

## CHAPTER TWO

**A Revision of the Afrotropical species of *Hersilia* Audouin (Araneae: Hersiliidae)****Abstract**

The genus *Hersilia* from the Afrotropical Region is revised. All valid species were fully redescribed. Fourteen new species are described: *Hersilia beva*, *H. bubu*, *H. caronae*, *H. dilumen*, *H. eloetsensis*, *H. ferra*, *H. moheliensis*, *H. nicolae*, *H. plara*, *H. salda*, *H. taita*, *H. tamatavensis*, *H. unca*, *H. woutrinae*. The following names have been synonymized: *H. segregata* Benoit with *H. occidentalis* Simon and *H. nossibeensis* Strand with *H. insulana* Strand. A neotype was designated for *H. vinsonii* Lucas. *Hersiliopsis madagascariensis* Wunderlich is transferred to *Hersilia*. *H. kauderni* Strand, *H. stumpfi* Strand and *H. fossulata* are doubtful because the descriptions are poor, specimens immature, and type(s) are lost or could not be received for examination. A key is provided for all the *Hersilia* species from the Afrotropical Region and the species are grouped into five monophyletic species groups.

**Key words:** Afrotropical Region, Araneae, Hersiliidae, *Hersilia*

## Introduction

With 58 species distributed throughout the Afrotropical, Oriental (Baehr & Baehr 1993) and Australian Regions (Baehr & Baehr 1987), *Hersilia* is the largest and most diverse hersiliid genus (Platnick 2004). Members of the genus are arboreal and recognised by the very long posterior lateral spinnerets and biarticulations on metatarsi I, II and IV of the legs. Their chelicerae are armed with teeth on the pro- and retromargin, lateral eyes on slight tubercles and abdomens have four pairs of conspicuous muscular pits dorsally.

To date, there were 22 species of *Hersilia* known from the Afrotropical Region. The type species, *Hersilia caudata*, described by Audouin (1826) was recorded from Egypt. Between 1865 and 1900, five species were described from the Afrotropical Region viz. *H. vinsonii* Lucas, 1869, *H. hildebrandti* Karsch, 1878, *H. fossulata* Karsch, 1881, *H. albicomis* Simon, 1887, and *H. sericea* Pocock, 1898. The first three species are only known from the type specimens whereas numerous synonyms have been proposed for the latter two species as well as several new localities were recorded.

Simon (1907) described *H. occidentalis* from the central parts of West Africa, while Strand, described four species from Madagascar, viz. *H. insulana* (1907a), *H. kauderni* (1908), *H. nossibeensis* (1916), and *H. stumpfi* (1916). Lawrence (1928) described two species, *H. setifrons* and *H. arborea* from Namibia, and Tucker (1920) described *H. pungwensis* from Zimbabwe. Benoit (1967) described four species: *H. baforti*, *H. segregata*, *H. clarki*, and *H. sigillata* from the eastern parts of central Africa and in 1971 he described two additional species, *H. vanmoli*, and *H. incompta* from West Africa.

Knowledge of the natural history of *Hersilia* is still rudimentary. They are cryptic and remain with their bodies adpressed to the substrate when at rest, moving at great speed when disturbed (Dippenaar-Schoeman & Jocqué 1997). Prey is rapidly encircled and enswathed with silk released from the long posterior lateral spinnerets. Although specimens are not easily located, reflections of sunlight on the guide threads they leave on trunks, are good indicators of their presence on a tree (Dippenaar-Schoeman & Jocqué 1997). The females construct a flat, oval-shaped eggsac that she covers with bits of bark.

Smithers (1945) reported on the hersiliid taxa from South Africa and Benoit (1967) revised the *Hersilia* from Africa, excluding Madagascar. Both made significant contributions to the understanding of the group. However, the present status of the genus is still not resolved. Several species are only known from one sex and most descriptions are incomplete lacking drawings especially of the internal genitalia of the female.

The Afrotropical Region represents the last biogeographical region for which no contemporary revision exists. In the present study the Afrotropical species of *Hersilia* are revised. All available material of *Hersilia* from North Africa and the Afrotropical Region housed in southern African, European and American institutions, was studied. A total of 412 *Hersilia* specimens were examined, the 22 known species were re-examined, three were listed as *nomina dubia* and 16 were redescribed and figured. Since series of specimens were available, it was possible to study intraspecific morphological variation and critically evaluate diagnostic characters used in the separation of the species. This resulted in the transfer of *Hersilia corticola* to the genus *Neotama* Baehr & Baehr, the transfer of *Hersiliopsis madagascariensis* Wunderlich to *Hersilia* and the synonymy of two species the description of 15 new species. A key to the 31 recognized species from the Afrotropical Region was prepared.

### 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, the Seychelles, Zanzibar, Yemen, Aldabra Islands and Cape Verde. Reference is made to the distribution of species from the North Africa (countries outside the Afrotropical Region) only if such species also occur, at least partly, in the Afrotropical Region. Where possible, locality co-ordinates are given for localities of species.

**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 are 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; c - copulatory duct; CI - carapace index; CL - carapace length; CLL - clypeus length; CW - carapace width; el - epigyne length; ew - epigyne width; 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 and indexes determined.

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).

Ratio of leg length is relative to leg I. All *Hersilia* spp., have a biarticulation on metatarsus I, II, and IV; the length of the proximal and distal segments of the metatarsi are given under the headings of metatarsus i and metatarsus ii respectively.

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

Epigyne: length and width of sclerotized area.

Drawings: the left palps of males were drawn if available; otherwise the right palp was drawn and specified as such. Drawings of the carapace include a lateral view and an

anterior view. The abdomen of the female was drawn if available, otherwise the male abdomen was drawn. In some type specimens the abdomen was damaged to such an extent that no drawings could be made. Drawings of the epigyne include a ventral and dorsal view.

Material was received on loan from the following institutions:

AMNH - American Museum of Natural History, New York, USA; BMNH - The Natural History Museum, London, UK; CASC - California Academy of Sciences, Golden Gate Park, San Francisco, California, USA; DNSM - Durban Natural Science Museum, Durban, South Africa; MNHU - Museum für Naturkunde der Humboldt Universität, Berlin, Germany; MNHN - Museum National d'Histoire naturelle, Paris, France; MRAC - Koninklijk Museum voor Midden- Afrika, Tervuren, Belgium; MSNG - Museo Civico di Storia Naturale Giacomo Doria, Genoa; NCA - National Collection of Arachnida, Agricultural Research Council -Plant Protection Research Institute, Pretoria, South Africa; NM - Natal Museum, Pietermaritzburg, South Africa; NMB - National Museum, Bloemfontein, South Africa; NRM - Swedish Museum of Natural History; QM - Queensland Museum, Brisbane, Australia; SAM – Iziko Museum of Cape Town, South Africa; SMFD - Forschungsinstitut und Naturmuseum Senckenberg, Federal Republic of Germany; SMN - State Museum, Windhoek, Namibia; TMP -Northern Flagship Institute -Transvaal Museum, Pretoria, South Africa;

### **Systematics**

#### ***Hersilia* Audouin, 1826**

*Hersilia* Audouin, 1826: 317; Lucas, 1869: 1; Simon, 1893: 440; Smithers, 1945: 1; Benoit, 1967: 1; Baehr & Baehr, 1987: 351; 1993: 3; Levy, 2003: 1.

Type species by monotypy: *Hersilia caudata* Audouin, 1826.

## Diagnosis

A group of spiders characterized by very long posterior lateral spinnerets, longer than carapace width; very long legs,  $> 2 \times$  total body length; metatarsi of leg I, II, and IV biarticulate (Fig. 1e); lateral eyes on slight tubercles (Fig. 10c); chelicerae armed with three large cheliceral teeth on promargin and one row of 3-9 minute teeth on retromargin; spermathecae globose or cylindrical.

## Description

**Female.** Size: small to medium (range 4.81 - 13.42).

Colour: carapace varies from pale yellow to dark brown, edge with dark border of varying thickness; clypeus pale with dark or white markings; MOQ dark, white marks posteriad of eye tubercle in some species; sternum, labium and endites pale; abdomen: dorsum mottled white, antero-lateral border dark brown, lancet-shaped heart mark dark, extends up to third pair dorsal muscular pit (Fig. 2e); ventrum pale to mottled white; legs: femora and tibiae pale with faint to dark annulation and lateral stripes.

Carapace: varying in length between longer than wide to wider than long; thoracic region widest; dorso-ventrally flattened; fovea longitudinal with radial striae; covered with plumose setae; lateral borders with row of conspicuous setae (Fig. 1f); clypeus truncate in dorsal view, sloping, varies in length from  $0.4 - 1.5 \times$  MOQ length; eye tubercle of variable height. Eyes: PER recurved from above, straight from front; AER recurved from above and in front; AME</>PME</>PLE>>ALE with ratio range AME: ALE: PME: PLE = 1: 0.23-0.7: 0.54-1.2: 0.5-1.27; MOQ wider than long, widest anteriorly; chelicerae: stout to elongate, retromargin with row of 3 - 9 minute teeth, promargin with three large teeth. Sternum: heart-shaped, sparsely covered with plumose setae. Labium: triangular- to crescent-shaped; two-thirds the length of endites; endites elongate, rectangular.

Abdomen: longer than wide, widest in posterior third; dorso-ventrally flattened; densely covered with plumose setae (Fig. 1b); four pairs of distinct dorsal muscular pits that vary in size (Figs. 1b & 2e); ventrum with muscular pits in V-shaped pattern. Spinnerets: posterior lateral spinnerets long, at least longer than cephalothorax width; terminal segment  $>2 \times$  length of basal segment; rows of numerous elongate tapering spinules ventrally on posterior lateral spinnerets (Fig. 1a), terminating distally in conical

apophyses with a truncate or acute apex; spinules on basal segment and entire length of terminal segment.

Legs: either leg I or II longest; leg I at least  $1.5 \times$  longer than total length of body; leg III very short,  $<0.4 \times$  length of leg I; metatarsus I  $>6 \times$  longer than tarsus I; distal segment of metatarsus  $<0.6 \times$  length of proximal segment. Legs I and II are one-third shorter than male's legs and legs III and IV are one-fifth shorter. Relative length of segments varies slightly between species. Femur slightly longer than tibia; length ratio of biarticulate metatarsi is 1 : 0.6. Leg spines similar between species. Femur, patella, and metatarsus with spines; spine formula similar between species and variations of: I- Fe 1r1p-1d-1r1p-1d-1r1p-1d, Pat 1r, Tib 1r1p-1d-1r1p-1d-1r1p-1d, Mt 1p1r-1d-1r1p-1d; II- Fe 1r1p-1d-1r1p-1d-1r1p-1d, Pat 1r, Tib 1r1p-1d-1r1p-1d-1r1p-1d, Mt 1p1r-1d-1r1p-1d-1r1p-1r1p; III- Fe 1d-1d-1d-1r1p, Pat 1d-1r-1d, Tib 1d-1r1p, Mt 1r1p-1d; IV- Fe 1p-1d-1p-1d-1p1r-1d-1p1r, Pat 1d-1r-1d, Tib 1d-1r1p-1d-1r1p-1d, Mt 1r1p-1r1p-1d; spines covered with irregular pattern of lancet-shaped scales (Figs. 1c, d). Four trichobothria distally on metatarsi; tarsal claw three clawed with 3 - 8 teeth on paired claws.

Epigyne: either with longitudinal division into median plate and lateral borders (Fig. 2f) or entire (Fig. 3f); epigyne with latter arrangement characterised by transverse white plate posteriad on epigyne (Fig. 3f); large median plate varies in shape from subquadrate (Fig. 9f), narrowing anteriorly to varying degrees (Fig. 2f) or T-shaped (Fig. 14a); presence of fixing structures that are triangular or sickle-shaped sclerotized outgrowths laterad on median plate (Fig. 2f), varies between some species in size and shape; lateral borders vary in size and shape (Figs. 2f & 8f). Spermathecae: copulatory openings usually posteriad or medially on epigynal plate; spermathecae and seminal receptacle sclerotized, vary from globose to cylindrical, (Fig. 13g); fertilization ducts simple, short to elongate.

**Male.** Size: Small to medium (3.84 - 8.40). Resembles female in shape and colour but differs structurally as follows: smaller in size; abdomen more slender, widest medially; legs much longer in relation to body length; metatarsus in some males can be up to  $1.7 \times$  longer than femur; length ratio of biarticulate metatarsi is 1:0.5.

Palps: tibia short, some species with strong spines dorsally on tibia (Figs. 16b, 20b & 28b), or numerous elongate setae present in front of bulbus (Fig. 2a); sperm duct

shape varies between species groups; hook-shaped median apophysis usually present (Figs. 2a & 8a); conductor sometimes present (Figs. 21a); sclerotized tegular projection present in some species (Fig. 3a); embolus either long and filiform (Fig. 2a) or short and stout with apex acute or furcated (Fig. 21b).

**Phylogenetics.** The genus *Hersilia* forms a monophyletic unit based on the presence of glandular parts covered by threads on the seminal receptacles of the epigyne.

**Species groups.** Based on the material studied, most species of *Hersilia* fall into species groups, primarily based on male and female genital structures. The groups referred to can be defined as follows:

*HERSILIA CAUDATA* GROUP (Fig. 33). This is a large monophyletic group, with weak support based on a cladistic analysis of hersiliid relationships. The only characters supporting the monophyly of the group: the presence of fixing structures laterad on the median plate (Figs. 2f, 8f) varying in shape from triangular to sickle-shaped and the longitudinally angled, hook-shaped median apophysis in males (Figs 2a & 8a). Other ambiguous characters include epigyne with broad median plate; border of septum in line with epigastric furrow; lateral borders of epigyne visible externally (Fig. 9f); copulatory ducts simple, vary from short to elongate; spermathecae globose, on a stalk (Fig. 16g); male palp with hook-shaped median apophysis, sperm duct regularly curved; embolus circular, apex acute (Figs. 9a). Composition: *H. albicomis*, *H. caudata*, *H. pungwensis*, *H. occidentalis*, *H. sericea*, *H. setifrons*, *H. tamatavensis*.

*HERSILIA BAFORTI* GROUP (Fig. 34). Monophyletic group defined by the following synapomorphies: male palp with bulbus basally swollen (Fig. 11b), sperm duct incurved (Fig. 11a); absence of median apophysis; straight or slightly curved embolus with laterally produced basal process (Figs. 3a,b); epigyne entire with transverse oval or sub-quadrangle unpigmented area mesad on epigynal plate (Fig. 6f). Composition: *H. alluaudi*, *H. baforti*, *H. beva*, *H. bubu*, *H. clarki*, *H. dilumen*, *H. ferra*, *H. plara*, *H. salda*, *H. unca*, *H. vanmoli*, *H. woutrinae*.

*HERSILIA SIGILLATA* group (Fig. 35). Paraphyletic group based on the following ambiguous characters: spermathecae globose or subtriangular, several small seminal receptacles basally on epigynal plate, one large subtriangular seminal receptacle;

Spermathecae not on a stalk. Median apophysis transversely directed. Composition: *H. vinsoni*, *H. insulana*, *H. caronae*, *H. sigillata*.

**HERSILIA MADAGASCARIENSIS GROUP** (Fig. 36). Monophyletic group defined by the following autapomorphies: male palp with median apophysis broad, angled transversely, embolus hidden behind median apophysis for most of its length (Fig. 17a); epigyne of female with heavily sclerotized, oval copulatory openings (Fig. 17f); large basal bulbus (Figs. 17g). Composition: *H. madagascariensis*, *H. arborea*, *H. moheliensis*, *Hersilia taita*, *Hersilia eloetsensis*.

**HERSILIA INCOMPTA GROUP** (Fig. 37). Monophyletic group defined by the following synapomorphies: female epigyne with conspicuous striae laterally on median plate (Figs. 19e); two pairs of well separated elongate spermathecae on very long copulatory ducts (Fig. 19e). Male palp with compact palpal tibia with angular dorsal projection and at least four very strong dorsal spines; bulbus with lamellar modifications; embolus angular sides; median apophysis hollowed, complexly modified (Fig. 19a). Composition: *H. hildebrandti*, *H. incompta*, *H. nicolae*.

### Key to the Afrotropical species of *Hersilia* Audouin

- |  |                         |
|--|-------------------------|
| 1. Males.....  | 2                       |
| — Females.....   | 29                      |
| 2. Bulbus with lamellar modifications (Figs. 4b, 19a).....   | 3                       |
| — Bulbus simple, unmodified.....   | 5                       |
| 3. Bulbus with lamellar modification forming bifid projection distally, median apophysis absent; palpal tibia simple, dorsal spines absent (Fig. 4a); Namibia, Zimbabwe.....                       | <i>arborea</i> Lawrence |
| — Bulbus with lamellar modification forming a simple round opening with complex median apophysis within; palpal tibia angulate, with row of 4-5 short, very strong spines dorsally (Fig. 19a)..... | 4                       |

4. Apophyses form two large basal concavities and end in two lateral acute spines at opposite sides; four dorsal spines on tibial palp (Figs. 15a,b); Ivory Coast.....  
.....*incompta* Benoit
- Ventral concavity of apophyses end in broad projection distally; five dorsal spines on tibial palp (Figs. 19a,b); Kenya..... *nicolae* sp. nov.
  
5. Bulbus circular, sperm duct regularly curved, embolus circular, median apophysis present, usually hook-shaped (Fig. 2a).....6
- Bulbus ovoid, basally swollen, sperm duct incurved, embolus curved or straight, median apophysis absent (Figs. 5a & 6a) .....19
  
6. Median apophysis flap-like broadening distally, embolus irregularly shaped, embolus hidden behind median apophysis for some of its length (Figs. 17a,b); Comoros, Madagascar.....*madagascariensis* (Wunderlich)
- Median apophysis hook-shaped, embolus simple, visible for entire length (Fig. 2a,b).....7
  
7. Median apophysis angled longitudinally, apex basally directed (Fig. 2a).....8
- Median apophysis angled transversely, apex directed prolaterally (Figs. 16a).....16
  
8. Embolus with or without projections medially, median apophysis basally thick (Figs. 2a & 26a-c).....9
- Embolus without medial projections, median apophysis hollowed basally (Figs. 12a,b & 18a).....15
  
9. Embolus with triangular projections medially.....10
- Embolus without triangular projections medially.....12
  
- 10 Median apophysis elongate, extends beyond embolus curve, distal part of median

- apophysis curved prolaterally (Figs. 9a & 26b); North, East, and West Africa..... *caudata* Audouin
- Median apophysis short, does not extend beyond embolus curve, distal part of median apophysis straight (Figs. 2a & 26a)..... 11
11. Embolus distally with small triangular projection, median apophysis hook-shaped in medial view, distal part longer, medium-sized spiders >6mm; Central and East Africa (Figs. 20a & 26c).....*occidentalis* Benoit
- Embolus with broad medial projection, median apophysis triangular in medial view, compact, distal part short, small spiders, <6mm; West Africa (Figs. 2a,b & 26a).  
.....*albicomis* Simon
12. Median apophysis simple hook-shaped, distal part straight..... 13  
Median apophysis curved distally..... 14
13. Median apophysis thin, straight in ventral view, apex acute (Fig. 29a), two large spines dorsally on palpal tibia (Fig. 29b); Madagascar.....*tamatavensis* sp. nov.
- Median apophysis broad, triangular in ventral view, with apex rounded (Figs. 25a & 26e), spines absent on palpal tibia; South Africa, Namibia  
..... *setifrons* Lawrence
14. Median apophysis filiform with distal coil (Figs. 24a & 26d), two very strong spines dorsally on palpal tibia, (Fig. 24b); South and East Africa.....*sericea* Pocock
- Median apophysis with apex truncate, short curve in distal part of median apophysis; dorsal spines on palpal tibia absent (Fig. 22a); Zimbabwe.....  
..... *pungwensis* Tucker
15. Median apophysis with distal part abruptly acute, convex medially (Fig. 12a,b), cymbium compact, three spines dorsally on palpal tibia; small spiders, < 6mm; Madagascar.....*eloetsensis* sp. nov.
- Median apophysis hollowed basally with simple distal flap, apex acute; cymbium

- digitate, dorsal spines absent, medium-sized spiders, > 6mm (Fig. 18a,b); Comoros  
 ..... *moheliensis* sp. nov.
16. Median apophysis with apex acute (Fig. 16a).....17  
 — Median apophysis with apex rounded (Figs. 25h & 26a).....18
- 17 Median apophysis simple, hook-shaped with two very strong dorsal spines on palpal tibia (Fig. 16a,b); Madagascar..... *insulana* Strand  
 — Median apophysis medially convex, abruptly acute apex, medially convex, basal margin projecting, three dorsal spines on palpal tibia not as strong (Figs. 8a,b); Comoros.....*caronae* sp. nov.
18. Median apophysis short, scoop-shaped with broad hollow base in medial view, apex broad, embolus, simple filiform, apex acute (Figs. 28a,b); Kenya.....  
 .....*taita* sp. nov.  
 — Median apophysis long, triangular in medial view, apex rounded, embolus and slide like tegular projection elongate (Figs. 26h & 27a,b); Central Africa.....*sigillata* Benoit
19. Conductor absent (Figs. 10a,b); Zimbabwe..... *clarki* Benoit  
 — Conductor present (Figs. 3a & 5a).....20
20. Conductor very small (Fig. 5a), whole length of embolus visible; Central Africa.....*baforti* Benoit  
 — Conductor, larger, embolus hidden for part of its length.....21
21. Conductor proximad of embolus (Figs. 6a & Fig. 30b).....22  
 — Conductor distad or above embolus (Figs. 12a & 3a).....23
22. Conductor circular thin (Fig. 6a); West, Central Africa.....*beva* sp. nov.  
 — Conductor broad, stout (Fig. 30a); West Africa..... *vanmoli* Benoit

23. Conductor distally of embolus, embolus broad, deeply furcate (Fig. 13a); Democratic Republic of the Congo.....*ferra* sp. nov.  
 — Conductor cover embolus for part or most of its length (Figs. 13a & 32a)..  
 .....24
24. Conductor small, cover only base of embolus, embolus apex acute (Fig. 32a).....*woutrinae* sp. nov.  
 Conductor large, cover embolus for most of its length, embolus apex bifurcate (Fig. 13a).....25
25. Sclerotized tegular projection absent (Fig. 13a), conductor shorter than bulbus width, distally with round chitinous projection; central Africa.....*bubi* sp. nov.  
 — Sclerotized tegular projection present; conductor as long as or longer than bulbus width, chitinous projection may or may not be present (Fig. 3a).....26
26. Conductor with broad chitinous projection distally; apex broad (Fig. 3a); Kenya.....*alluaudi* Berland  
 — Conductor tapering distally, apex rounded (Fig. 21a).....27
27. Conductor distally without ventral furrow, apex simple, round, embolus broad and thin basally, seven strong spines dorsally on palpal tibia (Fig. 21a); Cameroon.....*plara* sp. nov.  
 — Conductor with ventral furrow distally, apex rounded, embolus filiform, with or without dorsal spines (Figs. 11a & 23a).....28
28. Elongate, fine sclerotized tegular projection, five strong spines dorsally on palpal tibia and dorsally on palpal femur (Figs. 11a,b); Ivory Coast.....*dilumen* sp. nov.  
 — Short, stout sclerotized tegular projection, three thin dorsal spines on tibial (Figs. 23a,b); east, central Africa.....*salda* sp. nov.

