

## CHAPTER FIVE

### **The First Records of *Neotama* Baehr & Baehr from the Afrotropical Region and Description of a New Genus, *Prima* (Araneae: Hersiliidae)**

The genus *Neotama* Baehr & Baehr is recorded from the Afrotropical Region for the first time. The *Hersilia* Audouin species *H. corticola* was transferred to *Neotama*. A new genus from Madagascar, *Prima* gen. nov., are erected and two new species, *P. ansiae* and *P. syda* is described.

**Key words:** Afrotropical Region, Araneae, Hersiliidae, *Neotama*, *Prima*.

## Introduction

The family Hersiliidae is known for the peculiarly long legs of its members. The legs of some genera have been modified to accommodate this elongation and presumably add to the speed at which these spiders move. These adaptations vary from flexibilities in the distal third of the metatarsi to complete biarticulation. Until recently arboreal hersiliids with flexible zones on their metatarsi, were only known from Australia (Baehr & Baehr 1987), Neotropical Region (Reihms and Brescovit, 2004) and the Oriental Region (Baehr & Baehr 1993). The biarticulate condition could be considered derived and is restricted to the Afrotropical (Benoit, 1968) and Oriental Regions. This study records the first arboreal hersiliids with flexible zones on their metatarsi from the Afrotropical Region.

*Neotama* Baehr & Baehr is a small, very long-legged genus in the family Hersiliidae with four species recorded from India, Sri Lanka, Java and Sumatra (Platnick 2004). Rheims & Brescovit has described four additional species from the Neotropical Region. The genus is distinguished by the narrow flexible zone in the distal third of metatarsi I, II and III, and the epigine with a slit-like lateral opening, (Baehr & Baehr 1993).

Members of *Neotama* are arboreal forest dwellers. Very little is known about their natural history. The narrow flexible zone and very simple male palp and epigyne are considered to be plesiomorphic and Baehr & Baehr (1998) used members of the genus to polarise characters in the genus *Hersilia* Audouin.

In this study the first records of *Neotama* from the Afrotropical Region was made resulting in a considerable expansion of the genus' known distribution. One species is described that were collected in the southeastern coastal forests of South Africa. A new genus, *Prima* gen. nov., is also erected for two new species from Madagascar. This paper forms part of a series on the hersiliidae of the Afrotropical Region.

## Materials and Methods

Study area: The area covered by this study is the Afrotropical Region, including the following islands in both the Indian and Atlantic oceans: St. Helena, Comoros ,

Madagascar, Seychelles, Zanzibar and Cape Verde. Reference is made to the distribution of species from the rest of Africa (countries outside the Afrotropical Region), only if such species also occur, at least partly, in the Afrotropical Region. Where possible, locality coordinates are given for all collection localities of species. Terminology follows Baehr & Baehr (1993) in part.

Slide preparation: The epigyne of the female and the left palp of the male (where available, otherwise the right) were removed and mounted temporarily on slides in Heinze's modified PVA mounting medium (Meyer & Rodrigues 1966). References to illustrations in this publication is capitalised whereas references to figures from other papers are noted in lower case.

Abbreviations: The following abbreviations are used in this paper:

ALE - anterior lateral eye; AME - anterior median eye; bS - basal segment of posterior lateral spinneret; CI - carapace index; CL - carapace length; CLL - clypeus length; co - copulatory opening; CW - carapace width; el - epigyne length; ew - epigyne width; f - fertilization duct; Fe - femur; MOQ - median ocular quadrangle; MOQ-AW - MOQ anterior width; MOQ-PW - MOQ posterior width; MOQL - MOQ length; Mt - metatarsus; Pat - patella; PER - posterior eye row; PLE - posterior lateral eyes; PME - posterior median eyes; Ta - tarsus; Tib - tibia; tS - terminal segment of posterior lateral spinneret.

Measurements: Where enough material was available, 10 specimens of both sexes were measured for each species. Measurements were made under a stereomicroscope using an ocular micrometer with up to 50× magnification. All measurements are given in millimetres with the observed ranges in parentheses.

The following measurements were taken.

Carapace: CI - carapace index (derived by dividing the length of carapace by its width); CL - carapace length (measured from clypeal edge to posterior edge); CW - carapace width (measured over widest part of the carapace); CLL - clypeus length (measured from outer edge of AME to anterior edge of clypeus).

Size of eyes is given as relative to AME in the following order: AME: ALE: PME: PLE.

Legs - length of leg (each segment from the femur to tarsus was measured and the sum of the measurements given as the leg length).

Length ratio of legs is relative to leg I.

Abdomen: length (measured from anterior edge to posterior edge of abdomen) and width (measured over widest part of abdomen); spinneret length.

Epigyne: length and width.

Drawings: The left palp of males was drawn where available, otherwise the right palp were drawn and specified as such. Drawings of the carapace include a lateral view and an anterior view. The abdomen of the female were drawn if available, otherwise the male abdomen were drawn. In some type specimens the abdomen was damaged to such an extent that no drawings could be made. Drawings of epigyne include a ventral and dorsal view.

Material were received on loan from the following institutions: NM - Natal Museum, Pietermaritzburg, South Africa; TMP – Northern Flagship Institute – Transvaal Museum, Pretoria, South Africa; .

## Taxonomy

### ***Neotama* Baehr & Baehr, 1993.**

*Tama* Simon, 1882: 255

*Neotama* Baehr & Baehr, 1993: 68

Type species: *Tama variata* Pocock, 1899

**Remarks.** *Neotama* differs from *Tama* Simon in its arboreal life style; much longer legs, leg I and II always longer than leg IV, a narrow flexible zone in distal third of leg I, II and IV; dorso-ventrally flattened carapace and abdomen; very short clypeus. As opposed to monotypic *Tama*, which is a ground living species, with short legs, leg IV always longer than leg I and II, elongate flexible zone in distal third of metatarsi I, II, and IV; carapace inclined and abdomen convex; clypeus long.

