (AM), ♀ (NM), ♀, P. D. Morris (AM), ♀, ii.1911, P. D. Morris (AM); De Aar, 4 ♀ (AM); Rooispruit



Figs 256–266. *Moggridgea peringueyi* Simon, male (Swartkops). 256. Carapace, dorsal. 257. Cheliceral teeth. 258. Carapace, lateral. 259. Venter. 260. Patella-tarsus I, anterolateral. 261. Patella-tarsus IV, anterolateral. 262. STC I. 263. STC IV. 264–266. Left Palpus. 264. Tibia-tarsus, anterolateral. 265. Tarsus and apex of tibia, ventral. 266. Femur-tarsus, retrolateral.

( $31^{\circ}27'S:25^{\circ}20'E$ ), 2 ♀ (AM); Keurbooms ( $34^{\circ}01'S:23^{\circ}25'E$ ), 4 ♀ (AM); Cradock, 2 ♀, 10.x.1918, G. van Dam (TM), 4 ♀ (AM); Peddie, ♀ (AM); Fort Brown, 3 ♀, M. Walton (AM); Dunbrody, ♀ (AM); 8 mi. SE Kirkwood, ♂, 18.iv.1958, E. Ross & H. Leech (CAS); Uitenhage, 4 ♀ (AM); Coega, near Uitenhage, ♀ (*coegensis* type), 24.v.1899, J. Drege (SAM); Port Elizabeth, 4 ♀ (SAM), 7 ♀, F. Cruden (AM); Baakens Valley, Port Elizabeth, 2 ♀ (AM); Oudtshoorn, ♂, 29.x.1949, B. Malkin (CAS); Zwartkops, ♂, F. Cruden (AM); Ashton, 2 ♀ (*nigra* lectotype, paralectotype), v.1903, T. O'Connor (SAM); Worcester, ♀ (AM); Caledon, 12 ♀ (*latus* lectotype, paralectotypes), vii.1910, W. Purcell (SAM); Brandvlei, Worcester, ♂ (SAM); Houwhoek, ♂, 17.viii.1900, W. Purcell (SAM); Port Alfred, ♀ (AM); Blaauwkrantz Drift ( $33^{\circ}22'S:26^{\circ}43'E$ ), ♀, 20.ix.1927, J. Hewitt (AM); Redhouse, 11 ♀ (AM); Swartberg ( $33^{\circ}22'S:22^{\circ}06'E$ ), ♀, 'sifted', 1.viii.1979, S. Endrödy-Younga (TM); Aicedale, ♀ (AM).

### *Moggridgea pseudocrudeni* Hewitt

Figs 13–14, 21–27, 29, 31, 33, 39, 121–123, 267–279; Map 4

*Moggridgea crudeni*; Cruden, 1916 (not *crudeni* Hewitt, 1913a): 607, pl. 27 b, c.

*M. crudeni*; Hewitt, 1919 (not *crudeni* Hewitt, 1913a): 212 (♂ only).

*Moggridgea pseudocrudeni* Hewitt, 1919:210 (lectotype, 2473, and 6 paralectotype ♀, here designated, Aicedale, South Africa, AM). Roewer, 1942:192. Bonnet, 1957:2973.

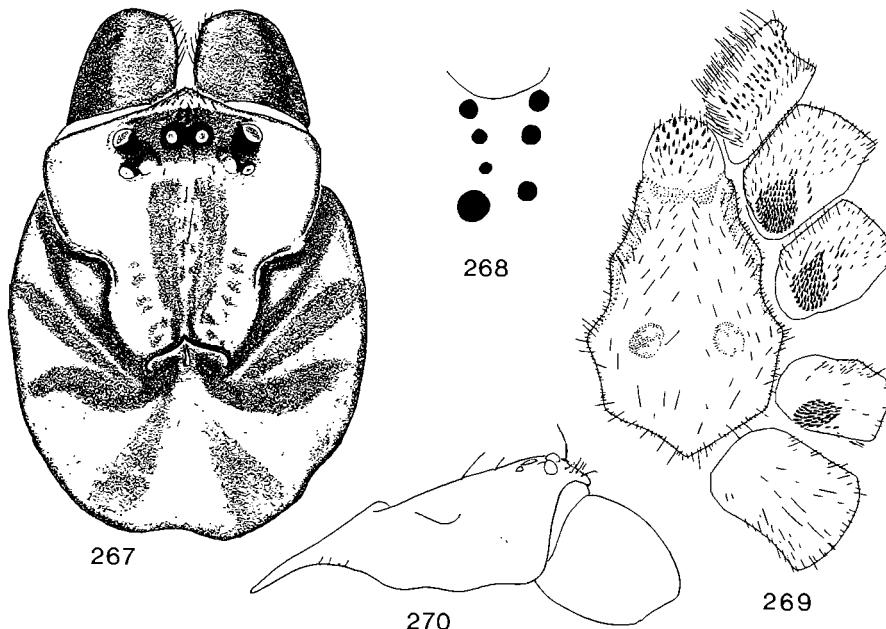
**Note:** Cruden (1916) in his description of the nesting habits of several species of trap-door spider from near Aicedale, South Africa, referred to this species as *crudeni* Hewitt. Subsequently, in part on the basis of differences in the form of the lid to the nest, Hewitt (1919) proposed *pseudocrudeni*. Males determined as *crudeni* (Hewitt, 1919) were misidentified, and the number of coxal thorns on these specimens supports their assignment to *pseudocrudeni*.

**Diagnosis:** ♀ with more than 50 thorns on coxae I and II, and more than 30 on coxa III (Fig. 269); patella IV (Fig. 14) with a broad anterolateral band of setae grading into numerous spinules basally; carapace with bold, contrasting markings (Fig. 267), with clypeus usually angular, projecting. ♂ with at least 30 thorns each on coxae I–III (Fig. 274), the caput raised (Figs 31, 279), with the sides nearly vertical, and PME larger than PLE (Fig. 273). Trap door with fimbriated margin.

**Female (lectotype):** Total length 14,40. Carapace (Fig. 267) red-brown, with dark brown bands radiating from fovea along margin of caput, anterolaterally, laterally, and posterolaterally; caput pale yellow-brown, with broad median red-brown band between PER and fovea; ocular area red-brown, black pigment surrounding AME, behind ALE, and anterior to PLE. Chelicerae red-brown, venter, coxae and trochanters pale yellow-brown. Legs yellow-brown, faint median dorsal longitudinal bands on femora III, IV, patella and tibia III dusky laterally. Abdomen pale grey.

Carapace (Fig. 267) 5,47 long, 4,53 wide, 1,26 high, height at fovea 0,29 width carapace; glabrous; lateral pits large, deep. Caput 0,78 width carapace, sloping, height at OA 1,41 times height at fovea; median row of 3 setae, 2 long and 4 short between PME, 3 large and 20 small setae on clypeus; clypeus broad, 0,68 length OA, margin projecting. Thoracic fovea 0,25 width carapace, angled in middle, width 2,54 times length, with posterior projection.

Ocular area narrow, 0,56 width caput, 2,68 times wider than long; AER 1,90 wide, slightly procurved, 1,07 times width PER, diameter ALE 1,25 times AME; PER 1,77 wide, recurved, length PME 1,14 times PLE; OA 0,71 long. Ratio of eyes: AM:AL:PM:PL, 1,14:1,43:1,14:1; PME broadly oval. Distances between eyes: AM-AL 0,39, AM-AM 0,16, AM-PM 0,19, AL-PL 0,26, PM-PM 0,74, PM-PL 0,065. Ocular quadrangle 2,28 times wider than long, strongly narrowed anteriorly, posterior 2,10 times anterior.



Figs 267-270. *Moggridgea pseudocrudeni* Hewitt, female. 267-269. Lectotype. 270. Paralectotype. 267. Carapace, dorsal. 268. Cheliceral teeth. 269. Venter. 270. Carapace, lateral.

Sternum (Fig. 269) 3,29 long, 2,48 wide, margin sinuate between coxae, submarginally setose; sigilla 0,18 width sternum, broadly oval, length 1,30 times width, distance between 1,43 times distance from margin. Labium 1,03 long, 1,06 wide, apex bluntly curved with 22 pointed cuspules. Pedipalpal coxa 1,68 long, 1,13 wide, trapezoidal, apical angle acute, with 32-36 cuspules in broad median band. Chelicera 1,33 long, promargin of fang furrow (Fig. 268) with 3 teeth, retromargin with 3 small, 1 large teeth.

Coxae I-III with thorns (Fig. 269): I 79, II 65, III 41; coxae, trochanters, and legs sparsely setose. Femur II with 15-16 stout setae in 2 ventral rows; patella III with narrow anterolateral band of stout setae and small apical spine; tibia III with basal depression equal to 0,20 length segment, with few subapical spinules; patella IV with broad anterolateral band of setae grading into more than 40 spinules proximally; metatarsus IV apical comb of 4 setae. Spination: palpus, tibia v2, tarsus v2; leg I, patella v1 (apical), tibia v2221122, metatarsus v2222222; leg II, tibia v221-21-21, metatarsus v22212; leg III, patella a1 (apical); leg IV, metatarsus a1

(apical). Basal teeth of superior tarsal claws: I 1–2, II 1–3, III, IV 1–2. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,27	2,87	2,47	3,33	2,00
Patella	2,07	1,93	1,60	2,13	1,07
Tibia	1,93	1,73	1,53	2,53	1,07
Metatarsus	1,87	1,67	1,33	2,27	—
Tarsus	0,87	0,93	1,20	1,40	1,20
Total	10,01	9,13	8,13	11,66	5,34

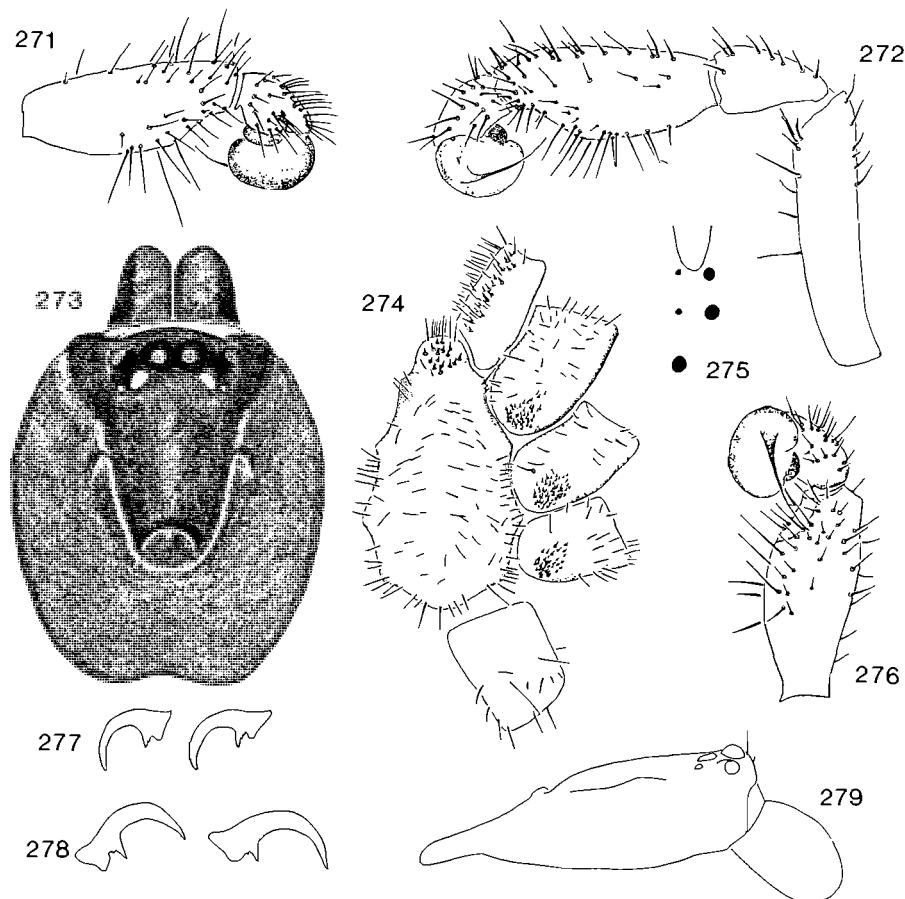
Abdomen 8,27 long, 5,40 wide. Spermathecae (paralectotype, Fig. 121) sinuous, cylindrical, length 7,60 times diameter, base narrow, 0,85 spermatheca length; pores numerous, absent from distal chamber, sclerotised band extends from distal chamber nearly to base.

Variation: Total length 7,33–14,40; carapace 3,40–5,47 long, 2,80–4,53 wide, 0,77–1,26 high, height at fovea 0,24–0,34 width carapace. Caput 0,77–0,795 width carapace, height at OA 1,36–1,58 times height at fovea (Fig. 270); ocular area 0,56–0,595 width caput, 2,8–2,95 times wider than long, diameter ALE 1,25–2,25 times AME, length PME 1,14–1,49 times PLE. Clypeus 0,47–0,68 length OA, usually strongly projecting, rarely smoothly curved, with 12–24 setae. Thoracic fovea 0,22–0,25 width carapace, evenly recurved to angled in centre, width 2,22–3,10 times length, posterior projection long or rarely short, carapace rarely swollen behind fovea. Labium with 16–26, pedipalpal coxa with 22–36 cuspules; coxa I with 53–85, II 53–88, III 30–65 thorns. Patella IV (Fig. 14) with 25–40 proximal anterolateral spines; metatarsus IV apical comb of 3–5 setae (Fig. 21). STC I (Fig. 39) with 1–2 basal teeth, STC IV with 1–3 basal teeth. Spermathecae (Figs 121–123) strongly sinuous to rarely straight, length 7–8 times diameter, base width 0,70–0,95 spermatheca length.

Male (Alicedale): Total length 8,93. Carapace and chelicerae dark brown, slightly lighter on caput. Sternum, labium, coxae and trochanters yellow-brown. Legs red-brown to yellow-brown distally, unmarked, femora I, II dark brown. Abdomen dark grey on dorsum and sides, pale grey ventrally, yellow-white over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 273) 3,67 long, 3,33 wide, 0,97 high, height at fovea 0,30 width carapace; weakly rugose (Fig. 29); glabrous; lateral pits deep. Caput 0,66 width carapace, raised (Fig. 279), sides steep, convex, height at OA 1,23 times height at fovea; weakly rugose; glabrous, 4 setae between PME; clypeus very steep, weakly striate, 0,31 length OA, margin weakly curved with 3 setae anterior to AME. Thoracic fovea 0,20 width carapace, evenly recurved, width 3,0 times length, with weak posterior projection.

Ocular area 0,64 width caput, 2,62 times wider than long; AER 1,35 wide, straight, 1,10 times width PER, diameter ALE 1,60 times AME; PER 1,23 wide, straight, PME large, length 3,17 times PLE; OA 0,52 long. Ratio of eyes: AM:AL:PM:PL, 1,67:2,66:3,17:1; PME oval, straight along posteromedian margin, with anterior tapetum. Distances between eyes: AM-AL 0,29, AM-AM 0,18, AM-PM 0,11, AL-PL 0,23, PM-PM 0,48, PM-PL 0,03. Ocular quadrangle 1,88 times wider than long, narrowed anteriorly, posterior 1,96 times anterior.



Figs 271–279. *Moggridgea pseudocrudeni* Hewitt, male, Aicedale. 271–272, 276. Left palpus. 271. Tibia-tarsus, anterolateral. 272. Femur-tarsus, retrolateral. 273. Carapace, dorsal. 274. Venter. 275. Cheliceral teeth. 276. Tibia-tarsus, ventral. 277. STC I. 278. STC IV. 279. Carapace, lateral.

Sternum (Fig. 274) 2,26 long, 1,65 wide, sinuate between coxae, sparsely setose; sigilla 0,20 width sternum, oval, length 1,33 times width, lateral, distance between 2,85 times distance from margin. Labium 0,61 long, 0,58 wide, apex bluntly curved, with 17 slender cuspules. Pedipalpal coxa 1,23 long, 0,74 wide, trapezoidal, apical and posterior angles weakly produced, with 20 slender cuspules. Chelicera 0,80 long, promargin of fang furrow (Fig. 275) with 2 teeth, retromargin with 2 small, 1 large tooth; fang stout.

Femur I 0,87, tibia I 0,60, femur IV 0,78, tibia IV 0,65 width carapace. Coxae I–III with small, slender thorns (Figs 23, 24, 274); I 55, II 49, III 34; coxae, trochanters, and legs sparsely setose. Femur I with ventral carina (Fig. 13); femur II convex; patella III with scattered anterolateral setae and small apical spine, IV with narrow band of fine setae; metatarsus IV cylindrical, weakly bent distally, with 3 separate setae in position of apical comb (Fig. 22). Scopulae: weak, divided

beneath tarsi I, II; very weak beneath distal two-thirds of tarsus III; strong, entire beneath tarsus and distal half of metatarsus IV. Spination: leg I, patella a1v1, tibia v2211223, metatarsus v21232; leg II, patella v1, tibia v3123221, metatarsus v22121; leg III, patella a1 (apical); leg IV, femur d1. Basal teeth of superior tarsal claws: I (Fig. 277), II 2, III, IV (Fig. 278) 1–2. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,20	2,73	2,00	2,87	1,97
Patella	1,67	1,47	1,20	1,60	0,90
Tibia	2,00	1,80	1,47	2,40	1,64
Metatarsus	2,20	1,93	1,47	2,27	—
Tarsus	1,07	1,07	1,00	1,33	0,68
Total	10,14	9,00	7,14	10,47	5,19

Palpus (Figs 271–272, 276) with femur 0,58, tibia 0,48 width carapace; femur 2,90, tibia 2,43 times length tarsus; tibia somewhat swollen, height 0,42 length; bulb width equal to tarsus length, embolus slender, 1,48 bulb width.

Abdomen 4,33 long, 4,96 wide; dorsum and sides with rows of attenuate setae. Variation: Total length 7,73–9,07; carapace 3,33–3,87 long, 3,13–3,33 wide, 0,63–0,97 high, height at fovea 0,195–0,30 width carapace. Height at OA 1,23–1,69 times height at fovea; clypeus 0,27–0,37 length OA, with 3–7 setae; ocular area 0,64–0,68 width caput, length PME 1,78–3,17 times PLE. Labium with 10–16, pedipalpal coxa with 11–19 cuspules; coxa I with 36–55, II 31–48, III 41–60 slender thorns (Fig. 274). Sternal sigilla broad to narrow oval, length 1,33–2,50 times width. STC I with 1–3, IV with 1–2 basal teeth.

Natural history: Rupicolous, occupying or perhaps excavating small cylindrical cavities in earth or mud. Cruden (1916:607–608; pl. 27 b, c) describes the nest in detail under the name *crudeni*. The tube is found in earth-filled rock crevices, is usually less than 5 cm in length, wide at the bottom and narrowing to the mouth, and thickly lined with silk. The mouth of the tube has a horizontally expanded collar, which is closed with a thick lid with a scalloped or crenulated edge (Cruden 1916, fig. 27b). Captive spiders occupied pre-existing cavities, lined them with silk, and closed them with characteristic lids. Eggs were found in sealed nests from December to February.

Distribution (Map 4): Southern Cape Province, South Africa.

Material examined: SOUTH AFRICA: *Cape*: Alicedale, 7 ♀ (lectotype, paratypes), 8 ♀, many fragmentary ♀ (AM), 3 ♂ (AM), ♂, ii.1916, 3 ♂, 28.ii.1917, F. Cruden (AM); Dassie Klip, Bushman's River (33°30'S:26°11'E), ♀, 25.vii., J. Hewitt (AM); Hell Poort (33°11'S:26°21'E), ♀, iii.1935, J. Hewitt (AM); Committees (33°09'S:26°50'E), ♀, ii.1935, J. Hewitt (AM); Wydgelee (34°23'S:20°26'E), 2 ♀, A. Verdonck (MRAC).

#### *Moggridgea purpurea* Lawrence

Figs 226, 280–284; Map 4

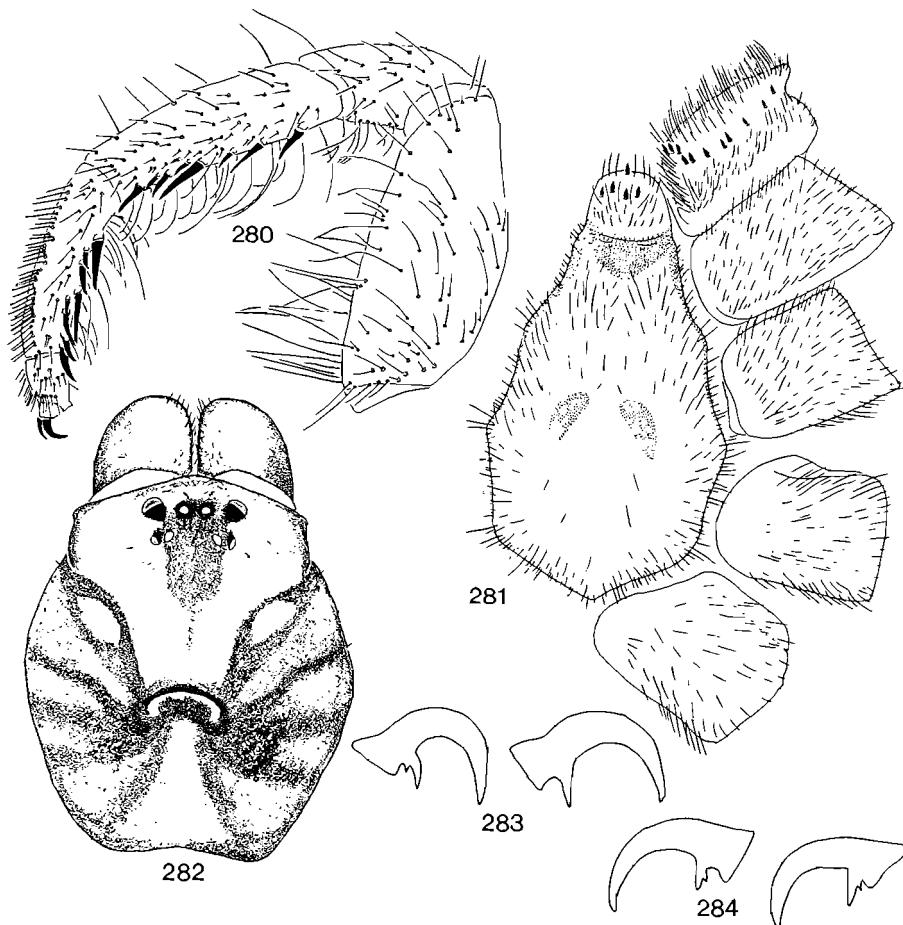
*Moggridgea purpurea* Lawrence, 1928:219 (type ♀, 6686, Camaeis, Namibia, SAM). Roewer, 1942:192. Bonnet, 1957:2973.