29. Epigyne clearly divided by longitudinal fold in median plate with lateral borders (Fig. 2f), heart mark lancet-shaped, abdomen with faint transverse bands; female abdomen always longer than wide (Fig. 9e).....30
- Median section and lateral borders fused not divided longitudinally into three parts (Fig 6f), abdomen with heart mark triangular, broadening posteriorly, female abdomen often wider than long (Fig. 6e).....41
30. Fixing structures laterad on median plate (Fig. 9f).....31
- Fixing structures absent laterad on median plate (Fig. 4f).....38
31. Fixing structures sub-triangular (Figs. 9f, 24f).....32
- Fixing structures sickle-shaped, elongate, basally swollen (Fig. 17f).....34
32. Anterior part of fixing structures obliquely, laterad directed (Fig. 9f), seminal receptacles much larger than spermathecae, medial spermathecae widening posteriorly (Fig. 9g); North Africa.....*caudata* Audouin
- Fixing structures not as above, spermathecae equal in size, spermathecae clearly separated from ducts.....33
33. Fixing structures with acute medial apex, lobiform lateral lobes, tips inward pointing; median plate with medial protuberance on distal border (Figs. 24f,g); East, South Africa.....*sericea* Pocock
- Fixing structures with round medial apex, angulate lateral borders not projecting much beyond border, median plate with distal border straight (Figs. 25f,g); southern Africa.....*setifrons* Lawrence
34. Seminal receptacles and spermathecae sub-triangular to cylindrical in shape, several seminal receptacles posteriad on epigyne (Fig. 16g), spermathecae narrowed basally.....35
- Spermathecae and seminal receptacles globose, several small seminal receptacles

- posteriad on epigyne, absent (Fig. 2g).....37
35. Abdomen obovate, very large, oval dorsal muscular pits (Fig. 27e), legs short, eye tubercle conspicuously low, clypeus very short (Figs. 27c,d); central Africa.....  
.....*sigillata* Benoit  
— Not as above.....36
- 36 Spermathecae cylindrical, with medial curve (Fig. 8g); Comoros..... *caronae* sp. nov.  
Spermathecae cylindrical, with medial curl (Fig. 16g); Madagascar.....  
.....*insulana* Strand
37. Epigyne with spiniform, downward pointing lateral borders (Fig. 2f), copulatory ducts elongate; west Africa.....*albicomis* Simon  
— Epigyne externally with angulate lateral borders, copulatory ducts short (Fig. 20g); east, central Africa.....*occidentalis* Benoit
38. Epigyne with small spiniform, inward pointing lateral borders (Figs. 4f,g), broad median plate, elongate apophysis distally on seminal receptacle, spermathecae larger than seminal receptacle (Fig. 4g); Namibia.....*arborea* Lawrence  
— Epigyne with large lateral borders, median plate narrowed anteriorly, broadening posteriorly, spermathecae similar in size (Figs. 14a, 15f, 19d).....39
39. Median plate with striae basally on lateral borders, spermathecae simple, round, copulatory and fertilization ducts short (Figs. 14a,b); Tanzania.....  
.....*hildebrandti* Karsch  
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### 1. *Hersilia albicomis* Simon, 1887 (Figs. 2, 26a & 33)

*Hersilia albicomis* Simon, 1887: 273; 1893: 443; Benoit, 1967: 26.

*H. decellei* Benoit, 1967: 17; first synonymized by Benoit 1971:152.

**Types.** *Hersilia albicomis*, female holotype, **Ivory Coast:** no locality specified, C.H. Alluaud, MNHN 10055 (examined); - paratypes: 1 male, same data (examined); 1 female, **Ghana:** Accra (05°33'N 00°15'W), 20.vii.1964, G. Marlier, MRAC 127235 (not examined).

**Diagnosis.** Small spiders (5.25 - 5.6); legs very long; eye tubercle slightly raised (Fig. 2c); clypeus long (Fig. 2d); epigyne: fixing structures elongate, sickle-shaped, lateral borders spiniform downward pointing (Fig. 2f), elongate copulatory ducts (Fig. 2g); male palp with embolus broadening basally (Fig. 2a); median apophysis hook-shaped, angled longitudinally, short not extending beyond curve of embolus, basally broad, triangular in lateral view (Fig. 2b), tapering, apex acute (Figs. 2a & 26a), prolaterally directed. The hook-shaped median apophysis of male palp and sickle-shaped fixing structures of epigyne resemble those of *H. occidentalis*. However, this species differs from *H. occidentalis* in the triangular shape of the median apophysis (in lateral view), presence of two dorsal tibial spines instead of three, smaller size, and the elongate fixing structures.

**Redescription. Female.** Size(n=7). TL 5.45 (5.25 - 5.6); CL 2.32 (1.76 - 3.15); CW 2.24 (1.76 - 3.15); CLL 0.47 (0.3 - 0.59); OAL 0.46 (0.39 - 0.52). AME diameter 0.16; AME-AME 0.17; ALE 0.18; MOQ-AW 0.48; ALE diameter 0.07; PME-PME 0.17; PME diameter 0.16; PME-PLE 0.22; MOQ-PW 0.5; PLE diameter 0.18.

Colour: carapace varies from pale yellow to pale brown with broad dark border; clypeus pale yellow to pale with white pilosity anteriorly; eye area with dark patch, white longitudinal line posterior on eye tubercle in some specimens; abdomen (Fig. 2e) white to pale white, with or without serrated dark antero-lateral border extending up to 2/3 of abdomen, sometimes absent; heart mark extends up to third pair of dorsal muscular pit; ventrum mottled white; spinnerets with no or vague annulation; legs: pale yellow to pale brown; no or faint annulation on femora; patellae dark; palps with dark annulation at base and distal tip of tarsus.

Carapace: as wide as long (CI 1.05); lateral border with row of conspicuous setae; clypeus long,  $1.02 \times$  MOQ length, sloping; eye tubercle raised sides vertical; PLE largest; eye ratio 1: 0.46: 1: 1.17; MOQ-AW = MOQ-PW; chelicerae elongate,  $1.78 \times$  longer than wide.

Abdomen: longer than wide, varies in shape from obovate to widest in posterior third; dorsal muscular pits round, second pair largest; posterior lateral spinnerets as long as abdomen,  $1.68 \times$  cephalothorax width; tS  $3.3 \times$  length of bS.

Legs: leg II longest,  $2.6 \times$  total length of body; leg ratio 1: 1.03: 0.33: 0.91; metatarsus I,  $6.8 \times$  longer than tarsus I; distal part of metatarsus half the length of the proximal part; leg measurements: I- Fe 5.13, Pat + Tib 4.45, Mt I 3.83, II 2.48, Ta 0.8, total 16.5; II-4.65, 4.37, 3.75, 2.25, 0.8, total 15.45; III-1.76, 1.59, 1.18, 0.62, total 4.81; 3.68, 3.84, 3.32, 1.37, 0.46, total 12.8; Palp-0.88, 1.09, 0.55, total 2.52.

Epigyne (Figs. 2f,g): wide (el/ew 0.45); lateral borders spiniform, directed downward; median plate sub-quadrate, posterior border straight; sickle-shaped fixing structures laterally on median plate; copulatory ducts simple, elongate; spermathecae simple, round, similar in size; spermathecae broadening basally; seminal receptacle with glandular parts covered by threads; fertilization ducts curve dorsally (Fig. 2g).

**Male.** Size (n=3). TL 4.68 (4.35 - 5); CL 1.77 (1.4 - 2.03); CW 1.77 (1.4 - 2.03); CLL 0.55 (0.52 - 0.6); OAL 0.46 (0.39 - 0.52). AME diameter 0.16; AME-AME 0.16; ALE 0.19; MOQ-AW 0.5; ALE diameter 0.07; PME-PME 0.16; PME diameter 0.17; PME-PLE 0.21; MOQ-PW 0.49; PLE diameter 0.19.

Structurally similar to females except legs longer,  $4.34 \times$  longer than total length of body; posterior lateral spinnerets long,  $1.4 \times$  length of abdomen,  $2.8 \times$  carapace width; leg measurements: I- Fe 5.77, Pat + Tib 6.32, Mt I 5.09, II 2.83, Ta 0.74, total 20.74; II- 5.36, 6.27, 5.04, 2.53, 0.72, total 19.91; III-1.99, 1.9, 1.79, 0.58, total 6.26; 4.55, 4.42, 4.09, 2.1, 0.64, total 15.09; Palp-0.95, 0.78, 0.73, total 2.46.

Palp (Figs. 2a,b & 26a): tibia elongate,  $1.39 \times$  longer than wide,  $0.59 \times$  cymbium length; two strong, long dorsal spines; cymbium elongate,  $1.73 \times$  longer than wide; four apical spines on cymbium; bulbus circular; sperm duct regularly curved; embolus circular broadening basally, median apophysis hook-shaped, angled longitudinally angled, distally tapering, apex acute.

**Additional material examined. Equatorial Guinea:** Bioko, 8 km West of Luba, (3°27'N 8°29'E), 1 female, M. Boko, D.K. Dabney, R.W. Tomos, D. Ubick, J.V. Vindum, CASC; **Ghana:** Legon (05.39°N 00°11'W), 1 female, 14.iii.1972, J. Edmunds, MRAC 14401; **Ivory Coast:** Kossou (06°57'N 04°58'W), 1 female, 1 male, 19.v.1975,

R. Jocqué, MRAC 149811; **Nigeria:** Benin (6°20'N 5°38'E), 1 female, x-xi.1975, C.B. Powell, MRAC 155475; Rivers state, Oguta Lake (05°24'N 06°48'E), 1 male, 10-24.ii.1992, H. Segers, MRAC 174627.

**Distribution.** Ghana, Ivory Coast, new records: Equatorial Guinea, Nigeria (Fig. 33).

**Natural history.** Females were caught from March to November and males between February and May.

## 2. *Hersilia alluaudi* Berland, 1919 (Figs. 3 & 34)

*Hersilia alluaudi* Berland, 1919: 348; 1920: 123; Benoit, 1967: 22.

**Types.** Male holotype, **Tanzania:** Kilimandjaro, Neu-moschi (3°21'S 37°21'E), 4-12.iv.1912, MNHN 10042 (examined); - paratypes: 1 female, **Democratic Republic of the Congo:** District Ituri: Kinawa (0°41'N 29°51'E), foot of Ruwenzori, 25.ii.1940, Lepersonne-Warnant, MRAC 26824 (examined).

**Diagnoses.** Small spiders (5), legs very long eye tubercle slightly raised (Fig. 3c), and clypeus short (Fig. 3d); male palp with sclerotized tegular projection (stp), apex truncate (Fig. 3b); basal embolar projection distally opaquely transparent, apex broad (Fig. 3a); epigyne with two round adjacent openings, spermathecae large (Figs. 3f,g). The males of this species resemble that of *H. plara* in the large basal projection of the embolus that hide the embolus for most of its length, furcated apex of the embolus and straight sclerotized tegular projection. The palp differs from *H. plara* in the absence of the angulate tibial palp and strong dorsal spines; presence of a broad apex of basal projection of embolus and stout sclerotized tegular projection.

**Redescription. Male.** (Size = 1). TL 5; CL 1.4; CW 1.44; CLL 0.44; OAL 0.2; AME diameter 0.24; AME-AME 0.2; ALE 0.2; MOQ-AW 0.68; ALE diameter 0.07; PME-PME 0.2; PME diameter 0.13; PME-PLE 0.13; MOQ-PW 0.46; PLE diameter 0.22.

Colour: carapace with border dark; clypeus dark brown; chelicerae dark; eye area dark brown; dorsum of abdomen dark with dark wavy antero-lateral border; heart mark

broad, continuous with darker posterior half of abdomen (Fig. 3e); ventrum pale; posterior lateral spinnerets faintly annulate; legs pale brown; femora and palps faintly annulate.

Carapace (Figs. 3c,d): as wide as long (CI 1.01); clypeus short,  $0.77 \times$  median ocular quadrangle length, almost vertical; eye tubercle slightly raised, sides sloping; AME very large; eye ratio 1: 0.36: 0.57: 0.82; MOQ-AW > MOQ-PW; chelicerae elongate,  $1.7 \times$  longer than wide.

Abdomen (Fig. 3e): longer than wide, widest in anterior third with four pairs of dorsal muscular pits, second pair largest, oval; posterior lateral spinnerets  $1.22 \times$  length of abdomen,  $3.6 \times$  carapace width; ts four  $\times$  bs.

Legs: leg I longest,  $6.25 \times$  longer than total body length; leg ratio 1: 1.01: 0.33: 0.89; metatarsus I,  $12.9 \times$  longer than tarsus I; distal part of metatarsus  $0.63 \times$  length of proximal part; leg measurements: I- Fe 8.16, Pat + Tib 9.6, Mt I 7.6, II 4.8, Ta 0.96, total 31.12; II-7.7, 9.6, 7.6, 4.8, 0.96, total 30.66; III-3.8, 3.6, 2.8, 0.8, total 11; IV-6.8, 8.24, 7.2, 4.4, 1.2, total 27.84; Palp-1, 1.06, 0.91, total 2.97.

Palps (Figs. 3a,b): tibia compact, as wide as long,  $0.51 \times$  cymbium length; four short, slender spines dorsally; cymbium compact,  $1.75 \times$  longer than wide, four apical spines; bulbous ovoid with basal swelling; sperm duct incurved; embolus straight, apex furcate; stout sub-triangular sclerotized tegular projection (stp) with truncate apex; basal projection of embolus distally opaquely transparent, broad.

**Female.** (Size =1). CL 2.85; CW 2.78; CLL 0.52; OAL 0.13; AME diameter 0.29; AME-AME 0.18; ALE 0.16; MOQ-AW 0.75; ALE diameter 0.08; PME-PME 0.13; PME diameter 0.22; PME-PLE 0.22; MOQ-PW 0.57; PLE diameter 0.16.

Females structurally resemble males; leg measurements: I- Fe 4.88, Pat + Tib 5.33, Mt I 3.83, II 2.63, Ta 0.98, total 17.63; II-5.18, 5.85, 4.13, 2.85, 0.68, total 18.68; III-2.25, 2.55, 2.03, 0.83, total 7.65; IV-4.73, 5.03, 4.28, 2.4, 0.75, total 17.18; Palp-1.13, 1.28, 0.98, total 3.38.

Epigyne (Figs. 3f,g): abdomen absent; figures of the epigynes redrawn from Benoit (1967).

**Additional material examined.** Tanzania: UDSM campus in Zoology Building (6°48'S 39°17'E), 1male, 25.ix.1971, K.M. Howell, MRAC 159.265

**Distribution.** Democratic Republic of Congo, Tanzania (Fig. 34).

**Natural history.** Adults were caught between February and April.

### 3. *Hersilia arborea* Lawrence, 1928 (Figs. 4 & 37)

*Hersilia arborea* Lawrence, 1928: 239; Benoit, 1967: 24.

**Types.** Female lectotype (here designated) **Namibia:** Kaoko Otavi (18°18'S 13°42'E), i-iv.1926, Museum expedition, R. Lawrence, SAM B6944; - paralectotypes: 3 males, 4 females, same data, SAM B6941 (examined); 1 male, Warmbad (28°27'S 18°44'E), SAM B7141 (not examined); 1 male, 1 female, Outjo (20°07S 16°09E), SAM B6726 (not examined).

**Diagnoses.** Small to medium-sized spiders (4.8 - 7.5); legs long; eye tubercle raised (Fig. 4c); clypeus very long (Fig. 4d); epigyne with broad median plate; seminal receptacle with elongate distal apophysis, smaller than seminal receptacle (Fig. 4g); male palp with median apophysis broad, bifid (Figs. 4a,b); embolus short, stout, apex acute. The epigyne of this species resembles those of the *caudata*-group in the presence of two pairs of round spermathecae, short copulatory ducts and medially curved fertilization ducts.

**Redescription. Female.** Size (n=2). TL 6.15 (4.8 - 7.5); CL 2.2 (1.77 - 2.63); CW 2.16 (1.77 - 2.55); CLL 0.7 (0.56 - 0.85); OAL 0.1 (0.9 - 0.12); AME diameter 0.16; AME-AME 0.14; ALE 0.12; MOQ-AW 0.4; ALE diameter 0.05; PME-PME 0.13; PME diameter 0.14; PME-PLE 0.11; MOQ-PW 0.42; PLE diameter 0.13.

Colour: carapace pale with brown streaks and patches; clypeus and eye area pale; dorsum mottled white with pattern on antero-lateral border faint; heart mark lancet-shaped; posterior half of dorsum with broad, dark, transverse lines (Fig. 4e); ventrum and posterior lateral spinnerets pale; legs pale brown, annulation on femora and palps.

Carapace: as long as wide (CI 1.01); clypeus very long,  $1.73 \times$  MOQ length, sloping; eye tubercle raised (Fig. 4c), AME largest; eye ratio 1: 0.35: 0.93: 0.82; chelicerae elongate,  $1.73 \times$  longer than wide; seven minute cheliceral teeth on retromargin.

Abdomen (Fig. 4e): longer than wide, widest in middle; four pairs of round dorsal muscular pits, second pair largest; posterior lateral spinnerets  $0.94 \times$  abdomen length,  $1.76 \times$  carapace width; tS  $4.29 \times$  bS.

Legs: leg IV longest,  $2.78 \times$  total body length; leg ratio 1: 0.98: 0.37: 1.01; metatarsus I  $13.75 \times$  tarsus I; distal part of metatarsus  $0.57 \times$  length of proximal part; leg measurements: I- Fe 4.5, Pat + Tib 6.23, Mt I 5.25, II 3, Ta 0.6, total 20.33; II-4.4, 6.23, 5.25, 3, 0.6, total 20.33; III-2.63, 2.33, 1.88, 0.68, total 7.5; IV-4.51, 5.7, 4.82, 2.23, 0.56, total 16.94; Palp-1.16, 0.99, 0.84, total 2.99.

Epigyne (Figs. 4f,g): wide (el/ew 0.5); lateral borders spiniform (Fig. 4f); copulatory openings widely spaced; copulatory ducts short; spermathecae simple, round, well separated from copulatory ducts; seminal receptacle with elongate, linear distal apophysis, smaller than spermathecae; fertilization ducts curved dorsally.

**Male.** Size (n=3). TL 4.68 (4.3 - 5.25); CL 2.02 (1.8 - 2.25); CW 1.7 (1.4 - 1.9); CLL 0.55 (0.35 - 0.72); OAL 0.11 (0.09 - 0.12); AME diameter 0.18; AME-AME 0.1; ALE 0.07; MOQ-AW 0.46; ALE diameter 0.05; PME-PME 0.11; PME diameter 0.13; PME-PLE 0.1; MOQ-PW 0.38; PLE diameter 0.15.

Smaller in size but structurally similar to female except: longer legs with leg I longest; longer posterior lateral spinnerets; carapace red-brown, abdomen clearly longer than wide, widest in anterior third, narrower than carapace; dorsum dark brown; leg measurements: I- Fe 4.83, Pat + Tib 5.65, Mt I 4.7, II 2.73, Ta 0.62, total 18.53; II-4.52, 5.66, 4.73, 2.55, 0.59, total 18.04; III-2.03, 2.01, 1.79, 0.62, total 6.46; IV-4.62, 5.48, 5.59, 2.29, 0.6, total 18.88; Palp-1.12, 1.03, 0.78, total 2.97.

Palps (Figs. 4a,b): tibia elongate,  $1.85 \times$  longer than wide,  $0.79 \times$  cymbium length; cymbium elongate,  $1.73 \times$  longer than wide, three apical spines; bulbus round; sperm duct regularly curved; embolus circular, short and stout; median apophysis hollow, broad base, apex bifid.

**Additional material examined. Namibia:** Lower Ostrich Gorge (22°30' S 14°58'E), 1 male, 11.ii-11.iii.1985, J. Irish, H. Rust, SMN 38681; Annabis Farm (20°0'S 14°58'E), 2 females, 23-24.ii.1969, B. Lamoral, NM 11549; 1 male, same data, NM 11557; **Zimbabwe:** Victoria Falls (17°56'S 25°50'E), female, 1-8.ii.1995, W.J. Pulawski, CASC.

**Distribution.** Namibia (Fig. 37).

**Natural history.** Specimens caught between January and February.

#### **4. *Hersilia baforti* Benoit, 1967 (Figs. 5 & 34)**

*Hersilia baforti* Benoit, 1967: 19.

**Types.** Female holotype, **Democratic Republic of the Congo:** District Tanganyika, Kapoma (7°10'S 29°8E), iii.1966, J. Baforti, MRAC 129811; -paratypes: 1 male, same data, MRAC 130774 (examined); 1 female, Shaba, Kisenge (10°40'S 23°10'E), A. Regnard, 1965, MRAC 128011 (examined).

**Diagnoses.** Small spiders; legs very long; eye tubercle slightly raised (Fig. 5c); clypeus short (Fig. 5d); epigyne with distinct impression of spermathecae and seminal receptacles visible through integument; central unpigmented transverse plate posteriorly (Fig. 5f), spermathecae with elongate distal apophyses (Fig. 5g); male palp without any apophyses; embolus filiform, straight with apex acute (Figs. 5a,b). This species resembles *H. woutrinae* and *H. bubi* in size, legs, colour, and genitalia; *H. baforti* differ in the smaller conductor and presence of transverse sclerotization anterad of central white plate.

**Redescription. Female.** Size (n=5). TL 5.74 (4.88 - 6.72); CL 2.15 (1.76 - 2.64); CW 2.15 (1.92 - 2.4); CLL 0.42 (0.35 - 0.52); OAL 0.13 (0.12 - 0.13). AME diameter 0.17; AME-AME 0.15; ALE 0.16; MOQ-AW 0.5; ALE diameter 0.07; PME-PME 0.; PME diameter 0.19; PME-PL 0.19; MOQ-PW 0.48; PL 0.13.