**Diagnosis:** clypeus very short, as long as ocular area length, eye tubercle depressed; very long legs, metatarsi I, II, and IV with narrow flexible zone in distal third; male palp with tibia

elongate, cymbium digitate, bulbus round; sperm duct regularly curved; embolus curved short, stout; epigyne externally with two lateral oval openings, medial spermathecae basally swollen, lateral spermathecae simple, round well separated from copulatory duct.

**Description. Female.** Size: medium, range (6.32 - 7.13).

Colour: pale yellow carapace with isolated dark and white markings laterally; clypeus pale yellow, white anteriorly; eye area dark around AME eyes and PER; white mark posteriad on eye tubercle; abdomen white with dark antero-lateral borders; dorsum with lancet-shaped heart mark; V-shaped marking posteriad on dorsum (Fig. 1e); posterior lateral spinnerets with no or faint annulation; legs pale yellow with patellae dark brown; femora and palps with faint annulation.

Carapace: as long as wide; thoracic region widest; cephalic region narrow; dorso-ventrally flattened (Fig. 1c); fovea longitudinal with radial striae; clypeus very short, not projecting beyond eye tubercle, varies in length between  $0.36$  and  $0.59 \times$  median ocular quadrangle length; eye tubercle very depressed (Fig. 1c); ALE smallest, white; AME largest; chelicerae stout, retromargin with one row of minute teeth, promargin with three large teeth. Sternum heart-shaped; labium triangular,  $0.63 \times$  endite length; endites elongate, rectangular.

Abdomen: wider than long, widest in posterior third; dorso-ventrally flattened; heart mark lancet-shaped, extends up to third pair of dorsal muscular pits (Fig. 1e); four pairs of distinct dorsal muscular pits that vary in size, second pair largest, oval; venter with V-shaped muscular pits posterior lateral spinnerets very long,  $>2 \times$  carapace width; terminal segment  $>4 \times$  basal segment; spinules on posterior lateral spinnerets conical in shape narrowing distally to tapers at the end (Fig. 1e);.

Legs: either leg I or II longest; leg I  $> 3 \times$  total body length; leg formula I:II:IV:III; leg III very short,  $< 0.3 \times$  length of leg I; metatarsus I  $> 8 \times$  longer than tarsus I; distal segment of metatarsus  $< 0.5 \times$  length of proximal segment. Femur, patella, and metatarsus with spines; spines short,  $< 0.5 \times$  diameter of legs, spine formula tends to be rather similar between species and were variations of the following: I- Fe 1p1r1d-1p1r1d-1p1r1d, Pat 1d, Tib 1d-1p-1r-1d-1r-1p, Mt 1p1r; II- Fe 1p1r1d-1p1r1d-1p1r-1d, Pat, Tib 1d-1p1r-1d-1p1r-1d, Mt 1p1r; III- Fe 1d-1d, Pat 1d, Tib 1d-1d, Mt 1r1p1v-1d; IV- Fe 1d-

1d-1d-1d, Pat 1d, Tib 1d-1d-1r-1d, Mt 1p1r; spine with irregular patterns of lancet-shaped scales; paired tarsal claws with nine teeth.

**Male.** Size: small (4.83 - 5). Resemble female in shape and colour; male differs structurally as follows: smaller in size; abdomen more slender, legs much longer in relation to body length; leg I much longer than other legs.

Palps: tibia elongate, cymbium digitate; bulbus round, sperm duct regularly curved; embolus short, stout, curves, apex acute.

### 1. *Neotama corticola* (Lawrence, 1937) comb. nov. (Figs.1a-g & 4)

*Hersilia corticola* Lawrence, 1937: 226; 1938: 481; Smithers, 1945: 5, 8; Benoit, 1967: 15.

**Types.** female holotype, **South Africa:** KwaZulu-Natal: Durban, Bluff, (29°53'S 31°01'E), xi.1936, R.F. Lawrence, NMSA 74; - paratypes: one female, same data; three males, Umzinto, Vernon Crookes Nature Reserve, (30°16'S 30°37'E), 5.i.1992, L.N. Lotz, NMBA 5957; 1 male, Eastern Cape Province: Kudu Reserve (Fort Brown) near Grahamstown (33°07'S 26°37'E), 629 m a.s.l., on trunk of *Combretum caffrum*, 14.xii.1981, E. Nieman, J. Hoffman, NMSA.

**Diagnoses.** Medium-sized spiders; very long legs; eye tubercle depressed; clypeus short; narrow flexible zone on metatarsi I, II, and IV; male palp with bulbus without any apophysis; embolus short, stout, curved (Figs.1a,b); epigyne with spiniform lateral lobes, central septum narrow anteriorly(Fig.1f); spermathecae bilobed, lateral circular spermathecae strongly divided from insemination duct (Fig.1g);

**Description. Female.** Size (n=4). TL 6.67 (6.32- 7.13); CL 2.28 (1.76 - 2.63); CW 2.36 (2 - 2.7). OAL 0.2 (0.16-0.23); CLL 0.29 (0.2-0.4). AME diameter 0.23; AME-AME 0.21; AME-ALE 0.2; ALE diameter: 0.078; MOQ-AW 0.64; PME-PME 0.22; PME diameter 0.17; PME-PLE 0.23; MOQ-PW 0.55; PLE diameter: 0.15.