Diagnosis: Legs I and II of ♀ with ventral setae long, slender, curved, length greater than height of segments (Fig. 280), femur II lacking stout ventral setae;

thoracic fovea broad (Fig. 282), width/length  $> 4.0$ ; coxae without thorns (Fig. 281), sternal sigilla narrow-oval; spermathecae distinctive (Fig. 226), sclerotised region a narrow band at base of distal chamber.

Female (type): Total length 18.67. Carapace (Fig. 282) yellow-brown, darker radial pattern extending from fovea anteriorly along margin of caput, laterally and posteriorly, thoracic fovea pale. Caput with dark band extending posteriad from ocular area, narrowed before fovea; black pigment behind ALE, surrounding each AME, and anterior to PLE. Chelicerae, venter and legs red-brown, patella III with dorsal longitudinal pale band. Abdomen pale, mottled with grey.

Carapace 9.33 long, 8.13 wide, 1.71 high; low, height at fovea 0.27 carapace width; glabrous, caput with row of 4 setae, 6 between PME, clypeus with 3 large and 20 slender setae. Thoracic fovea (Fig. 282) broad, 0.27 width of carapace, short, width 4.23 times length, evenly curved, posterior extension absent. Caput



Figs 280–284. *Moggridgea purpurea* Lawrence, type female. 280. Femur-tarsus I, retrolateral. 281. Venter. 282. Carapace, dorsal. 283. STC IV. 284. STC I.

0,78 width of carapace, gently sloping, height at OA 1,46 times height at fovea, lateral pits shallow. Clypeus 0,41 length OA, margin nearly straight.

Ocular area (Fig. 282) narrow, 0,45 width caput, 2,07 times wider than long; AER 2,74 wide, slightly procurved, 1,2 times width PER, ALE 1,7 times diameter AME; PER 2,29 wide, slightly recurved, PME 1,25 times diameter PLE; OA 1,03 long. Ratio of eyes AM:AL:PM:PL, 1,25:2,125:1,25:1; PME oval, straight along inner margin. Distances between eyes: AM-AL 0,48, AM-AM 0,32, AM-PM 0,48, AL-PL 0,61, PM-PM 1,03, PM-PL 0,19. Ocular quadrangle 1,53 times wider than long, narrowed anteriorly, posterior 1,75 times anterior.

Sternum (Fig. 281) 6,06 long, 4,26 wide, margin weakly sinuate, finely setose laterally; sigilla narrow oval, length 2,7 times width, large, length 0,28 width sternum, central, distance between 0,52 distance to margin. Labium 1,61 long, 1,61 wide, apex rounded, with 5 pointed cuspules. Pedipalpal coxa 2,90 long, 1,94 wide, trapezoidal with apical angle, 11 pointed cuspules in curved line. Chelicera 2,13 long, promargin of fang furrow with 5 teeth, retromargin with 5 teeth and 4 denticles; fang long, narrow.

Coxae without thorns, finely setose. Legs I, II ventrally with long, slender, curved setae (Fig. 280), stout setae absent beneath femur II; patella III with narrow anterolateral band of slender setae, spinules absent, 1 apical spine; tibia III with shallow basal depression equal to 0,13 length; patella IV with broad anterolateral band of slender setae; metatarsus IV preening comb of 3 setae. Spination: palpus, tibia v2a11, tarsus v12121; leg I, patella v1, tibia v2122-1221-2, metatarsus v222-2321-1; leg II, tibia v221-22-212, metatarsus v222-222-2; leg III, patella a1 (apical), tibia v2 (apical), metatarsus v3 (apical); leg IV, tibia v1 (apical), metatarsus v2 (apical); tarsi III, IV with ventral spinules. Basal teeth of superior tarsal claws: palpus weakly bifid, I serrate (Fig. 284), II 2, III 1, IV 1-2 (Fig. 283). Leg measurements:

	I	II	III	IV	Palpus
Femur	6,40	5,93	4,87	6,80	4,27
Patella	3,53	3,73	3,13	4,07	2,27
Tibia	4,13	3,80	3,33	4,53	2,87
Metatarsus	3,67	3,73	3,33	4,93	—
Tarsus	1,60	1,60	2,00	2,40	2,33
Total	19,33	18,79	16,66	22,74	11,74

Abdomen damaged, distorted, length 9,33, width 10,67. Spermathecae (Fig. 226), large, widely spaced, base width 1,19 times spermatheca length; straight, tapering from base to distal chamber, slender, length 7,95 times width; sclerotised band very short, restricted to ring at base of distal chamber.

Male: Unknown.

Natural history: Lawrence (1928:219) reports that the type was taken from a 'burrow' in a cleft in a wall of limestone rock. Whether this was a silken nest or an excavated burrow is not clear.

Distribution (Map 4): Kaokoveld and Ovamboland in the northern interior of Namibia.

Material examined: NAMIBIA: Camaeis, Kaokoveld, ♀ (type), i-iv.1925, R. F. Lawrence (SAM). Juvenile specimens, almost certainly this species, from Arabib and Sesfontein, Kaokoveld (SAM) and Ghaub, Ovamboland (NM).

*Moggridgea pymi* Hewitt

Figs 83, 285–289; Map 7

*Moggridgea pymi* Hewitt, 1914b:15 (type ♀, 50 mi. S Umtali, Zimbabwe, AM). Roewer, 1942:192. Bonnet, 1957:2973.

*Moggridgea chirindaensis* Benoit, 1962:279, figs 4, 5 (holotype juvenile, 116119, Chirinda forest, Zimbabwe, MRAC). Brignoli, 1983:121. *Syn. n.*

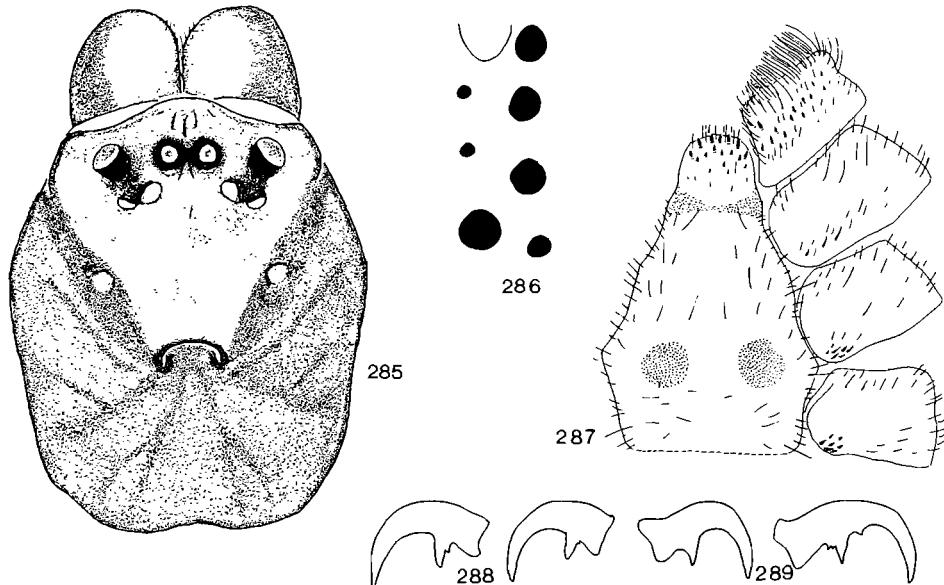
**Synonymy:** Although the holotype of *chirindaensis* is a late-instar juvenile, the distribution of thorns on coxae II and III (not III only: Benoit 1962), form of the sternal sigilla, thoracic fovea and tarsal claws, and geographic distribution leave little doubt that this name is synonymous with *pymi*.

**Diagnosis:** ♀ with coxae II, III each with fewer than 10 thorns (Fig. 287); sternal sigilla nearly round; basal teeth of STC I simple or bifid (Fig. 288).

**Female (*pymi* type):** Total length 9.87. Carapace (Fig. 285), chelicerae, and legs yellow-brown, dark radial bands along caput margin, laterad and posteriad of fovea. Ocular area with black pigment surrounding AME, posterior to ALE and anterior to posterior eyes. Venter, coxae, and trochanters yellow-white. Dorsum and sides of abdomen dark grey, venter pale.

Carapace (Fig. 285) 4.33 long, 3.67 wide, 1.32 high, height at fovea 0.37 width; glabrous; lateral pits small, shallow. Caput 0.76 width carapace, gently sloping, height at OA 1.32 times height at fovea; 1 seta behind, 2 between PME, 3 large and 2 small setae on clypeus; clypeus 0.61 length OA, margin strongly curved. Thoracic fovea 0.20 width carapace, strongly recurved at sides, width 3.08 times length, posterior projection absent.

Ocular area broad, 0.73 width caput, 2.65 times wider than long; AER 1.97 wide, nearly straight, 1.27 times width PER, ALE 1.5 times diameter AME; PER 1.55



Figs 285–289. *Moggridgea pymi* Hewitt, type female. 285. Carapace, dorsal. 286. Cheliceral teeth. 287. Venter. 288. STC I. 289. STC IV.

wide, recurved, PME 1,28 times length PLE; OA 0,74 long. Ratio of eyes: AM:AL:PM:PL, 1,33:2,0:1,28:1; PME oval. Distances between eyes: AM-AL 0,42, AM-AM 0,13, AM-PM 0,19, AL-PL 0,32, PM-PM 0,58, PM-PL 0,16. Ocular quadrangle 1,5 times wider than long, narrowed anteriorly, posterior 1,35 times anterior.

Sternum (Fig. 287) 2,52 long (damaged posteriorly), 2,16 wide, margin sinuate between coxae, sparsely setose near margin; sigilla nearly round, length 0,18 width sternum, distance between equal to distance from margin. Labium 0,68 long, 0,77 wide, apex bluntly curved, with 18 cuspules. Pedipalpal coxa 1,29 long, 0,84 wide, rectangular, apical angle blunt, with 16 cuspules in narrow median band. Chelicera 1,00 long, promargin of fang furrow (Fig. 286) with 4 teeth, retromargin with 2 small and 1 large teeth.

Coxa II with 5-7, III with 7-8 thorns (Fig. 287); coxae, trochanters, and legs sparsely setose. Femur I with row of 5, II with 11 stout setae in 2 rows; patella III with narrow anterolateral row of spinelike setae; tibia III with basal depression equal to 0,2 length segment; patella IV with narrow anterolateral band of stout setae; metatarsus IV preening comb of 3 setae. Spination: palpus, tibia v111, tarsus v22; leg I, tibia v22-21212, metatarsus v221-222; leg II, tibia v22222, metatarsus v222212; leg IV, metatarsus v1 (apical). Basal teeth of superior tarsal claws: leg I (Fig. 288) III 1-2, IV (Fig. 289) 1-3. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,20	2,67	2,13	3,20	1,73
Patella	1,93	1,73	1,47	1,80	0,93
Tibia	1,80	1,60	1,60	2,13	1,20
Metatarsus	1,60	1,60	1,47	2,07	—
Tarsus	0,73	0,73	1,00	1,27	1,06
Total	9,26	8,33	7,67	10,47	4,92

Abdomen 4,80 long, 3,47 wide. Spermathecae (Fig. 83) with base width equal to length, slender, length 6 times diameter, expanded distally, diameter at distal chamber 1,8 times that at base; pores sparse, absent from distal chamber, sclerotised band extending from distal chamber nearly to base.

Variation: A specimen from Transvaal, South Africa, is much larger than the type: total length 16,00, carapace length 6,13, width 4,93, height 1,80; venter with sternal sigilla 0,24 width sternum, distance between 0,77 distance from margin; labium with 16, pedipalpal coxa with 25 cuspules, coxa II with 4-5, III with 8-9 thorns; patella IV with broad anterolateral band of fine setae. Legs more spinose, tibia I with 6, metatarsus I with 7 pairs of ventrolateral spines; otherwise as in type.

Male: Unknown.

Natural history: Hewitt (1914b) records that the type of *pymi* was taken from its nest at the foot of a baobab tree, but does not specify if it was arboreal or terrestrial.

Distribution (Map 8): Eastern Zimbabwe to northern Transvaal, South Africa.

Material examined: ZIMBABWE: 50 mi. S Umtali (Mutare), ♀ (*pymi* type), F. Pym (AM); Chirinda forest, Mount Selinda, el. 1 250 m, juv. (*chirindaensis* holotype), vii.1960, N. Leleup (MRAC). SOUTH AFRICA: Transvaal: Wylies Poort, Soutpansberg (22°53'S:29°56'E), ♀, A. Capener (NM).

*Moggridgea quercina* Simon

Figs 290–296, 301–310; Map 5

*Moggridgea quercina* Simon, 1903b:22 (lectotype, 15254, and paralectotype ♀, here designated, Cape of Good Hope, South Africa, MNHN). Roewer, 1942:192. Bonnet, 1957:2973.

*Caedmon congener* O. P. Cambridge, 1903:146 (type ♂, 5979, Cape Town, South Africa, UMO). Roewer, 1942:193. *Syn. n.*

*Poecilomigas congener*; Bonnet, 1956:919; 1958:3737.

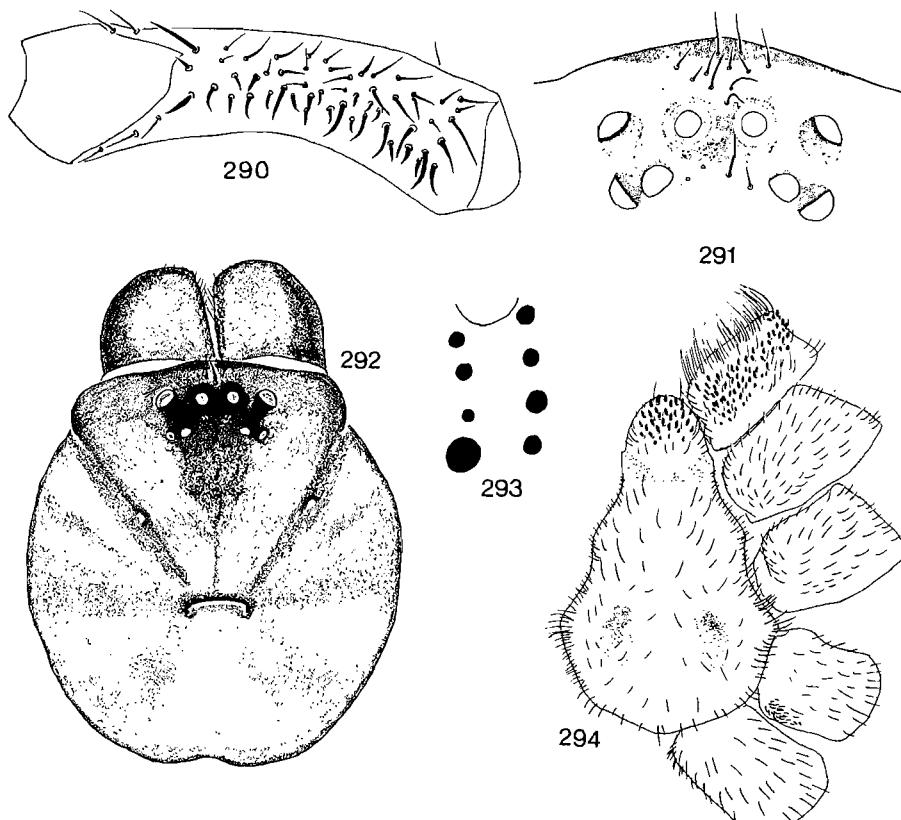
*Caedmon dubia* O. P. Cambridge, 1903:147 (type ♀, 6252, Muizenberg, South Africa, UMO). Roewer, 1942:193. *Syn. n.*

*Poecilomigas dubius*; Bonnet, 1956:919; 1958:3737.

*Caedmon thoracica* O. P. Cambridge, 1903:144 (type ♂, 6010, Simon's Town, South Africa, UMO). Roewer, 1942:193. *Syn. n.*

*Poecilomigas thoracicus*; Bonnet, 1956:919; 1958:3737.

**Synonymy:** The type of *C. dubia* agrees with *quercina* in having rows of thornlike setae ventrally on femur I, and in the form of the sternal sigilla. The male types of *C. congener* and *C. thoracica* lack coxal thorns, and as such are similar to *quercina* and *teresae*, the only species from the Cape of Good Hope to lack coxal thorns. The



Figs 290–294. *Moggridgea quercina* Simon, female. 290, 292–294. Lectotype. 291. Type of *Caedmon dubia* Cambridge. 290. Femur I, I., ventral, with thornlike setae. 291. Ocular area. 292. Carapace, dorsal. 293. Cheliceral teeth. 294. Venter.

males are distinct from the male of *teresae*, but share with it (the putative sister-species of *quercina*) the synapomorphies of the scopulae extending beneath metatarsi I, II, and absent from leg IV. They are most parsimoniously considered as synonyms of *quercina*.

**Diagnosis:** ♀ with ventral rows of thornlike setae (Fig. 290) on femur I, sternal sigilla pear-shaped to irregular, length 1,5–2,0 times width (Fig. 294), spermathecae stout (Figs 295–296), length 2,77–4,04 times diameter; coxae without thorns (Fig. 294). ♂ without scopula on leg IV (Fig. 309), femur I with ventral carina, scopulae extending on to venters of metatarsi I, II.

**Female (lectotype):** Total length 10,80. Carapace red-brown, slightly darker bands radiating from fovea along caput margin and laterally; caput with faint median band behind PER, narrowed before fovea, clypeal margin dark; ocular area with black pigment surrounding AME, behind ALE, anterior to and between PME–PLE. Chelicerae, venter, and legs yellow-brown, unmarked. Abdomen dark grey on dorsum and sides, venter pale grey, yellow-white over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 292) 5,00 long, 4,67 wide, 1,35 high, height at fovea 0,30 width carapace; glabrous, with few anterolateral marginal setae; lateral pits small, shallow. Caput 0,76 width carapace, convex, height at OA 1,17 times height at fovea; median row of 3 large and lateral rows of 4 small setae behind PER, 2 large, 3 small between PME, 1 large, 12 small setae on clypeus; clypeus broad, 0,55 length OA, margin weakly curved. Thoracic fovea 0,185 width carapace, nearly straight, width 5 times length, posterior projection absent.

Ocular area narrow, 0,45 width caput, 2,40 times wider than long; AER 1,55 wide, straight, 1,17 times width PER, diameter ALE 1,285 times AME; PER 1,32 wide, slightly recurved, length PME equal to PLE; OA 0,645 long. Ratio of eyes: AM:AL:PM:PL, 1,4:1,8:1:1; PME oval. Distances between eyes: AM–AL 0,23, AM–AM 0,16, AM–PM 0,26, AL–PL 0,29, PM–PM 0,61, PM–PL 0,065. Ocular quadrangle 1,53 times wider than long, narrowed anteriorly, posterior 1,53 times anterior.

Sternum (Fig. 294) 3,23 long, 2,71 wide, margin sinuate between coxae, setose; sigilla pear-shaped, length 1,6 times width, 0,25 width sternum, distance between 0,89 distance from margin. Labium 1,10 long, 0,97 wide, apex curved, with 33 cuspules. Pedipalpal coxa 1,45 long, 1,06 wide, rectangular, with 64 cuspules in broad median band. Chelicera 1,07 long, promargin of fang furrow (Fig. 293) with 4 teeth, retromargin with 3 small, 1 large teeth.

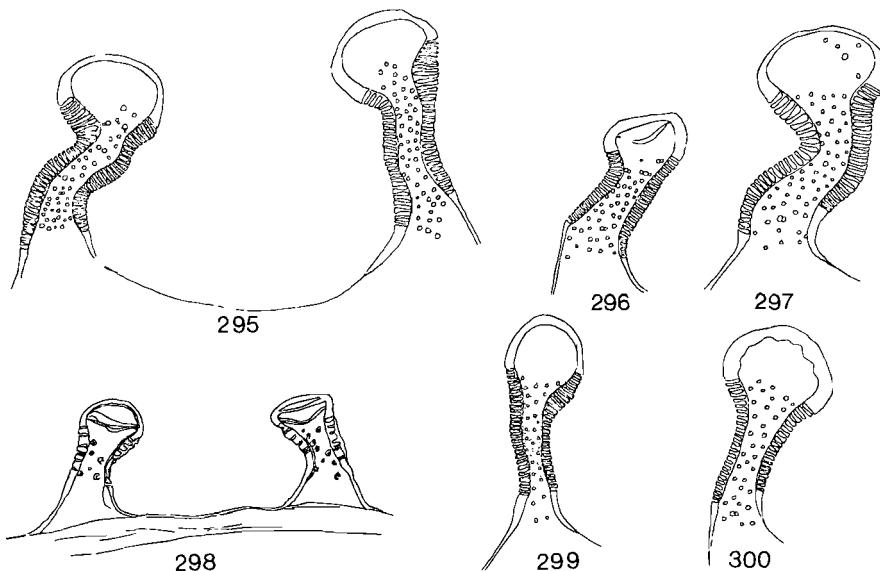
Coxae without thorns, but with basal patch of stout setae on III (Fig. 294); coxae, trochanters, and legs setose. Femur I with ventral band of 25–30 thornlike setae (Fig. 290), II with row of 6–8 stout setae; patella III with anterolateral band of stout setae and short apical spine; tibia III with deep basal depression equal to 0,18 length segment; patella IV with broad anterolateral band of slender setae; metatarsus IV with apical comb of 4 setae. Spination: palpus, tibia v12, tarsus v222; leg I, patella v1 (apical), tibia v222–212, metatarsus v2222–222–2; leg II, patella v1 (apical), tibia v21221–212, metatarsus v212–2211–2; leg IV, metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I 2, II–III 1, IV 1–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,53	3,33	2,60	3,53	2,20
Patella	2,20	2,13	1,80	2,27	1,20
Tibia	2,13	1,93	1,73	2,53	1,33
Metatarsus	1,87	1,80	1,67	2,40	—
Tarsus	1,00	0,93	1,40	1,60	1,27
Total	10,73	10,12	9,20	12,33	6,00

Abdomen 6,73 long, 4,80 wide. Spermathecae (Franschhoek ♀, Fig. 295) stout, slightly sinuate, widened distally, length 4,0 times diameter, base width 0,96 spermatheca length; pores sparse, absent from distal chamber, sclerotised band extending from distal chamber halfway to base.