Colour: carapace red-brown with dark border; clypeus pale, faint oblique lateral lines; eye area dark; white spot posteriorly on eye tubercle; dorsum whitish with wavy antero-lateral border; heart mark brown; broad dark transverse line posteriorly (Fig. 5e);

posterior lateral spinnerets with distinct annulation; legs pale brown; femora and palps conspicuously annulate.

Carapace: longer than wide (CI 1.1); clypeus short,  $0.81 \times$  MOQ length, sloping; eye tubercle slightly raised, sides sloping; AME = PME; eye ratio 1: 0.4: 1: 0.68; MOQ-AW = MOQ-PW; posterior eyes on small tubercles (Fig. 5c); chelicerae elongate, twice as long as wide.

Abdomen (Fig. 5e): distinctly wider than long, widest in posterior third; four pairs of round dorsal muscular pits, second pair largest; posterior lateral spinnerets elongate,  $1.16 \times$  longer than abdomen,  $1.72 \times$  cephalothorax width; tS,  $5.53 \times$  bS.

Legs: leg II longest;  $2.5 \times$  total length of body; leg ratio 1: 1.08: 0.38: 0.92; metatarsus I,  $8.19 \times$  the length of tarsus I; distal part of metatarsus  $0.62 \times$  proximal part; leg measurements: I- Fe 3.49, Pat + Tib 3.92, Mt I 2.96, II 2.08, Ta 0.64, total 13.71; II- 3.61, 4.27, 3.28, 2.4, 0.56, total 14.75; III-1.59, 1.59, 1.23, 0.47, total 5.44; IV-3.22, 3.3, 2.87, 1.63, 0.62, total 12.56; Palp-0.75, 0.91, 0.53, total 2.19.

Epigyne (Figs. 5f,g): as wide as long (el/ew 0.92); broad sclerotization anterior of transverse unpigmented central plate; epigyne with distinctive impression of spermathecae visible through integument (Fig 5f); copulatory ducts short (Fig. 5g); spermathecae and seminal receptacles elongate, tubular; fertilization ducts directed dorsally with medial curve.

**Male.** Size (n=2). TL 4.88 (4.80 - 4.96); CL 2.28 (2.16 - 2.4); CW 2.04 (2 - 2.08). CLL 0.46 (0.43-0.49); OAL 0.48 (0.45-0.51). AME diameter 0.19; AME-AME 0.146; AME-ALE 0.13; MOQ-AW 0.52; ALE: 0.1; PME-PME: 0.15; PME diameter: 0.16; PME-PLE: 0.16; MOQ-PW: 0.48; PLE diameter: 0.13.

Structurally similar to female except for longer carapace (CI 1.15); AME larger than PME; eye ratio 1: 0.47: 0.85: 0.82; abdomen longer than wide, widest in middle; posterior lateral spinnerets  $1.5 \times$  length of abdomen, twice cephalothorax width; legs comparatively longer,  $4 \times$  total body length; leg ratio 1: 1.07: 0.37: 0.9; leg measurements: I- Fe 4.8, Pat + Tib 6, Mt I 4.48, II 2.48, Ta 0.8, total 18.56; II-5.04, 6.08, 4.8, 3.2, 0.8, total 19.92; III-2.4, 2.24, 1.76, 0.48, total 6.88; IV-4.4, 4.8, 4.4, 2.4, 0.72, total 16.72; Palp-absent (no measurement taken).

Palps (Figs. 5a,b): tibia compact, as long as wide,  $0.38 \times$  cymbium length; cymbium elongate,  $3.25 \times$  longer than wide, three apical spines; bulbus with basal swelling, sperm duct incurved; embolus filiform, straight, apex acute.

**Additional material examined. Uganda:** District Masindi, Budongo Forest, Sonso ( $01^{\circ}46'N$   $31^{\circ}33'E$ ), 2 females, 1-10.vii.1995, T.Wagner, QM T.R.16; 1 male, same data, QM C.a.1.; **Democratic Republic of the Congo:** Ituri, Faradje ( $3^{\circ}43'N$   $29^{\circ}43'E$ ), 1 female, 14.xiii.1938, H. du Bois, MRAC 137.388.

**Distribution.** Democratic Republic of the Congo; new record: Uganda (Fig. 34).

**Natural history.** Forest inhabiting species; adults were caught in March.

### 5. *Hersilia beva* sp. nov. (Figs. 6 & 34)

**Types.** Holotype male, **Cameroon:** South-West Province, Fako Division, Limbe Subdivision, 1.4 km NE of Etome ( $04^{\circ}02'N$   $09^{\circ}31'E$ ), 13-19.i.1992, J. Coddington, C. Griswold, Wansie, CASC; paratypes: 1 female, same data, CASC; **Ivory Coast:** 1 female, Appouesso, FC Bossematie, route nr. 1 ( $06^{\circ}35'N$   $03^{\circ}28'W$ ) rain forest along lagoon, night catch, 12.ii.1997, R. Jocqué, L. Baert, MRAC 205393; 1 female, Adiopo Doume' ( $5^{\circ}20'N$   $4^{\circ}20'W$ ), 17.xi.1995, R. Jocqué, MRAC 202570; **Equatorial Guinea:** Bioko, 3.5 km N Luba ( $3^{\circ}29'N$   $8^{\circ}35'E$ ), swampy forest at night, 13.x.1998, D.K. Dabney, D. Ubick, CASC.

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

**Diagnosis.** Small spiders; legs long; eye tubercle slightly raised (Fig. 6c); clypeus short (Fig. 6d); epigyne with sclerotization anteriorly of transverse unpigmented plate, narrowing medially (Fig. 6f); spermathecae elongate (Fig. 6g); male palp with conductor hook-shaped (Fig. 6b), embolus straight, apex acute. The palp of this species resembles that of *H. baforti* (Fig. 6a) in the horizontal filiform embolus. It differs from it in the presence of a hook-shaped conductor, a feature absent in *H. baforti*; epigyne resemble that of *H. plara* (Fig. 21f), except for the sclerotization anteriorly of central white plate narrowing medially.

**Description. Male.** Size (n=1). TL 4.4; CL 2; CW 1.6; CLL 0.26; OAL 0.07; AME diameter 0.195; AME-AME 0.169; ALE 0.065; MOQ-AW 0.56; ALE diameter 0.091; PME-PME 0.18; PME diameter 0.13; PME-PLE 0.156; MOQ-PW 0.54; PLE diameter 0.08.

Colour: carapace pale brown, border pale; clypeus pale; eye area black with white spot on posterior part of eye tubercle; dorsum black, mottled white, antero-lateral border wavy; heart mark rectangular broadens posteriorly into dark sub-quadrangle area (Fig. 6e); posteriorly with faint transverse lines; ventrum pale; posterior lateral spinnerets annulate; legs pale brown with dark annulation; palps faintly annulate.

Carapace: longer than wide (CI 1.25); clypeus short,  $0.67 \times$  MOQ length; eye tubercle slightly raised; AME largest; eye ratio 1: 0.47: 0.67: 0.41; MOQ-AW = MOQ-PW; chelicerae elongate more than twice as long as wide.

Abdomen: longer than wide, slender, widest in middle; four pairs of round dorsal muscular pits; posterior lateral spinnerets long,  $1.2 \times$  longer than abdomen;  $1.9 \times$  cephalothorax width; tS  $3.1 \times$  bS.

Legs: leg II longest,  $4 \times$  total body length; leg ratio 1: 1.03: 0.36: 0.88; metatarsus I,  $8.6 \times$  longer than tarsus I; distal part of metatarsus  $0.65 \times$  length of proximal part; leg measurements: I- Fe 4.4, Pat + Tib 5.28, Mt I 4.16, II 2.72, Ta 0.8, total 17.36; II-4.48, 5.28, 4.4, 2.96, 0.8, total 17.92; III-2.0, 2.0, 1.6, 0.72, total 6.32; IV-3.76, 4.56, 4, 2.16, 0.8, total 15.28; Palp-0.83, 0.68, 0.85, total 2.36.

Palp (Figs. 6a,b): tibia compact, as long as wide,  $0.36 \times$  cymbium length; two short, stout spines dorsally; cymbium elongate,  $1.9 \times$  as long as wide; four apical spines; bulbus with basal swelling; sperm duct incurved; embolus with broad base, narrows abruptly distally, apex acute; hook-shaped conductor curve across embolus, apex acute.

**Female.** Size (n=3). TL 5.5 (5.03 - 5.76); CL 2.07 (1.88 - 2.25); CW 2.04 (1.88 - 2.25); CLL 0.37 (0.35 - 0.39); OAL 0.13 (0.12 - 0.13). AME diameter 0.21; AME-AME 0.19; ALE 0.13; MOQ-AW 0.61; ALE diameter 0.1; PME-PME 0.19; PME diameter 0.18; PME-PLE 0.19; MOQ-PW 0.55; PLE diameter 0.21.

Structurally resemble male except for: abdomen larger, widest in posterior third (Fig. 6e); spinnerets short, as long as abdomen; legs short; leg measurements: I- Fe 3.55, Pat + Tib 3.93, Mt I 2.93, II 2.15, Ta 0.69, total 13.25; II-3.78, 4.03, 2.86, 1.85, 0.67,

total 13.02; III-1.57, 1.82, 1.28, 0.64, total 5.3; IV-3.22, 3.42, 3.22, 1.82, 0.69, total 12.4; Palp-0.95, 0.98, 0.75, total 2.48.

Epigyne (Figs. 6f,g): wider than long (el/ew 0.75); epigyne ventrally with sclerotizations anteriorly of transverse white plate (Fig. 6f); simple elongate copulatory ducts, spermathecae and seminal receptacle elongate, cylindrical; fertilization ducts directed dorsally with medial curve (Fig. 6g).

**Distribution.** Cameroon, Ivory Coast (Fig. 34).

**Natural history.** Active at night, collected from forest area along lagoon; adults collected between November and February.

## 6. *Hersilia bubi* sp. nov. (Figs. 7 & 34)

**Types.** Male holotype, **Equatorial Guinea:** Bioko, Moca (3°21'N 8°39'E) ca. 1300m, 1-7.x.1998, D.K. Dabney, R.W. Tomos, D. Ubick, CASC; - paratypes: 1 male, 1 female, same data, CASC; 1 female, **Uganda:** Masindi District, Budongo Forest, north of Sonso (1°45'N 21°35'E), 1-10.vii.1995, T. Wagner, MNHU R.a. 38.

**Etymology.** The specific epithet refers to the Bubi people whose spiritual center is Moca, the type locality.

**Diagnoses.** Small to medium-sized; legs vary from short to very long, eye tubercle slightly raised (Fig. 7c); clypeus short (Fig. 7d); male palp with median apophysis absent; basal embolar projection tapers obliquely, small chitinous projection distally (Fig. 7a); embolus furcate (Fig. 7b); elongate copulatory duct (cd); spermathecae chambered (Fig. 7g). This species resembles *H. alluaudi*, *H. baforti*, and *H. unca* in size, legs, shape of abdomen and epigynes. *H. bubi* differs from *H. alluaudi* by the absence of a sclerotized tegular process and *H. baforti* in the presence of conductor.

**Description. Male.** Size (n=2). TL: 4.25 (4.1 - 4.4). CL 2 (1.9 - 2.08); CW: 1.95 (1.9 - 2). CLL 0.33; OAL 0.43. AME diameter 0.186; AME-AME: 0.195; ALE: 0.091; ALE diameter: 0.13; MOQ-AW: 0.59; PME-PME: 0.195; PME diameter: 0.13; PME-PLE: 0.182; MOQ-PW: 0.46; PLE diameter: 0.091.

**Colour.** Carapace dark brown; clypeus dark brown with broad transverse paler area on promargin and pale lateral lines extending up to PME; longitudinal white line

posteriorly on eye tubercle; dorsum dark brown with dark serrate anterolateral border; heart mark triangular (Fig. 7e), broadening posteriorly; posteriorly with faint transverse lines; ventrum pale; legs pale; femora I, II, III, and posterior lateral spinnerets conspicuously annulate.

Carapace: as long as wide (CI 1); clypeus short,  $0.75 \times$  MOQ length; eye tubercle slightly raised, sides sloping; AME largest; eye ratio 1: 0.36: 0.78: 0.78; MOQ-AW >> MOQ-PW; chelicerae elongate, more than twice as long as wide; retromargin with seven minute cheliceral teeth.

Abdomen: short, slightly longer than wide, sub-quadrate; four pairs of small round dorsal muscular pits; posterior lateral spinnerets long, almost twice as long as abdomen,  $6 \times$  carapace width; tS  $3.4 \times$  bS.

Legs: leg II longest,  $4.76 \times$  total body length; leg ratio 1: 1.02: 0.38: 0.89; metatarsus I,  $8.5 \times$  longer than tarsus I; distal part of metatarsus 0.75 time length of proximal part; leg measurements: I- Fe 4.96, Pat + Tib 6.4, Mt I 4.96, II 3.2, Ta 0.96, total 20.48; II-5.2, 6.48, 5.04, 3.36, 0.8, total 20.88; III-2.32, 2.56, 2, 0.8, total 7.68; IV-4.32, 6.16, 4.56, 2.4, 0.8, total 18.24; Palp-0.83, 0.87, 0.84, total 2.54.

Palps (Fig. 7a,b): tibia stout, as long as wide,  $0.5 \times$  cymbium length; three spines dorsally (Fig. 7b); cymbium elongate,  $2.4 \times$  as long as wide, 6-9 spines apically; bulbus ovoid with basal swelling; sperm duct incurved; embolus straight, apex asymmetrically furcate, with ventral part longer than thick dorsal part; conductor cover embolus for most of its length; chitinous projection distally on process.

**Female.** Size (n=2). TL 6.8. CL 2.46 (2.28 - 2.64); CW 2.1 (2.04 - 2.16). CLL 0.41 (0.36-0.46); OAL 0.5 (0.48-0.52). AME diameter 0.16; AME-AME 0.195; ALE 0.091; ALE diameter: 0.13; MOQ-AW 0.57; PME-PME 0.195; PME diameter 0.195; PME-PLE 0.19; MOQ-PW 0.59; PLE diameter 0.169.

Similar to male except: larger, paler in appearance; carapace longer than wide (CI 1.24); eye area depressed (Fig. 7c); tridentate white marking posterior of PER; PME largest; eye ratio: 1: 0.4: 1.33: 0.87; abdomen as wide as long, sub-triangular with widest part in posterior third (Fig. 7e). Leg II longest; leg ratio: 1: 1.04: 0.4: 0.94; leg measurements: I- Fe 3.84, Pat + Tib 4.08, Mt I 2.96, II 2.16, Ta 0.8, total 14.4; II-3.6,

4.48, 3.2, 2.32, 0.8, total 14.4; III-1.6, 1.92, 1.44, 0.64, total 5.6; IV-3.2, 3.84, 3.2, 2, 0.8, total 13.84; Palp-1.1, 0.96, 0.9, total 2.96.

Epigyne (Figs. 7f,g): wider than long (el/ew 0.7); no lateral borders visible; transverse white plate (Fig. 7f), spermathecae visible as paired circular impressions externally on epigyne, copulatory openings widely spaced; elongate copulatory ducts; spermathecae chambered; seminal receptacle globose; fertilization duct (f) form dorsally directed circular curve (Fig. 7g).

**Distribution.** Equatorial Guinea: Bioko, Uganda (Fig. 34).

**Natural history.** None noted. Holotype male was collected in October and female paratypes in June from a Forest Biome.

### 7. *Hersilia caronae* sp. nov. (Figs. 8, 26g & 35)

**Types.** Female holotype, **Aldabra Island Group:** Malabar island, (9°22'S 46°21'E), 1970, G. Hamadian, MRAC 141121; - paratypes: 1 male, same data; 1 female; **Comoros:** Mayotte, Sazile (12°10'S 44°15'E), 26.ii.1999, Jocqué & De Smet, MRAC 208654; 1 female, 2 juveniles, same data, night catch, MRAC208596.

**Etymology.** Specific epithet named after the wife of author.

**Diagnosis.** Medium-sized spiders; legs long; clypeus long (Fig. 8d); eye tubercle slightly raised (Fig. 8c); epigyne with spermathecae S-shaped (Fig. 8g); male palp with median apophysis transversely angled (Fig. 8b), basally hollowed with proximad margin projecting (Fig. 8a & 26g). This species resemble *H. insulana* and *H. vinsonii* in shape of the seminal receptacle of the epigyne and presence of several secondary spermathecae. However, the two species differ from it in the fine, triangular, transversely angled median apophysis in *H. insulana* and absence of fixing structures in *H. vinsonii*.

**Description. Female.** (Size=2). TL 7.2 (6.9 - 7.5); CL 3.04 (2.93 - 3.15); CW 2.66 (2.63 - 2.7); CLL 0.65; OAL 0.18 (0.17 - 0.2). AME diameter 0.24; AME-AME 0.21; ALE 0.27; MOQ-AW 0.68; ALE diameter 0.1; PME-PME 0.2; PME diameter 0.2; PME-PLE 0.27; MOQ-PW 0.61; PLE diameter 0.24.

Colour: carapace black to grey; clypeus pale anteriorly, dark lateral lines, chelicerae dark medially, with thin longitudinal lines; chelicerae dark medially; eye area dark around PME and PLE white line posteriorly on eye tubercle; abdomen white with broad wavy transverse bands (Fig. 8e); femora with dark annulation; palps are dark distally on segments, apex brown.

Carapace: longer than wide (CI 1.14); clypeus long,  $1.05 \times$  MOQ length; eye tubercle slightly raised; AME largest, eye ratio: 1: 0.48: 0.88: 1; MOQ-AW = MOQ-PW; chelicerae elongate, 1.95 times longer than wide.

Abdomen: length 3.94; width: 3.38; four pairs of round dorsal muscular pits; posterior lateral spinneret  $1.3 \times$  abdomen length,  $1.97 \times$  carapace width; ts  $3.83 \times$  bS.

Legs: leg I longest,  $2.94 \times$  total body length; leg ratio 1: 0.99: 0.34: 0.91; metatarsus I,  $8.32 \times$  length of tarsus I; distal part of metatarsus  $0.51 \times$  length of proximal part; leg measurements: I- Fe 5.93, Pat + Tib 6.68, Mt I 4.95, II 2.55, Ta 0.9, total 21.01; II-6.19, 6.38, 4.73, 2.48, 0.68, total 19.9; III-2.25, 2.25, 1.69, 0.71, total 6.9; IV-5.44, 5.48, 5.18, 2.33, 0.72, total 19.14; Palp-1.2, 1.28, 0.83, total 3.3.

Epigyne (Figs. 8f,g): sickle-shaped fixing structures laterad on median plate; copulatory duct short, simple; several small secondary spermathecae posteriad of bilobed spermathecae; spermathecae S-shaped; seminal receptacle subtriangular, distally with glandular parts covered by threads; fertilization duct, short, curved medially.

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**Male.** (Size = 1) TL 6; CL 2.63; CW 2.1; CLL 2.63 mm; OAL 0.12; AME diameter 0.22; AME-AME 0.1; ALE 0.2; MOQ-AW 0.55; ALE diameter 0.07; PME diameter 0.16; PME-PLE 0.22; MOQ-PW 0.57; PLE diameter 0.17.

Males structurally resemble females except smaller, legs longer; leg measurements: I- Fe 6.75, Pat + Tib 7.88, Mt I 5.25, II 2.63, Ta 0.75, total 23.25; II-6, 6.9, 6, 2.63, 0.75, total 22.28; III-1.88, 2.03, 1.65, 0.6, total 6.15; IV-5.25, 5.18, 5.25, 2.25, 0.75, total 18.68; Palp-1.13, 1.28, 0.45, total 3.15.

Palp (Figs. 8a,b & 27g): tibia elongate,  $2.4 \times$  longer than wide, three slender spines dorsally; cymbium elongate 1.67 times longer than wide, four apical spines; bulbus round; sperm duct regularly curved; median apophysis transversely angled, basally hollowed with proximad margin projecting.

**Distribution.** Aldabra Island Group; Comoros (Fig. 35).

**Natural history.** Adults caught in February.

**8. *Hersilia caudata* Audouin, 1826 (Figs. 9, 26b & 33)**

*Hersilia caudata* Audouin, 1826: 318; Walckenaer, 1837: 371; C.L. Koch, 1843: 103; O. P.-Cambridge, 1876: 560; Simon, 1882: 227; 1893: 446; Kulczyński, 1901a: 18; Benoit, 1967: 34; 1971: 152; Baehr & Baehr, 1993: 17; Baehr, 1998: 63; Levy, 2003: 21.

*Hersilia hirtiventris* Benoit, 1967: 22; first synonymized by Benoit, 1971: 152.

*Hersilia diversa* O. P.-Cambridge, 1876: 576; first synonymized by Benoit, 1967: 34.

**Types.** *Hersilia caudata*, 21 females, 8 males among which is a female neotype, designated by Benoit (1967: 34), **Burkina Faso:** Ouagadougou (12°21'N 1°31'W), iv-v.1965, B. Roman, MRAC 128065 (not examined). *Hersilia hirtiventris*, female holotype, **Sudan:** Reuk (10°45'N 32°50'E), 4.xii.1961, J.L. Cloudsley-Thompson, MRAC 120833 (examined), - paratypes: 1 female, Kawa (13°43'N 32°30'E), 200 km south of Khartoum, 2.xii.1961, J.L. Cloudsley-Thompson, MRAC 120872 (examined); 1 juv. male, Bahr-el-Ghazal, Rumbek, (6°47'N 29°40'E), 11.iii.1964, G. Lewis, MRAC 126486 (not examined). *Hersilia diversa*, juvenile female holotype, **Egypt:** Cairo, (30° 3' N 31° 15' E), i.1864, O. Pickard-Cambridge (not examined).

**Diagnosis.** Medium-sized spiders, legs long, eye tubercle slightly raised (Fig. 9c); clypeus long (Fig. 9d); epigyne with anterior part of triangular-shaped fixing structures obliquely laterally directed (Fig. 9f); spermathecae significantly smaller than seminal receptacle, subtriangular in shape (Fig. 9g); male palp with median apophysis hook-shaped, conspicuously long, prolaterally directed, distal curve, embolus with triangular projection distally (Figs. 9a,b & 26b). This species resembles *H. albicomis* and *H. occidentalis* in the general shape of the male palp, the hook-shaped median apophysis and the triangular embolar projection. It differs from them in the much longer median apophysis; laterally oblique epigynal fixing structures and large seminal receptacle.