Colour: carapace pale yellow to pale brown, with brown and white spots laterally; clypeus pale, white anteriorly; eye area dark around AME eyes and PER; white mark

posteriad on eye tubercle; abdomen white with dark borders anteriorly; dorsally with lancet-shaped heart mark; posterior half of abdomen V-shaped dark border around dorsal muscular pits, venter mottled white; posterior lateral spinnerets with no or faint annulation; legs pale yellow with dark brown patellae; femora and palps with faint annulation.

Carapace: as long as wide (CI 0.97); clypeus very short,  $0.48 \times$  median ocular quadrangle length, sloping; eye tubercle depressed; AME largest; eye ratio 1: 0.47: 0.77: 0.72; MOQ-AW > MOQPW; chelicerae stout,  $1.71 \times$  longer than wide; one row of six minute teeth on retromargin; promargin sien genus beskrywing).

Abdomen: length 3.03, width 4.2, wider than long, widest in posterior third; four pairs of dorsal muscular pits, second pair large, oval; posterior lateral spinnerets  $1.64 \times$  length of abdomen;  $2.82 \times$  CW; tS  $4.25 \times$  bS.

Legs: leg I longest,  $3.23 \times$  total body length; leg ratio 1: 0.99: 0.28: 0.87; metatarsus I  $8.29 \times$  longer than tarus I; distal part of metatarsus  $0.49 \times$  proximal part; leg measurements: I- Fe 6.49, Pat + Tib 7.18, Mt I 8.93, Ta 0.98, total 21.8; II-6.01, 6.81, 8.09, 0.98, total 21.07; III-2.06, 2.06, 1.66, 0.64, total 5.95; IV-5.47, 5.74, 7.8, 0.86, total 19.16; Palp-1.13, 1.13, 0.94, total 3.38.

Epigyne (Figs.1f,g): wide (el/ew 0.58); spiniform lateral lobes; central septum broad, narrower anteriorly; copulatory openings widely spaced; spermathecae bilobed, lateral spermathecae simple, round, strongly divided from copulatory duct duct (Fig.1g).

**Male.** Size (n=3). TL 4.92 (4.83 - 5); CL 2.25 (2.16 - 2.33); CW 2.02 (1.88 - 2.16). OAL 0.56 (0.56-0.57); CLL 0.21 (0.19-0.22). AME diameter 0.22; AME-AME 0.12; AME-ALE 0.13; MOQ-AW 0.57; ALE diameter 0.09; PME-PME 0.19. PME diameter 0.13; PME-PLE 0.19; MOQ-PW: 0.44; PLE diameter 0.14.

Closely resemble females except: smaller; legs longer,  $1.2 - 1.7 \times$  longer; leg I very long, patellae dark; leg measurements: I- Fe 9.39, Pat + Tib 11.82, Mt I 18.68, Ta 1.12, total 37.22; II- 7.5, 8.98, 10.88, 0.71, total 28.58; III-2.46, 2.44, 2.1, 0.6, total 7.25; IV-6.75, 7.25, 11.07, 0.75, total 25.05; Palp-1.12, 0.77, 0.7, total 2.59.

Palps (Figs.1a,b): tibia elongate,  $1.5$  longer than wide; cymbium digitate, twice as long as wide, three apical spines; row of long white setae on prolateral border of cymbium arching over bulbus; bulbus round; sperm duct regularly curved; embolus circular, stout, apex acute.

**Additional material examined. South Africa:** KwaZulu-Natal: Hluhluwe Game Reserve (28°09'S 32°10'E), 2 females, x.1935, R.F. Lawrence, NM 1149; Port Edward (31°03'S 30°13'E), 1 female, xi.1943, R.F. Lawrence, NM 4168; Ngome State Forest (27°52'S 31°24'E), 2 females, Northern KwaZulu-Natal, 1.ii.1988, L. Prendini, TMP 181653; “Cascade” farm (H. Lee) 10km W Eshowe (28°53'S 31°28'E), Ngotsche (Ntumeni) forest, 600m a.s.l., 2 females, 1 juv., 17-18.i. 1984, C.E. Griswold, P. Croeser, R. Lee, P. Reavell; Western Cape Province: Knysna, Diepwalle Forest Station, 22 km NE of Knysna (33°57'S 23°10E), 600m a.s.l., indigenous forest, 1 female, 1 juv., 11-13.xi. 1985, C.E. Griswold, J. Doyen, T.M. Griswold, NMSA

**Distribution:** South Africa (forested areas of KwaZulu-Natal and Western Cape) (Fig. 4).

**Natural history.** Found mainly on trees in the Forest Biome. Adult females were collected between October and November, adult males in January and July; arboreal, caught in forest on tree trunk.

***Prima* gen. n.**

Type species: *Prima ansiae* spec. nov.

**Etmology.** Prima was the daughter of Hersilia, Roman mythology. The gender is feminine.

**Diagnoses.** The species in this genus *Prima* resemble those of *Tama* Simon by the presence of an elongate flexible zone on metatarsi I, II, and IV. The males are distinguished by the apically inserted, bifid median apophysis, short stout embolus and sperm duct with a medial curve (Fig. 2a). The females are distinguished by the presence of medial copulatory openings on the epigynal plate, unpigmented subtriangular median plate and the indistinct separation between the spermathecae and seminal receptacles (Fig. 3a,b).

**Description. Female.** Size: small, range (4.5-6).

Colour: Carapace pale yellow; clypeus pale with dark or white markings; eye area dark around median ocular quadrangle and around posterior eye row, white marks



posteriad of eye tubercle in some species; sternum, labium and endites pale. Abdomen: dorsum mottled white; heart mark dark, lancet-shaped extends up to third pair of dorsal muscular pits; antero-lateral border dark brown; venter pale to mottled white; femora and tibiae pale with faint to dark annulation and lateral stripes.