Variation: Total length 8,00–13,33; carapace 3,13–5,40 long, 2,87–4,73 wide, 0,58–1,35 high. Caput 0,74–0,76 width carapace, height at OA 1,17–1,83 times height at fovea, height at fovea 0,21–0,30 width carapace. Ocular area (Figs 291–292) 0,44–0,53 width caput, AER 1,09–1,24 times width PER, diameter ALE 1,28–1,9 times AME, length PME 0,88–1,0 times length PLE; clypeus (Figs 291, 292) 0,49–0,63 length OA, margin straight to angled. Thoracic fovea 0,17–0,21 width carapace, nearly straight to evenly recurved, width 3,28–6,0 times length. Labium with 19–31, pedipalpal coxa with 31–64 cuspules. Sternal sigilla irregular, pear-shaped, or assymetrical, length 1,60–1,90 times width, length 0,16–0,26 width sternum, distance between 0,66–1,25 times distance from margin. Femur I (Fig. 290) with 7–30 thornlike setae on venter; tibia I with 5–7, metatarsus I with 7–8 pairs of ventrolateral spines; apical comb of metatarsus IV of 3–4 setae. STC I with 1–2, II with 1–3 basal teeth. Spermathecae (Figs 295, 296) straight to slightly sinuate, length 2,77–4,04 times diameter.

Male (type of *Caedmon congener*): Total length 6,90. Specimen faded. Carapace



Figs 295–300. Spermathecae of *Mogridgea* spp. 295–296. *M. quercina* Simon. 295. Franschhoek. 296. Paralectotype. 297–300. *M. terricola* Simon. 297. Cape Town. 298. Paralectotype. 299. George. 300. Swellendam.

red-brown, darker along caput margin; caput with dark, median, double band behind PER, ending before fovea; black pigment surrounding AME, behind ALE, and between PME-PLE. Venter, palpi, and legs yellow-white, unmarked, femora darkest. Abdomen grey on dorsum and sides, pale ventrally, white over book-lungs and anterior to epigastric furrow.

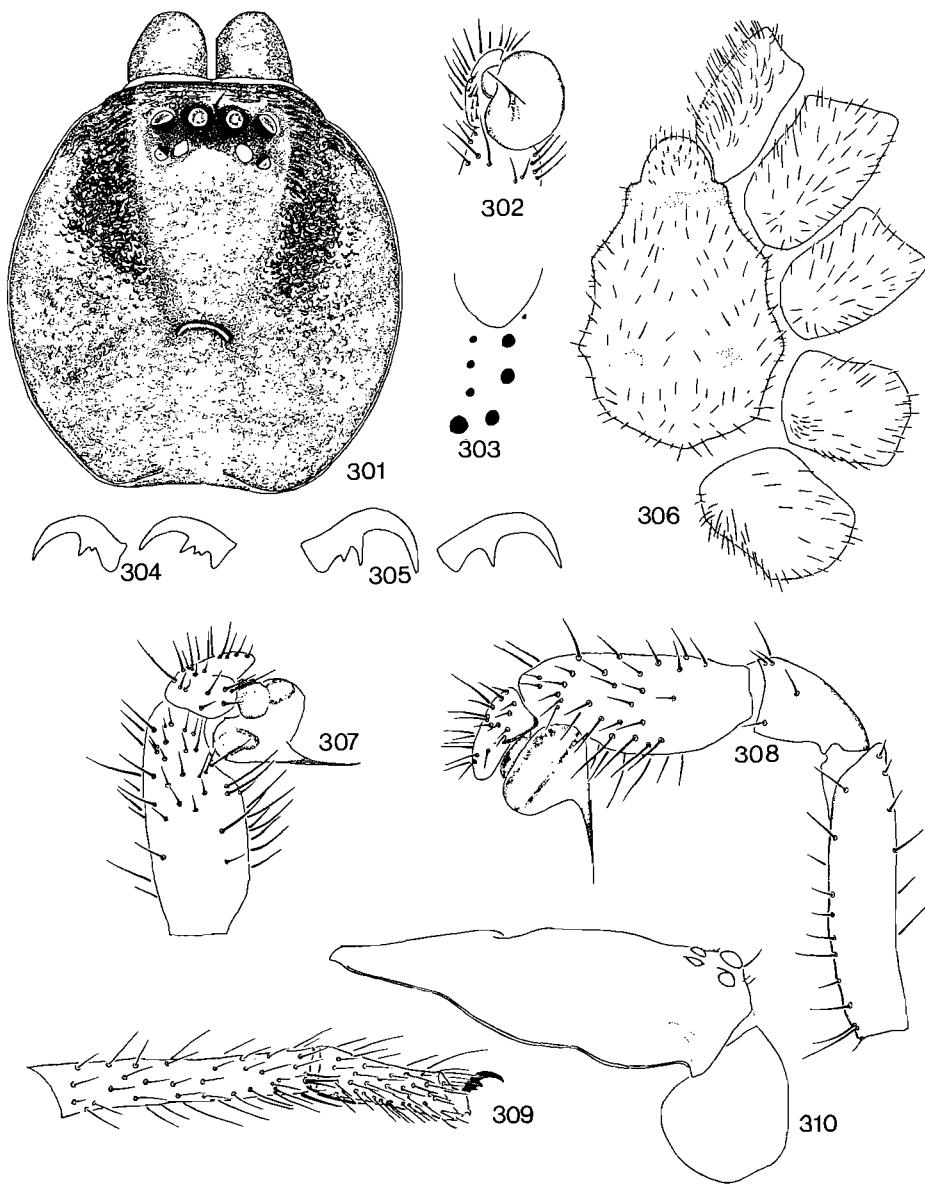
Carapace (Fig. 301) 3,33 long, 3,33 wide, 0,645 high, height at fovea 0,16 carapace width; strongly punctate-rugose laterad of caput, smooth submarginally and posteriorly; glabrous; lateral pits indistinct. Caput 0,62 width carapace, convex (Fig. 310), height at OA 1,35 times height at fovea, sides raised, weakly demarcated; punctate laterally becoming rugose beside OA, smooth mesally; 2 small setae between PME, 1 large, 2 small anterior to AME; clypeus 0,5 length OA, steep, weakly striate, margin straight. Thoracic fovea small, 0,16 width carapace, evenly recurved, width 3,88 times length, posterior projection absent.

Ocular area narrow, 0,53 width caput, 2,06 times wider than long; AER 1,06 wide, straight, 1,06 times width PER, diameter ALE 1,17 times AME; PER 1,00 wide, slightly recurved, length PME 1,15 times PLE; OA 0,52 long. Ratio of eyes: AM:AL:PM:PL, 1,5:1,75:1,125:1; PME nearly round. Distances between eyes: AM-AL 0,10, AM-AM 0,13, AM-PM 0,13, AL-PL 0,16, PM-PM 0,39, PM-PL 0,065. Ocular quadrangle 1,43 times wider than long, narrowed anteriorly, posterior 1,25 times anterior.

Sternum (Fig. 306) 1,90 long, 1,61 wide, margin sinuate between coxae, sparsely setose; sigilla nearly round, length 1,4 times width, small, length 0,17 sternum width, lateral, distance between 4,0 times distance from margin. Labium 0,48 long, 0,58 wide, apex rounded, with 7 tiny, slender cuspules. Pedipalpal coxa 1,13 long, 0,645 wide, trapezoidal, apex and posterior angle weakly produced, lacking cuspules. Chelicera 0,33 long, promargin of fang furrow (Fig. 303) with 2 small, 2 large teeth, retromargin with 3 small, 1 large teeth; fang slender, weakly bent at base.

Femur I 0,82, tibia I 0,58, femur IV 0,90, tibia IV 0,72 times width carapace. Coxae without thorns, setal patch at base of coxa III; coxae, trochanters, and legs sparsely setose. Femur I with ventral carina, II convex; patella III with scattered anterolateral setae and 2 apical spines, IV with narrow anterolateral band of slender setae; metatarsus IV straight, cylindrical, apical comb of 3 setae. Scopulae: dense, weakly divided beneath tarsi and distal fifth of metatarsi I, II; narrow, very weak beneath tarsus III; absent from leg IV (Fig. 309). Spination: leg I, femur d1, patella a3v2 (apical), tibia a11111v2122121, metatarsus a11v1121; leg II, femur d1, patella a3v2 (apical), tibia v222221, metatarsus v222; leg III, patella a11 (apical), metatarsus a1r2 (apical); leg IV, metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I (Fig. 304), II 2-3; III 3; IV (Fig. 305) 1-2. Leg measurements:

	I	II	III	IV	Palpus
Femur	2,73	2,67	2,13	3,00	1,87
Patella	1,53	1,40	1,20	1,60	0,87
Tibia	1,93	1,80	1,60	2,40	1,47
Metatarsus	2,00	1,80	1,53	2,27	—
Tarsus	0,87	1,00	0,93	1,20	0,60
Total	9,06	8,67	7,39	10,47	4,81



Figs 301–310. *Moggridgea quercina* Simon, male (type of *Caedmon congener* Cambridge). 302, 307–308. Left palpus. 301. Carapace, dorsal. 302. Tarsus, apex of tibia, ventral. 303. Cheliceral teeth. 304. STC I. 305. STC IV. 306. Venter. 307. Tibia-tarsus, anterolateral. 308. Femur-tarsus, retrolateral. 309. Metatarsus-tarsus IV, retrolateral. 310. Carapace, lateral.

Palpus (Figs 302, 307–308) with femur 0,56, tibia 0,44 width carapace; femur 3,16, tibia 2,55 times length tarsus; tibia somewhat swollen, height 0,41 length; bulb width equal to tarsus length, embolus 1,10 times bulb width.

Abdomen 3,27 long, 2,27 wide; dorsum and sides with rows of attenuate and blunt setae.

Variation: The type of *Caedmon thoracica* is larger; total length 7,33, carapace broader, length 0,95 width, caput more steeply inclined, height at OA 1,48 times height at fovea; sternal sigilla more oval, length 1,67 times width, 0,20 width sternum, closer, distance between 2,00 times distance from margin.

Natural history: Non-terrestrial, nest-building. Simon (1903b:22) states that this species is common on the bark of oak trees (*Quercus pedunculata*) where the nests have a thin but rigid lid, and resemble those of *Moggridgea dyeri*. The type of *Caedmon dubia* was taken from an oval nest beneath stones with a thin lid, camouflaged with grains of earth and sand (O. P. Cambridge 1903:147). Both arboreal and rupicolous nests are found in other species, including *intermedia*. Males (*C. congener* and *thoracica*) were found under stones. The description of a nest attributed to this species from Durban (Tucker 1917:80) certainly refers to *microps*.

Distribution (Map 5): Southwestern Cape Province, South Africa.

Material examined: SOUTH AFRICA: *Cape*: Cape of Good Hope, 3 ♀ (lectotype, paralectotypes, MNHN), 2 ♀ (MRAC); Lion's Hill, Cape Peninsula, ♂ (type, *Caedmon congener*, UMO); Muizenberg, ♀ (type, *Caedmon dubia*, UMO), imm. ♀, vi.1899, C. French (SAM); Simonstown, Cape Peninsula, ♂ (type, *Caedmon thoracica*, UMO); Frenchhoek, ♀, iii.1916, R. Lightfoot (SAM).

#### *Moggridgea rupicola* Hewitt

Figs 124–125, 311–323; Map 7

*Moggridgea rupicola* Hewitt, 1913c:462 (lectotype and 13 paralectotype ♀, here designated, Aicedale, South Africa, AM). Roewer, 1942:192. Bonnet, 1957:2973.

*Moggridgea crudeni* Hewitt, 1913a:47 (part: 2 cotype ♀ in TM).

Synonymy: The two cotype females of *crudeni* located in the Transvaal Museum (TM 2791,2) are distinct from the Albany Museum cotypes of this species, and differ as well from the concept of *crudeni* in Hewitt's (1913a:47) description. They are clearly specimens of *rupicola*.

Diagnosis: ♀ with thorns on coxae II–III only, each with fewer than 25 thorns (Fig. 313); abdomen uniformly dark dorsally (Fig. 311); carapace without pair of setae anterior to thoracic fovea, ocular area broad, greater than 0,67 width caput (Fig. 311), PER recurved; spermathecae (Figs 124, 125) long, slender, sinuate, base width less than 0,92 spermatheca length. ♂ with thorns on coxae II–III (Fig. 317) and PME smaller than PLE (Fig. 316).

Female (lectotype): Total length 15,60. Carapace (Fig. 311) yellow-brown, darker around fovea and forming radial bands along caput margin, laterally and posterolaterally, broad median band behind PER narrowing to fovea; ocular area dusky, black pigment surrounding each AME, behind ALE, and anterior to PME and PLE. Sternum yellow-white, mouthparts, coxae, trochanters, and legs yellow-

brown; patella III dusky laterally, with pale median dorsal mark. Abdomen (Fig. 311) dark grey, unmarked dorsally, sides and venter pale grey.

Carapace (Fig. 311) 4,80 long, 4,13 wide, 1,19 high, height at fovea 0,30 width carapace; glabrous; lateral pits small, deep. Caput 0,76 width carapace, convex, height at OA 1,38 times height at fovea; median row of 3 setae, 2 long and 4 short between PME, 1 large and 14 small setae on clypeus; clypeus 0,48 length OA, margin curved. Thoracic fovea 0,19 width carapace, evenly recurved, width 2,67 length, with very weak posterior projection.

Ocular area broad, 0,70 width caput, 3,14 times wider than long; AER 2,13 wide, straight, 1,22 times width PER, diameter ALE 1,43 times AME; PER 1,74 wide, recurved, length PME 0,89 PLE; OA 0,68 long. Ratio of eyes: AM:AL:PM:PL, 1,75:2,5:1:1,5; PME oval. Distances between eyes: AM-AL 0,52, AM-AM 0,26, AM-PM 0,26, AL-PL 0,32, PM-PM 0,90, PM-PL 0,19. Ocular quadrangle 2,31 times wider than long, narrowed anteriorly, posterior 1,85 times anterior.

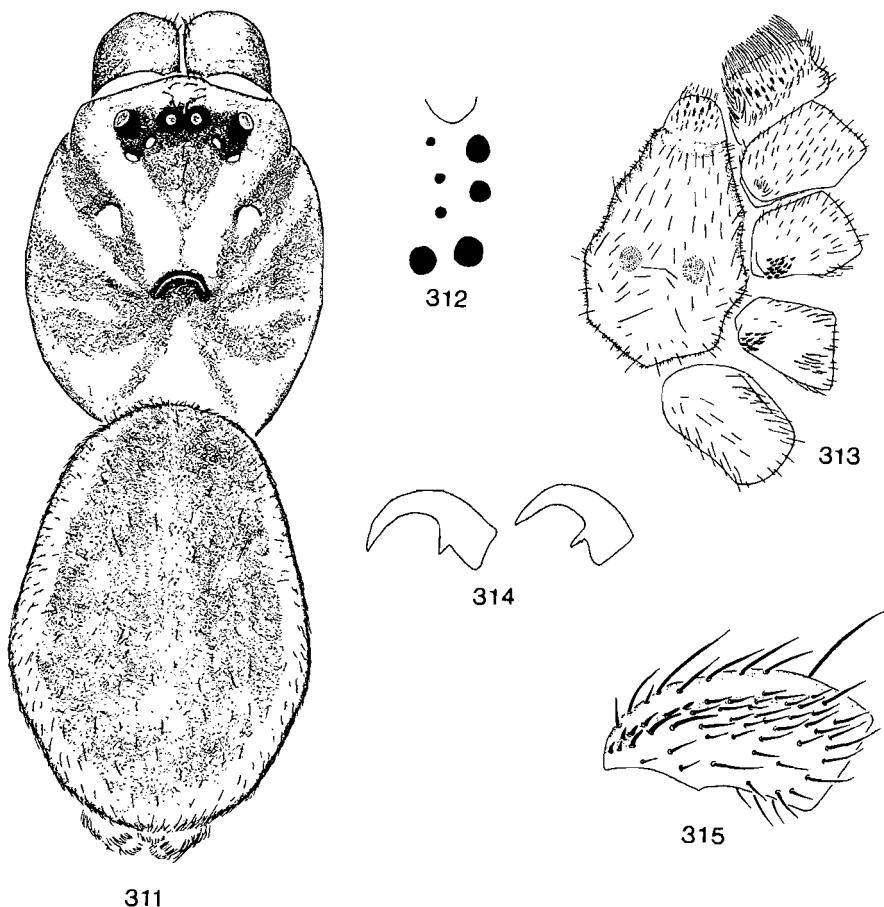
Sternum (Fig. 313) 3,23 long, 2,19 wide, margin weakly sinuate between coxae, setose; sigilla 0,19 width sternum, nearly round, length 1,23 times width, distance between equal to distance from margin. Labium 0,71 long, 0,90 wide, apex blunt, with 10 slender cuspules. Pedipalpal coxa 1,29 long, 1,00 wide, trapezoidal, apex weakly produced, with 13 cuspules in median row. Chelicera 1,20 long, promargin of fang furrow (Fig. 312) with 3 large teeth, retromargin with 3 small, 1 large teeth.

Coxae II-III with thorns (Fig. 313): II 19, III 12. Coxae, trochanters, and legs setose. Femur II with 20-22 stout setae in 2 ventral rows; patellae III, IV (Fig. 315) with narrow anterolateral bands of setae, III with apical spine; tibia III with shallow basal depression equal to 0,18 length segment; metatarsus IV apical comb of 3 setae. Spination: palpus, tibia v1, tarsus v22; leg I, patella v1 (apical), tibia v2122212, metatarsus v2122122; leg II, tibia v221222, metatarsus v222112; leg III, patella a1 (apical); leg IV, metatarsus a1 (apical). Basal teeth of superior tarsal claws: I (Fig. 314)-III 1, IV 1-2. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,27	3,07	2,60	3,60	2,00
Patella	2,00	1,93	1,67	2,13	1,07
Tibia	2,07	1,73	1,87	2,67	1,20
Metatarsus	1,73	1,67	1,67	2,40	—
Tarsus	1,00	0,93	1,33	1,53	1,20
Total	10,07	9,33	9,14	12,33	5,47

Abdomen (Fig. 311) 7,53 long, 5,53 wide. Spermathecae (paralectotype, Fig. 124) weakly sinuate, cylindrical to slightly expanded distally, slender, length 8,75 times diameter, base narrow, 0,73 spermatheca length; pores dense, extend into distal chamber, sclerotised band extends from distal chamber nearly to base.

Variation: Total length 8,80-15,60. Carapace 3,47-4,80 long, 2,67-4,13 wide, 0,71-1,19 high, height at fovea 0,24-0,30 width carapace; caput 0,73-0,76 width carapace, height at OA 1,31-1,45 times height at fovea; ocular area broad, 0,68-0,73 width caput, 2,65-3,14 times wider than long; diameter ALE 1,43-2,00 times AME, length PME 0,78-0,89 PLE; clypeus 0,47-0,68 length OA. Thoracic fovea 0,19-0,23 width carapace, recurved to nearly straight, width 2,50-3,85 times length, posterior projection weak to absent. Sternal sigilla 0,14-0,19 width sternum, length 1,11-1,3 times width; labium with 9-15, pedipalpal coxa with 10-



Figs 311–315. *Moggridgea rupicola* Hewitt, lectotype female. 311. Carapace and abdomen, dorsal. 312. Cheliceral teeth. 313. Venter. 314. STC I. 315. Patella IV, anterolateral.

18 cuspules; coxa II with 14–20, III with 10–17 thorns; STC I with 1–2 basal teeth. Spermathecae (Figs 124, 125) weakly to strongly sinuate, length 7,85–8,90 times diameter, base width 0,72–0,91 spermathecae length, pores present or absent in distal chamber.

Male (Alicedale): Total length 8,00. Carapace and chelicerae dark red-brown, unmarked; ocular area with black pigment surrounding AME, behind ALE, and anterior to PLE. Sternum yellow-white, coxa, trochanters, palpi and legs yellow-brown, unmarked; femora I and II red-brown. Abdomen dark grey on dorsum and sides, venter pale grey, yellow-white over book-lungs.

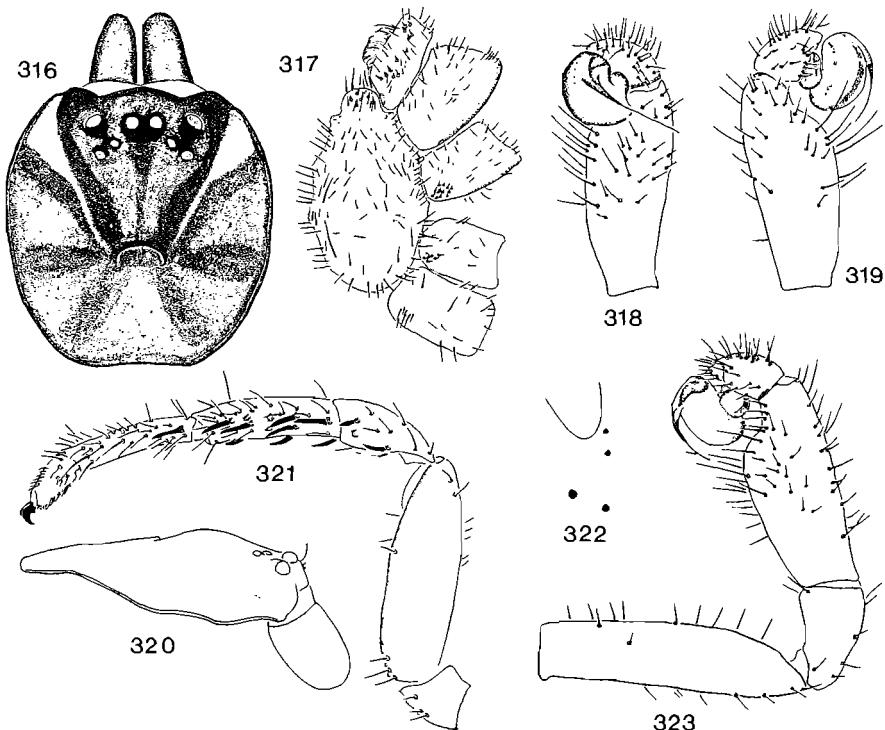
Carapace (Fig. 316) 3,40 long, 3,33 wide, 0,81 high, height at fovea 0,25 width carapace; rugose; glabrous; lateral pits shallow, indistinct. Caput 0,60 width carapace, raised, sides steep, convex (Fig. 320), height at OA equal to height at fovea; weakly rugose behind PER, striate laterad of ALE; glabrous with 1 large and 6 small setae anterior to AME; clypeus 0,47 length OA, steep, nearly smooth,

margin sinuate. Thoracic fovea small, 0,18 width carapace, weakly recurved, width 3,75 times length, with short posterior projection.

Ocular area broad, 0,75 width caput, 2,64 times wider than long; AER 1,45 wide, straight, 1,17 times width PER, diameter ALE 1,60 times AME; PER 1,24 wide, recurved, length PME 0,90 PLE; OA 0,55 long. Ratio of eyes: AM:AL:PM:PL, 1,11:1,78:1:1,11; PME nearly round. Distances between eyes: AM-AL 0,27, AM-AM 0,16, AM-PM 0,16, AL-PL 0,26, PM-PM 0,89, PM-PL 0,10. Ocular quadrangle 2,08 times wider than long, narrowed anteriorly, posterior 1,80 times anterior.