**Redescription. Female.** Size (n=11). TL 9.1 (7.04 - 11.44); CL 3.49 (2.55 - 4.08); CW 3.32 (2.4 - 4.32); CLL 0.82 (0.64 - 1.2); OAL 0.2 (0.12 - 0.26). AME diameter 0.22; AME-AME 0.24; ALE 0.26; MOQ-AW 0.69; ALE diameter 0.09; PME-PME 0.21; PME diameter 0.2; PME-PLE 0.27; MOQ-PW 0.61; PLE diameter 0.22.

Colour: carapace varies from pale orange to red brown to dark brown with narrow dark border; clypeus pale, anteriorly with white pilosity; eye area with dark patch; faint white spot on posterior part of eye tubercle in some specimens; dorsum pale white, mottled white with dark brown background; antero-lateral border with dark serrated pattern, heart mark lancet-shaped extending up to third pair of dorsal muscular pits, laterally with faint, broad transverse bands (Fig. 9e); ventrum mottled white; spinnerets pale with or without annulation; legs pale orange to brown with or without annulation; palpal femur and tibia with striations on lateral border.

Carapace: as long as wide (CI 1.06); lateral border with row of conspicuous setae; clypeus long,  $1.33 \times$  MOQ length, sloping; eye tubercle raised, sides vertical; AME largest; eye ratio 1: 0.41: 0.89: 0.98; MOQ-AW > MOQ-PW; chelicerae elongate,  $1.7 \times$  longer than wide.

Abdomen (Fig. 9e): longer than wide, widest in posterior third; four pair of round dorsal muscular pits, second pair largest; posterior lateral spinnerets  $1.1 \times$  length of abdomen,  $1.8 \times$  carapace width; tS  $3.87 \times$  bS.

Legs: leg I longest,  $2.5 \times$  total body length; leg ratio 1: 1: 0.31: 0.85; metatarsus I,  $7.7 \times$  length of tarsus I; distal part of metatarsus  $0.55 \times$  length of proximal part; leg measurements: I- Fe 6.82, Pat + Tib 7.41, Mt I 5.55, Mt II 3.03, Ta 1.1, total 23.38; II- 6.58, 7.44, 5.72, 3.07, 0.82, total 23.33; III-2.33, 2.51, 1.97, 0.83, total 7.26; IV-5.76, 6.52, 6.71, 2.93, 0.88, total 22.5; Palp-1.36, 1.45, 1.07, total 3.88.

Epigyne (Figs. 9f,g): wide (el/ew 0.47); lateral borders angulate not projecting beyond border; median plate sub-quadrangle, posterior border rounded, laterally with sub-triangular fixing structures; anterior part of fixing structures obliquely laterally directed, copulatory openings widely spaced; copulatory ducts short, simple; two pairs of spermathecae; seminal receptacle large, round, with glandular parts covered by threads; spermathecae smaller, sub-triangular; fertilization ducts short, curved dorsally (Fig. 9g).

**Male.** Size (n=5). TL 7.64 (5.25 - 9.3); CL 3.34 (2.25 - 3.84); CW 3.05 (2.18 - 3.45); CLL 0.81 (0.51 - 1.04); OAL 0.64 (0.46 - 0.78). AME diameter 0.23; AME-AME 0.22; ALE 0.26; MOQ-AW 0.69; ALE diameter 0.1; PME-PME 0.21; PME diameter 0.21; PME-PLE 0.27; MOQ-PW 0.64; PLE diameter 0.21.

Males resemble females, except body smaller, legs longer 4.5 × longer than total length of body; dorsal muscular pits larger, leg measurements: I- Fe 8.75, Pat + Tib 10.65, Mt I 9.48, Mt II 3.31, Ta 0.98, total 33.95; II-7.67, 9.86, 8.42, 3.88, 0.88, total 31.61; III-2.94, 2.9, 2.58, 0.76, total 9.18; IV-7.04, 8.04, 7.34, 0.78, total 26.65; Palp- 1.43, 1.29, 1.04, 3.73.

Palp (Figs. 9a,b): tibia elongate, 1.3 × longer than wide, 0.72 × cymbium length, cymbium elongate, 1.9 × longer than wide with 2-3 apical spines; bulbous unmodified, round; spermatophore channel regularly curved; embolus circular, stout, reaching only medial part of bulbous; median apophysis hook-shaped, medially attached, long extending beyond curve of embolus; embolus filiform with triangular projection distally (Fig. 9a & 26 b).

**Additional material examined. Benin:** Kandi (11°7'N 2°55'E), 2 females, 3 juveniles, 8-27.xi.1948, B. Malkin, AMNH. **Cape Verde Islands:** Ile Fogo, Sao Filipe (14°53'N 24°31'W), 1 male, 6.xi.1998, W. Tavernier, MRAC 208426; 2 females, same data, 8.xi.1998, W. Tavernier, MRAC 208400. **Cameroon:** Yagoua (10°19'N 15°13'E), 5.xiii.1971, F. Puylaert, MRAC 143679. **Chad:** Bebedjia, pre's Moundou (8°41'N 16°34'E), 1 female, 20.ix.1977, G. Ruella, MRAC 151473; 1 male, same data, 1-10.vii.1977, MRAC 151421. **Guinea:** Conakry (9°30'N 13°42'W), 1 female, 2.vii.1957, E.S. Ross & R.E. Leech, AMNH. **Mali:** Bamako (12°40'N 07°59'E), 1 female, v-vi.1977, W.H. Settle, AMNH. **Nigeria:** 22 mi[le] E Damaturu (11°45'N 11°58'E), 400 m, 1 female, 19.ix.1966, E.S. Ross & K. Lorenzen, CASC. **Senegal:** Dakar Peninsula, 1 female, xi.1945, E.H. Newcombe, AMNH; Dakar 15 km, Road Rufisque (14°38'N 17°27'E), 2 males, viii. 1980, W. Settle, CASC; 20 km south of Richard Toll, (16°20'N 15°30'W), 1 male, 9.ix.1991, H. van der Valk, MRAC 200505. **Somalia:** (Abyssinian Somaliland), 1 female, 3-4.xii.1920, Selmahania & Abou Foulau, AMNH. **Togo:** (no exact locality) 1 female, MNHU.

**Distribution.** Egypt, Israel, Burkina Faso, Cape Verde Islands, Chad, Nigeria, Sudan; new records: Cameroon, Guinea, Ivory Coast, Mali, Senegal, Somalia, Togo (Fig. 34), Baehr & Baehr (1993) recorded one enigmatic specimen from the Oriental Region from Turkestan (Singkiang) in western China.

**Natural history.** One male was caught on a tree trunk in Cape Verde Islands, and one male was caught in a pitfall in Senegal. Adult females were caught from November to July and adult males between March and August.

### 9. *Hersilia clarki* Benoit, 1967. (Figs. 10 & 34)

*Hersilia clarki* Benoit, 1967: 20.

**Types.** Male holotype, **Zimbabwe:** Mazoe (17°31'S 30°58'E), 7.iii.1899, BMNH 1899.3.7.54 (examined).

**Diagnosis.** Small spiders; legs long; eye tubercle slightly raised; clypeus short; palp with sperm duct incurved, embolus curved, with acute apex (Figs. 10a,b). This species resembles *H. baforti* and *H. woutrinae* in the incurved sperm duct, the absence of a conductor is unique to the *Hersilia baforti* species group. Female unknown.

**Redescription. Male.** (Size n=1). TL 5.33; CL 2.4; CW 2.33; CLL 0.36; OAL 0.12. AME diameter 0.22; AME-AME 0.17; ALE 0.13; MOQ-AW 0.61; ALE diameter 0.08; PME-PME 0.14; PME diameter 0.18; PME-PLE 0.17; MOQ-PW 0.51; PLE diameter 0.17.

Colour: carapace pale orange with broad, dark lateral border; clypeus dark with distal protuberance; chelicerae pale; eye area dark; abdomen darkly mottled, dorsum with broad heart mark, posteriorly with thin transverse lines (Fig. 10e); ventrum pale; posterior lateral spinnerets pale; legs and palps pale with no annulation.

Carapace: as wide as long (CI 1.03); clypeus short,  $0.7 \times$  MOQ length; eye tubercle slightly raised, sides sloping; AME largest, eye ratio 1: 0.35: 0.82: 0.76; chelicerae elongate, twice as long as wide.

Abdomen (Fig. 10e): longer than wide, sub-quadrate; four pairs of round dorsal muscular pits, second pair largest; posterior lateral spinnerets 1.39 times abdomen length,  $1.61 \times$  carapace width; tS  $3.55 \times$  bS  $3.55$ .

Legs: legs broken; leg IV very long,  $5 \times$  total body length; leg measurements: I-Fe 7.5, absent; II-7.13, 8.78, 6.9, absent; III-3, 2.93, 2.55, 0.75, total 9.23; IV-6.75, 7.95, 6.98, 3.45, 0.98, total 26.1; Palp-0.98, 0.98, 0.83, total 2.78.

Palp (Figs. 10a,b): tibia elongate,  $1.2 \times$  longer than wide,  $0.55 \times$  cymbium length; cymbium elongate,  $1.83 \times$  longer than wide with four apical spines; bulb unmodified, round; spermatophore channel incurved; embolus curved, thick base, filiform distally with apex acute; no apophyses or processes.

**Female.** Unknown.

**Distribution.** Zimbabwe (Fig. 34). Known only from type locality.

**Natural history.** Male caught in March.

## 10. *Hersilia dilumen* sp. nov. (Figs. 11 & 34)

**Types.** Male holotype, **Ivory Coast:** Appouesso, FC Bossematie (06°35'N 03°28'W), modified malaise trap, 1.xii.1994, R. Jocqué, MRAC 200946.

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

**Diagnosis.** Small spiders; legs long; eye tubercle slightly raised (Fig. 11c); clypeus short (Fig. 11d); male palp with sclerotized tegular projection elongate, thin; conductor with basal groove distally (Fig. 11a); embolus straight, apex furcate (Fig. 11b). This species resembles *H. salda* based on the presence of a ventral furrow distally on conductor. Female unknown.

**Description. Male.** Size(n=1). TL 4.35; CL 1.73; CW 2.03; CLL 0.29; OAL 0.09; AME diameter 0.26; AME-AME 0.2; ALE 0.13; MOQ-AW 0.72; ALE diameter 0.07; PME-PME 0.13; PME diameter 0.18; PME-PLE 0.2; MOQ-PW 0.49; PLE diameter 0.21.

Colour: carapace pale brown medially with broad, dark lateral border covered with dark setae; clypeus pale white, dark laterally with oblique border; chelicerae dark; eye area dark; posterior half of dorsum with faint transverse lines (Fig. 11e); ventrum

mottled white; posterior lateral spinnerets with strong annulation; legs basally pale, darker distally; dark striations on femora and palps, patellae dark.

Carapace: wider than long; CI (CL/CW): 0.85; clypeus short,  $0.54 \times$  MOQ length; eye area slightly raised; AME largest; eye ratio 1: 0.25: 0.7: 0.8; MOQ-AW > MOQ-PW; chelicerae elongate,  $2.35 \times$  longer than wide.

Abdomen (Fig. 11e): abdomen as wide as long, widest in posterior third; four round dorsal muscular pits, second pair largest; posterior lateral spinnerets as long as abdomen,  $1.22 \times$  carapace width; tS  $3.71 \times$  bS.

Legs: leg II longest,  $3.85 \times$  total length of body; leg ratio 1: 1.08: 0.38: 0.81; metatarsus  $112.29 \times$  tarsus I; distal part of metatarsus  $0.59 \times$  proximal part; leg measurements: I- Fe 4.13, Pat + Tib 4.73, Mt I 4.05, II 2.4, Ta 0.53, total 15.83; II-4.13, 5.25, 4.35, 2.63, 0.68, total 17.03; III-1.8, 2.03, 1.5, 0.68, total 6; IV-3.45, 3.68, 3.45, 1.65, 0.6, total 12.83; Palp-1.13, 0.9, 1.05, total 3.08.

Palps (Figs. 11a,b): three spines dorsally on femur; tibia stout,  $0.67 \times$  longer than wide,  $0.29 \times$  cymbium length; five spines dorsally; cymbium digitate; twice as long as wide; four stout apical spines; bulbous with basal swelling; sperm duct incurved; embolus straight, furcate; elongate, straight sclerotized tegular projection arise near embolus base; large conductor with basal groove distally, tapering distally.

**Female.** Unknown.

**Distribution.** Ivory Coast (Fig. 34). Known only from type locality.

**Natural History.** Caught in a modified malaise trap. Male adult was caught in December.

### 11. *Hersilia eloetsensis* sp. nov. (Figs. 12 & 36)

**Types.** Male holotype, **Madagascar:** Toliara Province, Mahafaly, near Eloetse by Lake Tsimanampetsoa ( $18^{\circ}28'S$   $46^{\circ}58'E$ ), el. 1218m, 15-16.ix.1992, V. & B. Roth, CASC.

**Etymology.** The specific epithet refers to the type locality.

**Diagnosis.** Small spiders; legs long; eye tubercle slightly raised (Fig. 12c); clypeus long (Fig. 12d); palp with small, median apophysis angled longitudinally, broad and convex basally, apex acute (Figs. 12a,b), embolus short, filiform. The palp resembles

that of *H. caronae* in the concave hook-shaped median apophysis, but *H. eloetsensis* differs from this species in the smaller size of the median apophysis and short embolus. Female unknown.

**Description. Male.** Size (n=1). TL 4.08; CL 1.68; CW 1.68; CLL 0.39; OAL 0.39; AME diameter 0.13; AME-AME 0.13; AME-ALE 0.2; MOQ-AW 0.39; ALE diameter 0.065; PME-PME 0.16; PME diameter 0.13; PME-PLE 0.17; MOQ-PW 0.42; PLE diameter 0.13.

Colour: carapace pale brown bearing dark setae, border dark; clypeus pale, V-shaped white mark medially extending up to AME; eye area black, longitudinal white line posteriorly of eye tubercle; dorsum (Fig. 12e) white with fine white transverse lines throughout, indistinct brown border antero-laterally, posteriorly with fine transverse lines; ventrum white; posterior lateral spinnerets annulated; legs and palps pale brown without markings.

Carapace: as wide as long (CI 1); row of conspicuous setae on border; clypeus long, as long as MOQ length; slightly raised eye tubercle, sides vertical sides; AME = PME = PLE; eye ratio 1: 0.5: 1: 1; MOQ-AW < MOQ-PW; chelicerae elongate, 1.8 × longer than wide, retromargin with row of five minute teeth.

Abdomen (Fig. 12e): longer than wide, oval, slightly wider in front; dorsal muscular pits round, second pair oval; posterior lateral spinnerets 1.18 × abdomen length; 1.6 × cephalothorax width; tS 2.3 × bS.

Legs: leg I longest, 3.25 × total body length; leg ratio 1: 0.91: 0.3: 0.81; metatarsus I, 12.4 × longer than tarsus I; distal part of metatarsus half the length of proximal part; leg measurements: I- Fe 4, Pat + Tib 4.4, Mt i 3.28, ii 1.68, Ta 0.4, total 13.76; II-3.28, 4.08, 3.04, 1.68, 0.4, total 12.48; III-1.2, 1.28, 1.12, 0.48, total 4.08; IV-3.2, 2.96, 3, 1.5, 0.45, total 11.11; Palp-0.83, 0.94, 0.6, total 2.37.

Palps (Figs. 12a,b): tibia elongate, 1.8 × longer than wide, 0.88 × cymbium length, three dorsal spines; cymbium compact, 1.5 × longer than wide, two apical spines; bulbus round, unmodified; sperm ducts regularly curved; embolus filiform, very short, curved, but curve not reaching apex of median apophysis; median apophysis hook-shaped, angled longitudinally; short (Fig. 12e), convex basally; apex acute, retrolaterad

**Female.** Unknown.

**Distribution.** Madagascar (Fig. 36). Known only from type locality.

**Natural history.** Adult male caught in September.

## 12. *Hersilia ferra* sp. nov. (Figs. 13 & 34)

**Types.** Female holotype, **Democratic Republic of Congo:** Shaba, Luishwishi, (11°31'S 27°27'E), Savannah, 9.xii.1973, F. Malaisse, MRAC 148982; 1 female, 1 male, same data, xi.1973, F. Malaisse, MRAC 149075; 4 females, 1 juv. male, same data, forêt claire brulee, x-xi. 1973, F. Malaisse, MRAC 149117.

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

**Diagnosis.** Medium-sized spiders; eye tubercle slightly raised (Fig. 13c); clypeus short (Fig. 13d); legs long; epigyne laterally with oval copulatory openings, anteriorly sclerotized and faint V-shaped sclerotization medially (Fig. 13f); spermathecae round, similar size (Fig. 13g); male palp with conductor triangular, apex acute; embolus deeply furcated (Figs. 13a,b) This species resemble *H. salda* in the V-shaped sclerotization medially, oval copulatory openings and elongate copulatory ducts. The round spermathecae distinguish it from *H. salda*. The male embolus is unique.

**Description. Female.** Size (n=1). TL 7.94 (7.63 - 8.25); CL 2.93 (2.85 - 3); CW 2.7 (2.63 - 2.78); CLL 0.58 (0.51 - 0.65); OAL 0.14 (0.12 - 0.16); AME diameter 0.24; AME-AME 0.21; ALE 0.2; MOQ-AW 0.69; ALE diameter 0.07; PME-PME 0.16; PME diameter 0.21; PME-PLE 0.16; MOQ-PW 0.58; PLE diameter 0.2.

Colour: carapace brown with dark brown border, cephalic region orange brown; clypeus brown to orange brown; chelicerae orange brown; eye area brown, darker around eyes; abdomen in old preserved specimens, pale brown with isolated dark patches in no particular pattern; heart mark broad; posteriorly mottled with dark spots; posterior lateral spinnerets pale; ventrum pale; legs with annulation and lateral striations on femora; palps with apex dark.

Carapace (Figs. 13c,d): as long as wide (CI 1.08); clypeus short,  $0.98 \times$  MOQ length, sloping; eye area slightly raised; AME largest; eye ratio 1: 0.28: 0.88: 0.83;  $\text{MOQ-AW} > \text{MOQPW}$ ; chelicerae elongate,  $2.05 \times$  longer than wide.

Abdomen (Fig. 13e): longer than wide, widest in posterior third; dorsal muscular pits round, second pair largest; posterior lateral spinnerets  $1.22 \times$  length abdomen;  $2.04 \times$  carapace width; tS  $4.59 \times$  bS.

Legs: leg II longest,  $2.44 \times$  total body length; leg ratio: 1: 0.99: 0.38: 0.99; metatarsus I,  $8.18 \times$  tarsus I; distal part of metatarsus  $0.66 \times$  length of proximal part; leg measurements: I- Fe 5.3, Pat + Tib 5.78, Mt I 4.43, II 2.93, Ta 0.9, total 19.34; II-5.33, 5.58, 4.5, 2.85, 0.98, total 19.24; III-1.88, 2.63, 2.1, 0.75, total 7.36; IV-4.88, 5.78, 4.58, 2.85, 0.98, total 19.07; Palp-1.2, 1.21, 0.75, total 3.16.

Epigyne (Figs. 13f,g): elongate (el/ew 0.72 ); oval copulatory openings widely spaced with anterior edge sclerotized; faint V-shaped sclerotization medially; copulatory ducts elongate; spermathecae simple, round and well separated from copulatory ducts (Fig. 13g); fertilization duct elongate, curved medially, dorsally directed.

**Male.** Size (n=1). TL 6; CL 2.55; CW 2.25; CLL 0.39; OAL 0.17; AME diameter 0.22; AME-AME 0.23; ALE 0.13; MOQ-AW 0.68; ALE diameter 0.07; PME-PME 0.17; PME diameter 0.17; PME-PLE 0.2; MOQ-PW 0.51; PLE diameter 0.17.

Males resemble females except: smaller in size, clypeus shorter,  $0.68 \times$  MOQ length; legs longer; leg measurements: I- Fe 7.35, Pat + Tib 9, Mt I 7.5, II 3.6, Ta 0.9, total 28.35; II-7.13, 8.48, 7.13, 3.38, 1.13, total 27.23; III-3, 2.93, absent (no measurements taken); IV-6.53, absent (no measurements taken). Palp-1.13, 0.83, 0.98, total 2.93.

Palps (Figs. 13a,b): tibia stout,  $0.71 \times$  longer than wide,  $0.38 \times$  cymbium length; cymbium elongate,  $1.63 \times$  longer than wide; bulbus with basal swelling; sperm duct incurved; embolus curved, deeply furcate; conductor triangular, apex acute; median apophysis absent.

**Distribution.** Democratic Republic of Congo (Fig. 34). Known only from type locality.

**Natural History.** Holotype female caught in the Savannah Biome while one of the paratype females was collected from forest; adult females and males collected between June and November.

**13. *Hersilia hildebrandti* Karsch, 1878 (Figs. 14 & 38)**

*Hersilia hildebrandti* Karsch, 1878: 313; Benoit, 1967: 30.

**Type.** Female neotype, designated by Benoit, 1967: 30, **Tanzania:** North Tanganyika, between Lake Mangara and Ngorongoro crater (03°10'S 35°35'E), xi.1963, J.L. Cloudsley-Thompson, MRAC 125954 (examined).

**Diagnosis.** Medium-sized; legs long; eye tubercle slightly raised (Fig. 14d); clypeus long (Fig. 14e); epigyne with T-shaped median plate, narrowing anteriorly; oblique striae medially on lateral borders (Fig. 14a); copulatory openings opens medially of spermathecae; copulatory ducts (cd) with hairpin bend (Fig. 14b). The epigyne of this species is unique, although the simple, round spermathecae, presence of lateral borders, striae medially on lateral borders, anterior narrowing of median plate resemble epigyines of members in *H. incompta*-group. Male unknown.

**Redescription. Female.** Size (n=1). TL 8.4; CL 2.96; CW 2.96; CLL 0.65; OAL 0.55. AME diameter 0.18; AME-AME 0.2; MOQ-AW 0.56; PME-PME 0.13; PME diameter 0.16; MOQ-PW 0.45.

Colour: carapace red brown, border dark covered with dense black setae; clypeus and chelicerae dark; eye area dark; white patch posteriorly on eye tubercle; abdomen (Fig. 14c) mottled white, with short black setae; laterally covered with sparse white setae; lancet-shaped heart mark pale brown; pale wavy transverse lines posterior on dorsum; posterior lateral spinnerets pale; legs pale red; femora and palps pale with no annulation.

Carapace: as wide as long (CI 1); clypeus long,  $1.19 \times$  MOQ length, sloping; eye tubercle slightly raised; AME largest; eye ratio 1: 0.88: 0.95: 0.95; MOQ-AW > MOQPW; chelicerae elongate, twice as long as wide.