Carapace: as wide as long; thoracic region widest; cephalic region narrow; dorso-ventrally flattened; fovea longitudinal with radial striae; covered with plumose setae; clypeus truncate in dorsal view, sloping, short, varies in length from  $0.46-0.97 \times$  median ocular quadrangle length; eye area depressed to slightly raised (Figs. 2c & 3c); ALE smallest;  $AME \geq PME \geq PLE \gg PLE$  with ratio range  $AME:ALE:PME:PLE = 1: 0.38-0.83: 0.77-1.25: 0.54-1$ ; chelicerae stout, retromargin with one row of minute teeth, promargin with three large teeth; sternum heart-shaped; labium half the length of endite triangular to crescent-shaped; endites elongate, rectangular.

Abdomen: as long as wide, circular (Fig. 2e); dorso-ventrally flattened; dorsum with lancet-shaped heart mark (Fig. 2e); four small dorsal muscular pits that vary in size; second pair largest; ventrum with V-shaped muscular pits. spinnerets: posterior lateral spinnerets long, at least  $2 \times$  longer than carapace width; terminal segment  $>4 \times$  length of basal segment; spinules on posterior lateral spinnerets conical, tapering distally, apex truncate or acute;

Legs: either leg I or II longest; very long, leg I at least  $3.23 \times$  longer than total length of body; leg formula I:II:IV:III; leg III very short,  $<0.4 \times$  length of leg I; metatarsus I  $>6 \times$  longer than tarsus I; metatarsi I, II, and IV with elongate, flexible zone distally. Spines short spines  $<$  leg diameter; spine formula rather similar between species, variations of the following: I- Fe 1r1p-1d-1d-1r1p1d, Pat, Tib 1p, Mt 1p1r; II- Fe 1r1p-1d-1d-1r1p1d-1r-1p-1d, Pat, Tib, Mt 1p1r; III- Fe 1d-1d-1d, Pat 1d, Tib, Mt; IV- Fe 1d-1d-1d-1r-1p1d, Pat, Tib 1p, Mt 1r1p. Spine microstructure with irregular patterns of lancet-shaped scales; tarsal claws with seven tarsal teeth.

Epigyne (Figs. 2f,g & 3a,b): lateral lobes spiniform; median plate subtriangular, white; copulatory openings mesad of spermathecae; copulatory ducts short, simple; spermathecae and seminal receptacles indistinctly separated; fertilization duct curved medially.

**Male.** Size: Small (4.5). Resemble female in shape and colour; male differs structurally as follows: smaller in size; abdomen more slender.

Palps (Figs. 2a,b): tibia elongate; cymbium digitate, one spine apically; bulbus distad flattened; sperm duct with medial curve; median tegular apophysis apically inserted attached; embolus short, stout.

**Distribution.** Madagascar

**Phylogenetics.** The monophyly of this genus is supported by the presence of a claw-like, bifid median apophysis positioned distally on the bulbus of the palp and the indistinct separation between the spermathecae and seminal receptacles of the epigyne.

### 1. *Prima ansieae* spec. nov. (Figs. 2 & 4)

**Types.** Holotype female, **Madagascar:** Fianarantsoa Province: Parc Nationale, Ranomafana: Talatakely (21°14'S 47°25'E), 5-18.iv.1998, C.E. Griswold, D.H. Kavanaugh, N.D. Penny, M.J. Raheirilalao, J.S. Ranorianarisoa, J. Scweikert, D. Ubick, CAS; -paratypes: 1 male, 8 juveniles, same data; 1 female, Parc Nationale Ranomafana: 23km N. Vohiparona village, (21°12'S 47°23'E), c.a. 1100m, 10-11.iv.1998, C.E. Griswold, D.H. Kavanaugh, N.D. Penny, M.J. Raheirilalao, J.S. Ranorianarisoa, J. Scweikert, D. Ubick, CAS; 1 female, Antsiranana Province; PN Montagne d'Ambre, 2.79km NE of park entrance (12°32'S 49°10'E), 21-30.xi.1993, J. Coddington, C. Griswold, N. Scharff, S. Larcher, R. Adrianmazinama, CAS.

**Etymology.** The specific epithet is a patronym in honor of Prof. Ansie Dippenaar-Schoeman for her contribution to the knowledge of African spiders.

**Diagnoses.** Small spider; legs very long; eye tubercle depressed (Fig. 2c); clypeus short (Fig. 2d); males are distinguished by the medial curve of the sperm duct; median tegular apophysis, apically attached, bifid with concave flap laterally, medially with a hook-shaped process excised at apex (Fig. 2a); epigyne with subtriangular median palte, copulatory openings mesad of spermathecae; separation between seminal receptacle and spermathecae indistinct (Fig. 2f,g).

**Description. Female.** Size (n=3). TL 5.62 (5.25 - 6); CL 2.06 (1.84 – 2.16); CW 2.14 (2 - 2.16). OAL 0.11 (0.1 - 0.12); CLL 0.28 (0.26-0.3). AME diameter: 0.14; AME-AME: 0.21; AME-ALE: 0.15; MOQ-AW: 0.57; ALE diameter: 0.11; PME-PME: 0.13; PME diameter: 0.2. PME-PLE: 0.14. MOQ-PW: 0.52. PLE diameter: 0.15.

Colour: carapace pale brown; clypeus pale; eye area dark with tridentate white spot posteriad on eye tubercle; abdomen white with antero-lateral dark border; heart mark, linear broadening posteriorly; posterior half of dorsum with dark chevron markings (Fig. 2e), distinct transverse lines; venter pale; posterior lateral spinnerets with annulation; legs pale brown; femora and palps annulate.