Sternum (Fig. 317) 2,19 long, 1,52 wide, margin weakly sinuate between coxae, sparsely setose; sigilla small, 0,17 width sternum, oval, length 1,50 times width, lateral, distance between 2,06 times distance from margin. Labium 0,48 long, 0,55 wide, apex blunt, with 8 small cuspules. Pedipalpal coxa 1,16 long, 0,65 wide, trapezoidal, weakly produced proximally, with 10–12 small cuspules. Chelicera 0,67 long, promargin of fang furrow (Fig. 322) with 3, retromargin with 1 denticle.

Femur I 0,94, tibia I 0,62, femur IV 0,88, tibia IV 0,70 width carapace. Coxae II–III with basal patches of tiny, slender thorns: II 9–10, III 8–10; coxae, trochanters, and legs sparsely setose. Femur I (Fig. 321) strongly, II weakly carinate; patella III anterolaterally with few stout setae and apical spines, IV with



Figs 316–323. *Moggridgea rupicola* Hewitt, male (Alicedale). 318–319, 323. Left palpus. 316. Carapace, dorsal. 317. Venter. 318. Tibia-tarsus, ventral. 319. Tibia-tarsus, anterolateral. 320. Carapace, lateral. 321. Trochanter-tarsus I, anterolateral. 322. Cheliceral teeth. 323. Femur-tarsus, retrolateral.

scattered slender setae; metatarsus IV slightly swollen distally, without apical comb. Scopulae: weak, divided between tarsi I (Fig. 321), II; very weak beneath tarsus III; weak, entire beneath tarsus and distal two-thirds of metatarsus IV. Spination: leg I, femur d1, patella a11v111, tibia a12221v1121212, metatarsus v21212; leg II, femur d1, patella a1 (apical), tibia a11111v121121, metatarsus v2212; leg III, patella a1 (apical), tibia v2 (apical), metatarsus v2 (apical); leg IV, metatarsus a1 (apical). Basal teeth of superior tarsal claws: I 1, II 1–2, III 1, IV 1–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,13	2,67	2,00	2,93	2,06
Patella	1,67	1,50	1,27	1,93	0,87
Tibia	2,07	1,80	1,53	2,33	1,645
Metatarsus	2,00	1,80	1,50	2,20	—
Tarsus	1,07	0,93	1,13	1,27	0,645
Total	9,94	8,70	7,43	10,66	5,125

Palpus (Figs 318–319, 323) with femur 0,64, tibia 0,51 width carapace; femur 3,20, tibia 2,55 times length tarsus; tibia swollen, height 0,39 length; bulb width equal to tarsus length, embolus 1,48 times bulb width.

Abdomen 3,93 long, 2,87 wide, dorsum and sides sparsely covered with attenuate setae.

Variation: Total length 7,60–8,00; carapace 3,40–3,47 long, 3,33–3,40 wide, 0,74–0,87 high, height at fovea 0,23–0,27 width carapace; caput 0,52–0,60 width carapace, height at OA 1,00–1,17 times height at fovea; ocular area 0,72–0,86 width caput, diameter ALE 1,60–1,67 times AME, length PME 0,80–0,90 PLE. Thoracic fovea 0,15–0,18 width carapace, posterior projection present or absent. Sternal sigilla 0,16–0,17 width sternum, distance between 2,06–2,33 times distance from margin; labium with 7–8, pedipalpal coxa with 10–12 cuspules; coxa II with 9–11, III with 8–12 thorns. Denticles present or absent on retromargin of fang furrow. Palpal femur 0,61–0,64 width carapace; femur 3,15–3,20, tibia 2,55–2,63 times length tarsus.

Natural history: A rupicolous, nest-building species. Hewitt (1913c:463) describes this species as occupying the same rock crevices as *crudeni*, distinguished in having the trap-door thinner and more oval. Cruden (1916:608) describes the nests in detail: nests are formed in rock crevices or attached to the underside of overhanging ledges, horizontal, strengthened and camouflaged with earth, 2,5–4,0 cm in length, widened away from the door, and furnished with a thin, wafer-like, nearly circular door. Males were taken from these characteristic nests in March–April.

Distribution (Map 7): Eastern Cape Province, South Africa.

Material examined: SOUTH AFRICA: *Cape*: Alicesdale, 14 ♀ (lectotype, paralectotypes), 5 ♂, many fragmentary ♀ (AM), ♀, ♂, 30.v.1913, F. Cruden (AM), 5 ♀ (UMO), 2 ♀ (*crudeni* Hewitt cotypes), 3.iv.1913, J. Hewitt (TM); Grahamstown, Howisons Poort, ♀, 16.viii.1920, J. Hewitt (AM), 2 ♀, 24.ii.1934 (AM), 4 ♀, iii.1935, J. Hewitt, (AM); Coldspring, Grahamstown, ♀, 5.ix.1918, G. van Dam (TM), ♀ (AM); Dassie Klip, Bushmans River (33°30'S:26°11'E), ♀, vii.1913, J. Hewitt (AM); Avontuur, 2 ♀, A. Verdonck (MRAC).

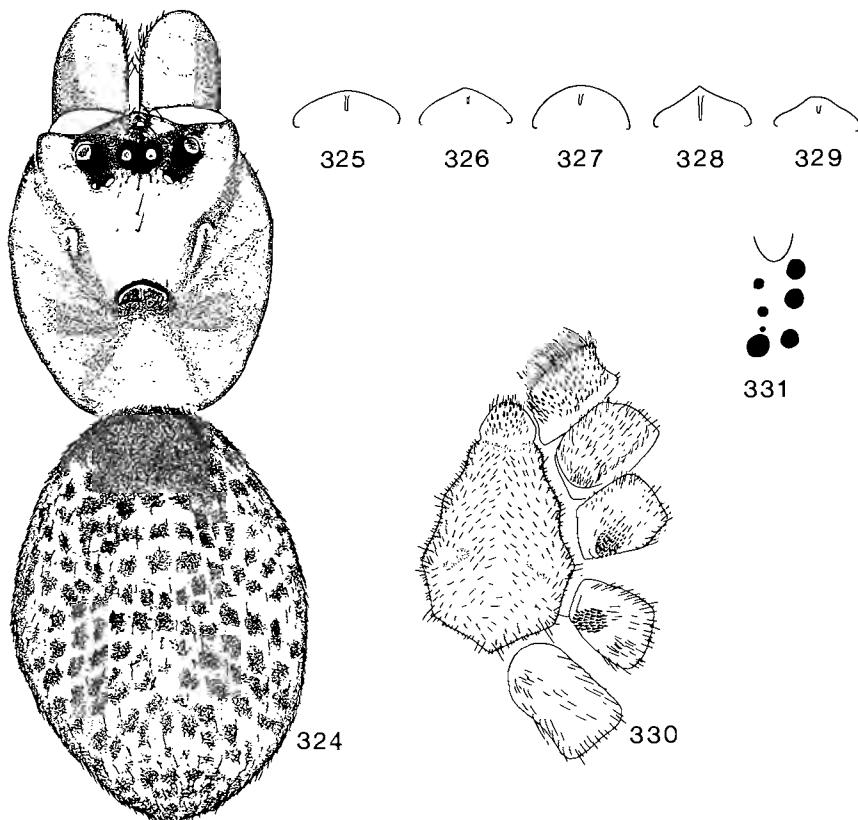
*Moggridgea rupicoloides* Hewitt

Figs 128–129, 324–331; Map 4

*Moggridgea rupicoloides* Hewitt, 1914b:14 (lectotype and 8 paralectotypes ♀, here designated, Grahamstown, South Africa, AM). Roewer, 1942:192.  
*Moggridgea rupicoloides* (lapsus) Bonnet, 1957: 2973.

Diagnosis: ♀ with thorns on coxae II and III (Fig. 330); spermathecae (Figs 128–129) long, slender, sinuate, length greater than 1,10 times base width; abdomen (Fig. 324) with dorsal pattern of chevrons breaking into spots posteriorly and laterally.

Female (lectotype): Total length 8.93. Carapace yellow-brown, dark bands radiating from fovea along caput margin, laterally, and posterolaterally; caput with dark median band behind PME, ending before fovea; ocular area with black pigment surrounding AME, behind ALE, and anterior to PME–PLE. Chelicerae yellow-brown, dusky laterally; venter, coxae, and trochanters yellow-white. Legs yellow-brown, unmarked. Abdomen with ground colour pale yellow-brown to yellow-white; dorsum with dark grey markings broken into chevrons from middle posteriad, dark grey spots posteriorly and on sides.



Figs 324–331. *Moggridgea rupicoloides* Hewitt, female, paralectotypes. 324. Carapace and abdomen, dorsal. 325–329. Thoracic foveae, variation. 330. Venter. 331. Cheliceral teeth.

Carapace 3,73 long, 3,00 wide, 0,58 high, height at fovea 0,20 width carapace; glabrous; lateral pits small, deep. Caput 0,78 width carapace, inclined, height at OA 2,0 times height at fovea; median row of 3 setae, 2 large, 4 small between PME, 1 large, 6 small setae on clypeus; clypeus 0,55 length OA, margin curved. Thoracic fovea 0,24 width carapace, evenly recurved, width 2,9 times length, with short posterior projection.

Ocular area 0,66 width caput, 2,55 times wider than long; AER 1,48 wide, slightly procurved, 1,28 times width PER, diameter ALE 1,50 times AME; PER 1,16 wide, slightly recurved, length PME 1,14 times PLE; OA 0,58 long. Ratio of eyes: AM:AL:PM:PL, 1,43:2,14:1,14:1; PME broadly oval. Distances between eyes: AM-AL 0,39, AM-AM 0,16, AM-PM 0,19, AL-PL 0,26, PM-PM 0,74, PM-PL 0,06. Ocular quadrangle 1,60 times wider than long, narrowed anteriorly, posterior 1,85 times anterior.

Sternum 2,29 long, 1,81 wide, sinuate between coxae, setose; sigilla small, 0,16 width sternum, oval, length 1,40 times width, lateral, distance between 3,13 times distance from margin. Labium 0,645 long, 0,645 wide, apex rounded, with 19 slender cuspules. Pedipalpal coxa 1,13 long, 0,77 wide, trapezoidal, apex weakly produced, with 35 slender cuspules in median band. Chelicera 0,73 long, promargin of fang furrow (Fig. 331) with 3 large teeth, retromargin with 3 small, 1 large teeth.

Coxae II and III with thorns: II 41, III 37; coxae, trochanters, and legs sparsely setose. Femur II with 15–18 stout setae in 2 ventral rows; patella III with narrow anterolateral band of stout setae and short apical spine; tibia III with shallow basal depression equal to 0,21 length segment; patella IV with broad anterolateral band of setae grading into 20–25 spinules basally; metatarsus IV with apical comb of 3 setae. Spination: palpus, tibia v2, tarsus v12; leg I, tibia v221221, metatarsus v22222; leg II, tibia v2221, metatarsus v22212; leg III, patella a1 (apical); leg IV, tibia a1 (apical), metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I 1–2, II–IV 1. Leg measurements:

	I	II	III	IV	Palpus
Femur	2,40	2,13	1,73	2,33	1,27
Patella	1,40	1,33	1,13	1,47	0,73
Tibia	1,33	1,13	1,07	1,67	0,87
Metatarsus	1,20	1,13	1,00	1,67	—
Tarsus	0,60	0,60	0,80	1,00	0,87
Total	6,93	6,32	5,73	8,14	3,74

Abdomen 4,93 long, 3,93 wide. Spermathecae (paralectotype, Fig. 128) slender, cylindrical, sinuate, length 9,25 times diameter, base narrow, width 0,83 spermatheca length; pores numerous, may occur in distal chamber, sclerotised band extends from distal chamber to base.

Variation: Total length 8,80–11,87; carapace markings bold to obscure, abdomen with dorsal chevrons or rarely with dorsum entirely spotted. Carapace (Fig. 324) 3,47–4,20 long, 2,67–3,67 wide, 0,68–1,03 high, height at fovea 0,20–0,31 width carapace; caput 0,76–0,78 width carapace, gently to steeply inclined, height at OA 1,41–2,00 times height at fovea; ocular area 0,52–0,68 width caput, 2,20–2,87 times wider than long, diameter ALE 1,50–1,80 times AME, length PME 1,14–1,25 times PLE; clypeus 0,44–0,55 length OA, margin angled to nearly straight.

Thoracic fovea (Figs 325–329) evenly recurved to sharply angled in centre, width 2,60–3,85 times length, posterior projection long to short, rarely absent. Labium with 15–21, pedipalpal coxa with 16–46 cuspules; coxa II with 32–64, III with 26–57 thorns (Fig. 330). Sternal sigilla 0,14–0,17 width sternum, broad to narrow oval, length 1,40–3,00 times width. Patella IV with 15–30 proximal spinules; metatarsus IV apical comb of 3–4 setae; tibia I with 4–6, metatarsus I with 5–6 pairs of ventrolateral spines. STC I with 1–3 basal teeth. Spermatheca (Figs 128–129) length 7,20–9,5 times diameter, base width 0,81–0,91 spermatheca length.

Male: Unknown.

Natural history: A rupicolous, nest-building species. The type series was taken ‘from nests found under the shelter of rocks and large stones’ (Hewitt 1914b:14).

Distribution (Map 4): Eastern Cape Province, South Africa.

Material examined: SOUTH AFRICA: *Cape*: Grahamstown, 9 ♀ (lectotype, 8 paralectotypes), 19.x.1913, J. Hewitt (AM), 4 ♀ (AM), ♀ (NM), Botanical Garden, ‘found on undersides of stones in moss’, ix.1918, G. van Dam, 20 ♀ (TM), ♀ (MCZ), ♀, 25.iii.1917 (AM); Uitenhage, 10 ♀, F. Cruden (AM); Redhouse, ♀, iv.1913, J. Patterson (AM); Craigie Burn, Somerset East, ♀ (AM).

#### *Moggridgea socotra* sp. n.

Figs 78, 332–338; Map 1

Etymology: A noun in apposition from the type locality.

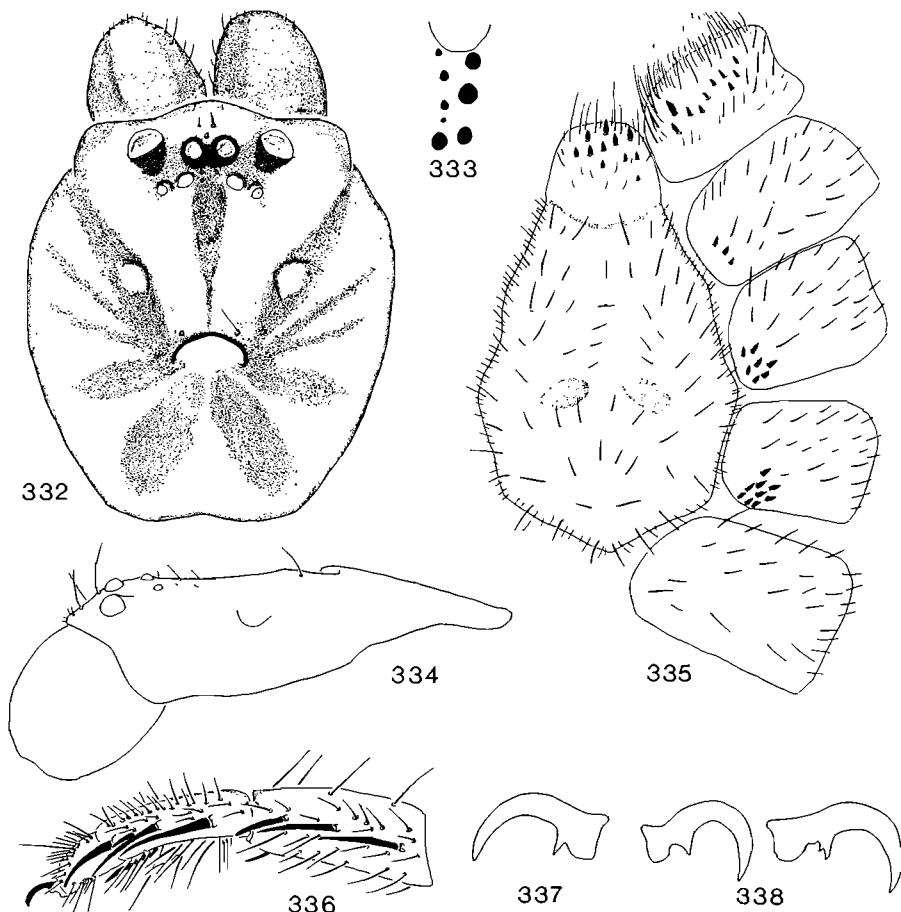
Note: Pocock (1903:352) noted the presence of *Moggridgea* in Socotra but did not describe the species.

Diagnosis: ♀ caput with pair of long setae anterior to thoracic fovea (Fig. 332); sternal sigilla central (Fig. 335), distance between less than from sternal margin; diameter ALE greater than 2,2 times AME.

Female (holotype): Total length 8,13. Carapace red-brown, dark radial bands extending from fovea along caput margin, laterally and posteriorly, not reaching margin; caput with dark brown between lateral eyes and forming median longitudinal band, narrowed before fovea; black pigment surrounding each AME and behind ALE. Chelicerae and legs red-brown, unmarked. Venter, coxae, and trochanters pale yellow-brown; abdomen faded, pale yellow-brown.

Carapace (Fig. 332) 3,40 long, 2,93 wide, 0,84 high, height at fovea 0,295 carapace width; glabrous; lateral pits small. Caput 0,75 width carapace, gently sloping (Fig. 334), height at OA 1,115 times height at fovea; pair of long setae anterior to thoracic fovea, pair between PME, and 4 large and 5 small setae on clypeus; clypeus 0,44 length OA, margin curved. Thoracic fovea 0,23 width carapace, twice as wide as long, evenly recurved, posterior projection absent.

Ocular area 0,61 width caput, 2,22 times wide as long; AER 1,29 wide, nearly straight, 1,33 times PER width, ALE large, diameter 2,50 times AME; PER 0,97 wide, recurved, PME length 1,33 times PLE; OA 0,58 long. Ratio of eyes: AM:AL:PM:PL, 1,33:3,33:1,33:1; PME oval. Distances between eyes: AM–AL 0,26, AM–AM 0,13, AM–PM 0,13, AL–PL 0,27, PM–PM 0,29, PM–PL 0,10.



Figs 332-338. *Moggridgea socotra* sp. n., holotype female. 332. Carapace, dorsal. 333. Cheliceral teeth. 334. Carapace, lateral. 335. Venter. 336. Tibia-tarsus I, anterolateral. 337. STC I, anterolateral. 338. STC IV.

Ocular quadrangle 1,23 times wider than long, narrowed anteriorly, posterior 1,28 times anterior.

Sternum (Fig. 335) 2,06 long, 1,68 wide, margin slightly sinuate between coxae, setose; sternal sigilla oval, length 1,8 times width, 0,21 sternen width, central, distance between 0,5 distance to margin. Labium 0,645 long, 0,68 wide, apex bluntly curved, with 11 pointed cuspules. Pedipalpal coxa 0,97 long, 0,74 wide, rectangular, with 10 pointed cuspules in narrow central band. Chelicera 0,67 long, promargin of fang furrow (Fig. 333) with 3 large teeth, retromargin with 4 small and 1 large teeth.

Coxa I with 3, II 7-8, III 9 thorns in basal groups (Fig. 335); coxae, trochanters, and legs sparsely setose. Femur I with 1, II with 11-13 stout ventral setae; patella III with narrow anterolateral band of stout setae, apical spine present; tibia III with strong basal depression equal to 0,15 length segment; patella IV with narrow anterolateral band of slender setae; metatarsus IV preening comb of 3 setae.

Spination (spines long, slender, curved): palpus, tibia r1, tarsus v11; leg I (Fig. 336), tibia v21212, metatarsus v22212; leg II, tibia v2122, metatarsus v2122; leg III, patella a1 (apical); tarsi without spinules. Basal teeth of superior tarsal claws: I (Fig. 337)–III 1, leg IV (Fig. 338) 1–2. Leg measurements:

	I	II	III	IV	Palpus
Femur	2,33	1,87	1,67	2,40	1,40
Patella	1,33	1,20	1,07	1,40	0,67
Tibia	1,13	1,00	1,00	1,60	0,67
Metatarsus	1,13	1,07	0,93	1,47	—
Tarsus	0,67	0,63	0,80	1,00	0,80
Total	6,59	5,77	5,47	7,87	3,54

Abdomen 4,67 long, 4,07 wide. Spermathecae (Fig. 78) widely spaced, base width 1,15 times length, slightly sinuous, cylindrical, slender, length 5 times diameter; pores sparse, occurring in distal chamber; sclerotised band from distal chamber to base.

Male: Unknown.

Distribution (Map 1): Known only from the type locality of Socotra in the Arabian Sea.

Material examined: YEMEN P.D.R.: Socotra Island, ♀ (holotype, 81.106), 1880, I. Balfour (BMNH).

### **Moggridgea tanypalpa sp. n.**

Figs 339–349; Map 4

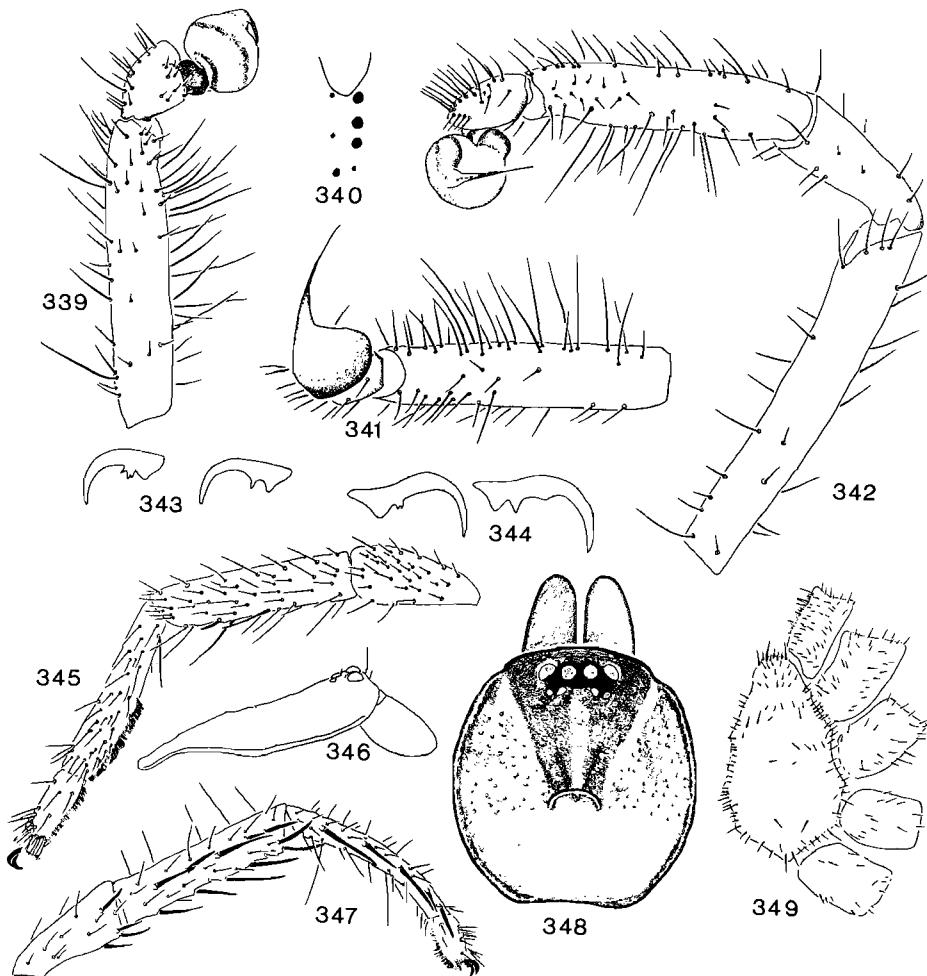
Etymology: Gr. *tany-*, long, referring to the elongate palpi.