Abdomen (Fig. 14c): longer than wide, widest in posterior third; four pairs of round dorsal muscular pits, second pair largest; posterior lateral spinnerets  $0.77 \times$  shorter than abdomen;  $1.35 \times$  cephalothorax width; tS four  $\times$  bS.

Legs: leg II longest,  $2.5 \times$  total body length; leg ratio 1: 1.04: 0.32: 0.95; metatarsus I,  $9.1 \times$  longer than tarsus I; distal part of metatarsus  $0.52 \times$  the length of proximal part; leg measurements: I- Fe 6, Pat + Tib 6.16, Mt I 4.8, II 2.48, Ta 0.8, total

20.24; II-6, 6.32, 5.2, 2.8, 0.8, total 21.12; III-2, 2.32, 1.6, 0.64, total 6.56; IV-5.2, 5.6, 5.2, 2.4, 0.8, total 19.2. Palp- absent.

Epigyne (Figs. 14a,b): triangular, as long as wide (el/ew 1); lateral borders lobiform; striae basally on lateral borders; median plate with narrowed anteriorly, widening posteriorly, T-shaped; copulatory openings widely separated, copulatory ducts elongate, with central bend (cd) (Fig. 14a); spermathecae well separated from copulatory ducts; equally sized, simple and round; glandular parts covered by threads (not visible in Fig. 14); fertilization ducts medially curved.

**Male.** Unkown.

**Distribution.** Tanzania (Fig. 38). Known only from type locality.

**Natural history.** None noted. The adult female was collected in November.

#### 14. *Hersilia incompta* Benoit, 1971 (Figs. 15 & 38)

*Hersilia incompta* Benoit, 1971: 154.

**Types.** Female holotype, **IVORY COAST:** Bondoukou (7°34'N 5°16'W), vii.1968, G. Fraipont, MRAC 136390 (examined); - paratype: male, same data, MRAC 136391 (examined).

**Diagnosis.** Small to medium-sized spiders; legs long; eye tubercle slightly raised (Fig. 15c); clypeus short (Fig. 15d); epigyne with median plate narrowing anteriorly, distal part broad (Fig. 15f); spermathecae elongate, subquadrate (Fig. 15g); male palp with median apophysis large, complex and hollow (Fig. 15a,b); embolus thick, cornered, curved near acute apex. The male resemble *H. nicolae*, and members of the *H. pectinata*-species group from the Oriental Region ( Baehr & Baehr 1993) in the dorsally angulate palpal tibia with row of strong spines; embolus laterally angular and curved; median apophysis large. The epigyne drawn by Benoit (1971) resemble that of *H. nicolae*, but Benoit's drawing of the vulva was without detail and no further statements can be made about the T-shaped median plate of the epigyne with a its rippled lateral border that ties *H. nicolae* with females of the *H. pectinata*-species group. Females of both two species possess two pairs of tubercles laterally on dorsum.

**Remarks.** The female was described by Benoit (1971), however the epigyne of the type specimen was not in the bottle with the female. His figures (figs. 147,148) are redrawn here. The specimen although only collected in 1968 is in a bad condition and markings on the abdomen are faded, therefore the male abdomen is redrawn here.

**Redescription. Female.** Size (n=1). TL 6.6; CL 2.48; CW 2.48; CLL 0.59 mm; OAL 0.13; AME diameter 0.21; AME-AME 0.2; MOQ-AW 0.61; PME-PME 0.2; PME diameter 0.16; PME-PLE 0.2; MOQ-PW 0.51; PLE diameter 0.2.

Colour: carapace pale brown, border dark; clypeus pale with dark border laterally; eye area dark around posterior eye row; abdomen white with dark border; heart mark lancet-shaped, extend up to third pair of dorsal muscular pits; ventrum pale; posterior lateral spinnerets pale without annulation; legs pale without annulation.

Carapace: as long as wide (CI 1); clypeus long,  $1.18 \times$  MOQ length; eye tubercle raised, concave lateral sides; AME largest; eye ratio 1: 0.34: 0.75: 0.94; chelicerae stout,  $1.56 \times$  longer than wide; retromargin with row of 3 minute teeth.

Abdomen: longer than wide, widest in posterior third; four pairs of round dorsal muscular pits, second pair largest; Benoit (1971) mentions the presence of two pairs of tubercles lateral on anterior part of abdomen; posterior lateral spinnerets long, as long as abdomen;  $1.61 \times$  carapace width; tS  $3.08 \times$  bS.

Legs: long,  $2.33 \times$  total body length; leg I longest; leg ratio 1: ? : 0.36: 0.85; metatarsus I, eight  $\times$  longer than tarsus I: distal part of metatarsus  $0.6 \times$  length of proximal part; leg measurements: I- Fe 4.5, Pat + Tib 4.73, Mt I 3.38, II 2.03, Ta 0.68, total 15.3; II-4.5; III-1.65, 1.8, 1.35, 0.68, total 5.48; IV-3.9, 3.53, 3.6, 1.5, 0.53, total 13.05; Palp- 0.98, 1.58, 0.9, total 3.08.

Epigyne (Figs. 15f,g): central septum distally broad; narrowed anteriorly, extends posteriorly beyond border of epigastric furrow (Fig. 15f); copulatory openings widely spaced; copulatory ducts elongate; spermathecae sub-quadrangle, seminal receptacle with glandular part covered by threads; fertilization duct short, straight (Fig. 15g).

**Male.** Size (n=1). TL 4.32; CL 1.88; CW 1.88; CLL 0.44 mm; OAL 0.44; AME diameter 0.16; AME-AME 0.16; AME-ALE 0.13; MOQ-AW 0.48; ALE diameter 0.07; PME-PME 0.16; PME diameter 0.12; PME-PLE 0.2; MOQ-PW 0.39; PLE diameter 0.13.

Males structurally resemble females except: smaller; abdomen longer than wide, widest in middle, at second dorsal muscular pit (Fig. 15e); posterior lateral spinneret very long, twice as long as abdomen; three  $\times$  carapace width; tS  $8.5 \times$  bS; legs  $3.7 \times$  total body length; metatarsus I,  $11 \times$  longer than tarsus I; leg measurements: I- Fe 4.4, Pat + Tib 4.72, Mt I 3.84, II 2.24, Ta 0.56, total 15.76; II-4.32, 4.64, 4, 2.24, 0.56, total 15.76; III- 1.52, 1.52, 1.04, 0.64, total 4.72; IV-3.6, 4, 3.6, 1.6, 0.64, total 13.44; palp- absent.

Palps (Figs. 15a,b): tibia stout, wider than long,  $0.24 \times$  cymbium length, markedly angulate with four very strong spines dorsally; cymbium compact, almost as wide as long, four spines apically; bulbus with lamellar modifications that contain median apophysis; sperm duct not visible; embolus thick, angular, elongate with curve near acute apex; median apophysis with two large basal concavities, both ending in two acute apophyses at opposite sides; ventral concavity with serrated lower edge.

**Distribution.** Ivory Coast (Fig. 38). Known only from type locality.

**Natural history.** None noted. Female collected in July.

### 15. *Hersilia insulana* Strand, 1907 (Figs. 16 & 35)

*Hersilia insulana* Strand, 1907a: 728; 1907b: 26.

*Hersilia nossibeensis* Strand, 1916: 55, new synonym.

**Types.** *Hersilia insulana*, female lectotype (here designated), **Madagascar:** St. Juan Nova ( $17^{\circ}03'S$   $42^{\circ}45'E$ ), vi.1894, Voeltkov, MNHU 32443 (examined); - paralectotype (here designated): 1 male, Majunga ( $15^{\circ}43'S$   $46^{\circ}19'E$ ), vi.1898, Voeltzkov, MNHU 32442 (examined); 1 female, Foret de Zombitsy near Sakahara, el. 650m, 16.xi.1959, E.S. Ross, CASC; 1 female, 1 male, Tulear, Ampanihy ( $24^{\circ}40'E$   $44^{\circ}43'S$ ), iv.1994, A. Pauly, MRAC 201685; 1 male, Ambotulampy, ( $18^{\circ}52'S$   $46^{\circ}42'E$ ), iv.1999, Van Estbroek, MRAC 209097.

**Diagnosis.** Medium-sized spiders; legs long; eye tubercle slightly raised (Fig. 16c), clypeus long (Fig. 16d); spermathecae with medial curl (Fig. 16g); male palp with

hook-shaped median apophysis, transversely angled, apex acute (Fig. 16a); palpal tibia with two strong dorsal spines (Fig. 16b). The epigyne of this species resembles that of *H. sigillata* and *H. caronae* in the broad base of seminal receptacle, tapering distally and sickle shaped fixing structures. The meidal curve of the spermathecae distinguishes *H. insulana* from the previous two species. The transverse angle of the median apophysis corresponds with that of *H. sigillata* and *H. caronae*.

**Redescription. Female.** Size (n=3). TL 9.71 (6.56 - 13.2); CL 3.84 (2.96 - 4.8); CW 3.42 (2.8 - 4.08); CLL 0.86 (0.68 - 1); OAL 0.2 (0.13 - 0.26). AME diameter 0.29; AME-AME 0.22; ALE 0.3; MOQ-AW 0.8; ALE diameter 0.07; PME-PME 0.23; PME diameter 0.26; PME-PLE 0.28; MOQ-PW 0.74; PLE diameter 0.26.

Colour: carapace pale brown; clypeus pale with white medial line; dark rings around posterior eyes, white mark posteriorly on eye tubercle; dorsum white, lancet-shaped heart mark extend up to third pair of dorsal muscular pits; serrated dark antero-lateral border, covered with small white setae; faint broad transverse lines; posterior half of dorsum with faint, thin transverse lines (Fig. 16e); ventrum mottled white; posterior lateral spinnerets with annulation; legs with faint annulation; palps: annulation with dark tarsus.

Carapace: as wide as long (CI 1.05); lateral border with row of conspicuous setae; clypeus long,  $1.15 \times$  MOQ length, sloping; eye tubercle slightly raised, sides vertical; PLE largest; eye ratio 1: 0.46: 1: 1.17; MOQ-AW > MOQ-PW; chelicerae elongate,  $1.78 \times$  longer than wide.

Abdomen: length 5.62, width 4.49; longer than wide, varies in shape from oval to widest in posterior third; dorsal muscular pits round, second pair largest; posterior lateral spinnerets  $1.37 \times$  abdomen length,  $2.21 \times$  times carapace width; tS 4.55 times bS.

Legs: leg I longest,  $2.7 \times$  total body length; leg ratio 1: 0.98: 0.35: 0.93; metatarsus I,  $9.25 \times$  longer than tarsus I; distal part of metatarsus  $0.51 \times$  proximal part; leg measurements: I- Fe 7.24, Pat + Tib 8.28, Mt I 6.2, II 3.16, Ta 1, total 25.88; II-6.68, 7.92, 6.48, 3.4, 1, total 25.48; III-3, 2.88, 2.4, 0.92, total 9.2; IV-6.6, 6.84, 7.08, 2.92, 1, total 24.44; Palp-1.5, 1.58, 1.17, total 4.25.

Epigyne (Figs. 16f,g): wide (el/ew 0.6); lateral borders angular, slightly projecting beyond border; broad median plate, border straight; sickle-shaped fixing structures

laterally; copulatory openings widely spaced; short simple copulatory ducts; several small secondary spermathecae basally on spermathecae; bilobed spermathecae; lateral spermathecae with wide base tapering distally; spermathecae with medial curve; fertilization ducts short, simple.

**Male.** Size (n=3). TL 7.8 (7.13 - 8.4); CL 3.5 (3.15 - 3.75); CW 3.22 (3 - 3.38); CLL 0.88 (0.82 - 0.91); OAL 0.17 (0.13 - 0.2). AME diameter 0.31; AME-AME 0.22; ALE 0.3; MOQ-AW 0.84; ALE diameter 0.07; PME-PME 0.2; PME diameter 0.25; PME-PLE 0.3; MOQ-PW 0.69; PLE diameter 0.23.

Resemble females except: larger in size; MOQ-AW >> MOQ-PW; legs longer,  $4.76 \times$  total body length; leg measurements: I- Fe 9.9, Pat + Tib 12.21, Mt I 11.64, II 4.54, Ta 1.05, total 38.74; II-8.74, 11.13, 9.89, 4.23, 1.09, total 35.06; III-3.49, 3.26, 2.71, 0.85, total 10.31; IV-7.98, 9.25, 9.19, 3.41, 0.89, total 30.72.1.63; Palp-1.81, 1.65, 0.85, total 4.31.

Palps (Figs. 16a,b): tibia elongate, twice as long as wide,  $0.67 \times$  cymbium length with two spines dorsally (Fig. 16b); group of dense, long white setae present in front of bulbus; cymbium elongate  $1.83 \times$  longer than wide with four apical spines; bulbus unmodified; sperm duct regularly curved; embolus long, filiform, completes  $\frac{3}{4}$  of a circle, completely free, apex acute; median apophysis angled transversely, apex acute.

**Additional material examined. Madagascar:** Ambotolanpy (18°52'S 46°42'E), el. 800m, 1 male, iv.1999, Van Estbroek, MRAC 209097; Tulear, Ampanihy (23°21'S 43°40'E), el. 12m, 1 male, 1 female, iv.1994, A. Pauly, MRAC 201685; Nossibe (16°16'S 44°52'E), *Hersilia nossibeensis*, female holotype, 1883, G. Stumpff, SMFD2916 (examined); -paratype: 1 female, same data, 1885, SMFD 2917, (examined).

**Distribution.** Madagascar (Fig. 35).

**Natural history.** None noted. Females were caught between April and November and males between April and June.

## **16. *Hersilia madagascariensis* (Wunderlich 2004) (Figs. 17, 26d & 36)**

*Hersiliopsis madagascariensis* Wunderlich, 2004: 822.

**Remarks.** Wunderlich (2004) described *Hersiliopsis madagascariensis*, a new genus and species in copal from Madagascar. The palp of this fossil resembles that of the extant specimens that are described here. The species *Hersiliopsis madagascariensis* is transferred to the genus *Hersilia* because phylogenetic analysis of *Hersilia* suggest that *Hersiliopsis madagascariensis* falls well within what is currently considered to be *Hersilia*.

**Types.** Holotype in copal, Madagascar: northern regions (F52/CM/AR/HER/CJW) not examined.

**Diagnoses.** Small spiders; legs long; slightly raised eye tubercle (Fig. 17c); clypeus long (Fig. 17d); epigyne with oblique, oval copulatory openings laterally (Fig. 17f); large bulbous sac around copulatory openings; seminal receptacle irregularly coiled (Fig. 17g); male palp with median apophysis forming a broad flap-like structure, apex broad (Fig. 17a & Fig 29a); embolus circular, filiform, irregularly shaped; apex acute (Fig. 17b); ventrum with large ventral muscular pits. This species is unique to the Afrotropical Region.

**Description. Male.** Size (n=3). TL 4.61 (4.5 - 4.72); CL 1.9 (1.88 - 1.92); CW 1.79 (1.65 - 1.92); CLL 0.42 (0.39 - 0.52); OAL 0.41 (0.37 - 0.46). AME diameter 0.13; AME-AME 0.14; ALE 0.21; MOQ-AW 0.4; ALE diameter 0.04; PME-PME 0.15; PME diameter 0.17; PME-PLE 0.18; MOQ-PW 0.48; PLE diameter 0.17.

Colour: carapace pale brown, covered by dense white setae, border dark, narrow; clypeus pale; V-shaped white mark medially, white pilosity anteriorly; eye area dark covered with white setae; dorsum mottled white, covered by dense pale setae heart mark lancet-shaped, extend up to third pair of dorsal muscular pits; thin wavy antero-lateral border, posteriorly darker with distinct wavy transverse lines (Fig. 17e); ventrum dark to mottled white; legs pale with annulation on femora; patellae and tibiae distally dark; tarsi dark; spinnerets and palps pale.

Carapace: as long as wide (CI 1.07); clypeus long, 1.23 MOQ length (Fig. 17d); eye tubercle slightly raised (Fig. 17e), sides vertical; PLE largest; eye ratio: 1: 0.3: 1.5: 1.5; MOQ-AW < MOQ-PW; chelicerae rather stout, 1.5 × as long as wide.

Abdomen (Fig. 17e): short, slightly longer than wide, almost square; dorsal muscular pits with first and second pair much larger than third and fourth pair; posterior lateral spinnerets elongate,  $1.34 \times$  longer than abdomen,  $1.81 \times$  carapace width.

Legs: leg II longest; elongate,  $3.57 \times$  total body length; leg ratio: 1: 1.06: 0.3: 0.9; metatarsus I,  $7.4 \times$  the length of tarsus I; distal part of metatarsus  $0.49 \times$  proximal part; posterior lateral spinnerets  $1.4 \times$  longer than abdomen and  $1.5 \times$  longer than CW; leg measurements: I- Fe 4.38, Pat + Tib 4.66, Mt I 3.99, II 1.94, Ta 0.7, total 15.66; II-4.5, 4.88, 4.3, 2.25, 0.7, total 16.63; III-1.55, 1.48, 1.17, 0.43, total 4.62; IV-3.88, 4.03, 3.92, 1.63, 0.63, total 14.07; Palp-0.87, 0.73, 0.83, total 1.94.

Palps (Figs. 17a,b & 26a): tibia stout,  $0.92 \times$  as long as wide,  $0.48 \times$  cymbium length, two spines dorsally; cymbium compact,  $1.75 \times$  longer than wide; four apical spines; bulbus round, sperm duct regularly curved, embolus irregularly shaped (Fig. 17b); median apophysis broad flap-like, apex acute (Fig. 17a & 26a).

**Female.** Size(n=2). TL 4.84 (4.5 - 5.18); CL 1.96 (1.88 - 2.03); CW 1.81 (1.73 - 1.88); CLL 0.54 (0.52 - 0.55); OAL 0.15 (0.13 - 0.16). AME diameter 0.13; AME-AME 0.15; ALE 0.23; MOQ-AW 0.41; ALE diameter 0.05; PME-PME 0.19; PME diameter 0.17; PME-PLE 0.2; MOQ-PW 0.52; PLE diameter 0.15.

Structurally resemble males, except for abdomen widest in posterior third; leg measurements: I- Fe 3.75, Pat + Tib 3.79, Mt I 2.97, II 1.88, Ta 0.6, total 13.03; II-3.75, 4.09, 3.23, 1.84, 0.57, total 13.47; III-1.35, 1.17, 1.02, 0.53, total 4.06; IV-3.31, 3.38, 3.04, 1.65, 0.49, total 11.86; Palp-0.75, 0.84, 0.42, total 2.

Epigyne (Figs. 17f,g): wide (el/ew 0.67); oval, sclerotized copulatory openings, obliquely placed, wide apart, large bulbous sac around openings (Fig. 17f); spermathecae globose, stalk present; seminal receptacle irregularly coiled with glandular parts covered by threads distally; fertilization ducts short, curved medially.

**Additional material examined. Comoros:** Mayotte, Coconi, campus de la DAF (12°49'S 45°10'E), 1 male, 22.vii.1998, R. Jocqué, MRAC 208633; same data, 1 female, MRAC 208633; Anjouan, Cole de Patsi (12°15'S 44°25'E), el. 725m, forest remnants on building, 1 male, 17.v.2003, R. Jocqué, D. van Spiegel, MRAC 213374; 1 male, viii.1903, Voëltzkow, MNHN. **Madagascar:** Tamatave, Foulpointe (17°40'S 49°31'E), laguna forest, 1 female, xi. 1994, A. Pauly, MRAC 205633; Fianarantsoa Prov.

Ranomafana (town) (21°14S 47°27E) el. 933m, on bark of tree, 1 male, 30.iv.1998, C.E. Griswold, D.H. Kavanaugh, N.D. Penny, M.J. Raheirilalao, J.S. Ranorianarisoa, J. Schweikert, D. Ubick, CASC.

**Distribution.** Madagascar; Comoros (Fig. 35).

**Natural history.** Collected from trees in forested areas. Males were collected between April and July, females between June and July.

### 17. *Hersilia moheliensis* sp. nov. (Figs. 18 & 36)

**Types.** Male holotype, **Comoros:** Mohéli, Miringoni, Jardin (12° 15' S 43° 45' E), 6-12.xi.1983, R. Jocqué, Malaise trap, MRAC 160952.

**Diagnosis.** Medium-sized spiders, legs very long; eye tubercle slightly raised (Fig. 18c), clypeus short (Fig. 18d); median apophysis of palp hollowed basally, concave flap distally, apex acute (Figs. 18a,b); embolus elongate, circular apex acute. This species resemble *H. incompta* and *H. nicolae* in having a hollowed but much simpler median apophysis, Female unknown.

**Etymology:** The specific epithet refers to the type locality.

**Description. Male.** Size (n=1). TL 6.38; CL 2.48; CW 2.25; CLL 0.33 mm; OAL 0.61. AME diameter 0.22; AME-AME 0.17; MOQ-AW 0.61; ALE diameter 0.08; PME-PME 0.17; PME diameter 0.26; MOQ-PW 0.69; PLE diameter 0.2.

Colour: carapace pale yellow, narrow dark lateral border; clypeus pale with white line medially; chelicerae dark distally; eye area dark; dorsum white, faint transverse bands; heart mark lancet-shaped, extend up to third pair of dorsal muscular pits; ventrum pale; posterior lateral spinnerets pale with faint annulation; legs pale with faint annulations on femur; palps pale.

Carapace: longer than wide (CI 1.1); clypeus short,  $0.54 \times$  MOQ length, sloping; eye tubercle depressed; PME largest; eye ratio 1: 0.36: 1.18: 0.91; MOQ-AW < MOQ-PW; chelicerae elongate,  $1.83 \times$  longer than wide.

Abdomen: longer than wide, widest in middle; four pairs of round dorsal muscular pits, second pair largest, oval; posterior lateral spinnerets  $1.36 \times$  length of abdomen;  $2.17 \times$  carapace width; tS  $3.98 \times$  bS.

Legs: leg I longest,  $4.55 \times$  total body length; leg ratio 1: 0.86: 0.23: 0.68; metatarsus I,  $14.51 \times$  tarsus I; distal part of metatarsus  $0.45 \times$  proximal part; leg measurements: I- Fe 9.2, Pat + Tib 8.48, Mt I 7.5, II 3.38, Ta 0.75, total 29.31; II-6.75, 8.03, 6.9, 2.93, 0.69, total 25.3; III-2.25, 1.88, 1.88, 0.6, total 6.61; IV-5.25, 5.93, 5.78, 2.4, 0.68, total 20.04; Palp-1.43, 1.05, 0.6, total 3.08.