Carapace: as wide as long (CI 0.96); clypeus short,  $0.76 \times$  longer than median ocular quadrangle length, sloping; eye tubercle depressed, sides sloping; AME largest; eye ratio 1: 0.68: 1.04: 0.82; MOQ-AW > MOQ-PW; chelicerae stout,  $1.67 \times$  longer than wide, row of seven minute teeth on retromargin.

Abdomen (Fig. 2e): length 3.16, width 3.16, circular; four pairs of round dorsal muscular pits, 2<sup>nd</sup> large, 3<sup>rd</sup> and 4<sup>th</sup> very small; posterior lateral spinnerets elongate,  $1.55 \times$  longer than abdomen,  $2.26 \times$  carapace width; ts  $4.37 \times$  bS.

Legs: leg II longest,  $3.23 \times$  total body length; leg ratio 1: 1.11: 0.34: 0.96; metatarsus I,  $8 \times$  longer than tarsus I; metatarsi I, II, and IV with elongate flexible zone distally; distal flexible zone  $0.54 \times$  proximal part; leg measurements: I- Fe 4.73, Pat + Tib 5.23, Mt I 6.54, Ta 0.81, total 16.88; II-4.86, 6.12, 7.69, 0.85, total 18.79; III-1.66, 1.96, 1.73, 0.7, total 5.71; IV-4.69, 3.78, 5.4, 0.9, total 14.31; Palp-1.09, 0.98, 0.91, total 2.98.

Epigyne (Figs. 2f,g): wide (el/ew 0.5); spiniform lateral lobes; epigyne with trapezoid central lobe, copulatory openings mesad of spermathecae; copulatory ducts short, simple; fertilisation duct medially curved.

**Male.** Size (n=1). TL 5.36; CL 2.4; CW 2.4; OAL 0.47; CLL 0.39. AME diameter: 0.26; AME-AME 0.8; ALE 0.08; MOQAW 0.6; ALE diameter 0.07; PME-PME 0.08; PME diameter 0.13; PME-PLE 0.07; MOQPW 0.34; PLE diameter 0.2.

Similar to female except AME larger, absence of lateral line on clypeus; abdomen elongate, longer than wide, widest in middle with almost no dark antero-lateral borders; 3<sup>rd</sup> and 4<sup>th</sup> pair of dorsal muscular pits indistinct; legs disarticulated, legs very long relative to that of females; leg measurements: I- Fe 7.2; Pat + Tib ?, Mt I ?, Ta ?, total ?;

II-8, ?, ?, ?, total ?; III-3.12, 2.4, 2.88, 0.8, total 9.2; IV- 7.6, ?, ?, ?, total ?; Palp-1.33, 1.61, 0.91, total 3.85

Palps (Figs. 2a,b): tibia elongate,  $1.75 \times$  longer than wide; cymbium digitate,  $2.8 \times$  longer than wide, one apical spine; row of long white setae on prolateral border of cymbium extends across bulbus; bulbus with distad flattened; sperm duct with medial curve; median tegular apophysis apically attached; hollowed, bifid, laterally with concave flap and medially with curved process excised at apex; embolus short, stout, apex acute.

**Distribution.** Madagascar (Fig. 4)

**Natural history.** Specimens were collected at 1100m above sea level; females collected in November and April, males in April.

## 2. *Prima syda* gen. n. (Figs. 3 & 4)

**Types.** Female holotype, **Madagascar:** Androrona (15°50'S 49°31E), x.1970, A. Lambillon, MRAC 142.940.

**Etymology.** The specific epithet is an arbitrary combination of letters.

**Diagnosis.** Small spiders; legs long; eye tubercle depressed (Fig. 3c); clypeus short (Fig. 3d); epigyne with median plate, white; copulatory openings adjacent, circular (Fig. 3a), mesad of spermathecae; copulatory ducts elongate with medial bend; fertilisation duct form basal loop, distally with medial curve (Fig. 3b). Male unknown.

**Description. Female.** Size (n=1). TL 4.5; CL 1.88; CW 1.88; CLL 0.26; OAL 0.56; AME diameter 0.26; AME-AME 0.13; ALE 0.1; MOQ-AW 0.65; ALE diameter 0.1; PME-PME 0.09; PME diameter 0.2; PME-PLA 0.1; MOQ-PW 0.49; PLA diameter 0.14.

Colour: carapace pale brown; eye tubercle dark; oblique dark line extends laterally to thoracic region; clypeus dark, anteriorly white; chelicerae pale orange; dark medially; tridentate white spot posteriad on eye tubercle; abdomen mottled darkly; dorsum without pattern, oval white patch anterior of 1<sup>st</sup> and 2<sup>nd</sup> dorsal muscular pits; venter pale; posterior lateral spinnerets and femora annulate; palps with dark annulation.

Carapace: as wide as long (CI 1); clypeus very short,  $0.45 \times$  median ocular quadrangle length; eye tubercle depressed; AME largest; eye ratio: 1: 0.38: 0.77: 0.54. Chelicerae elongate,  $1.79 \times$  longer than wide.

Abdomen: length: 3.5; width: 3.3; widest in posterior third; four pairs of dorsal muscular pits, second pair large, oval; posterior lateral spinnerets elongate,  $1.6 \times$  longer than abdomen,  $2.83 \times$  carapace width; ts  $4.04 \times$  bS.

Legs: leg II longest,  $4.55 \times$  total body length; leg ratio: 1: 1.17: 0.3: 0.96; leg measurements: I- Fe 4.73, Pat + Tib 5.25, Mt I 7.58, Ta 0.9, total 17.63; II-5.1, 7, 7.58, 0.9, total 20.58; III-1.73, 1.73, 1.43, 0.45, total 5.34; IV-4.43, 4.88, 6.83, 0.83, total 16.97; Palp-1.1, 0.91, 0.9, total 2.91.