Diagnosis: ♂ palpus elongate (Fig. 342), femur length 0,95 width carapace; femora without ventral carinae; caput low, flat (Fig. 346); coxae without thorns, labium and pedipalpal coxa without cuspules (Fig. 349).

Male (holotype): Total length 7,87. Carapace red-brown, dusky along lateral margin; ocular area with black pigment surrounding AME and between ALE and PER. Chelicerae, venter, palpus, and legs yellow-brown, unmarked. Abdomen dark purple-grey on dorsum and sides, paler on venter, yellow-white over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 348) 3,27 long, 3,00 wide, 0,77 high, low, height at fovea 0,27 width carapace; smooth to weakly rugose; glabrous; lateral pit very shallow, indistinct. Caput 0,67 width carapace, margin indistinct, low, flat (Fig. 346), height at OA 1,04 times height at fovea; smooth; median row of short setae behind PER, 1 pair between PME, 3 setae on clypeus; clypeus broad, 0,6 length OA, weakly striate, margin broadly curved. Thoracic fovea small, 0,2 width carapace, evenly recurved, width 3,4 times length, with short posterior projection.

Ocular area narrow, 0,55 width caput, 2,2 times wider than long; AER 1,06 wide, straight, 1,22 times width PER, diameter ALE 1,6 times AME; PER 0,87 wide, straight, length PME 1,43 times PLE; OA 0,48 long. Ratio of eyes: AM:AL:PM:PL, 1,43:2,28:1,43:1; PME oval. Distances between eyes: AM-AL 0,08, AM-AM 0,1, AM-PM 0,1, AL-PL 0,13, PM-PM 0,29, PM-PL 0,03. Ocular quadrangle 1,46 times wider than long, narrowed anteriorly, posterior 1,36 times anterior.



Figs 339–349. *Moggridgea tanypalpa* sp. n., holotype male. 339, 341–342. Left palpus. 339. Tibia-tarsus, anterolateral. 340. Cheliceral teeth. 341. Tibia-tarsus, ventral. 342. Femur-tarsus, retrolateral. 343. STC I. 344. STC IV. 345. Patella-tarsus IV, anterolateral. 346. Carapace, lateral. 347. Patella-tarsus I, anterolateral. 348. Carapace, dorsal. 349. Venter.

Sternum (Fig. 349) 2,00 long, 1,52 wide, margin weakly sinuate between coxae, sparsely setose; sigilla narrow oval, length 2,86 times width, length 0,22 sternum width, lateral, distance between 1,69 times distance to margin. Labium 0,55 long, 0,61 wide, apex evenly rounded, without cuspules. Pedipalpal coxa 1,13 long, 0,645 wide, trapezoidal, weakly produced proximally, apical angle developed, without cuspules. Chelicera 0,87 long, promargin of fang furrow with 3 teeth, 1 denticle, retromargin with 1 tooth, 2 denticles (Fig. 340); fang long, slender, subbasally narrowed.

Femur I 1,13, tibia I 0,78, femur IV 1,09, tibia IV 0,80 times carapace width. Coxae without thorns; coxae, trochanters, and legs sparsely setose, tibiae-tarsi I, II with sparse long hairs. Femora I, II convex, without carinae; patella III with

narrow anterolateral band of setae, apical spine present; patella IV with anterolateral band of fine setae; metatarsus IV slightly bent in profile, slightly expanded laterally near apex, apical comb indistinct (Fig. 345). Scopulae: divided beneath tarsus I (Fig. 347); entire beneath tarsi II, III; dense, entire beneath tarsus and distal half of metatarsus IV (Fig. 345). Spination: leg I (Fig. 347) femur d111, patella a2v21, tibia a2111v212122r111; leg II, femur d1111v11, patella a2v2, tibia a2111v22211221, metatarsus v22121; leg III, femur d11a11r11, patella a1 (apical), tibia v311, metatarsus a1r2 (apical); leg IV, femur d11, tibia v2 (apical), metatarsus r2 (apical). Basal teeth of superior tarsal claws: leg I (Fig. 343) 1–2, II–IV (Fig. 344) 1. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,40	2,87	2,07	3,27	2,90
Patella	1,67	1,47	1,20	1,60	1,29
Tibia	2,33	2,00	1,47	2,40	2,35
Metatarsus	2,40	2,07	1,60	2,27	—
Tarsus	0,87	0,80	0,93	1,33	0,68
Total	10,67	9,21	7,27	10,87	7,22

Palpus (Figs 339, 341–342) with femur 0,96, tibia 0,78 width carapace; femur 4,28, tibia 3,48 times length tarsus; tibia cylindrical, height 0,21 length; bulb width 0,9 tarsus length, embolus length 1,84 times bulb width.

Abdomen 3,87 long, 2,53 wide; dorsum and sides with rows of attenuate setae.

Female: Unknown.

Distribution (Map 4): Known only from the type locality in the northern Namib desert.

Material examined: ANGOLA: 6 mi. NE Mocâmedes, ♂ (holotype 15789), 120 m, 23.v.1958, E. Ross & R. Leech (CAS).

#### **Moggridgea teresae** sp. n.

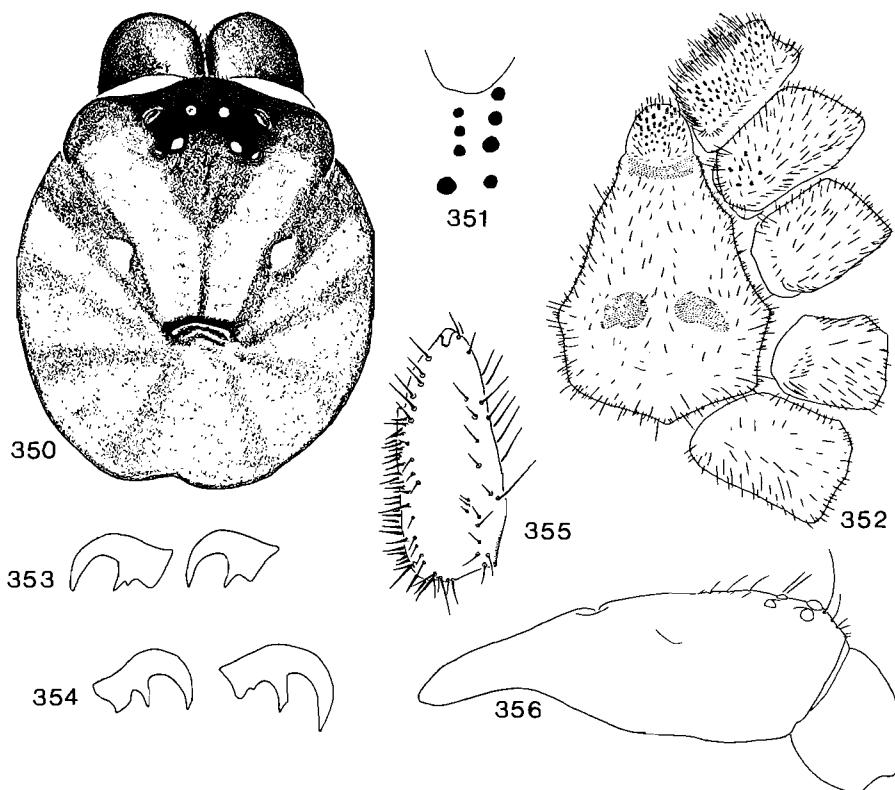
Figs 1–4, 10–11, 162, 350–370; Map 5

Etymology: Named for my wife Teresa Meikle Griswold, discoverer of this species and observer and collector of many interesting and little-known Migidae.

Diagnosis: ♀ (Fig. 1) recognised by the presence of cuspules on coxa I (Figs 357–358) and ventral bands of short, thornlike setae (Figs 10–11, 355) on femora I and II. Males lack coxal thorns, have minute cuspules on labium and pedipalpal coxa (Fig. 366), femur I non-carinate ventrally, and have the ventral scopulae on legs I (Fig. 364) and II on the tarsus and apex of metatarsus.

Female (holotype): Total length 11,47. Carapace and chelicerae olive-brown, dark grey along margin, brown forming radial pattern from fovea along caput margin, laterally and posteriorly. Caput with dark median band behind PER, narrowed before fovea, clypeus and ocular area dark; black pigment in ocular area surrounding AME and between ALE and PER. Sternum, labium, and coxae yellow-brown. Legs and palpi olive-brown, pale ventrally on femora, dorsa of patella III, tibiae-tarsi I–IV dusky. Abdomen dark grey, grey over book-lungs and pale grey anterior to epigastric furrow.

Carapace (Fig. 350) 5,07 long, 4,53 wide, 1,10 high, height at fovea 0,25 width



Figs 350–356. *Moggridgea teresae* sp. n., female. 350–352, 355–356. Holotype. 353–354. Paratype.  
350. Carapace, dorsal. 351. Cheliceral teeth. 352. Venter. 353. STC I. 354. STC IV. 355.  
Femur I, retrolateral. 356. Carapace, lateral.

carapace; glabrous; lateral pits small, deep. Caput 0,75 width carapace, convex (Fig. 356), height at OA 1,35 times height at fovea; median row of 3 large and scattered small setae behind PER, 2 large and 4 small setae between PME, 1 large and 14 small setae on clypeus; clypeus broad, 0,52 length OA, margin curved in centre. Thoracic fovea small, width 0,19 carapace, weakly recurved, width 4,89 times length, posterior projection absent.

Ocular area narrow, 0,49 width caput, 2,17 times wider than long; AER 1,61 long, slightly recurved, width 1,11 times PER, diameter ALE 2,0 times AME; PER 1,45 wide, recurved, length PME 0,88 PLE; OA 0,74 long. Ratio of eyes: AM:AL:PM:PL, 1:2,0:1,55:1,78; PME oval, with shiny tapetum. Distances between eyes: AM-AL 0,29, AM-AM 0,26, AM-PM 0,29, AL-PL 0,29, PM-PM 0,55, PM-PL 0,10. Ocular quadrangle 1,26 times wider than long, narrowed anteriorly, posterior 1,61 times anterior.

Sternum (Fig. 352) 3,00 long, 2,65 wide, margin sinuate between posterior coxae, setose, sigilla irregularly pear-shaped, length 1,65 times width, large, length 0,24 width sternum, central, distance between 0,61 distance from margin. Labium 0,84 long, 0,87 wide, apex rounded, with 35 blunt cuspules. Pedipalpal coxa 1,32 long, 0,97 wide, rectangular, apex weakly produced, with 48 blunt cuspules in

broad median band. Chelicera 0,80 long, promargin of fang furrow (Fig. 351) with 4 teeth, retromargin with 3 small and 1 large teeth; fang stout, blunt.

Coxa I with basal group of 7–8 small cuspules (Fig. 352); coxae, trochanters, and legs setose. Femora I (Fig. 10), II (Fig. 355) with ventral bands of 40–50 short, thornlike setae; patella III with anterolateral band of spinelike setae, apical spine absent; tibia III with deep basal depression equal to 0,18 length segment; patella IV with narrow anterolateral band of slender setae; metatarsus IV apical comb of 4 setae. Spination (spines relatively short, stout): palpus, tibia a1r1, tarsus v22; leg I, tibia v2221–22–21, metatarsus v221–221–21; leg II, tibia v211221–222, metatarsus v222–21–221–2; leg IV, tibia a2 (apical), metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I (Fig. 353), II 1–2, III 1, IV (Fig. 354) 1–2. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,33	3,07	2,47	3,67	1,93
Patella	2,00	2,00	1,67	2,00	1,13
Tibia	2,00	1,93	1,67	2,47	1,20
Metatarsus	1,73	1,60	1,40	2,20	—
Tarsus	0,93	1,07	1,27	1,53	1,13
Total	9,99	9,67	8,48	11,87	5,39

Abdomen 6,27 long, 4,47 wide. Spermathecae (Fig. 162) stout, length 3,21 times diameter, cylindrical, mesally inclined, base broad, width 1,87 times spermatheca length; pores numerous, may occur in distal chamber, sclerotised band extends from distal chamber to base.

Variation: Total length 8,40–13,87; carapace 3,67–5,87 long, 3,33–5,33 wide, 0,90–1,16 high; caput 0,72–0,76 width carapace, height at OA 1,28–1,41 times height at fovea; ocular area 0,47–0,49 width caput, 2,12–2,43 times wider than long; diameter ALE 1,4–2,28 times AME, length PME 0,83–1,33 times PLE. Clypeal margin straight to projecting in centre. Thoracic fovea 3,25–4,8 times wider than long, evenly curved to straight in centre with sharply recurved sides, posterior projection rarely present. Sternal sigilla length 1,6–1,9 times width, 0,2–0,28 width sternum, distance between 0,64–1,4 times distance from margin. Labium with 20–37, pedipalpal coxa with 32–48, coxa I with 3–8 cuspules. Tibia and metatarsus I with 5–6 pairs of ventrolateral spines. Spermatheca length 2,47–3,38 times diameter, base width 1,22–1,9 times length.



Figs 357–359. *Moggridgea teresae* sp. n., paratype female. 357. Coxa I, with cuspules, 26 ×. 358. Cuspule on coxa I, 265 ×. 359. Cuspule on pedipalpal coxa, 382 ×.

**Male (paratype):** Total length 6,27. Carapace olivaceous red-brown, black pigment behind ALE and between PME–PLE; venter yellow-white; palpi and legs olivaceous grey, unmarked; abdomen dark grey, pale over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 360) 2,67 long, 2,60 wide, 0,48 high, low, height at fovea 0,19 width carapace; weakly rugose, nearly smooth posteriorly; glabrous; lateral pits shallow, indistinct. Caput 0,65 width carapace, margin indistinct, convex, sloping steeply to OA (Fig. 369), height at OA 1,47 times height at fovea; weakly rugose behind OA, smooth posteriorly; 2 large, 2 small setae between PME, 1 large, 4 small setae on clypeus; clypeus steep, 0,42 length OA, smooth, margin straight. Thoracic fovea small, 0,18 width carapace, weakly recurved, width 4,83 times length, posterior projection absent.

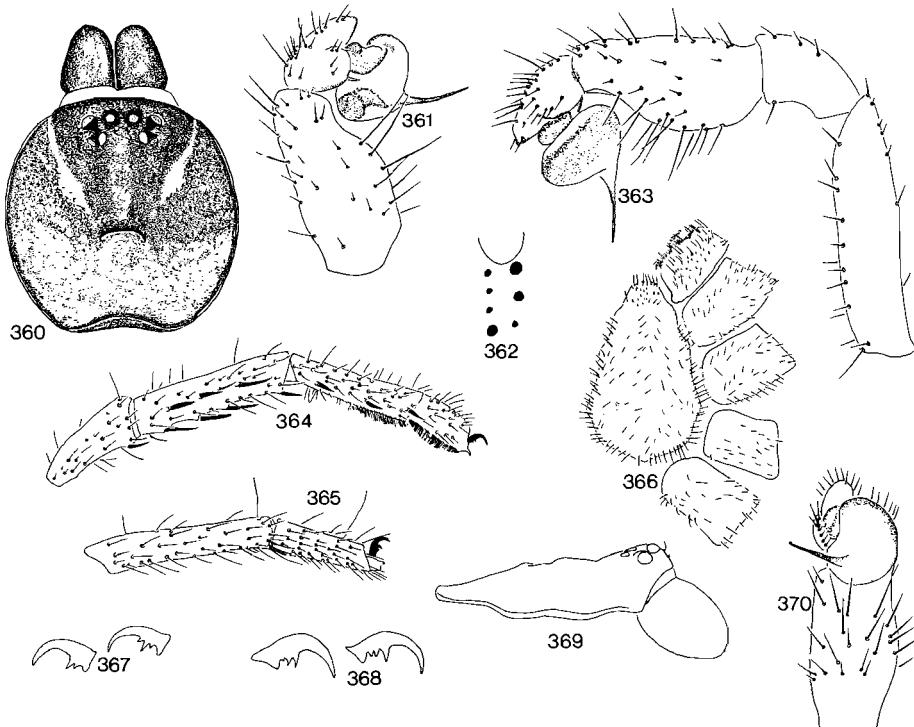
Ocular area 0,60 width caput, 2,42 times wider than long; AER 0,935 wide, slightly recurved, 1,16 times width PER, diameter ALE 1,75 times AME; PER 0,81 wide, straight, length PME 1,25 times PLE; OA 0,39 long. Ratio of eyes AM:AL:PM:PL, 1:1,75:1,25:1, PME oval. Distances between eyes: AM–AL 0,13, AM–AM 0,13, AM–PM 0,11, AL–PL 0,13, PM–PM 0,32, PM–PL 0,03. Ocular quadrangle 1,5 times wider than long, narrowed anteriorly, posterior 1,44 times anterior.

Sternum (Fig. 366) 1,58 long, 1,29 wide, margin weakly sinuate between coxae, sparsely setose; sigilla irregularly oval, length 1,5 times width, 0,225 width sternum, lateral, distance between 1,43 times distance from margin. Labium 0,42 long, 0,45 wide, apex rounded, with 19 small, slender cuspules. Pedipalpal coxa 0,87 long, 0,48 wide, trapezoidal, weakly produced proximally, apex blunt, with 12 small, slender cuspules. Chelicera 0,67 long, promargin of fang furrow with 2 large, 1 small teeth, retromargin with 3 small, 1 large teeth (Fig. 362); fang slender, slightly bent at base.

Femur I 1,0, tibia I 0,69, femur IV 0,95, tibia IV 0,77 times carapace width. Coxae without thorns; coxae, trochanters, and legs sparsely setose. Femora I, II convex ventrally, non-carinate; patellae III, IV with scattered anterolateral setae; metatarsus IV (Fig. 365) straight, cylindrical, apical comb of 3 setae. Scopulae: dense, entire beneath tarsus and distal half of metatarsus I (Fig. 364) and II; weak beneath tarsus III; absent from leg IV (Fig. 365). Spination: leg I (Fig. 364), patella v2 (apical), tibia a1111v21221, metatarsus v222; leg II, patella v2 (apical), tibia a1111v1312, metatarsus v1; leg III, metatarsus v2 (apical); leg IV, metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I (Fig. 367) 2–3, II–III 2, IV (Fig. 368) 2–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	2,60	2,40	1,80	2,47	1,45
Patella	1,33	1,27	0,93	1,27	0,68
Tibia	1,80	1,67	1,33	2,00	1,10
Metatarsus	1,67	1,47	1,20	1,73	—
Tarsus	0,80	0,80	0,93	1,20	0,58
Total	8,20	7,61	6,19	8,67	3,81

Palpus (Figs 361, 363, 370) with femur 0,55, tibia 0,41 width carapace; femur 2,50, tibia 1,89 times length tarsus; tibia swollen, height 0,515 length; bulb width equal to tarsus length, embolus length 1,09 times bulb width.



Figs 360–370. *Moggridgea teresae* sp. n., paratype male. 361, 363, 370. Left palpus. 360. Carapace, dorsal. 361. Tibia-tarsus, anterolateral. 362. Cheliceral teeth. 363. Femur-tarsus, retro-lateral. 364. Patella-tarsus I, anterolateral. 365. Metatarsus-tarsus IV, retro-lateral. 366. Venter. 367. STC I. 368. STC IV. 369. Carapace, lateral. 370. Tibia-tarsus, ventral.

Abdomen 2,67 long, 2,27 wide; dorsum and sides with rows of blunt and attenuate setae.

**Natural history:** Arboreal. Collected from oval to pear-shaped nests (Fig. 3) with a single, oval door in crevices in the bark of fallen logs (Fig. 2). Nests are thoroughly camouflaged with bark and soil. Found only in wet, ravine forests. Locally abundant, a single 3 m × 0,5 m log had 8 nests. Collections in January included mature females with 11, 14, 19, 23, 41, and 59 young in the nest, and a mature male in a nest.

**Distribution (Map 5):** Known only from the slopes of Table Mountain, Cape Province, South Africa.

**Material examined:** SOUTH AFRICA: *Cape*: Table Mountain, Skeleton Gorge forest, Kirstenbosch Botanical Gardens (33°59'S:18°26'E), el. 700 ft, 'nests on trunks of fallen *Virgilia oroboides*', 7. i.1985, T. Meikle Griswold (holotype ♀ with 41 young, NM type 3336, paratype ♂, NM, 14 paratype ♀, 6 in NM, 1 each USNM, NCP, BMNH, MRAC, AMNH, SMF, MNHN, and CAS); Fernwood, Table Mountain, ♀ (SAM); Bat's Cave, Table Mountain, 1 juv., 'from humus under *Podocarpus*', xii.1960, N. Leleup (MRAC).