Palps (Figs.18a,b): tibia elongate,  $1.58 \times$  longer than wide, as long as cymbium; cymbium elongate,  $1.33 \times$  longer than wide; bulbus round; sperm duct regularly curved; embolus elongate, circular, apex acute, extending beyond base of median apophysis; median apophysis hollowed basally with concave flap terminating in acute apex.

**Female.** Unknown.

**Distribution.** Comoros (Fig. 36). Known only from type locality.

**Natural History.** Holotype male has been collected in a Malaise trap in November.

### 18. *Hersilia nicolae* sp. nov. (Figs. 19 & 38)

**Types.** Female holotype, **Kenya:** Kenya coast, Taita Discovery Center ( $03^{\circ}25'S$   $38^{\circ}46'E$ ), 19.viii.2001, E. Selempo, Malaise trap, MRAC 211563; -paratypes: 1 female, same data; 1 male, 1 female, Kenya coast, Taita Discovery Center ( $03^{\circ}25'S$   $38^{\circ}46'E$ ), 2-13.ii.2002, E. Selempo, MRAC 212943; 1 male, same data, MRAC 212888; 1 male, same data, 8-15.i.2002, MRAC 212943.

**Etymology.** Specific epithet refers to the first daughter of the author.

**Diagnosis.** Small spiders; legs long; eye tubercle slightly raised; clypeus short; epigyne with elongate median plate, lateral sclerotizations form two elongate lateral curves (Fig. 19d); median plate with striae laterally (Fig. 19e); male palp with hollowed, complex median apophysis terminating prolaterally in broad truncate apophysis, retrolaterally with acute spine (Figs. 19a,b). This species represent *H. incompta* in the

structure of the epigyne, except for an elongate median plate and the broad retrolateral apophysis on the hollowed median apophysis.

**Description. Female.** Size (n=2). TL 5.07 (4.88 - 5.25); CL 1.96 (1.88 - 2.03); CW 1.99 (1.95 - 2.03); CLL 0.57 (0.52 - 0.61); OAL 0.13. AME diameter 0.18; AME-AME 0.2; ALE 0.15; MOQ-AW 0.56; ALE diameter 0.08; PME-PME 0.19; PME diameter 0.17; PME-PLE 0.2; MOQ-PW 0.52; PLE diameter 0.17.

Colour: carapace red brown with dark border; clypeus pale, medially white, anterior border with white pilosity; dorsum with lancet-shaped heart mark, extend up to third pair of dorsal muscular pits; dorsum posteriorly with V-shaped mark between heart mark and broad transverse bands; legs pale, patellae and tarsi dark, femora and tibiae distally dark.

Carapace: as wide as long (CI 0.98); clypeus long,  $1.21 \times$  MOQ length; eye area raised, AME largest; eye ratio 1: 0.44: 0.93: 0.93; chelicerae very long,  $2.14 \times$  longer than wide.

Abdomen (Fig. 19c): wider than long, widest in middle; four pairs of dorsal muscular pits, second pair largest, oval; dorsum with two pairs of tubercles (t) laterally; posterior lateral spinnerets  $0.93 \times$  abdomen length,  $1.44 \times$  CW; tS  $3.27 \times$  bS.

Legs: leg I and leg II longest,  $2.27 \times$  longer than total body length; leg ratio: 1: 1: 0.34: 0.96; metatarsus I,  $8.56 \times$  longer than tarsus I; distal part of metatarsus  $0.63 \times$  length of proximal part; leg measurements: I- Fe 3.15, Pat + Tib 3.34, Mt I 2.56, II 1.62, Ta 0.49, total 11.15; II-3.08, 3.42, 2.56, 1.65, 0.49, total 11.19; III-1.13, 1.21, 0.98, 0.53, total 3.84; IV-3.01, 2.89, 2.86, 1.47, 0.53, total 10.75; Palp-0.75, 0.76, 0.75, total 2.26.

Epigyne (Figs. 19d,e): large and elongate (el/ew 0.8); lateral borders and median plate elongate, lateral sclerotizations form elongate lateral curves; median plate elongate, broadening slightly posteriorly, laterally with striae; copulatory openings widely spaced; copulatory ducts (c) elongate; one pairs of elongate spermathecae; dorsal spermathecae with glandular parts covered by threads; fertilization ducts (f) short, straight, simple.

**Male.** Size (n=2). TL 4.13 (3.98 - 4.28); CL 1.8 (1.73 - 1.88); CW 1.58 (1.5 1.65); CLL 0.42 (0.39 - 0.46); OAL 0.12; AME diameter 0.16; AME-AME 0.11; ALE 0.12; MOQ-AW 0.42; ALE diameter 0.08; PME-PME 0.16; PME diameter 0.14; PME-PLE 0.15; MOQ-PW 0.44; PLE diameter 0.13.

Males resemble females except: smaller in size, abdomen without two pairs of tubercles laterally on dorsum, posterior lateral spinnerets longer; leg measurements: I- Fe 3.3, Pat + Tib 3.38, Mt I 3.08, II 1.84, Ta 0.45, total 12.19; II-3.19, 3.45, 2.96, 1.76, 0.45, total 12; III-1.24, 1.2, 1.09, 0.64, total 4.16; IV-3, 3.15, 3.08, 1.39, 0.45, total 11.33; Palp- 0.75, 0.75, 0.75, total 2.25.

Palps (Figs. 19a,b): tibia compact, as long as wide,  $0.5 \times$  cymbium length; five strong spines dorsally on angular projection of tibia; cymbium wider than long, compact; bulbus with lamellar modifications that contain complex hollowed median apophysis; sperm duct visible prolaterally on bulbus (Fig. 19a); median apophysis with large basal concavity with serrated lower edge, prolaterally ending in a broad apophysis, retrolaterally forming acute, curved process.

**Distribution.** Kenya (Fig. 37). Known only from type locality.

**Natural History.** Type series caught in Malaise traps during February and August.

### 19. *Hersilia occidentalis* Simon, 1907 (Figs. 20, 26c & 33)

*Hersilia occidentalis* Simon, 1907: 248; Benoit, 1967: 28.

*Hersilia brevimamillata* Strand, 1913: 339; first synonymized by Benoit 1967: 28.

*Hersilia segregata* Benoit 1967: 24, new synonym.

**Remarks.** *Hersilia occidentalis* is diagnosed by the sickle-shaped fixing structures externally on the epigyne, the angular lateral borders, short copulatory ducts and similar-sized spermathecae. This corresponds closely with the holotype female of *H. segregata* recorded from Kenya (Benoit 1967). The latter species is only known from the female. Therefore *H. segregata* is considered as a junior synonym of *H. occidentalis*.

**Types.** *Hersilia occidentalis*, male holotype, **Principe Island:** Bahia de Oest, L Fea, MSNG (not examined); - paratype: 1 female, **Democratic Republic of Congo:** Kivu, Territory, Muhinga, Kinazi (02°23S 29°48E), 17-18.iv.1949, MRAC 130780 (not examined). *Hersilia brevimamillata*, female holotype, Ituri, SW from Albert-Sea, Kirk Falls (1°05'N 30°08'E), iii.1908, Expedition Hertzog Adolf Friedrich, Z. Mecklenburg,

MNHU 32441 (examined). *Hersilia segregata*, female holotype, **Tanzania**: Kilimanjaro mountain mass (2°45'S 37°55'E), Marangu (3°37'S 38°43S), woodland area and crop-growing district, SE slope, 1800-2000 m, 20-17.vii.1957, P. Basilewski, N. Leleup, MRAC 112028 (examined); - paratypes: 1 juvenile paratype, **Kenya**: Nairobi (01°17'S 36°52'E), xi.1963, J.L. Cloudsley-Thompson, MRAC 125894 (examined); 2 females, same data, MRAC 125906 (examined).

**Diagnosis.** Medium-sized spiders; legs long; eye tubercle raised (Fig. 20c), clypeus long (Fig. 20d); median plate of epigyne laterally with sickle-shaped fixing structures (Fig. 20f); male palp with slender, longitudinally angled, hook-shaped median apophysis, short not extending beyond curve of embolus with apex acute, embolus with triangular projection distally (Figs. 20a,b & Fig. 26c). This species resemble *H. caudata* based on the presence of a triangular projection distally on embolus. It is distinguished from the latter species by the shorter hook-shaped median apophysis.

**Redescription. Male.** Size (n=3). TL 7.08 (6.8 - 7.35); CL 2.86 (2.72- 3); CW 2.44 (2.4 - 2.48); CLL 0.76 (0.68 - 0.85); OAL 0.61 (0.59 - 0.64). AME diameter 0.21; AME-AME 0.21; ALE 0.26; MOQ-AW 0.63; ALE diameter 0.07; PME-PME 0.21; PME diameter 0.19; PME-PLE 0.28; MOQ-PW 0.59; PLE diameter 0.18.

Colour: carapace varies from pale brown to grey to red brown; dark, broad band around border, bearing white and black setae; clypeus pale with a faint medial white spot, dark, oblique lateral lines (Fig. 20d), white pilosity on anterior border; eye area pale, covered with white setae, dark patch over eye area; faint white spot on posterior part of eye tubercle; chelicerae pale, with dark pilosity distally; dorsum with short dark setae, white pilosity anteriorly, and posteriorly; dark lateral border all around and broad transverse bands; heart mark lancet-shaped, extending up to fourth pair of dorsal muscular pits (Fig. 20e); posterior lateral spinnerets pale with annulation; legs pale brown, patellae dark, femora dark brown with annulation, tibiae with broad annulation; base of palpal segments with dark brown annulation.

Carapace: longer than wide (CI 1.12); clypeus long,  $1.24 \times$  median ocular quadrangle length, sloping; eye tubercle raised, sides vertical; AME largest; eye ratio: 1: 0.46: 0.85: 0.88; MOQ-AW > MOQ-PW; five long setae between PME; chelicerae elongate,  $1.67 \times$  longer than wide; retromargin with row of five minute teeth.

Abdomen: longer than wide, widest medially; four pairs of dorsal muscular pits, second pair oval, largest; posterior lateral spinnerets  $1.34 \times$  length of abdomen,  $2.11 \times$  cephalothorax width; tS  $4.66 \times$  bS.

Legs: leg I longest,  $4.35 \times$  longer than length of body; leg ratio: 1: 0.87: 0.3: 0.73; metatarsus I,  $10.73$  length of tarsus I; distal part of metatarsus  $0.43 \times$  length of proximal part; leg measurements: I- Fe 8.62, Pat + Tib 10.41, Mt I 8.09, II 3.49, Ta 1.09, total 27.48; II-7.32, 8.83, 6.7, 3.22, 0.74, total 26.79; III-2.55, 2.41, 2.25, 0.75, total 7.85; IV-6.04, 7.56, 6.31, 2.41, 0.82, total 19.96; Palp-1.44, 1.32, 0.9, total 3.66.

Palps (Figs. 20a,b): tibia elongate,  $1.8 \times$  longer than wide,  $0.86 \times$  cymbium length; two spines dorsally; cymbium elongate,  $1.5 \times$  longer than wide, four apical spines; bulbun modified, round; sperm duct regularly curved, embolus elongate, filiform, circular with triangular projection distally; median apophysis hook-shaped, short, prolaterad directed, apex acute.

**Female.** Size (n=8). TL 9.9 (8.08 - 11.2); CL 3.8 (3.2 - 4.8); CW 3.8 (3.3 - 5.12); CLL 0.88 (0.72 - 1); OAL 0.63 (0.52 - 0.74). AME diameter 0.23; AME-AME 0.24; ALE 0.28; MOQ-AW 0.69; ALE diameter 0.1; PME-PME 0.24; PME diameter 0.2; PME-PLE 0.32; MOQ-PW 0.63; PLE diameter 0.25.

Females similar to males but larger in size; PLE largest; eye ratio 1: 0.42: 0.95: 1.06; legs shorter,  $2.56 \times$  longer than length of body; leg measurements: I- Fe 7.1, Pat + Tib 7.62, Mt I 5.68, II 3.09, Ta 1.02, total 24.51; II-6.83, 7.61, 5.7, 2.83, 0.9, total 23.89; III-2.26, 2.38, 2.01, 0.76, total 7.41; IV-4, 4.5, 4.14, 1.93, 0.62, total 20.25; Palp-1.33, 1.49, 1.03, total 3.84.

Epigyne (Figs. 20f,g): wide (el/ew 0.52); lateral borders angulate, not projecting much beyond border; median plate narrower anteriorly, broadening slightly distally, border straight; fixing structures sickle-shaped (Fig. 20f); copulatory openings widely spaced; copulatory duct short, simple; spermathecae and seminal receptacle globose, similar in size; spermathecae broadening posteriorly; fertilization ducts short, curved dorsally (Fig. 20g).

**Additional material examined: Botswana:** Okavango Delta, Xabaxaba Camp (19°30S 23°10'E), 1 female, T. Bestelink, U. Wilmot, NM; **Cameroon:** Lake Barombimbo, lowland rainforest, 1 female, 13.iii.1981, Bosmans & Van Stalle, MRAC

162551; **Democratic Republic of Congo:** Equateur, Bamania (00°01'N 18°19'E), 1 female, no date, P. Hulstaert, MRAC 155496; Katanga, Luiswishi (11°31'S 27°27'E), 5 females, 1 male, 9.x.1974, F. Malaisse, MRAC 146220; **Kenya:** Shimba Hills Nature Reserve, 45 km SW Mombassa (04°03'S 39° 41'E), S. Kwale, Hunter's Camp Site, 1 female, 31.iii.1989, Coyle & Bennett, AMNH; Nairobi (01°17'S 36°52'E), 1 female, vi.1951, N.L.H. Krauss, AMNH; Rift Valley Province, Marich Pass Field studies Centre 3000ft (1°32'S 35°27'E), 4 females, 3 males, 7.vi.1999, W.J. Pulawski, J.S. Schweikert, CASC; **Liberia:** Monrovia, (06°20'N 10° 46'W), 1 female, vi.22.1958, E.S. Ross & R.E. Leech, CASC; **Rwanda:** Butare (02°36'S 29°44'E), 1 female, vi.1971, P. Nyalaguka, MRAC 139158; **Tanzania:** Matema, Guesthouse, lake beach by night (09°30'S 34°03'E), 1 female, 11.xi.1991, R Jocqué, MRAC 173648;

**Distribution.** Kenya, Tanzania; new records: Democratic Republic of Congo, Liberia, Rwanda (Fig. 33).

**Natural history.** One female was caught in a lowland rainforest. Females were caught between March to November and males between April and June.

## 20. *Hersilia plara* sp. nov. (Figs. 21 & 34)

**Types.** Female holotype **Cameroon:** South-West Province, Fako Division, Limbe Subdivision, 1.4 km NE of Etome, ca. 400m (04°02'N 09°31'E), 13-19.i.1992, Larcher, G. Hormiga, J. Coddington, C. Griswold, Wansie, CASC; - paratypes: 3 females, 4 males, same data, CASC; 1 female, Barombi, Mbo (4°40'N 9°22'E), lowland tropical rain forest, 13.iii.1981, Bosmans, Van Stalle, MRAC 162551; 2 females, Kounden (5°42'N 10°40'E), 12.xii.1975, F. Puylaert, MRAC 148.388; 1 male, **Democratic Republic of Congo:** 36 km N of Matadi (6°6'S 23°2E) (4°40'S 17°19E), el. 661m, vii.28.1975, CASC.

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

**Diagnosis.** Medium sized spiders; legs very long; eye tubercle slightly raised (Fig. 21c); clypeus short (Fig. 21d); epigyne with transverse white plate and transverse sclerotization anteriorly, thickening medially (Fig. 21f); palp with broad, straight and distally oblique sclerotized tegular projection (Fig. 21b), horizontal conductor with

rounded apex (Fig. 21a); embolus filiform, apex furcate (Fig. 21b). The epigyne is almost identical to that of *H. beva* except for lateral pilosity on spermathecae and sclerotization anterior of central white area, thickened medially; the male palp resemble that of *H. alluaudi*, except for thick medial spines on tibia; elongate cymbium that are twice as long, broad, elongate median apophysis and rounded apex of the conductor.

**Description. Female.** Size (n=1). TL 8.4; CL 3.2; CW 3.2; CLL 0.59 mm; OAL 0.74; AME diameter 0.39; AME-AME 0.23; ALE 0.16; MOQ-AW 1.01; ALE diameter 0.13; PME-PME 0.26; PME diameter 0.234; PME-PLE 0.26; MOQ-PW 0.73; PLE diameter 0.2.

Colour: Carapace pale brown, border dark; clypeus pale, white anteriorly, dark laterally; chelicerae brown, darker medially; eye area dark; dorsum white, darkly mottled, with thick transverse lines narrowing posteriorly (Fig. 21e); posterior lateral spinnerets with faint annulation; ventrum mottled white; legs and palps pale brown;

Carapace: as long as wide (CI 1), clypeus short,  $0.79 \times$  MOQ length, sloping; eye tubercle slightly raised; AME largest; eye ratio: 1: 0.33: 0.6: 0.5; MOQ-AW > MOQ-PW; chelicerae elongate,  $1.6 \times$  longer than wide.

Abdomen: slightly longer than wide; four pairs of round dorsal muscular pits, first pair well separated from the last three pairs, second pair largest; posterior lateral spinnerets elongate,  $1.5 \times$  length of abdomen,  $2.5 \times$  cephalothorax width; tS  $4 \times$  bS.

Legs: leg II longest,  $3.5 \times$  longer than total length of body; leg ratio 1: 1.06: 0.38: 0.94; metatarsus I,  $8.7 \times$  longer than tarsus I; distal part of metatarsus  $0.72 \times$  length of proximal part; leg measurements: I- Fe 7.2, Pat + Tib 8.56, Mt I 6.08, II 4.4, Ta 1.2, total 27.44; II-7.2, 8.88, 6.64, 5.12, 1.12, total 28.96; III-3.2, 3.36, 2.8, 1.04, total 10.4; IV- 6.56, 7.44, 6.64, 3.92, 1.2, total 25.76; Palp-1.58, 1.28, 0.9, total 3.76.

Epigyne (Figs. 21f,g): wider than long (el/ew 0.84); convex sclerotization anterior of transverse white plate, thickening medially; subquadrate dark impression of spermathecae anterad of sclerotization (Fig. 21f); copulatory ducts short; spermathecae irregularly shaped, elongate; seminal receptacle cylindrical with glandular parts covered by threads; spermathecae laterally with pilosity; fertilization ducts incurved.

**Male.** Size (n=2). TL 7.04 (6.88 - 7.2); CL 2.9 (2.8 - 3); CW 2.8 (2.8); CLL 0.46 (0.4 - 0.52); OAL 0.78 (0.75 - 0.8); AME diameter 0.43; AME-AME 0.18; ALE 0.12;

MOQ-AW 1.03; ALE diameter 0.13; PME-PME 0.24; PME diameter 0.31; PME-PLE 0.17; MOQ-PW 0.85; PLE diameter 0.29.

Closely resembles female except for longer legs; spinnerets more than twice length of abdomen (Fig. 21e); leg measurements: I- Fe 10.4, Pat + Tib 12.88, Mt I 12, II 6.4, Ta 1.2, total 42.88; II-9.2, 12.64, 10.4, 6.4, 1.2, total 39.84; III-4.4, 4.16, 3.6, 1.04, total 13.2; IV-7.6, 10.08, 9.76, 5.2, 1.2, total 33.84; Palp-1.73, 1.43, 1.65, total 4.81.

Palps (Figs. 21a,b): tibia compact, as long as wide,  $0.41 \times$  cymbium length; angular projection with seven spines dorsally (Fig. 21b); cymbium elongate,  $1.9 \times$  longer than wide, four apical spines; bulbus ovoid with basal swelling; sperm duct incurved; embolus basally broad and flat, much wider than thick with parallel sinewy lines, apex furcate (Fig. 21b); sclerotized tegular projection straight, elongate with rounded apex; form oblique angle away from bulbus; conductor with apex round (Fig. 21a).

**Distribution.** Cameroon, Democratic Republic of the Congo (Fig. 34).

**Natural history.** Females were collected between December and March, males between March and July.

## 21. *Hersilia pungwensis* Tucker, 1920 (Figs. 22 & 33)

*Hersilia pungwensis* Tucker, 1920: 475; Benoit, 1967: 36.

**Types.** Male holotype, **Zimbabwe:** Umtali (18°57'S 32°25'E), Pungwe, 1903, D.L. Patrick, SAM 13639 (examined).

**Diagnosis.** Small spiders; legs long; eye tubercle strongly raised (Fig. 22c); clypeus long (Fig. 22d); male palp with hook-shaped median apophysis, swelling at the base and curved distally with apex truncated (Fig. 22a). This species resembles *H. sericea* in the curved distal part of median apophyses, but differs from it in the truncate apex. Female unknown.

**Remarks.** Both the type specimens collected in 1903 were in poor condition as noted by Tucker (1920) and Smithers (1945). Tucker (1920) included the female (SAM 12509) as part of the type series although this specimen was collected 7km south-east of

the holotype. However, I am of the opinion that the paratype female (SAM 12509) belongs to *H. sericea*, this observation was supported by Smithers (1945).

**Redescription. Male.** Size (n=1). TL 4.8; CL 2.08; CW 2.08; CLL 0.56; OAL 0.13. AME diameter 0.18; AME-AME 0.16; MOQAW 0.52; ALE diameter 0.053; PME-PME 0.18; PME diameter 0.16; MOQPW 0.5; PLE diameter 0.18.

Colour: carapace with narrow dark border; clypeus pale; eye tubercle pale brown with dark border; dorsum with heart mark lancet-shaped, faint transverse lines posteriorly; ventrum and posterior lateral spinnerets pale; legs and palps pale, no annulation

Carapace: as wide as long (CI 1); clypeus long,  $1.2 \times$  MOQ length, eye tubercle strongly raised, sides vertical; eye ratio: 1: 0.29: 0.89: 1; MOQ-AW = MOQ-PW; chelicerae  $1.6 \times$  longer than wide.

Abdomen: longer than wide, widest in middle; four pairs of round dorsal muscular pits; posterior lateral spinnerets  $0.93 \times$  length of abdomen,  $1.43 \times$  carapace width; tS  $4 \times$  bS.

Legs: all legs were damaged to such an extent that measurements were impossible.

Palps (Figs. 22a,b): tibia elongate,  $1.7 \times$  longer than wide; cymbium elongate,  $1.7 \times$  longer than wide, three spines apically; bulbus round; sperm duct regularly curved; embolus filiform, circular, completing  $3/4$  of a circle, apex acute; median apophysis hook-shaped, curved distally, apex truncate.