Epigyne (Figs. 3a,b): epigyne with median plate white; copulatory openings adjacent (Fig. 3a), mesad of spermathecae; copulatory ducts elongate with medial bend; spermathecae and seminal receptacle indistinctly separated; fertilisation duct form basal loop, distally with medial curve (Fig. 3b).

**Male.** Unknown.

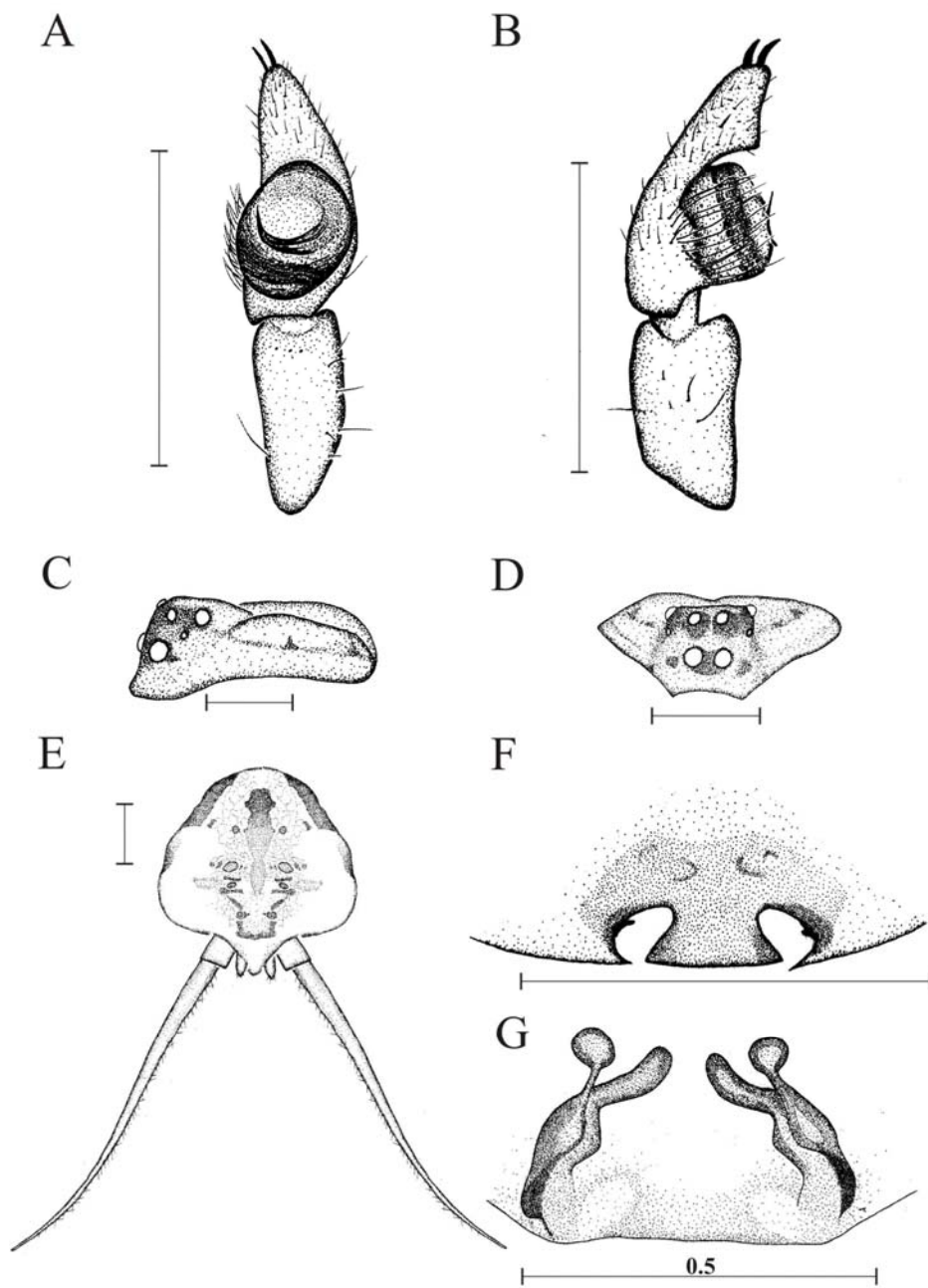
**Distribution.** Madagascar (Fig. 4).