*Moggridgea terrestris* Hewitt

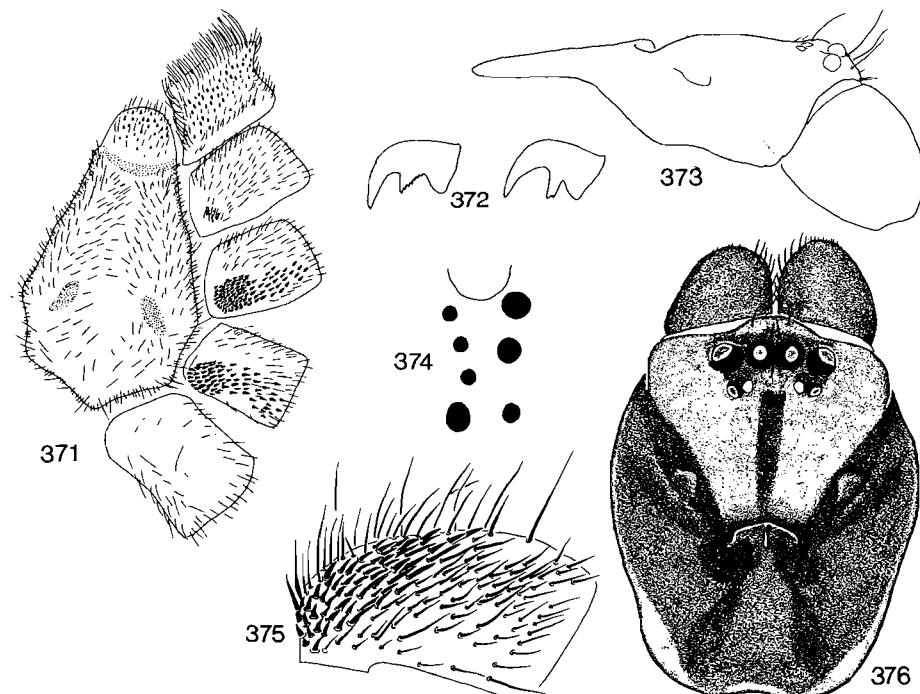
Figs 126–127, 371–376; Map 2

*Moggridgea terrestris* Hewitt, 1914b:13 (type ♀ Aicedale, South Africa, AM). Roewer, 1942:192. Bonnet, 1957:2973.

**Diagnosis:** ♀ with coxae II, III each with more than 50 thorns (Fig. 371) usually scattered for length of segment; ocular area narrow, width less than 0,57 width caput (Fig. 376), PER nearly straight; patella IV with at least 20 basal anterolateral spinules (Fig. 375); dorsum of abdomen uniformly marked. Readily distinguished in sympatry from *rupicola*.

**Female (Type):** Total length 14,67. Carapace red-brown, darker around fovea with bands radiating along caput margin, laterally, and obliquely posteriad; margin yellow-white, broadened posterolaterally. Caput yellow-white, dusky red-brown between eyes and on narrow median band from behind PER to fovea; black pigment surrounding AME, behind ALE, anterior to PME–PLE. Chelicerae, venter, and palpi yellow-brown, unmarked. Legs pale yellow-brown, patellae I–III darker laterally, IV with basal anterolateral dark brown mark. Abdomen uniformly pale grey.

Carapace (Fig. 376) 4,73 long, 3,80 wide, 0,68 high, low, height at fovea 0,18 width carapace; glabrous; lateral pits small, deep. Caput broad, 0,81 width carapace, convex (Fig. 373), inclined, height at OA 1,285 times height at fovea; 2



Figs 371–376. *Moggridgea terrestris* Hewitt, female. 371, 373, 376. Type. 372, 374–375. Aicedale. 371. Venter. 372. STC I. 373. Carapace, lateral. 374. Cheliceral teeth. 375. Patella IV, anterolateral. 376. Carapace, dorsal.

small setae behind PER, 2 large, 4 small between PME, 3 large, 7 small setae on clypeus; clypeus 0,52 length OA, projecting in centre. Thoracic fovea broad, 0,26 width carapace, slightly angled in centre, width 3,0 times length, posterior projection developed.

Ocular area narrow, 0,52 width caput, 2,40 times wider than long; AER 1,55 wide, straight, 1,30 times width PER, diameter ALE 1,67 times AME; PER 1,19 wide, nearly straight, length PME 0,83 PLE; OA 0,68 long. Ratio of eyes: AM:AL:PM:PL, 1,2:2,0:1,2:1; PME nearly round. Distances between eyes: AM-AL 0,19, AM-AM 0,13, AM-PM 0,23, AL-PL 0,32, PM-PM 0,48, PM-PL 0,065. Ocular quadrangle 1,20 times wider than long, narrowed anteriorly, posterior 1,26 times anterior.

Sternum 3,10 long, 2,29 wide, weakly sinuate between coxae, setose; sigilla narrow oval, length 2,50 times width, 0,20 width sternum, distance between 2,27 times distance from margin. Labium 0,71 long, 0,87 wide, apex blunt, with 27 small, slender cuspules. Pedipalpal coxa 1,45 long, 1,13 wide, trapezoidal, apex acute, with 47 slender cuspules in broad, median band. Chelicera 0,93 long, promargin of fang furrow (Fig. 374) with 3 teeth, retromargin with 4.

Coxa II with 92, III with 88 slender thorns, concentrated basally but spread along length of segment; coxae, trochanters, and legs setose. Femur II with 23 stout setae in 2 ventral rows; patella III with broad anterolateral band of stout, spinelike setae; tibia III with deep basal depression equal to 0,18 length segment; patella IV with broad anterolateral setal band grading into 20–25 spinules at base; metatarsus IV with apical comb of 3 setae. Spination: palpus, tibia v1, tarsus a1v12; leg I, tibia v2222211, metatarsus v212–2212–22; leg II, tibia v22221, metatarsus v222112; leg IV, metatarsus a1 (apical); ventral spinules on tarsus III. Basal teeth of superior tarsal claws: leg I (Fig. 372), II 1 to serrate, III, IV 1–2. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,00	2,73	2,27	2,87	1,87
Patella	1,87	1,73	1,60	2,00	1,00
Tibia	1,60	1,47	1,40	2,07	1,07
Metatarsus	1,73	1,60	1,27	2,13	—
Tarsus	0,67	0,73	1,07	1,40	1,20
Total	8,87	8,26	7,61	10,47	5,14

Abdomen 8,93 long, 6,27 wide. Spermathecae (Alicedale: Figs 126–127) slender, cylindrical, sinuate, length 6,0 times diameter; base narrow, width 1,15 times spermatheca length; pores numerous, present or absent in distal chamber, sclerotised band extending from distal chamber nearly to base.

Variation: Total length 12,87–14,67; carapace 4,73–5,33 long, 3,80–4,27 wide, 0,90–1,13 high. Caput 0,78–0,82 width carapace, height at fovea 0,18–0,27 width carapace, height at OA 1,285–1,86 times height at fovea. Ocular area 0,52–0,535 width caput, diameter ALE 1,67–2,0 times AME, length PME 0,83–1,0 PLE. Thoracic fovea evenly recurved to angled in centre, width 3,00–4,40 times length. Coxa II with 71–106, III with 61–94 thorns (Fig. 371); patella IV (Fig. 375) with 20–35 basal spinules; apical comb on metatarsus IV of 3–4 setae.

Male: Unknown.

Natural history: A terrestrial, burrowing species. Cruden (1916:609) described the

tubular burrows as being as much as 9 cm deep, about 8 mm in diameter, widened to 1 cm at  $\frac{1}{3}$  to  $\frac{2}{3}$  of its length, lined with a thin layer of silk, and with a thick, D-shaped door lying slightly above the substrate. Burrows were found singly on 'bare flats under the shade of trees and bushes'.

**Distribution (Map 2):** Known only from the type locality in the arid eastern Cape Province of South Africa.

**Material examined:** SOUTH AFRICA: *Cape*: Aicedale, ♀ (type), x.1913, F. Cruden, 13 ♀ (AM).

### *Moggridgea terricola* Simon

Figs 297–300, 377–393; Map 7

*Moggridgea terricola* Simon, 1903b:22 (lectotype ♀, 15537, and 3 paralectotype ♀, here designated, Stellenbosch, South Africa, MNHN). Tucker, 1917:82, fig. 1. Roewer, 1942:192. Bonnet, 1957:2973.

*Caedmon affinis* O. P. Cambridge, 1903:145 (type ♂, 5960, Cape Town, South Africa, UMO). Roewer, 1942:193. *Syn. n.*

*Poecilomigas affinis*, Bonnet, 1956:919; 1958, 3737.

**Synonymy:** The type of *Caedmon affinis* agrees in detail with a male collected in association with females of *M. terricola* at Cape Town. The presence of slender thorns at the base of coxa III, and the fact that the type of *C. affinis* was dug from a terrestrial trap-door burrow support the proposed synonymy.

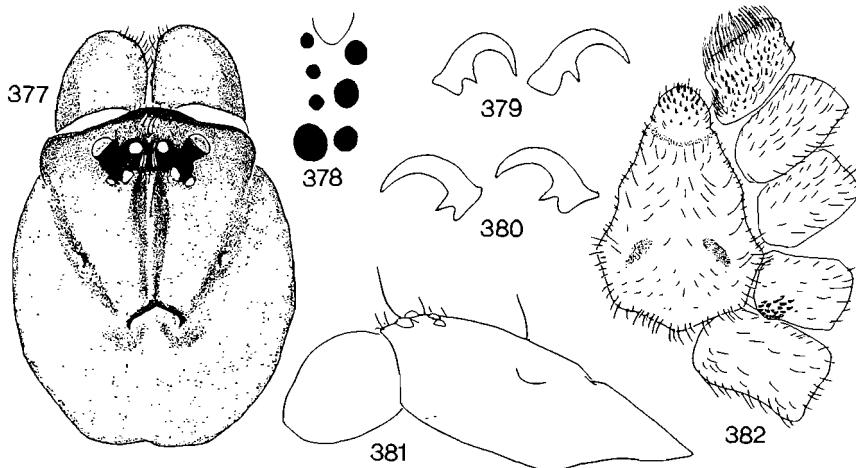
**Diagnosis:** ♀ with basal patch of thorns on coxa III (Fig. 382), spermathecae straight, stout (Figs 297–300), distance between the sternal sigilla greater than their length, and the basal tooth of STC I simple or bifid (Fig. 380). Males have a small patch of slender thorns on coxa III (Fig. 387), PME larger than PLE (Fig. 383), and scopulae beneath tarsi I–IV.

**Female (lectotype):** Total length 11,33. Carapace, chelicerae, venter, and legs yellow-brown; carapace darker around fovea and along margin of caput; caput with faint, double median band between OA and fovea, ocular area brown between eyes, apex of clypeus dark grey; black pigment surrounding AME, behind ALE, anterior to PME and PLE. Abdomen dark grey on dorsum and sides, paler ventrally, yellow-white over book-lungs and anterior to epigastric furrow.

Carapace (Fig. 377) 4,27 long, 3,53 wide, 0,87 high, height at fovea 0,21 width carapace; glabrous, with short setae along lateral margin; lateral pits small, shallow. Caput 0,77 width carapace, convex, height at OA 1,70 times height at fovea; median row of 2 long setae behind PER, 2 long and 2 small between PME, 1 large, 12 small setae on clypeus; clypeus broad, 0,6 length OA, produced in centre. Thoracic fovea 0,21 width carapace, angled in centre, width 2,35 times length, posterior projection absent.

Ocular area 0,57 width caput, 2,35 times wider than long; AER 4,27 wide, straight, 1,34 times width PER, diameter ALE 2,0 times AME; PER 1,13 wide, slightly recurved, length PME 1,11 times PLE; OA 0,645 long. Ratio of eyes: AM:AL:PM:PL, 1,11:2,22:1,11:1; PME broadly oval. Distances between eyes: AM-AL 0,23, AM-AM 0,11, AM-PM 0,19, AL-PL 0,29, PM-PM, 0,48, PM-PL 0,065. Ocular quadrangle 1,41 times wider than long, narrowed anteriorly, posterior 1,5 times anterior.

Sternum (Fig. 382) 2,42 long, 2,13 wide, margin serrate between coxae, setose; sigilla oval to pear-shaped, length 2,0 times width, large, length 0,32 width sternum, distance between 1,85 times distance from margin. Labium 0,71 long, 0,81 wide, apex rounded, with 25 slender cuspules. Pedipalpal coxa 1,29 long, 0,84 wide, trapezoidal, apex weakly produced, with 43 slender cuspules in broad median band. Chelicera 1,07 long, promargin of fang furrow (Fig. 378) with 3 teeth, retromargin with 3 small, 1 large tooth.



Figs 377–382. *Moggridgea terricola* Simon, female. 377–378, 382. Lectotype. 379–381. George. 377. Carapace, dorsal. 378. Cheliceral teeth. 379. STC IV. 380. STC I. 381. Carapace, lateral. 382. Venter.

Coxa III with basal patch of 29 thorns (Fig. 382); coxae, trochanters, and legs setose. Femur I with ventral row of slender setae, II with 14–17 stout setae in 2 ventral rows; patella III with narrow anterolateral row of stout setae, apical spine present; tibia III with deep basal depression equal to 0,16 length segment, apex with dorsal spinules; patella IV with broad anterolateral band of stout setae grading into basal spinules; metatarsus IV with apical comb of 4 setae. Spination: palpus, tibia v2, tarsus v212; leg I, tibia v2211–21–222, metatarsus v2221–222–22; leg II, tibia v212–2212, metatarsus v222–2121–2; leg III, patella a1 (apical); leg IV, tibia a11, metatarsus a111; tarsus III with ventral spinules. Basal teeth of superior tarsal claws: leg I (Fig. 380), II 2, leg III, IV (Fig. 379) 1. Leg measurements:

	I	II	III	IV	Palpus
Femur	2,80	2,53	2,13	2,80	1,80
Patella	1,73	1,60	1,40	1,87	1,00
Tibia	1,73	1,53	1,20	2,00	1,07
Metatarsus	1,53	1,47	1,33	2,07	—
Tarsus	0,87	0,93	1,07	1,33	1,07
Total	8,66	8,06	7,13	10,07	4,94

Abdomen 6,80 long, 4,67 wide. Spermathecae (paralectotype, Fig. 298) stout, length 3,125 times diameter, slightly expanded distally, straight, inclined mesad, base width 1,4 times spermatheca width; pores few, absent from distal chamber, sclerotised band extending from distal chamber over area of pores.

Variation: Total length 7,66–16,00; carapace 2,90–6,80 long, 2,58–5,07 wide, 0,71–1,97 high. Carapace, chelicerae, and legs yellow-brown to dark brown, medial band on caput narrow, double to broad and single. Caput 0,77–0,82 width carapace, height at fovea 0,25–0,40 width carapace, height at OA 1,31–1,70 times height at fovea (Fig. 381). Ocular area 0,48–0,57 width caput, diameter ALE 2,0–2,125 times AME, PME 0,73–1,37 times PLE. Clypeus 0,5–0,86 length OA, with 7–20 setae. Thoracic fovea 0,16–0,22 width carapace, straight in centre with recurved sides to strongly angled, length 1,6–4,0 times width. Labium with 16–28, pedipalpal coxa with 24–43 cuspules; coxa III with 11–29 thorns. Sternal sigilla 0,22–0,32 width sternum, length 1,12–2,0 times width, distance between 1,0–2,4 times distance from margin. Tibia I with 5–7, metatarsus I with 5–8 pairs of ventrolateral spines. Spermathecae (Figs 297–300) stout to slender, length 3–5 times diameter, base width 0,90–1,40 times spermatheca length, straight to sinuate, pores sparse to dense, present or absent in distal chamber.

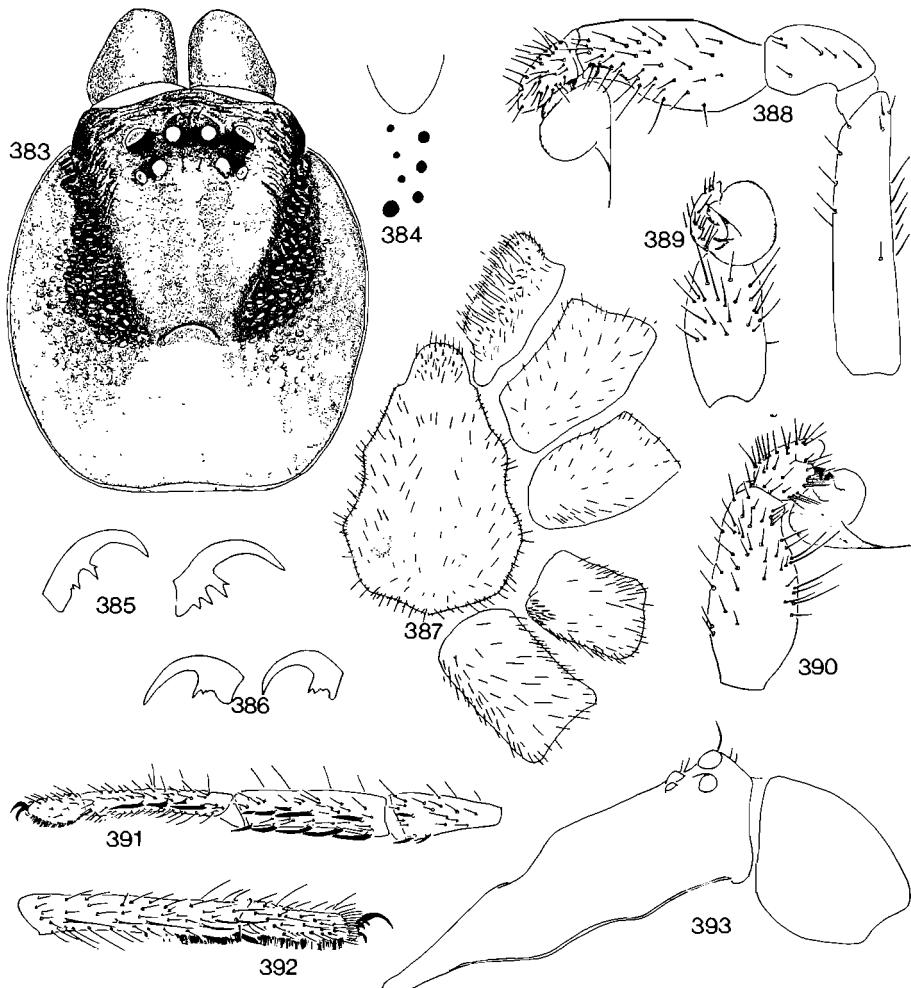
Male (type *Caedmon affinis*): Total length 11,07. Specimen faded. Carapace red-brown, slightly darker along margin of caput, faint median band between PER and fovea; black pigment between AME, and between ALE and PER. Chelicerae, venter, palpi, and legs yellow-brown, unmarked. Abdomen grey on dorsum and sides, venter pale.

Carapace (Fig. 383) 4,07 long, 3,73 wide, 0,81 high, height 0,22 width carapace; strongly punctate-rugose laterad of caput becoming smooth near margin and posteriorly; glabrous; lateral pits absent. Caput 0,64 width carapace, convex, steep anterior to fovea (Fig. 393), height at OA 1,72 times height at fovea, raised, margin weakly demarcated; rugose laterad of ocular area, weakly rugose to smooth posteriorly; 2 setae between PME, 1 large, 2 small setae anterior to AME; clypeus 0,55 length OA, steep, weakly striate, margin curved in centre. Thoracic fovea small, 0,17 width carapace, evenly recurved, width 2,8 times length, posterior projection absent.

Ocular area narrow, 0,57 width caput, 2,05 times wider than long; AER 1,32 wide, straight, 1,11 times width PER, diameter ALE 1,125 times AME; PER 1,19 wide, nearly straight, length PME 1,41 times PLE; OA 0,645 long. Ratio of eyes: AM:AL:PM:PL, 1,6:1,8:1,4:1; PM oval, with tapetum in anterior two-thirds. Distances between eyes: AM–AL 0,16, AM–AM 0,1, AM–PM 0,16, AL–PL 0,23, PM–PM 0,48, PM–PL 0,05. Ocular quadrangle 1,37 times wider than long, narrowed anteriorly, posterior 1,37 times anterior.

Sternum (Fig. 387) 2,10 long, 1,84 wide, margin sinuate between coxae, sparsely setose; sigilla oval to pear-shaped, length 1,38 times width, 0,22 width sternum, lateral, distance between 1,27 times distance from margin. Labium 0,68 long, 0,645 wide, apex rounded, with 19 slender, pointed cuspules. Pedipalpal coxa 1,55 long, 0,77 wide, trapezoidal, strongly produced proximally, apex produced, with 26–30 small, slender cuspules in narrow median band. Chelicera 0,80 long, promargin of fang furrow (Fig. 384) with 3 teeth, retromargin with 3 small, 1 large teeth; fang slender, bent at base.

Femur I 1,03, tibia I 0,68, femur IV 0,975, tibia IV 0,735 times width carapace. Coxa III with basal patch of 17–19 slender thorns (Fig. 387); coxae, trochanters, and legs sparsely setose. Femur I with ventral carina, II convex ventrally; patella III



Figs 383-393. *Moggridgea terricola* Simon, male (type of *Caedmon affinis* Cambridge). 383. Carapace, dorsal. 384. Cheliceral teeth. 385. STC IV. 386. STC I. 387. Venter. 388-390. Left palpus. 388. Femur-tarsus, retrolateral. 389. Tibia-tarsus, ventral. 390. Tibia-tarsus, anterolateral. 391. Patella-tarsus I, anterolateral. 392. Metatarsus-tarsus IV, retrolateral. 393. Carapace, lateral.

with anterolateral band of slender setae, apical spine present; tibia III with shallow basal depression equal to 0.16 length segment; patella IV with broad anterolateral band of slender setae; metatarsus IV (Fig. 392) straight, cylindrical, 3 setae in position of apical comb. Scopulae: dense, divided beneath tarsus I (Fig. 391); dense, weakly divided beneath tarsus II; dense, entire beneath tarsus III; dense; entire beneath tarsus, distal third of metatarsus IV (Fig. 392). Spination: leg I, femur d1, patella v21, tibia v2222121, metatarsus v22222; leg II, femur d1, patella v2, tibia v212112, metatarsus v2122; leg III, patella a1 (apical); leg IV, metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I (Fig. 386) 2-3, II, III 2, IV (Fig. 385) 2-3. Leg measurements:

	I	II	III	IV	Palpus
Femur	3,73	3,33	2,53	3,53	2,53
Patella	1,87	1,73	1,33	1,87	1,00
Tibia	2,47	2,27	1,73	2,67	1,80
Metatarsus	2,53	2,27	1,73	2,60	—
Tarsus	1,06	1,06	1,07	1,33	0,80
Total	11,66	10,66	8,39	12,00	6,13

Palpus (Figs 388–390) with femur 0,68, tibia 0,48 width carapace; femur 3,16, tibia 2,25 times length tarsus; tibia swollen, height 0,44 length; bulb width 1,06 times tarsus length, embolus length 1,06 times bulb width.

Abdomen 5,73 long, 3,60 wide; dorsum and sides with rows of stout, attenuate setae.

Variation: A male from Cape Town is relatively fresh: carapace dark brown to black, chelicerae, legs, and palpi dark brown, dorsum and sides of abdomen dark grey. Very similar to *affinis* type, differing in several details: thoracic fovea with weak posterior projection; sternal sigilla irregularly oval, length 2 times width, distance between 1,9 times distance from margin; tibia I with 4 anterolateral spines. The male specimens described by Tucker (1917:82) were not located at the SAM.

Natural history: A terrestrial, burrowing species. Purcell (1903:71) states that the nests are similar to those of *mordax*, with the trap-door lid raised slightly above the level of the surrounding soil. Barnard (1937:123) states that the spiders construct their trap-door nests in mossy banks. The type of *C. affinis* was 'dug out of a deep tubular hole in the ground with a trap-door cover' (O. P. Cambridge, 1903:146).