**Distribution.** Zimbabwe (Fig. 33). Known only from type locality.

**Natural History.** None noted.

## 22. *Hersilia salda* sp. nov. (Figs. 23, 26i & 34)

**Types.** Female holotype, **Kenya:** Shimba Hills National Reserve, 45km SW Mombassa (04°03'S 39° 41E), Makadora Forest, 9.iv.1975, A.J. Penniman, B.D. Valentine, AMNH; - paratypes: 1 male, same data; 1 male, 1 female, Mount Kasigau, Jora Village (3°49'S 38°38'E), xi. 2001, E. Selempo, MRAC 213037; 1 female, Kwale (4°10'S 39°27'E),

450m a.s.l., 11.v.1957, E.S. Ross, R.E. Leech, CASC; 1 female, **Tanzania:** Amani (05°06'S 38°38'E), 850m a.s.l., 9.xi.1957, E.S. Ross, R.E. Leech, CASC; 2 females, **South Africa:** Limpopo Province, Kruger National Park, Soutpansberg, Pafuri Camp (22°26'S 31°11'E), 11.i.1989, L. Lotz, NMBA 3150; 1 female, same data NMBA3152; 1 female; 2 females, Klein Kariba, ca. 7 km W of Warmbad, el. 1140m (24°50'S 28°20'E), lush bushveld, 24-28.xi.1996, C.E. Griswold, CASC; 1 female, **Malawi:** Chinteche (11°50'S 33°13'E), ii.1977, R. Jocqué, MRAC 152372; 1 female, Zomba (15°22'S 35°22'E), 28.xi.1981, R. Jocqué, MRAC 155663.

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

**Diagnoses.** Small to medium-sized spiders; legs long; eye tubercle slightly raised (Fig. 23c); clypeus short (Fig. 23d); epigyne with V-shaped sclerotization posteriorly (Fig. 23f); male palp with large conductor, apex rounded (Fig. 23b) with ventral groove distally. The V-shaped sclerotization on epigyne resemble that of *H. ferra*; males resemble *H. dilumen* in presence of ventral furrow distally on conductor.

**Description. Female.** Size (n=4). TL 6.4 (5.48 - 7.6); CL 2.33 (2.04 - 2.64); CW 2.38 (1.92) - 2.8); CLL 0.45 (0.4 - 0.52); OAL 0.49 (0.4 - 0.59); AME diameter 0.22; AME-AME 0.2; ALE 0.1; MOQAW 0.63; ALE diameter 0.09; PME-PME 0.16; PME diameter 0.16; PME-PLE 0.19; MOQPW 0.48; PLE diameter 0.18.

Colour: carapace red brown, border pale brown; clypeus brown, anteriorly pale; chelicerae dark; eye area dark, tridentate white mark posteriorly on eye tubercle; dorsum mottled white, heart mark broad, extend just beyond second pair of dorsal muscular pits, posterior half with transverse lines breaking up medially, forming triangular pattern (Fig. 23e); ventrum mottled white; posterior lateral spinnerets with annulation; legs pale brown; femora and palps with strong annulation.

Carapace: as wide as long (CI 0.99); clypeus short,  $0.94 \times$  MOQ length, sloping; eye tubercle slightly raised; AME largest; eye ratio 1: 0.36: 0.72: 0.69; chelicerae stout;  $1.4 \times$  longer than wide.

Abdomen: wider than long, widest in middle; four pairs of round dorsal muscular pits, second pair largest (Fig. 23e); posterior lateral spinnerets as long as abdomen,  $1.73 \times$  carapace width; tS  $3.6 \times$  bS.

Legs: leg II longest;  $2.5 \times$  longer than total length of body; leg ratio 1: 1.03: 0.36: 0.94; metatarsus I,  $7.2 \times$  longer than tarsus I; distal part of metatarsus  $0.71 \times$  length of proximal part; leg measurements: I- Fe 4.4, Pat + Tib 4.72, Mt I 3.36, II 2.4, Ta 0.8, total 17.65; II-4.4, 5.12, 3.6, 2.4, 0.8, total 17.65; III-2, 2.08, 1.52, 0.72, total 6.05; IV-4.08, 4.16, 3.52, 2.32, 0.8, total 16.08; Palp-1.2, 0.96, 0.84, total 3.

Epigyne (Figs. 24f,g): elongate (el/ew 1.25); V-shaped sclerotization posteriorly; oval copulatory openings widely spaced laterally; two pairs of spermathecae not well separated from copulatory ducts; seminal receptacle cylindrical, elongate; fertilization duct elongate, paired fertilization ducts form v-shaped pattern.

**Male.** Size (n=2). TL 3.98 (3.84 - 4.13); CL 1.78 (1.68 - 1.88); CW 1.67 (1.65 - 1.68); CLL 0.3 (0.28 - 0.33); OAL 0.11. AME diameter 0.21; AME-AME 0.15; ALE 0.1; MOQ-AW 0.57; ALE diameter 0.08; PME-PME 0.15; PME diameter 0.16; PME-PLE 0.17; MOQ-PW 0.46; PLE diameter 0.16.

Males resemble females except smaller in size; larger AME; legs five  $\times$  longer than total length of body; leg measurements: I- Fe 5.25, Pat + Tib 6.15, Mt I 4.95, II 2.93, Ta 0.68, total 20.02; II-5.1, 5.93, 4.95, 2.85, 0.75, total 20.11; III-2.4, 2.4, 1.88, 0.53, total 6.76; IV-4.65, absent, total absent; Palp-1.05, 0.68, 0.68, total 2.4.

Palps (Figs. 24a,b): tibia compact,  $0.44 \times$  cymbium length, two spines dorsally; cymbium elongate,  $1.8 \times$  longer than wide, bulbus ovoid with basal swelling; embolus straight, filiform, apex furcated; incurved sperm duct; median apophysis short; conductor with ventral groove distally; embolus acute.

**Distribution.** Kenya, Malawi, South Africa, Tanzania (Fig. 34).

**Natural history.** None noted. Males and females collected from November to April.

### 23. *Hersilia sericea* Pocock, 1898 (Figs. 24, 26d & 33 )

*Hersilia sericea* Pocock, 1898: 214; Lawrence 1937: 228; Benoit, 1967: 26.

*Hersilia bicornis* Tucker, 1920: 472; Smithers, 1945: 5; first synonymized by Benoit, 1967: 26.

*Hersilia hanstroemi* Kauri, 1950: 8; first synonymized by Benoit 1967: 26.

**Types.** *Hersilia sericea*, female holotype, **South Africa**: KwaZulu- Natal: Estcourt (29°00'S 29°53'E), G.A.K. Marshall, BMNH (not examined). *H. bicornis*, female holotype, Krantzkloof (24°53'S 30°36'E), xii .1914, W. Bell-Marley, SAM B864 (examined); - paratypes: 1 male, same data, SAM B864 (not examined); 1 female, Mpumalanga: Kaapmuiden (25°32'S 31°19'E), xi. 1918, R. Tucker, SAM B4255 (examined). *H. hanstromi*, female holotype, Kruger National Park, Pretorius Kop Camp (25°10'S 31°16'E), 4.xi.1948, B. Hanström, H. Kauri (not examined).

**Diagnosis.** Small to medium-sized spiders; legs long; eye tubercle raised (Fig. 24c), clypeus long (Figs. 24d); epigyne with sub-triangular fixing structures laterad on median plate, lateral borders digitate, pointing inward (Fig. 24f); male palp with hook-shaped median apophysis, transversely angled, retrolaterally directed, distally coiled, filiform, apex acute (Fig. 24a & 26d). This species resemble *H. setifrons* and *H. pungwensis* in shape, abdomen, and palpal structures. The triangular fixing structures of the epigyne closely resemble that of *H. setifrons*. It differs from these species in the, prolaterad curve of the hook-shaped median apophysis and two large dorsal spines on the palpal tibia.

**Redescription. Female.** Size (n=10). TL 7.4 (5 - 8.6); CL 2.95 (2.4 - 3.4); CW 2.83 (1.9 - 3.3); CLL 0.77 (0.53 - 0.91); OAL 0.18 (0.13 - 0.21). AME diameter 0.2; AME-AME 0.23; AME-ALE 0.23; MOQAW 0.59. ALE diameter 0.08; PME-PME 0.21; PME diameter 0.19; PME-PLE 0.26; MOQPW 0.59; PLE diameter 0.18.

Colour: carapace pale brown, covered with dark setae, narrow dark lateral border; clypeus pale, with white pilosity anteriorly; no clypeal markings (some females have white V-shaped medial mark that extends up to PME); eye tubercle dark with white spot posteriorly; dorsum darkly mottled on white background; dark, wavy antero-lateral border around most of abdomen; lancet-shaped heart mark extends up to third pair of dorsal muscular pits; wavy, broad, and dark transverse bands; ventrum varies from pale to mottled; posterior lateral spinnerets and palps with annulation.

Carapace: as wide as long (CI 1.05); lateral border with row of conspicuous setae; clypeus long,  $1.45 \times$  MOQ length, sloping; eye tubercle raised, sides concave (Fig. 24d);

AME largest; eye ratio 1: 0.48: 0.97: 0.91; MOQ-PW = MOQ-AW; chelicerae elongate, 1.5 × longer than wide.

Abdomen (Fig. 24e): almost circular, as long as wide, usually widest in posterior third of abdomen; four pairs of round dorsal muscular pits; posterior lateral spinnerets 1.14 × length of abdomen, 1.7 × cephalothorax width.

Legs: leg II longest, 2.6 × length of body; leg ratio 1: 1.02: 0.33: 0.93; metatarsus I, 9 × length of tarsus I; distal part of metatarsus half length of proximal part; leg measurements: I- Fe 5.33, Pat + Tib 5.69, Mt I 4.72, Mt II 2.21, Ta 0.77, total 18.72; II- 5.34, 5.86, 4.85, 2.34, 0.74, total 19.13; III-2.07, 1.69, 1.64, 0.71, total 6.37; 4.91, 5.1, 4.12, 2.29, 0.75, total 17.86; Palp-1.3, 1.55, 0.97, 2.87.

Epigyne (Figs. 24f,g): wide (el/ew 0.45); lateral borders digitate, pointing inward; median plate sub-quadrate; copulatory openings widely spaced; copulatory ducts short, simple; spermathecae and seminal receptacle globose, similar in size; fertilization ducts short, dorsally curved.

**Male.** Size (n=11). TL 5.82 (5.2 - 6.9); CL 2.48 (2.03 - 2.8); CW 2.45 (1.95 - 3); CLL 0.59 (0.47 - 0.72); OAL 0.16 (0.13 - 0.22). AME diameter 0.19; AME-AME 0.18; ALE 0.18; MOQ-AW 0.56; ALE diameter 0.08; PME-PME 0.19; PME diameter 0.16; PME-PLE 0.21; MOQ-PW 0.51; PLE diameter 0.18.

Similar to female except for: smaller size, eye ratio: 1: 0.41: 0.85: 0.94; leg I longest four × longer than total body length; leg ratio 1: 0.96: 0.31: 0.84; metatarsus I, 12 × longer than tarsus I; distal part of metatarsus 0.37 time length of proximal part; leg measurements: I- Fe 6.1, Pat + Tib 6.64, Mt I 6.72, II 2.52, Ta 0.76, total 22.67; II-5.68, 6.63, 6.25, 2.52, 0.7, total 21.79; III-2.23, 2.16, 1.96, 0.64, total 6.98; 4.99, 5.47, 6.5, 2.6, 0.8, total 19.08; Palp-1.16, 1.1, 0.88, 3.11.

Palps (Figs. 24a,b & 26d): tibia elongate, 1.3 × longer than wide, 0.69 × cymbium length, two strong spines dorsally, small tibial apophysis prolaterally; cymbium elongate, 1.7 × longer than wide, three apical spines; bulbus circular, round; sperm duct regularly curved; embolus long filiform, circular, apex acute; median apophysis hook-shaped, retrolaterally angled with distal filiform coil (Figs. 24a & 26d).

**Additional material examined. Kenya:** Kenya Coast, Taita Discovery Center (3°25'W 38°46'E), malaise trap, 29.vii – 5.viii.2001, E. Selembo, MRAC 211535.

**Mozambique:** Chicombera, South bank Limpopo flood plain opposite Jao Bello (25°01'S 33°32'E), on bark of tree, 1-4.vi.1971, F. Farquharson, NM. **South Africa:** Mpumalanga: Glenwood farm (25°44'S 27°45'E), macadamia orchards, 7 km NW of Nelspruit, 1 male, 17.xii.1997, M. vd Berg, NCA 98/555; same locality, 1 female, NCA 98/555; Agricultural College, Nelspruit (25°28'S 30°58'E), pit traps in grapefruit orchard, 1 male, 22.xii.1998, P. Stephen, NCA 99/205; Loskopdam Nature Reserve (25°26'S 29°18'E), on tree bark, 1 male, 10.x.1989, SA Spider Club, NCA 90/94; Gauteng: Roodeplaatdam Nature Reserve (25°37'S 28°19'E), 1 male, 1 female, 18.x.1997, A.S. Dippenaar-Schoeman, NCA 97/1026; Sinoville (25°40'S 28°14'E), Pretoria, 1 male, 1989, P. van Niekerk, NCA 90/431; Limpopo Province: Nylsvley Nature Reserve (24°39'S 28°42'E), 1 female, 7.ii.1998, A.S. Dippenaar-Schoeman, NCA 98/446; Shabalala, Thabazimbi (24°39'S 27°23'E), 1 female, 7.i.1989, D. Louw, NCA 89/341; Levubu, Groblar's Farm, Tropical Bushveld (23°55'S 30°21'E), el. 600 m, 1 male, 2.xii.1996, C.E. Griswold, CASC, Blyde River Canyon, Bourke's Luck Potholes, Drakensberg Mountains (24°35'S 30°49'E), 1 female, 23-25.xii.1990, V.D. Roth, B. Roth, CASC; KwaZulu-Natal: St. Lucia, Fannies Island (28°6'S 32° 27'E), 22.vii.1990, M. Alderweireldt, R. Jocqué, MRAC; Pietermaritzburg (29°37'S 30°23'E), 1 female, viii.1964, J.Y. Lawrence, NM 6308; Umhlali, Chakas Rock (Chakas kraal: 29°27'S 31°13'E), 1 male, 1951, R.F. Lawrence, NM 5610; Pietermaritzburg (29°37'S 30°23'E), 1 male, ix.1964, L. Kelsal, NM 9417; Mtunzini (28°57'S 31°45'E), 1 female, 1 male, vi.1954, R.F. Lawrence, NM 6308; Port St. Johns (31°38'S 29°32'E), xi.1980, M. Baddeley, MRAC 166572. **Tanzania:** Dar es Salaam, Ilala (6°48'S 39°17'E), 1 male, 23.ii.1971, D.M. Pearson, K.M. Howell, MRAC 159413; 1 female, same data, 1977, K.M. Howell, MRAC 159421. **Zimbabwe:** Victoria Falls (17°56'S 25°50'E), 1 female, 1 male, 19-22.xii.1995, W. Pulawski, CASC; Bulawayo (20°7'S 28°35'E), 2 males, xi.1990, V.D. Roth, B. Roth, CASC.

**Distribution.** South Africa. New records: Kenya, Mozambique, Tanzania, Zimbabwe, (Fig. 33).

**Natural History.** Adults were found on the bark of a variety of trees, including orchards. They do not seem to prefer specific tree species, although size of tree trunk seems to play a role. Specimens also preferred moist riparian and irrigated habitats (pers.

obs.). Females construct flat ovalish egg sacs on the surface of tree trunks that is camouflaged with bits of bark. She holds guard over the eggs in an upside down position until young emerge (pers. obs.). Some specimens were collected from walls in built up areas.

**Phenology.** Females were caught throughout the year and males from April through to December.

#### 24. *Hersilia setifrons* Lawrence, 1928 (Figs. 25, 26e & 33)

*Hersilia setifrons* Lawrence, 1928: 241; Benoit, 1967: 32.

**Types.** Female lectotype (here designated), **Namibia:** Sesfontein (19°09'S 13°38'E), SAM B6665 (examined); - paralectotypes: four females, 1 male, same data); 1 male, Kaoko Otavi (18°18'S 13°40'E), 1926, Museum Expedition, SAM B7140 (examined); two females, Warmbad (28°30'S 17°30'E), SAM B6653 (not examined).

**Diagnosis.** Medium-sized spiders; legs long; eye tubercle raised (Fig. 25c); clypeus long (Fig. 25d); epigyne with sub-triangular fixing structures laterad of median plate (Fig. 25f); lateral borders angular not projecting much beyond border; spermathecae similar-sized, round (Fig. 25g); male palp with stout, compact, hook-shaped median apophysis, longitudinally angled and triangular in ventral view, apex acute (Fig. 25a & 26e).

**Redescription. Female.** Size (n=10): TL 8.27 (5.7 - 10.4); CL 3.13 (2.2 - 3.8); CW 3.11 (2.2 - 3.8); CLL 0.79 (0.46 - 1.2); OAL 0.18 (0.13 - 0.2). AME diameter 0.2; AME-AME 0.23; AME-ALE 0.25; MOQ-AW 0.62; ALE diameter 0.08; PME-PME 0.22; PME diameter 0.18; PME-PLE 0.28; MOQ-PW 0.57; PLE diameter 0.16.

Colour: carapace varies from pale to dark brown; covered with setae that vary from white to dark brown; clypeus pale brown, some specimens with V-shaped mark medially; eye area dark brown or with dark brown patches around eyes; white spot posteriorly on eye tubercle; sternum pale or mottled white; dorsum (Fig. 25e) dark brown, darker laterally; lancet-shaped heart mark; faint broad transverse lines on both

sides of heart mark; posteriorly with short transverse markings; ventrum pale or mottled white; posterior lateral spinnerets pale brown to dark with or without annulation; legs dark brown femora, palps annulate.

Carapace: as wide as long (CI =1); lateral border with row of conspicuous setae; clypeus long,  $1.42 \times$  MOQ length, sloping; eye tubercle strongly raised; sides vertical; AME largest; eye ratio 1: 0.34:0.88:0.69. MOQ-AW > MOQ-PW; chelicerae elongate,  $1.6 \times$  longer than wide.

Abdomen (Fig. 25e): slightly longer than wide, widest medially; four pairs of round dorsal muscular pits, except for oval, second pair larger; posterior lateral spinnerets  $1.2 \times$  length of abdomen,  $1.8 \times$  cephalothorax width; tS four  $\times$  bS.

Legs: leg I longest,  $2.7 \times$  total length of body; leg ratio 1: 0.98: 0.3: 0.93; metatarsus I,  $10 \times$  length of tarsus I; distal part of metatarsus  $0.5 \times$  length of proximal part; leg measurements: I- Fe 6.34, Pat + Tib 7, Mt I 5.46, Mt II 2.94, Ta 0.82, total 22.91; II-5.95, 6.72, 5.38, 3.16, 0.78, total 22.46; III-2.08, 2.18, 1.79, 0.67, total 5.87; 5.24, 5.53, 5.1, 2.61, 0.67, total 19.46; Palp-0.9, 1.6, 0.75, 3.25.

Epigyne (Figs. 25f,g): wider than long (el/ew 0.6); lateral borders angulate; median plate sub-quadrate, distal border straight; copulatory openings widely spaced; copulatory ducts short, simple; spermathecae and seminal receptacle globose, similar in size; dorsally curved fertilization duct (Fig. 27g).

**Male.** Size (n=10). TL 6.55 (4.9 - 7.44). CL 2.85 (2.4 - 3.12); CW: 2.73 (2.5 - 3); CLL 0.72; OAL 0.57. AME diameter: 0.24. AME-AME: 0.22; AME-ALE: 0.36. MOQ-AW: 0.7. ALE diameter: 0.08. PME-PME: 0.2. PME diameter: 0.2. PME-PLE: 0.28. MOQ-PW: 0.59. PLE diameter: 0.2.

Similar to female, however abdomen longer than wide, almost rectangular, dorsal muscular pits larger; posterior lateral spinnerets  $1.5 \times$  abdomen length,  $1.88 \times$  cephalothorax width; leg measurements: I- Fe 8.09, Pat + Tib 9.92, Mt I 8.46, Mt II 3.62, Ta 0.95, total 31.2; II-7.29, 8.99, 7.85, 3.47, 0.86, total 29.02; III-2.6, 2.57, 2.31, 0.76, total 8.09; 6.35, 7.22, 7.55, 3.07, 0.81, total 25.14; Palp-1.37, 1.17, 0.92, total 3.43.

Palps (Figs. 25a,b & 26e): tibia elongate,  $1.25 \times$  longer than wide (Fig. 25a),  $0.77 \times$  cymbium length, dorsal spines absent; cymbium elongate, twice as long as wide, 2-4 apical spines; bulbus circular; sperm duct regularly curved; embolus filiform, circular,

apex acute, not extending much beyond medial part of bulbous, ending at base of median apophysis; median apophysis stout hook-shaped, triangular in ventral view, apex acute.

**Additional material examined. Angola:** 5 mile N Luanda, 1 male, 1 female, 1-2 xii.1966, E.S. Ross, K. Lorenze, CASC; Luanda (8°49'S 13°15'E), 1 female, 22.viii.1949, Malkin, CASC; **Namibia:** Halali (19°02'S 16°28'E), 1 female, ii-iv.1987, M. Paxton, SMN 41317; 1 female, 1 male, Aasvoëlnes (19°25'S 20°15'E), 15.iv.1991, V. & B. Roth, QM S.34972SA; Brandberg, Upper Hungarob ravine (21°11'S 14°31'E), 1 female, 30.viii.2002, K. Meakin, 1127m, SMN 45353; Namutoni (18°48'S 16°59'E), 1 male, 29.ix.1986, C. Ficq, SMN 41210. **South Africa:** Gauteng: Pretoria (25°45'S 28°12'E), 1 male, 18.iv.1993, S. vd Sandt, M. Lotter, NCA 93/276; Pretoria, 1 male, 29.iii.1987, G. Gelderblom, on tree trunk, NCA 89/50; Pretoria, Hazelwood, 1 male, 17.iii.1987, M. Vogt, NCA 88/163; Pretoria (25°45'S 28°12'E), 1 male, 1 female, iii.1987, D. Louw, NCA 87/469. KwaZulu-Natal: farm Vergeval (28°55'S 31°21'E), district Ngotsche, Pongola, 1 male, 3.v.1967, A.S. Dippenaar-Schoeman, NCA 84/797; Limpopo Province: Nylsvley Nature Reserve (24°39'S 28°42'E), on *Acacia karroo* in wetland, 1 male, 1 female, 18.iii.2001, S.H. Foord, NCA 2002/1025; North West Province: Rustenburg Nature Reserve (25°40'S 27°15'E), 1 male, 1 female, 5.ii.1980, M. Stiller, NCA 92/525.