**Natural history.** Holotype female collected in October

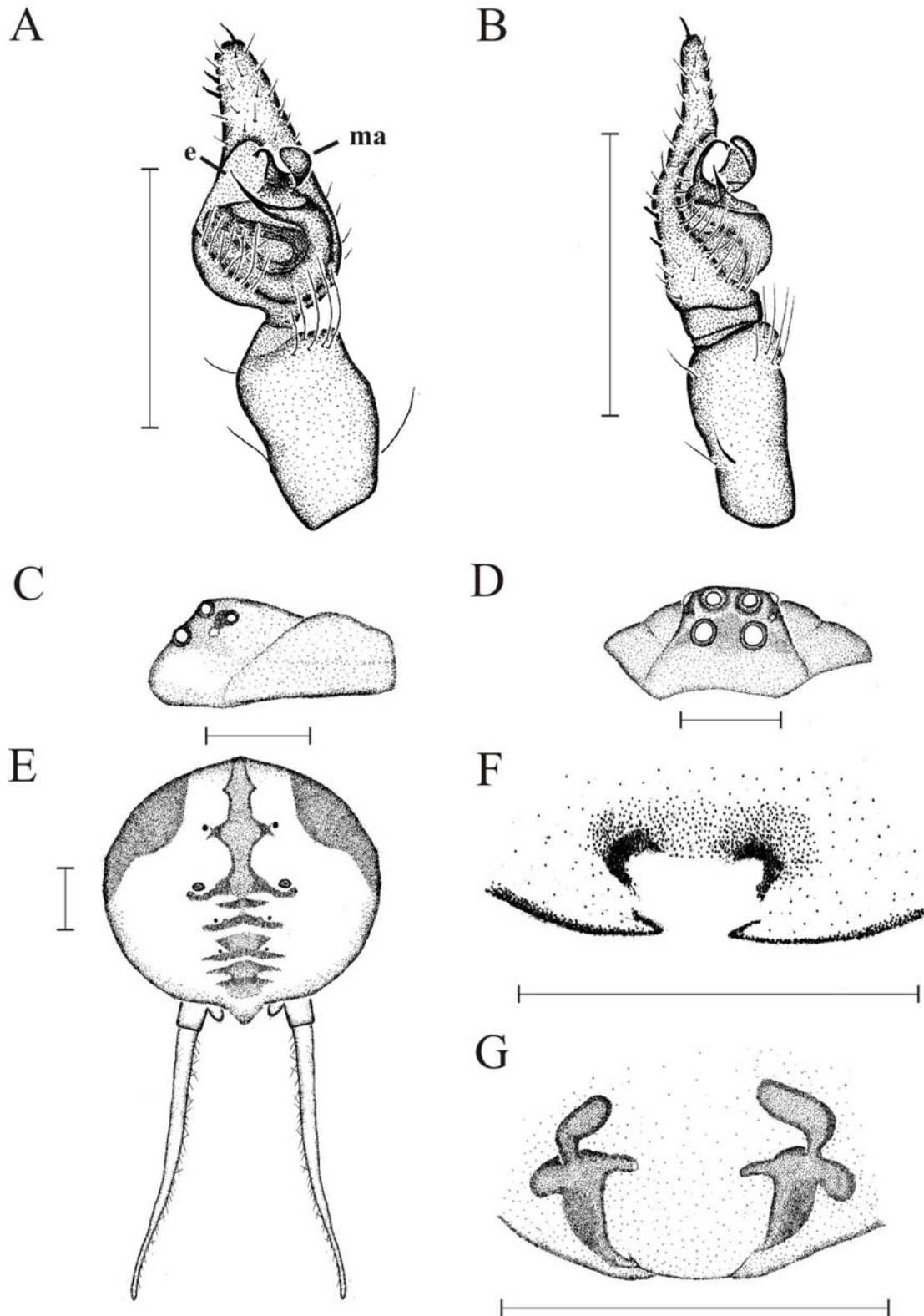
### References

- Baehr, M. & B. Baehr. 1993. The Hersiliidae of the Oriental Region including New Guinea. Taxonomy, phylogeny, zoogeography (Arachnida, Araneae). *Spixiana* Supplement **19**: 1-96.
- Baehr, B. 1998. The genus *Hersilia*: phylogeny and distribution in Australia and New Guinea (Arachnida, Araneae, Hersiliidae). - Proc. 17th European Coll. Arachnology 1997. *Bulletin of the British Arachnological Society* : 61-65.
- Benoit, P. L. G. 1967. Révision des espèces africaines du genre *Hersilia* Sav. et Aud. (Aran.-Hersiliidae). *Revue de zoologie et de botanique africaines* **76**: 1-36.
- Lawrence, R. F. 1937. A collection of Arachnida from Zululand. *Annals of the South African Museum* **8**: 211-273.
- Lawrence, R. F. 1938. A collection of spiders from Natal and Zululand. *Annals of the*

- South African Museum* **8**: 455-524.
- Meyer, M.K.P. (Smith), Rodrigues, M.C. 1966. Acari associated with cotton in South Africa. *Garcia de Orto* **13**:1-33.
- Platnick, N.I. 2003. The World Spider Catalog, Version 3.5.  
<http://research.amnh.org/entomology/spiders/catalog81-87/INTRO1.html>
- Pocock, R. I. 1900. *The fauna of British India, including Ceylon and Burma. Arachnida.* London, pp. 1-279.
- Rheims, C.A. & A.D. Brescovit. 2004. Revision and cladistic analysis of the spider family Hersiliidae (Arachnida, Araneae) with emphasis on Neotropical and Nearctic species. *Insect Systematics and Evolution* **35**: 189-239.
- Simon, E. 1882. II. Etude sur les Arachnides du Yemen méridional. In Viaggio ad Assab nel Mar Rosso dei signori C. Doria ed O. Beccari con il r. Aviso esploratere del 16 nov. 1879 ad 26 feb. 1881. *Annali di Museo Civico di Storia Naturale di Genova* **18**: 207-260.
- Simon, E. 1893. *Histoire naturelle des araignées.* Paris, **1**: 257-488.
- Smithers, R. H. N. 1945. The Hersiliidae (Araneae) of South Africa. *Transactions of the Royal. Society of South Africa* **31**: 1-18.