Distribution (Map 7): Southwestern Cape Province, South Africa.

Material examined: SOUTH AFRICA: *Cape*: Stellenbosch, 3 ♀ (lectotype, paralectotypes, MNHN); Wellington, 3 ♀ (AM); Swellendam, 2 ♀ (AM); George, ♀, 'indigenous forest patch, very wet', 4.ix.1979, S. Endrödy-Younga (TM); Cape Town, 2 ♀ (MRAC), ♂ 16 ♀ (AM); Signal Hill, Cape Town, ♂ (type of *Caedmon affinis*, UMO), 2 ♀, v.1917, M. Wagner (TM); Orangericht, Cape Town, 8 ♀, 'woodlands, in holes in ground', ♀, Cruden (AM); Cape Peninsula, ♀ (NM).

### **Moggridgea verruculata sp. n.**

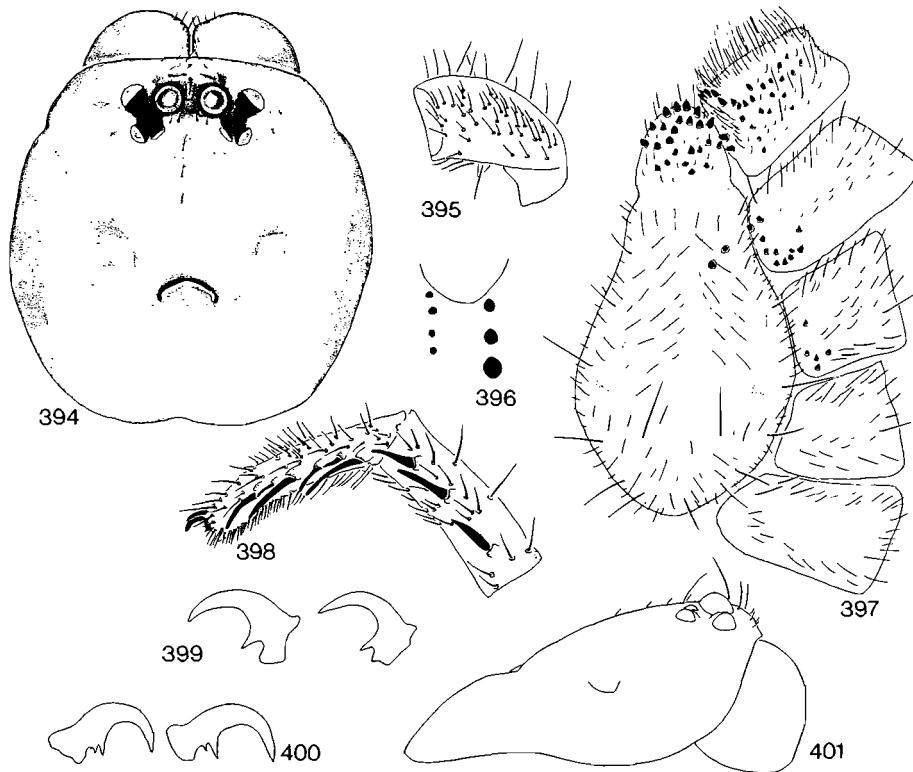
Figs 81, 394–401; Map 2

Etymology: L. *verrucula*, wart, referring to the blunt cuspules scattered across the sternum and coxa.

Diagnosis: ♀ sternum and coxae I, II with blunt cuspules (Fig. 397); sigilla lateral, distance between 6,7 times distance from margin.

Female (holotype): Total length 7,33. Carapace, chelicerae, and legs red-brown, venter, coxae, and trochanters yellow-brown; black pigment posterior of ALE, anterior of PME and PLE; faint, dusky longitudinal bands on dorsa of femora III, IV. Abdomen dark grey, pale anterior to epigastric furrow and over book-lungs (pale area on dorsum may be artifact of preservation).

Carapace (Fig. 394) 3,73 long, 3,67 wide, 0,935 high, low, height at fovea 0,26 carapace width; glabrous; lateral pits broad, shallow. Caput very broad, 0,8 width of carapace, sloping (Fig. 401), height at OA 1,62 height at fovea; median row of 3



Figs 394–401. *Moggridgea verruculata* sp. n., holotype female. 394. Carapace, dorsal. 395. Patella IV, anterolateral. 396. Cheliceral teeth. 397. Venter. 398. Tibia-tarsus I, anterolateral. 399. STC I. 400. STC IV. 401. Carapace, lateral.

small setae between fovea and ocular area, 2 large and 2 small between PME, 4 small laterad of OA, and 3 large and 4 small setae on clypeus; clypeus 0,53 length OA, margin nearly straight. Thoracic fovea narrow, 0,18 carapace width, 2,5 times wider than long, recurved.

Ocular area 0,51 width caput, 2,37 times wider than long; AER 1,45 wide, straight, 1,15 width PER, AME large, diameter ALE 1,285 times AME; PER 1,26 wide, nearly straight, PME 0,71 length PLE; OA 0,61 long. Ratio of eyes: AM:AL:PM:PL, 1,4:1,8:1:1,4; PME very narrow. Distances between eyes: AM-AL 0,19, AM-AM 0,16, AM-PM 0,23, AL-PL 0,23, PM-PM 0,55, PM-PL 0,01. Ocular quadrangle 1,315 times wider than long, slightly narrowed anteriorly, posterior 1,14 times anterior.

Sternum (Fig. 397) 2,10 long, 1,61 wide, margin entire, sparsely setose, 2 cuspules in anterior third; sternal sigilla round, small, diameter 0,16 sternum width, near margin, distance between 6,7 times distance from margin. Labium 0,81 long, 0,71 wide, apex rounded, with 24 large blunt cuspules. Pedipalpal coxa 1,06 long, 0,84 wide, rectangular, 24–27 cuspules scattered across middle. Chelicera 0,53 long, promargin of fang furrow (Fig. 396) with 3 large teeth, retromargin with 4 small teeth.

Coxae without thorns, I with 9–11, II with 5 cuspules (Fig. 397); coxae, trochanters, and legs sparsely setose. Femur II with ventral row of 7 stout setae; patella III with narrow anterolateral band of stout setae, apical spine absent; tibia III with very shallow basal depression equal to 0,17 length segment; patella IV (Fig. 395) with broad anterolateral band of slender setae; metatarsus IV preening comb indistinct, 2 separate setae. Spination: palpus, tibia v11, tarsus v12; leg I (Fig. 398), tibia v212121, metatarsus v22222; leg II, tibia v2122, metatarsus v22222; leg III, tibia v1 (apical); tarsi without ventral spinules. Basal teeth of superior tarsal claws: legs I (Fig. 399) to III 1, leg IV (Fig. 400) 2–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	2,80	2,47	2,07	2,80	1,80
Patella	1,53	1,53	1,27	1,53	0,87
Tibia	1,67	1,53	1,47	1,87	1,07
Metatarsus	1,40	1,33	1,27	1,80	—
Tarsus	0,67	0,67	1,00	1,00	1,07
Total	8,07	7,53	7,08	9,00	4,81

Abdomen 3,72 long, 3,20 wide. Spermathecae (Fig. 81) on narrow base, base width 0,66 length, short, broad, length 4,0 times width, diameter increasing distally; pores sparse, absent from distal chamber; sclerotised band extending from distal chamber to base.

Male: Unknown.

Distribution (Map 2): Known only from the type locality in central Africa.

Material examined: ZAÏRE: Lubondaie (6°34'S:22°39'E), Tshimbulu, ♀ (holotype), R. Stegall (AMNH).

#### *Moggridgea whytei* Pocock

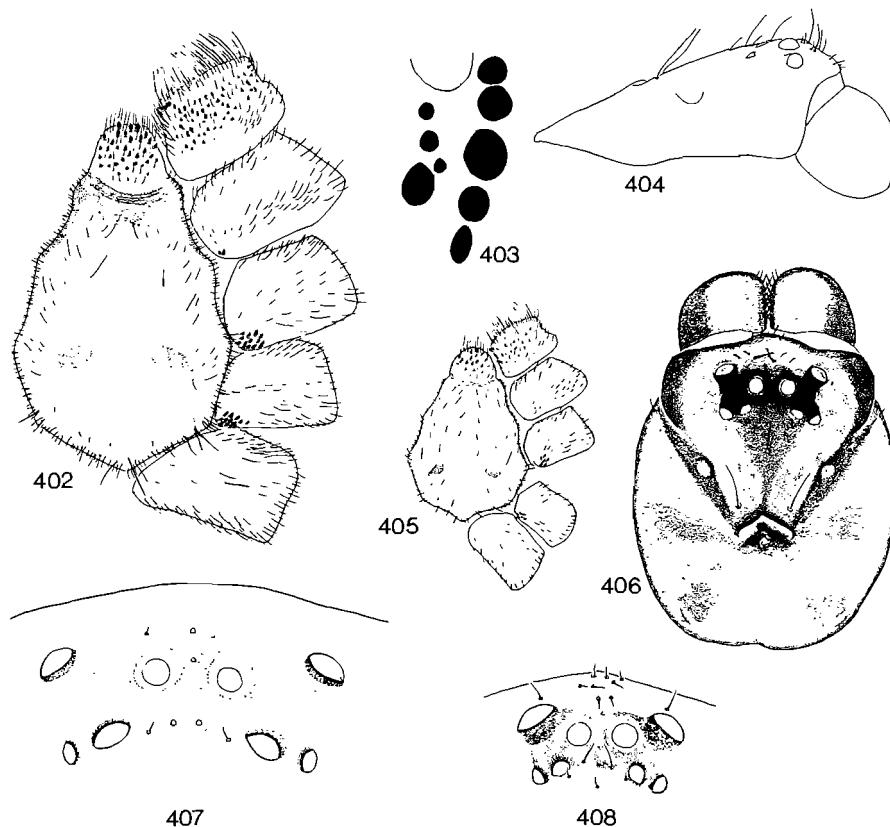
Figs 56–57, 79, 402–408; Map 1

*Moggridgea whytei* Pocock, 1897:733, pl. 42, figs 1–1b (type ♀, Nyika Plateau, Malawi, BMNH). Roewer, 1942:192. Bonnet, 1957:2974.

Diagnosis: ♀ caput with a pair of setae just anterior to thoracic fovea (Fig. 406); thoracic fovea recurved (Fig. 406); caput sloping (Fig. 404), height at OA more than 1,25 times height at fovea; coxa I with fewer than 5 thorns, may be altogether absent (Figs 402, 405); sternal sigilla farther apart than from sternal margin (Fig. 405); spermathecae relatively stout (Figs 56–57, 79), length less than 6 times diameter.

Female (type): Total length 18,27. Specimen somewhat discoloured with age. Carapace dark red-brown, darker surrounding thoracic fovea and forming radial bands along caput margin, laterally and obliquely posteriad. Caput with broad dark brown band between PER and fovea; black pigment surrounding AME, behind ALE, and between PME–PLE, area between eyes dark brown. Chelicerae dark red-brown. Legs and palpi red-brown, femora of palpus, I, II with elongate pale subdorsal marks. Sternum orange-brown, mouthparts, coxae, and trochanters red-brown. Abdomen uniformly dark grey, pale over book-lungs and anterior to epigastric furrow.

Carapace 6,73 long, 5,87 wide, 1,68 high, height at fovea 0,295 width carapace; glabrous; lateral pits small, deep. Caput 0,81 width carapace, convex, height at OA



Figs 402–408. *Moggridgea whytei* Pocock, female. 402–403, 407. Type. 404, 406. Kenya. 405, 408. Botswana. 402. Venter. 403. Cheliceral teeth. 404. Carapace, lateral. 405. Venter. 406. Carapace, dorsal. 407–408. Ocular area.

1,29 times height at fovea; pair of setae anterior to thoracic fovea, 4 between PLE, and 3 anterior to AER; clypeus broad (Fig. 407), 0,71 length OA, margin weakly curved. Thoracic fovea 0,20 width carapace, angled in centre, width 1,5 times length, posterior projection absent.

Ocular area (Fig. 407) narrow, 0,51 width caput, 2,57 times wider than long; AER 2,32 wide, slightly procurved, 1,16 times width PER, diameter ALE 1,58 times AME; PER 2,00 long, slightly recurved, length PME 1,48 times PLE; OA 0,90 long. Ratio of eyes: AM:AL:PM:PL, 1,26:2,0:1,58:1; PME narrow oval. Distances between eyes: AM-AL 0,45, AM-AM 0,23, AM-PM 0,26, AL-PL 0,52, PM-PM 0,90, PM-PL 0,13. Ocular quadrangle 1,80 times wider than long, narrowed anteriorly, posterior 1,5 times anterior.

Sternum (Fig. 402) 3,94 long, 3,32 wide, margin sinuate between coxae, submarginally setose; sigilla oval, length 1,75 times width, small, length 0,21 width sternum, distance between 1,23 times distance from margin. Labium 1,35 long, 1,19 wide, apex blunt, with 34 blunt cuspules. Pedipalpal coxa 1,94 long, 1,52 wide, rectangular, with 55–60 blunt cuspules in broad median band. Chelicera 1,47 long,

promargin of fang furrow (Fig. 403) with 5 large teeth, retromargin with 3 small, 1 large teeth.

Coxae I–III with thorns (Fig. 402): I 2, II 15–17, III 13–15. Coxae, trochanters, and legs sparsely setose. Femur II with 19–21 stout setae in 2 ventral rows; patella III with broad anterolateral band of stout setae, short apical spine present; tibia III with deep basal depression equal to 0,13 length segment; patella IV with broad band of fine setae; apex of metatarsus IV without comb, 2 separate setae in homologous position. Spination: palpus, tibia v1, tarsus v12; leg I, tibia v2111–22–21, metatarsus v221–222–21; leg II, tibia v21122, metatarsus v22–222–21; leg III, patella a1 (apical); leg IV, metatarsus a1 (apical). Basal teeth of superior tarsal claws: leg I, II 2, III 1–2, IV 2–3. Leg measurements:

	I	II	III	IV	Palpus
Femur	4,40	3,67	3,00	3,87	2,40
Patella	2,40	2,33	1,87	2,40	1,33
Tibia	2,40	2,20	1,93	2,60	1,60
Metatarsus	2,07	2,00	1,80	2,40	—
Tarsus	1,13	1,06	1,47	1,53	1,40
Total	12,40	11,62	10,07	12,80	6,73

Abdomen 9,73 long, 7,47 wide. Spermathecae (Fig. 57) broadened distally, distal chamber collapsed, length 4,5 times diameter, base width 0,83 spermatheca length; pores numerous, occur in distal chamber, sclerotised band extends from distal chamber two-thirds distance to base.

Variation: A widespread and variable species. The type is by far the largest specimen, and is somewhat damaged and discoloured with age. A specimen from Kenya is most like the type in size and morphology of the venter, but in the carapace (Figs 404, 406) and ocular area it is most like smaller specimens from Botswana (Fig. 408), Zaïre, and Zambia. The latter 3 are quite homogeneous, differing only in the presence or absence of thorns on coxa I.

Total length 7,73–18,27. Ocular area usually with black pigment completely connecting eyes (Figs 406, 408); carapace, chelicerae, and legs yellow-brown to red-brown, leg segments may have pale apical annuli. Carapace 3,33–6,73 long, 2,87–5,87 wide, 0,84–1,68 high, height at fovea 0,295–0,40 width carapace. Caput 0,75–0,81 width carapace, height at OA 1,29–1,63 times height at fovea. Ocular area (Figs 406–408) 0,51–0,59 width caput, 1,93–2,57 times wider than long; diameter ALE 1,40–1,67 times AME, length PME 0,67–1,48 times PLE. Clypeus 0,45–0,71 length OA, with 3–13 setae, margin nearly straight to strongly curved. Thoracic fovea 0,15–0,22 width carapace, width 1,50–2,80 times length. Sternal sigilla small, 0,12–0,22 width sternum, nearly round (Zaïre) to oval, lateral, distance between 1,23–3,40 times distance from margin (Figs 402, 405). Labium with 16–34, pedipalpal coxa with 20–60 cuspules. Coxa I with 0 (Botswana, Zambia), 1–2 (Zaïre) to 3 cuspules, II with 15–17, III with 5–15 cuspules. Setal bands on patellae III, IV narrow to broad; apex of metatarsus IV without distinct comb, but with 2–3 nearly contiguous setae. Tibia and metatarsus I with 4–6 pairs of ventrolateral spines in straight to diagonal series. Superior tarsal claws of legs I, II with 1–2 teeth. Spermathecae (Figs 56, 79) length 3,50–5,60 times diameter, base width 0,90–1,15 times spermatheca length.

Male: Unknown.

Distribution (Map 1): Central Africa.

Material examined: BOTSWANA: Xugana Island, Okavango Delta (19°04'S:23°03'E), ♀, 24.xi.1979, B. Lamoral (NM). KENYA: Kibwezi, ♀, 30.xii.1959, E. Ross (CAS). MALAWI: Nyika Plateau, between L. Nyasa and L. Tanganyika, 6 000–7 000 ft, ♀ (type), 1897, A. Whyte (BMNH). ZAIRE: 99 mi. W of Popokabaka (5°42'S:16°35'E), ♀, E. Ross & R. Leech (CAS). ZAMBIA: Kasama, 4 400 ft, ♀, 2.ii.1970, M Irwin & E. Ross (CAS).

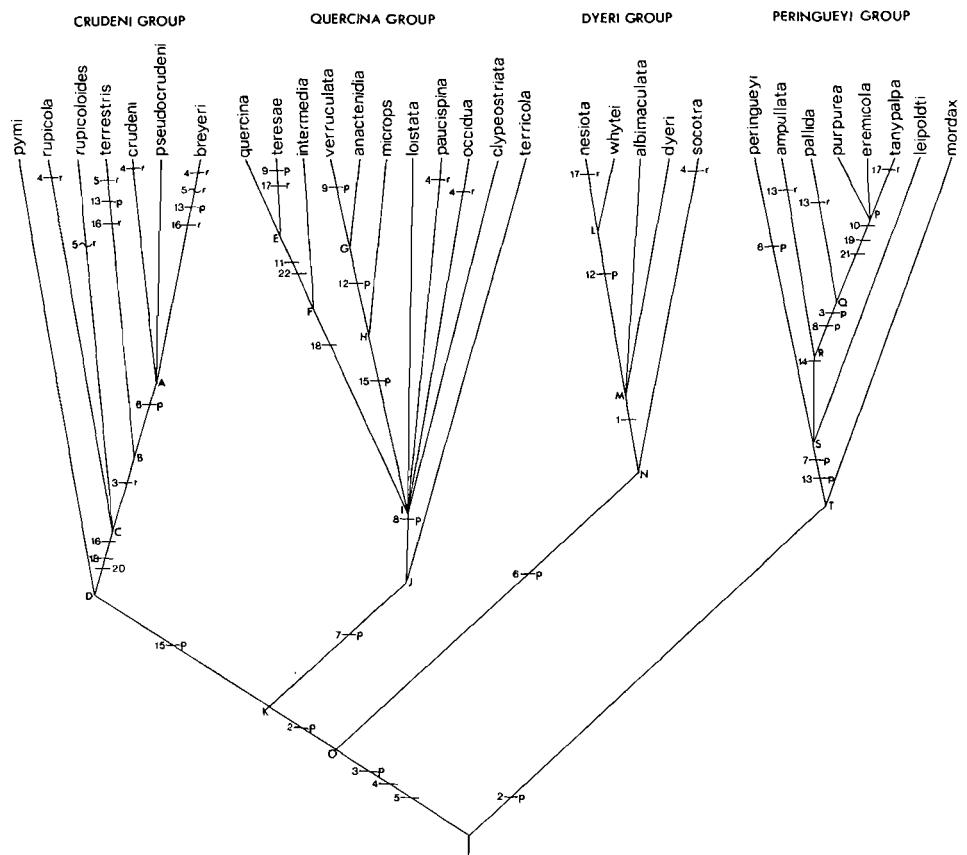
#### RELATIONSHIPS

The genus *Moggridgea* is monophyletic and is defined by the synapomorphy of patches of peculiar, erect setae located ventrally on the patellae (Fig. 4). These setae have a cylindrical, fimbriated shaft and a small apical spine (Fig. 5). The apex is flattened and slightly concave on one side. They are always present beneath patellae I, II and IV of males and females, and rarely beneath patella III as well. These unique setae were first noted by Hewitt (1913c:465) who suggested that they served to distinguish between *Moggridgea* and *Poecilomigas*. Setae of this type do not occur in any other Migidae. Within the subfamily Paramiginae *Moggridgea* is characterised by the absence of tarsal spines, by the presence of a retrolateral preening comb of contiguous setae apically on metatarsus IV (Figs 19–21), and by a band of sclerotisation for 0.2–0.8 of the spermathecae length (Figs 54, 61, 76, 226). It is probable that the ventral carina (Fig. 13) on femur I (and sometimes femur II) of males, unique within the family and found in 8 of the 11 species for which males are known, constitutes a fifth synapomorphy for the genus.

Within the Paramiginae, the occurrence of coxal thorns in *Micromesomma* and in several species of *Moggridgea* suggests a sister-group relationship between these genera. Thorns are short, stout setae arranged in tight, proximal clusters on the coxae of the legs (Figs 23–26, 50). The surfaces are smooth to weakly longitudinally striate (Figs 24, 26). Thorns are presumably ordinary body setae which have been modified.

For character analysis within *Moggridgea*, out-group comparison was made with *Micromesomma* for all characters occurring in females. Male character polarities are rendered ambiguous because within the Paramiginae males are described only for *Moggridgea*. For out-group comparison recourse was made to greater levels of inclusivity, and comparison was made with males of *Poecilomigas* and *Migas*, *Calathotarsus* and *Heteromigas*.

**Cladistics**—a cladogram (Fig. 409) for the 31 *Moggridgea* species is presented for 22 characters requiring 50 steps. This hypothesis must be considered extremely tentative due both to rampant homoplasy, and to missing data both within *Moggridgea* and in the outgroup. In *Moggridgea*, 20 species are known only from the female, 3 only from the male, and only 8 from both sexes. On this cladogram, character states are implicitly predicted for the missing sexes. Discovery of the missing sexes of known species, as well as new species of *Moggridgea* and the males



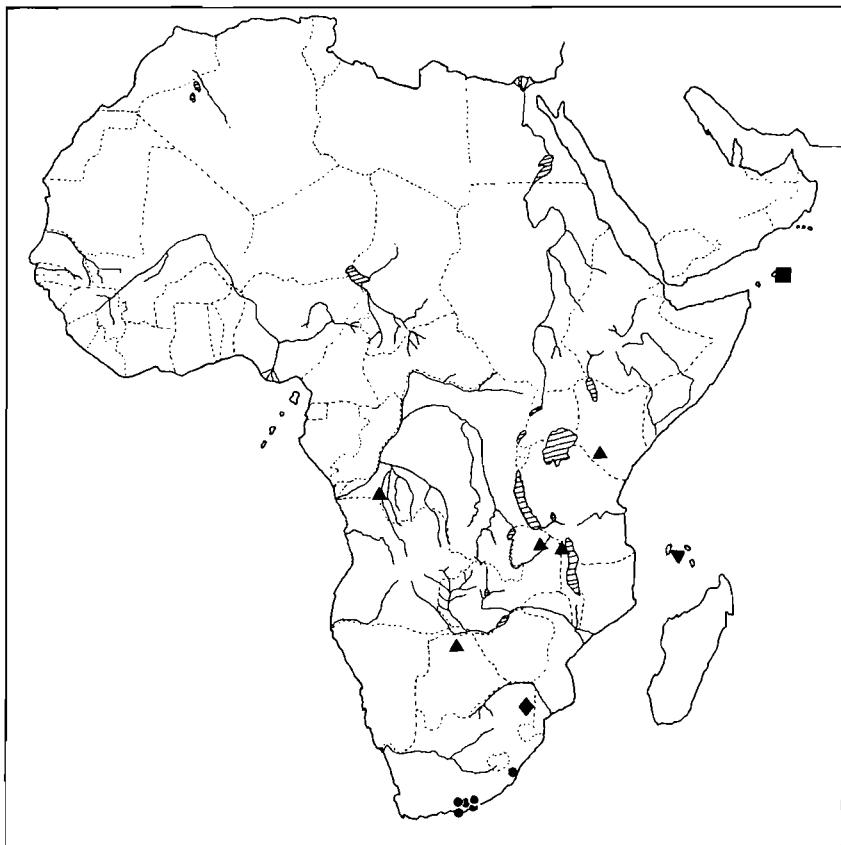
Figs 409 Cladogram for *Moggridgea* spp. Nodes noted alphabetically. Character state changes noted by character number: p, parallel gain of apomorphic states; r, reversal to plesiomorphic state. Sigmoid lines denotes character state variable in terminal taxon.

of the other paramigine genera, may radically alter the topography of this cladogram. Nevertheless, clear sister-group relationships are depicted in certain cases, and the general topography does reflect what the author perceived intuitively as 'natural' groups. It is hoped that the attention of collectors will be focused on Africa and particularly on Madagascar in order to supply the missing data necessary to refine or refute this hypothesis.

**Character analysis**—Twenty-two characters are analysed phylogenetically. Character state changes are discussed in terms of the group names and alphabetically denoted nodes on the cladogram, and homoplasies are tabulated as required.

1. Curvature of the AER: In *Micromesomma* and most *Moggridgea* the AER is straight to recurved (Figs 62, 350). A procurved AER, such that a line between the posterior edges of the ALE crosses the AME at a point anterior of their middle (Figs 30, 49, 197, 408) is derived.

2. Prefoveal setae: A pair of long setae on the caput just anterior to the thoracic fovea (Figs 32, 49, 406) is found in *Micromesomma* and in five species of



Map 1. Africa, with distributions of *Moggridgea* spp.: *M. albimaculata* Hewitt ♦; *M. dyeri* Cambridge ●; *M. nesiota* sp. n. ▽; *M. socotra* sp. n. ■; *M. whytei* Pocock ▲.

*Moggridgea* (the *dyeri* group). Loss of these setae is derived, and occurs in parallel for clades K and T.

3. Apex of pedipalpal coxa: A trapezoidal palpal coxa with a produced, acute apical angle is found in *Micromesomma* and in several *Moggridgea* (Figs 64, 89, 224). Within *Moggridgea* a rectangular pedipalpal coxa with a blunt apex (Figs 50, 71, 147) is considered derived. Parallel derivation is required for O and Q, and a reversal is required for B.

4. Distribution of cuspules on pedipalpal coxa: A narrow longitudinal band of cuspules occurs in *Micromesomma* and in several *Moggridgea* (Figs 166, 224, 231). Distribution of numerous cuspules in a broad band, several cuspules wide (Figs 71, 132, 179, 371) is considered derived. A single gain is postulated at O, with independent reversals required for *socotra*, *occidua*, *paucispina*, *breyeri*, *crudeni*, and *ruplicola*.

5. Sternal sigilla, shape: Narrow-oval sigilla with length greater than 2,0 times width occur in *Micromesomma* and several *Moggridgea* (Figs 64, 89, 166, 235). Sternal sigilla with length less than 2,0 times width are considered derived. These

may be broadly oval (Figs 50, 103, 132), irregular or pear-shaped (Figs 294, 352), or round (Figs 71, 156, 231). A single gain is postulated at O and reversals are required for *terrestris* and some individuals of *ruplicoloides* and *breyeri*.

Distribution of coxal thorns: Proximal patches of thorns occur on coxae II and III of *Micromesomma* and in a few *Moggridgea*. Two transformation series are envisioned, one involving the appearance of thorns on coxa I, and the other involving the progressive loss of thorns from coxae II and III.

6. Thorns present on coxa I: Occurs in parallel at N for the *dyeri* group (Fig. 132) and at A (Figs 89, 103, 274).

7. Thorns lost from coxa II: Occurs in parallel at S and J.

8. Thorns lost from coxa III (altogether absent): Occurs in parallel at I for the bulk of the *quercina* group, at Q, and for *peringueyi* (Fig. 235).

9. Cuspules on leg coxae: These are unique within the Paramiginae where occurring in *teresae* (Figs 352, 357) and *verruculata* (Fig. 397). On the present cladogram it is most parsimonious to consider these parallel gains.

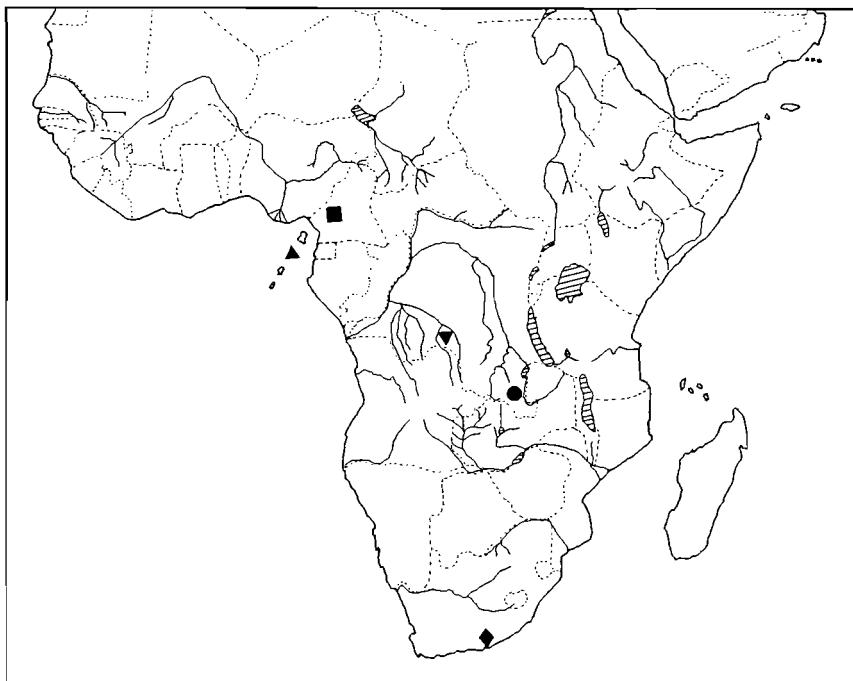
10. Long hairs beneath leg I: In *Micromesomma* and most *Moggridgea* the vestiture of the ventral surface of patella to metatarsus I consists of sparse setae with lengths less than the height of the segments (Figs 86, 92), although in *Paramigas perroti* there is a dense vestiture of long, fine setae. Within *Moggridgea* the presence of curved, slender setae with lengths much greater than the height of the segments is considered synapomorphic for *purpurea* (Fig. 280), *eremicola* (Fig. 138), and *tanypalpa* (Fig. 347).

11. Femur I with thornlike setae: Within the Paramiginae stout, thornlike setae on the venter of femur I occur only in *quercina* (Fig. 290) and *teresae* (Figs 10–11, 355) and are considered synapomorphic for these species.

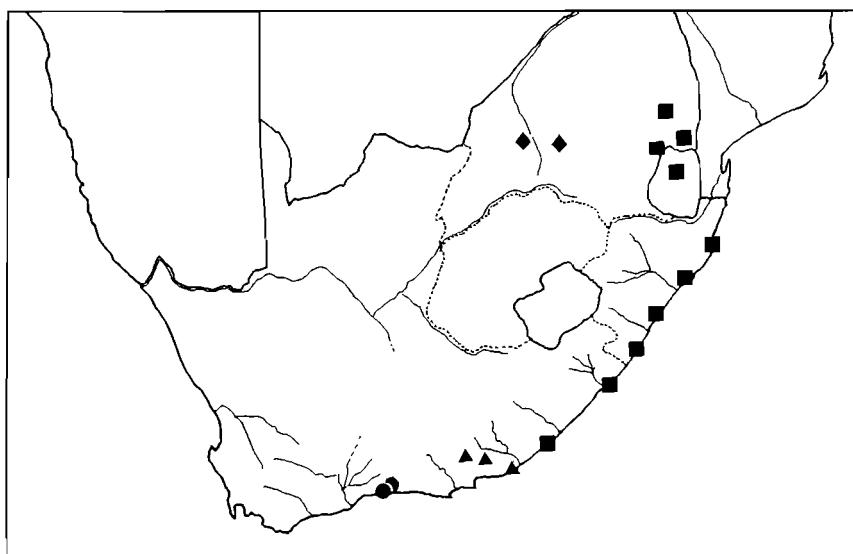
12. Metatarsus IV preening comb: Within the Paramiginae the presence of an apical, retrolateral comb of contiguous setae (Figs 19–21) on metatarsus IV is considered synapomorphic for *Moggridgea*. The absences of this comb (Fig. 74) for G and L are most parsimoniously treated as parallel losses.

13. Basal tooth of superior tarsal claw I: In *Micromesomma* the basal tooth of STC I is bifid, whereas in most *Moggridgea* the basal tooth may be simple (Fig. 399), bifid (Fig. 175) or with 3 points (Figs 34, 66). Basal teeth with 4 or more points ('serrate'; Figs 36, 167, 195) are unique within the Paramiginae and considered derived. This is considered synapomorphic for S (most of the *peringueyi* group and independently reversed in *ampullata* and *pallida*). Independent derivations are required in *terrestris* (Fig. 372) and *breyeri*. In the latter species the basal tooth is very broad with many points (Fig. 37), and the serrate condition is probably not homologous to that in other *Moggridgea*.

14. Spermathecae, sclerotised band: The spermathecae of *Micromesomma cowani* (Fig. 53) are entirely transparent when cleared in lactic acid. The spermathecae of all *Moggridgea* species so prepared have a sclerotised region extending from a fifth to the entire length (Figs 76, 81) of the spermathecal trunk, and this is considered synapomorphic for the genus. In *ampullata* (Fig. 61), *pallida* (Fig. 225) and *purpurea* (Fig. 226) this band is restricted to a narrow collar. This configuration is considered synapomorphic for R, and is predicted to occur in the females of *eremicola* and *tanypalpa*.



Map 2. Tropical and southern Africa, with distributions of *Mogridgea* spp.: *M. anactenidia* sp. n. ■; *M. clypeostriata* Benoit ●; *M. occidua* Simon ▲; *M. terrestris* Hewitt ◆; *M. verruculata* sp. n. ▼.



Map 3. Southern Africa, with distributions of *Mogridgea* spp.: *M. crudeni* Hewitt ▲; *M. intermedia* Hewitt ●; *M. microps* Hewitt ■; *M. paucispina* Hewitt ◆.

15. Spermathecal base: The spermathecae of *Micromesomma cowani* are set on a very broad base (Fig. 53), greater than 1,25 times the spermatheca length. Within *Moggridgea* the width of the spermathecal base ranges from 0,55 to 1,45 times the spermatheca length. A narrow base (Figs 83, 185), less than the spermatheca length, is considered apomorphic and has arisen in parallel for D and H.

16. A very narrow base (less than 0,95 spermatheca length) with slender, straight to sinuate spermathecae (Figs 117, 124, 128) is synapomorphic for C (most of the *crudeni* group). Independent reversals are required for the broader spermathecal bases in *terrestris* (Fig. 126) and *breyeri* (Fig. 159).

17. Femoral carina, male: The longitudinal carinal ridge (Figs 13, 321) on the venter of femur I (and occasionally femur II) has not been recorded from the males of any other Migidae. It is most parsimonious to consider this carina as plesiomorphic in *Moggridgea*, and the absences in *teresae*, *nesiota*, and *tanypalpa* as independent reversals.

18. Abdomen of male with blunt-tipped setae: These appear to be unique in *quercina*, *teresae*, and *intermedia* and synapomorphic for F. Such setae may occur more widely in the *quercina* group as males of most species are unknown.

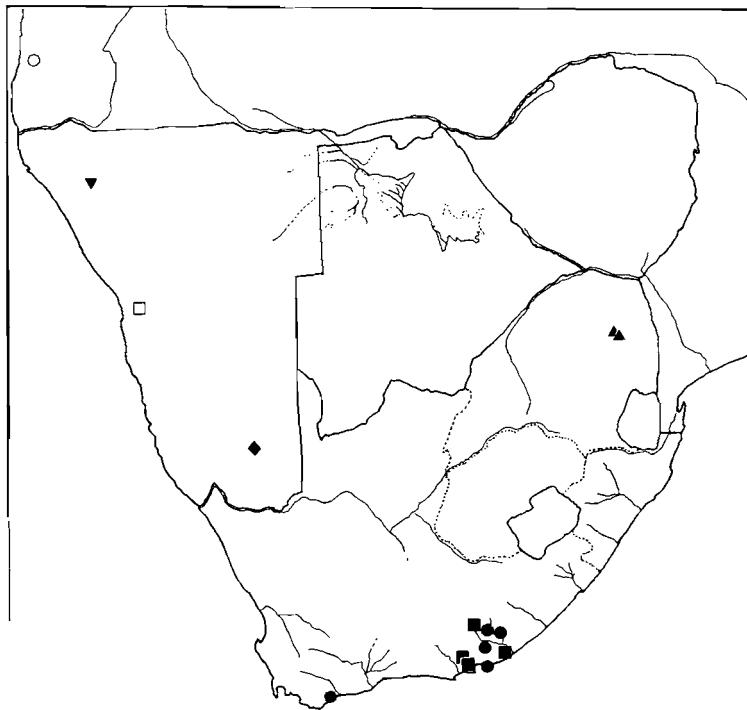
19. Male caput low, flat: The males of *eremicola* (Fig. 144) and *tanypalpa* (Fig. 346) have the caput flat and very low, with the apex of the AME barely above the level of the thoracic fovea. This is unique within *Moggridgea* and has not been recorded from males of the other Migidae. This configuration is considered synapomorphic for P and is predicted to occur in the male of *purpurea*.

20. Male caput raised: The caputs of the males of *rupicola* (Fig. 320) and *pseudocrudeni* (Figs 31, 279) are raised, domed with the highest point about halfway between the thoracic fovea and OA, and strongly demarcated with nearly vertical sides. This configuration is unique within the Migidae and is considered synapomorphic for clade C. It is predicted to occur in those species of this clade for which males are currently unknown. A raised caput occurs in the genera *Calathotarsus* (Schiapelli & Gerschman de Pikelin, 1975) and *Heteromigas* (Raven, 1984) but in these genera the caput slopes steeply from the thoracic fovea to the highest point at the OA, and the sides slope more gradually.

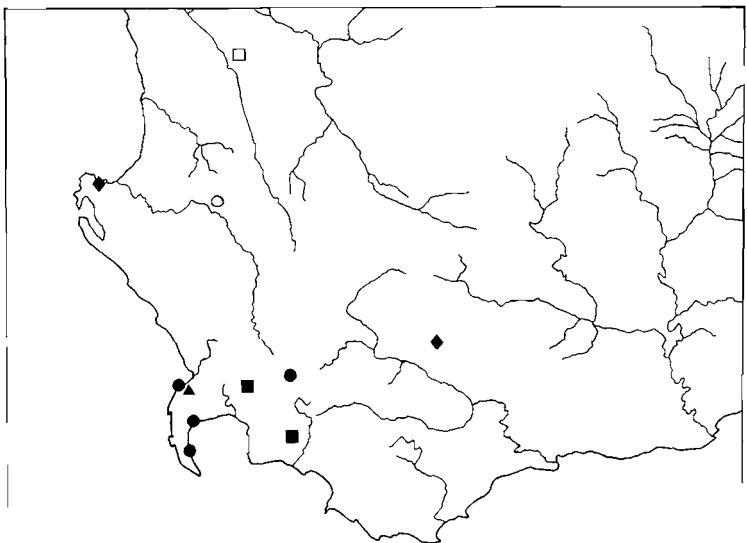
21. Apex of male metatarsus IV: The apex of metatarsus IV in *eremicola* and *tanypalpa* is slightly expanded laterally. This is unique within *Moggridgea* and not recorded from males of other Migidae. It is considered synapomorphic for P and predicted to occur in the male of *purpurea*.

22. Scopula on leg IV of males: A scopula beneath at least tarsus IV occurs in all subfamilies of Migidae: Miginae (*Poecilomigas*), Calathotarsinae (*Calathotarsus*, *Heteromigas*), and Paramiginae (*Moggridgea*: Figs 22, 134, 261). It is therefore most parsimonious to consider the absence of a scopula beneath leg IV in *quercina* (Fig. 309) and *teresae* (Fig. 365) as derived, constituting a synapomorphy uniting those species.

*Classification*—Due to the tentative nature of the cladogram, no formal classification is proposed. The genus is divided into 4 presumably monophyletic subgroups: these are informally named the *crudeni*, *quercina*, *dyeri*, and *peringueyi* groups on the basis of the oldest included specific names.



Map 4. Southern Africa, including Botswana, Lesotho, Namibia, South Africa, Swaziland and Zimbabwe and southern portions of Angola, Zambia and Mozambique, with distributions of *Moggridgea* spp.: *M. breyeri* Hewitt ▲; *M. eremicola* sp. n. □; *M. pallida* Hewitt ◆; *M. pseudocrudeni* Hewitt ●; *M. purpurea* Lawrence ▼; *M. rupicoloides* Hewitt ■; *M. tanypalpa* sp. n. ○.



Map 5. Southwestern Cape Province, South Africa, with distributions of *Moggridgea* spp.: *M. ampullata* sp. n. ○; *M. leipoldti* Purcell □; *M. loistata* sp. n. ■; *M. mordax* Purcell ◆; *M. quericina* Simon ●; *M. teresae* sp. n. ▲.

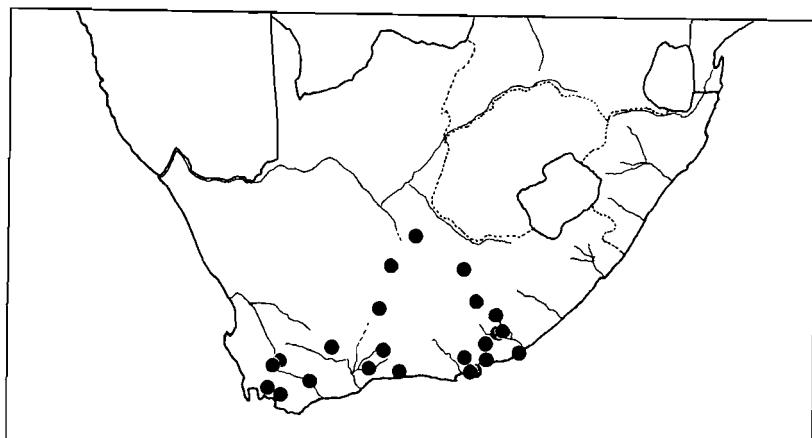
## GEOGRAPHY

The genus *Moggridgea* is confined to sub-Saharan Africa and the surrounding islands (Principe in the Gulf of Guinea, and Socotra and the Comoros in the Indian Ocean). The sister group, *Micromesomma*, occurs in Madagascar, as do the other paramigine genera *Paramigas* and *Thyropoeus*. As currently limited (Raven, 1985) the Paramiginae are endemic to Africa, Madagascar, and the surrounding islands.

Due to the tentative nature of the phylogenetic relationships expressed in the cladogram, it would be inadvisable to speculate in detail concerning the historical biogeography of the species. Nevertheless, general patterns are apparent, and there are a few clear examples of vicariance. There is a concentration of species in the southern part of Africa which is probably more than an artifact of collecting. Separate centres of richness occur in the eastern (6 endemic spp) and western (7 endemic spp) portions of the Cape Province, South Africa.

Of the 4 presumably monophyletic groups depicted on the cladogram (Fig. 409), 2 range widely in Africa and 2 are restricted to the southern part of the continent. The *dyeri* group (Map 1) ranges from Socotra to South Africa. The insular endemic *socotra* is plesiomorphic relative to the rest of the group and the tropical African *whytei* is the sister species of the Comoro Island's endemic *nesiota*. The *quercina* group ranges from the Cape of Good Hope to tropical West Africa. It appears that *microps*, which occurs in the warm, eastern portion of southern Africa, has affinities to equatorial species. A clade represented by *intermedia*, *quercina*, and *teresae* is restricted to the cool-temperate, southwestern parts of Cape Province, South Africa. The true relationship of these species to *loistata*, endemic to the area intervening between the ranges of *intermedia* and *quercina* plus *teresae* (Map 5), cannot be established until the male of *loistata* is known. The sister species *quercina* and *teresae* are endemic to extreme southwestern Cape Province, and the latter species appears to be restricted to the slopes of Table Mountain, near Cape Town.

The 2 other groups are essentially southern African and are well represented in the more arid regions. The *crudeni* group is highly diversified in the eastern part of Cape Province, South Africa, with 5 of 7 species restricted to an area between 20°



Map 6. Southern Africa, with distribution of *Moggridgea peringueyi* Simon.



Map 7. Southern Africa, with distributions of *Moggridgea* spp.: *M. pymi* Hewitt ■; *M. rupicola* Hewitt ●; *M. terricola* Simon ▲.

and 28° E and 32°20' and 34°30'S (Maps 2–4, 7). Four species (*crudeni*, *pseudocrudeni*, *rupicola*, and *terrestris*) occur in sympatry at Aicedale. The *peringueyi* group is essentially southwestern. A monophyletic group consisting of *pallida*, *eremicola*, *purpurea* and *tanypalpa* is endemic to the arid parts of Namaqualand and Namibia (Map 4), and *peringueyi* is widespread throughout the arid Karoo (Map 6).

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Date received: 1 December 1985.