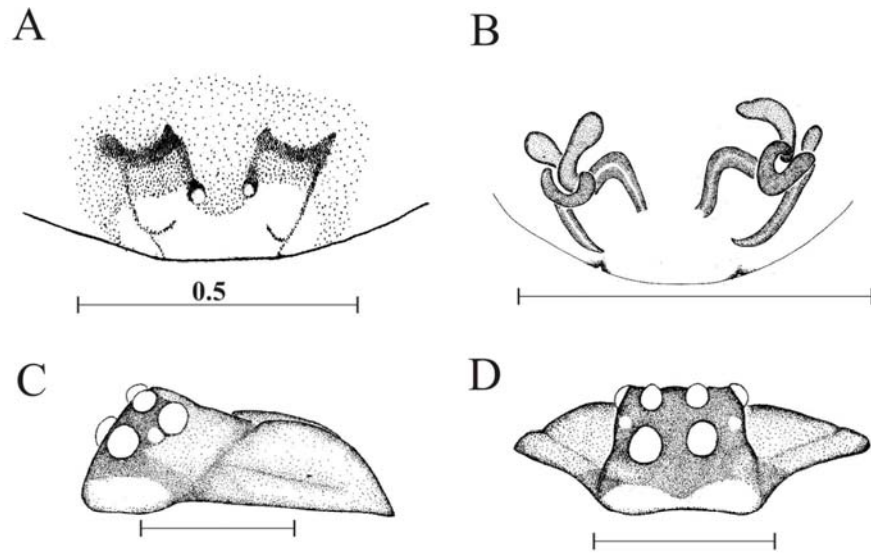


**Figure 1.** *Neotama corticola* (Lawrence, 1937) **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view. **D.** Carapace anterior view. **E.** Female abdomen dorsal view with spinnerets. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustration by SF.

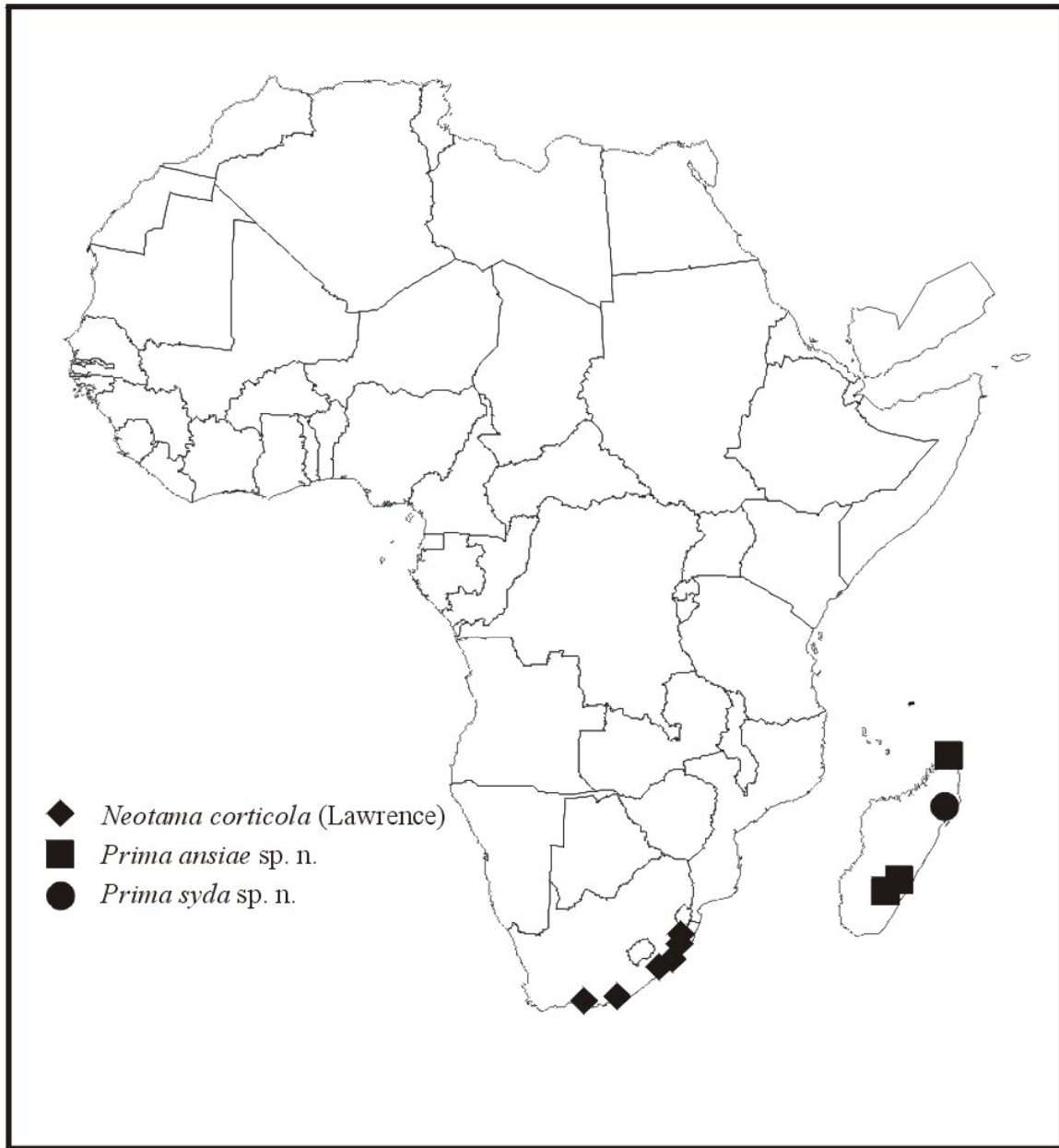


**Figure 2.** *Prima ansiae* sp. n. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace anterior view. **D.** Carapace lateral view. **E.** Female abdomen dorsal view with spinnerets. **F.** Epigyne ventral view. **G.** Epigyne dorsal view; e = embolus; ma = median apophysis





**Figure 3.** *Prima syda* sp. n. **A.** Epigyne ventral view. **B.** Epigyne dorsal view. **C.** Carapace lateral view **D.** Carapace anterior view. Illustration by SF.



**Figure 4.** Distribution map of *Neotama corticola* (Lawrence) and the *Prima* gen. n.