**Distribution.** Namibia. New records: Angola, South Africa (Fig. 33).

**Natural history.** Found to have similar habitat preferences to *H. sericea*. These two species were also found sympatrically in the Highveld region of South Africa. They have been collected from wetland and on various trees e.g. *Acacia karroo* and *A. luderitzi*. Also found on walls. Females were caught from February to August and males from September to May.

## 25. *Hersilia sigillata* Benoit, 1967 (Figs. 27, 26h & 35)

*Hersilia sigillata* Benoit, 1967: 15.

**Types.** Female holotype, **Ivory Coast:** Bingerville (5°20'N 3°53'W, v-vi.1962, J. Decelle, MRAC 122322 (examined); -male paratype, **Democratic Republic of Congo:** Sankuru, Komi (3°22'S 23°46'E, iv.1930, J. Ghesquiere, MRAC 30820 (examined).

**Diagnosis.** Medium-sized spiders; legs short; eye tubercle low (Fig. 27c); clypeus short (Figs. 27d); abdomen obovate (Fig. 27e); three pairs of anterior dorsal muscular pits very large, oval; median plate of epigyne with border convex, elongate, sickle-shaped fixing structures laterally; spermathecae sub-triangular (Fig. 27g), several small secondary spermathecae basally; male palp with median apophysis angled transversely, hollowed medially, apex round; embolus long, filiform, circular, deeply furcate (Fig. 27a,b & 26h). The transversely angled median apophysis, sub-triangular seminal receptacle as well as several small seminal receptacles posteriad on epigyne resemble that of *H. insulana* and *H. caronae*

**Redescription. Female.** Size (n=3). TL 8.52 (8.16 - 8.88); CL 3.12 (2.88 - 3.36); CW 2.88 (2.64 - 3.12); CLL 0.2 (0.2 - 0.2); OAL 0.48 (0.48 - 0.48). AME diameter 0.13; AME-AME 0.32; ALE-AME 0.33; MOQ-AW 0.61; ALE diameter 0.09; PME-PME 0.36; PME diameter 0.13; PME-PLE 0.29; MOQ-PW 0.48; PLE diameter 0.13.

Colour: carapace pale yellow-brown, dark lateral border with row of conspicuous setae, sparsely covered with dark setae; clypeus yellow-brown with dark medial line; chelicerae pale brown; eyes with dark borders; dorsum dark brown with white around dorsal muscular pits; grey-brown to brown border with brown pilosity on anterior and posterior border; heart mark broad, extend up to third pair of dorsal muscular pits; posterior half of dorsum with few transverse lines; spinnerets faintly annulate, base with dense setae; ventrum pale; legs pale brown; femora and palp with no distinctive markings.

Carapace: longer than wide (CI 1.08); clypeus short,  $0.43 \times$  MOQ length, sloping; eye tubercle depressed; AME largest; eye ratio 1:0.71: 1:1; MOQ-AW > MOQ-PW; very elongate chelicerae,  $2.3 \times$  longer than wide.

Abdomen (Fig. 27e): elongate, twice as long as wide, obovate; four pairs of very large, oval dorsal muscular pit, first three pairs much larger than fourth pair; posterior lateral spinnerets elongate,  $1.7 \times$  longer than abdomen,  $3.2 \times$  carapace width; tS  $3.6 \times$  bS

Legs: leg I longest; legs short,  $1.67 \times$  total body length; leg ratio 1: 0.92: 0.32: 0.89; metatarsus I,  $9 \times$  longer than tarsus; distal segment of metatarsus  $0.64 \times$  length of proximal part; leg measurements: I- Fe 4.13, Pat + Tib 4, Mt I 3.3, II 2.1, Ta 0.6, total 14.6; II-3.8, 3.75, 2.75, 1.75, 0.55, total 12.6; III-1.3, 1.35, 1.1, 0.75, total 4.45; IV-3.58, 3.5, 2.7, 1.7, 0.7, total 12.95; Palp-1.1, 1.05, 0.53, total 2.68.

Epigyne (Figs. 27f,g): wide (el/ew 0.8); large spiniform lateral borders; median plate broad anteriorly, posteriorly with convex border, elongate fixing structures laterally; copulatory openings widely spaced, copulatory ducts short; seminal receptacles wide basally, tapering distally, spermathecae sub-triangular, tapering distally; several small seminal receptacles basally; fertilization ducts short, curved medially.

**Male.** Size (n=1). TL 6.72; CL 2.4; CW 2.24; CLL 0.32 mm; OAL 0.48; AME diameter 0.13; AME-AME 0.26; AME-ALE 2.9; MOQ-AW 0.52; ALE diameter 0.09; PME-PME 0.25; PME diameter 0.13; PME-PLE 0.27; MOQ-PW 0.51; PLE diameter 0.16.

Male is structurally similar to female; leg measurements: I- Fe 4.5, Pat + Tib 4.3, Mt I 3.8, II 1.9, Ta 0.6, total 14.96; II-4.1, 4.1, 3.3, ?,?, total ?; III-1.4, 1.36, 1.13, 0.68, total 4.57; IV-3.53, 3.68, 3.15, 1.6, 0.6, total 12.56; Palp-1.2, 1.12, 0.85, total 3.17.

Palps (Figs. 26h & 27a,b): tibia stout, as long as wide,  $0.62 \times$  cymbium length (Fig. 27a), no dorsal spines; cymbium compact  $1.6 \times$  longer than wide, four apical spines; bulbus circular; sperm duct regularly curved; embolus long, filiform, circular, conductor elongate; median apophysis prolaterad, transversely angled, apex round.

**Additional material examined: Gabon:** Ntoun (0°22'N 9°46'E), 1 juv., iii.1984, A. Pauly, MRAC 168742. **Ivory Coast:** Bettie, forêt classée de Mabi (6°4'N 3°23'W), 96m a.s.l, forest road, R. Jocqué, MRAC 168742. **Uganda:** District Masindi: 1 female, Budongo Forest, n[ear] Sonso (1°45'N 31°35'E), 1-10.vii.1995, T. Wagner, QM C.a. 28; 1 male, same data, QM R.a. 75N.

**Distribution.** Ivory Coast, Democratic Republic of Congo. New Record: Uganda, Gabon (Fig. 35).

**Natural history.** Collected from trees in forests. Females collected from June to July and male in April and July.

## 26. *Hersilia taita* sp. nov. (Figs. 28 & 36)

**Types.** Male holotype, **Kenya:** Kenya coast, Taita Discovery Center, (03°25'S 38°46'E), 18.vii-3.ix.2001, E. Selempo, Malaise trap, MRAC 211563; - paratypes: 1 male, same data, 19.viii.2001, E. Selempo, Malaise trap, MRAC 211542; 4 males, same data, xii.2001, E. Selempo, MRAC 213131.

**Etymology.** The specific epithet refers to the type locality.

**Diagnosis.** Small spiders; legs long; eye tubercle raised (Fig. 28c), and clypeus long (Fig. 28d); male palp with median apophysis angled transversely, hollowed basally, scopula-shaped distal flap, apex broad (Figs. 28a,b). This species resemble *H. sigillata* and *H. insulana* in the transversely angled median apophysis. Female unknown.

**Description. Male.** Size (n=2). TL 3.87 (3.83 - 3.9); CL 1.69 (1.65 -1.73); CW 1.58 (1.5 - 1.65); CLL 0.44 (0.42 - 0.46); OAL 0.13. AME diameter 0.13; AME-AME 0.18; ALE 0.13; MOQ-AW 0.44; ALE diameter 0.06; PME-PME 0.17; PME diameter 0.12; PME-PLE 0.19; MOQ-PW 0.4; PLE diameter 0.13.

Colour: carapace pale white with grey patterns; clypeus pale with V-shaped mark medially; chelicerae pale; eye area with distinct dark patch around eyes with longitudinal white line posteriorly on eye tubercle; dorsum with four broad transverse bands, posterior half with white V-shaped mark between heart mark and transverse bands (Fig. 28e); posterior lateral spinnerets with lateral lines; legs pale white, dark rings on distal parts of segments; femora and palp with lateral striations.

Carapace: as long as wide (CI 1.08); clypeus long,  $1.18 \times$  MOQ length, sloping; eye tubercle raised; AME largest; eye ratio 1: 0.42: 0.88: 1, MOQ-AW > MOQ-PW; chelicerae very elongate  $2.25 \times$  longer than wide.

Abdomen (Fig. 28e): longer than wide, widest in posterior third; four pairs of round dorsal muscular pits; posterior lateral spinnerets  $1.26 \times$  longer than abdomen,  $1.64 \times$  carapace width; tS  $3.03 \times$  bS.

Legs: leg I longest;  $3.57 \times$  total body length; leg ratio: 1: 0.92: 0.29: 0.84; metatarsus I,  $10.77 \times$  tarsus I; distal part of metatarsus  $0.62 \times$  length of proximal part; leg measurements: I- Fe 3.6, Pat + Tib 3.91, Mt I 3.53, II 2.18, Ta 0.53, total 13.75; II-3.34,

3.75, 3.15, 1.92, 0.45, total 12.6; III-1.39, 1.21, 1.06, 0.38, total 4.03; IV-2.89, 3.27, 3.12, 1.76, 0.49, total 11.52; Palp-0.72, 0.58, 0.32, total 1.37.

Palps (Figs. 28c,d): tibia elongate,  $1.03 \times$  longer than wide,  $0.58 \times$  cymbium length, two spines dorsally; cymbium elongate,  $1.5 \times$  longer than wide, four apical spines; bulbus round; sperm duct regularly curved; embolus filiform, elongate, circular, apex acute; median apophysis form scopula-shaped, broad distal flap.

**Female.** Unknown.

**Distribution.** Known only from type locality (Fig. 36).

**Natural history.** Caught in Malaise trap.

### 27. *Hersilia tamatavensis* sp. nov. (Figs. 29a-d & 33)

**Type.** Holotype male, **Madagascar:** Tamatave Rd ( $18^{\circ}10'S$   $49^{\circ}22'E$ ), 4.iii.1952, V. Tipton, AMNH.

**Etymology.** The specific epithet refers to the type locality.

**Diagnosis.** Medium-sized; legs very long; eye tubercle raised (Fig. 29c); clypeus short (Fig. 29d); palp with hook-shaped median apophysis, long straight distal end, apex acute (Figs. 29a,b). The palp of this species is similar to that of *H. caudata*, with the hook-shaped median apophysis in a medial position on the bulbus, but differs in the distally straight median apophysis and the longer, filiform embolus. Female unknown.

**Description. Male.** Size (n=1). TL 7.2; CL 3.2; CW 2.8; CLL 0.52; OAL 0.13. AME diameter 0.27; AME-AME 0.16; AME-ALE 0.2; MOQ-AW 0.7; ALE diameter 0.065; PME-PME 0.2; PME diameter 0.221; PME-PLE 0.26; MOQ-PW 0.64; PLE diameter 0.24.

Colour: carapace pale orange with broad dark border (specimen damaged, must have dried out at some stage); clypeus pale anteriorly; eye area black around eyes; abdomen damaged; spinnerets dark; legs orange and femora with black striations on promargin.

Carapace: longer than wide (CI 1.14); clypeus short,  $0.83 \times$  MOQ length, sloping; eye tubercle raised; AME largest; eye ratio 1: 0.24: 0.81: 0.88; MOQ-AW > MOQ-PW; chelicerae elongate, twice as long as wide.

Abdomen: damaged to such an extent that meaningful observations, measurements and drawing could not be made, however the presence of dorsal muscular pits are noted; posterior lateral spinnerets elongate,  $2.2 \times$  carapace width; tS  $4.5 \times$  bS.

Legs: leg I longest; leg ratio 1: broken: 0.25: 0.74; metatarsus I,  $13 \times$  longer than tarsus I; distal part of metatarsus  $0.38 \times$  proximal part; leg measurements: I- Fe 10.4, Pat + Tib 12.8, Mt I 11.28, II 4.24, Ta 1.2, total 39.92; II-8.4, 11.2, absent; III-3.2, 3.2, 2.8, 0.8, total 10; IV-8, 8.4, 8.96, 3.2, 0.8, total 29.36; Palp-1.5, 1.48, 1.13, total 4.11

Palps (Figs. 29a,b): tibia elongate, almost twice as long as wide,  $0.56 \times$  cymbium length, two strong spines dorsally; cymbium elongate,  $1.88 \times$  its width, four apical spines; bulbus unmodified; sperm duct regularly curved, embolus very long, filiform, extend beyond base of median apophysis (Fig. 29b); median apophysis hook-shaped distal end long and slender, apex acute.

**Female.** Unknown.

**Distribution.** Madagascar (Fig. 33).

**Natural history.** None noted. Holotype male collected in March.

### **28. *Hersilia unca* sp. nov. (Figs. 29e-i & 34)**

**Types.** Female holotype, **RWANDA:** 60 km W of Astrida (02°34'S 29°43'E), 2400 m, 11.xii.1957, E.S. Ross, R.E. Leech, CASC.

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

**Diagnoses.** Medium-sized spider; legs long; eye tubercle slightly raised (Fig. 29g); clypeus long (Fig. 29h); epigyne with two separated sclerotized, slit-like openings anteriorly removed from epigastric furrow (Fig. 29e); seminal receptacles have apical projections; spermathecae with complex irregular lobes, (Fig. 29f). This species resemble *H. woutrinae* in the complex irregular spermathecae. Male unknown.

**Description. Female.** Size (n=1). TL 8. CL 2.8; CW 2.56. CLL 0.59; AOL 0.53. AME diameter 0.195; AME-AME 0.195; ALE 0.195; MOQ-AW 0.59; ALE diameter 0.065; PME-PME 0.234; PME diameter 0.156; PME-PLE 0.234; MOQ-PW: 0.55; PLE diameter: 0.13.

Colour: carapace pale brown; lateral border wide, bearing dark setae; clypeus pale with two dark spots laterally (Fig. 29h); eye area pale, dark between AME, tridentate white spot posteriorly on eye tubercle; dorsum dark brown, mottled white, heart mark indistinct, posterior half with transverse lines forming a chevron pattern (Fig. 29i); ventrum pale, mottled white; legs pale, femora and palps with conspicuous annulation.

Carapace: longer than wide (CI 1.09); clypeus long,  $1.1 \times$  MOQ length, sloping; eye tubercle slightly raised, sloping sides; AME largest; eye ratio: 1: 0.33: 0.8: 0.67; elongate chelicerae, twice as long as wide, retromargin with seven minute teeth.

Abdomen (Fig. 29i): elongate oval, longer than wide, widest in posterior third; four pairs of round dorsal muscular pits, second pair oval and large; posterior lateral spinnerets as long as abdomen, twice carapace width; tS 2.25 longer than bS.

Legs: leg I longest, elongate,  $2.7 \times$  total body length; leg ratio: 1: 0.98: 0.38: 0.9; metatarsus I,  $6.7 \times$  length of tarsus I; distal part of metatarsus  $0.66 \times \times$  length of proximal part; leg measurements: I- Fe 5.6, Pat + Tib 6.8, Mt I 4.8, II 3.2, Ta 1.2, total 21.6; II-5.2, 6.72, 4.96, 3.36, 0.96, total 21.2; III-2.4, 2.8, 2.16, 0.8, total 8.16; IV-5.2, 5.6, 4.8, 2.8, 0.96, total 19.36; Palp-1.35, 1.45, 1, total 3.8.

Epigyne (Figs.30e,f): wide (el/ew 0.8); epigyne border simple, transverse central plate; copulatory openings widely spaced, copulatory ducts short, curved; seminal receptacles with apical projections with glandular parts covered by threads; fertilization ducts medially curved (Fig. 29f).

**Male.** Unknown.

**Distribution.** Rwanda (Fig. 34). Known only from type locality.

**Natural history.** None noted. Female holotype collected in December.

## 29. *Hersilia vanmoli* Benoit, 1971 (Figs. 30 & 34)

*Hersilia vanmoli* Benoit, 1971: 156.

**Types.** Female holotype, **Ivory Coast:** Lamto, viii.1968, J.J. van Mol, MRAC 134634 (examined); male paratype, same data, MRAC 136843 (examined); female paratype, **Togo:** Missahohé (6°0'N 0°0'E), 6.viii.1969, F. Puylaert, MRAC 136080 (not examined).

**Diagnosis.** Small spiders; legs long; eye tubercle slightly raised (Fig. 30c); clypeus short (Fig. 30d); epigyne with linear sclerotization anterior of epigastric furrow (Fig. 30f); male palp with conductor broad, stout (Fig. 30a,b), embolus straight, apex acute. The straight embolus with acute apex and hook-shaped conductor resembles that of *H. beva* except that the conductor are more robust and epigyne compact.

**Redescription. Female.** Size (n=4). TL 5.27 (5.1 - 5.48); CL 1.82 (1.65 - 1.95); CW 1.84 (1.65 - 2.1); CLL 0.4 (0.3 - 0.46); OAL 0.1 (0.08 - 0.13). AME diameter 0.16; AME-AME 0.17; ALE 0.11; MOQ-AW 0.49; ALE diameter 0.07; PME-PME 0.15; PME diameter 0.18; PME-PLE 0.18; MOQ-PW 0.51; PLE diameter 0.17.

Colour: carapace dark; clypeus with dark medial line, pale border; chelicerae dark brown, red brown distally; eye area dark; dorsum dark brown, faint lateral border; heart mark faint, broadening posteriorly, triangular pattern of thin transverse lines posteriorly (Fig. 30e); ventrum pale; posterior lateral spinnerets with strong annulation; legs dark, distinct annulation on femora and tibia; palps dark, annulation basally on segments.

Carapace: as wide as long (CI 0.99); clypeus short,  $0.79 \times$  MOQ length; eye tubercle slightly raised, concave sides; PME largest; eye ratio 1: 0.43: 1.17: 1.09;  $MOQAW \leq MOQPW$ ; chelicerae very elongate,  $1.76 \times$  longer than wide.

Abdomen (Fig. 30e): distinctly wider than long, widest in posterior third; four pairs of small, round dorsal muscular pits; posterior lateral spinnerets  $0.87 \times$  length of abdomen;  $1.61 \times$  carapace width;  $tS 3.57 \times bS$ .

Legs: leg II longest,  $2.43 \times$  total body length; leg ratio 1: 1.08: 0.41: 0.92; metatarsus I,  $7.04 \times$  longer than tarsus I; distal part of metatarsus,  $0.72 \times$  length of proximal part; leg measurements: I- Fe 3.43, Pat + Tib 3.63, Mt I 2.58, II 1.85, Ta 0.63, total 12.13; II-3.49, 3.98, 2.88, 1.98, 0.65, total 13.01; III-1.56, 1.58, 1.24, 0.51, total 4.91; IV-3.19, 2.31, 2.03, 1.16, 0.42, total 11.09; Palp-0.78, 0.78, 0.58, total 2.14.

Epigyne (Figs. 30f,g): wide (el/ew 0.59); linear sclerotization near epigastric furrow, sub-triangular impression of spermathecae anteriorly (Fig. 30f); copulatory

openings widely spaced; copulatory ducts form continuous loop with fertilization duct; spermathecae elongate comma-shaped, tapering medially into short curve (Fig. 30g); seminal receptacle smaller, elongate; fertilization ducts medially curved.

**Male.** Size (n=2). TL 4.28 (4.05 - 4.5); CL 1.88; CW 1.65 (1.5 - 1.8); CLL 0.34 (0.33 - 0.35); OAL 0.12. AME diameter 0.2; AME-AME 0.14; ALE 0.07; MOQ-AW 0.54; ALE diameter 0.1; PME-PME 0.09; PME diameter 0.16; PME-PLE 0.13; MOQ-PW 0.43; PLE diameter 0.17.

Males resemble females except smaller and more slender, carapace longer than wide (CI 1.15); AME largest; MOQ-AW > MOQ-PW; abdomen much longer than wide, elongate; second dorsal muscular pit largest; very long legs, five × length of body; leg measurements: I- Fe 5.07, Pat + Tib 5.89, Mt I 4.73, II 2.66, Ta 0.64, total 18.98; II-4.76, 5.82, 4.61, 2.66, 0.6, total 18.46; III-1.65, 1.91, 1.46, 0.45, total 5.48; IV-4.2, 5.22, 4.28, 2.55, 0.68, total 16.92; Palp-0.9, 0.72, 0.72, total 2.3.

Palps (Figs. 30a,b): tibia stout, 0.89 × as long as wide, 0.47 × cymbium length, no dorsal spines; cymbium elongate, 1.76 × longer than wide with four apical spines; bulbus with basal swelling; sperm duct incurved; embolus horizontal, apex acute; broad conductor, apex acute (Fig. 30b).

**Additional material examined. Ivory Coast:** North of Korhogo, Bandama River (09°27'N 05°38'W) riverine forest on river edge, 1 females, ii.1980, J. Everts, MRAC 172149; 1 female, same data, MRAC 172148; 1 female, same date, MRAC 172150; 1 male, same data, MRAC 172147; Mankono, Ranch de la Marahoue (8°27'N 6°52'W) riparian forest, 2 females, iii. 1980, J Everts, MRAC 172151-2; North of Korhogo, Bandama River (09°27'N 05°38'W) center of riverine forest, 1 male, i.1980, J. Everts, MRAC 172147. **Togo:** Bassari (09°15'N 00°47'E) pitfalls, 1 female, v-vii.1984, P. Douben, MRAC 174250;

**Distribution.** Togo, Ivory Coast (Fig. 34).

**Natural History.** Females were caught in pitfalls in riparian forest and males in the centre of a forest. Type series were collected in August.

### 30. *Hersilia vinsonii* Lucas, 1869 (Figs. 31 & 35)

*Hersilia vinsonii* Lucas, 1869: 160.

**Types.** Female neotype (here designated), **Madagascar:** G. Schmidts, MRAC 133636 (no more data available).

**Diagnosis.** Medium-sized spiders; eye tubercle slightly raised (Fig. 31c); clypeus long (Fig. 31d); epigyne externally with tear-shaped lateral openings, faint depression laterally on median plate (Fig. 31a); seminal receptacle sub-triangular; spermathecae tubular, elongate, S-shaped (Fig. 31b). This species resemble *H. insulana* and *H. caronae* in size and shape of seminal receptacle but differs in the absence of tear-shaper fixing structures on median plate. Male unknown.

**Redescription. Female.** Size (n=1). TL 10.13; CL 3.38; CW 3.53; CLL 0.85 mm; OAL 0.2; AME diameter 0.26; AME-AME 0.26; ALE 0.34; MOQ-AW 0.78; ALE diameter 0.08; PME-PME 0.2; PME diameter 0.26; PME-PLE 0.26; MOQ-PW 0.72; PLE diameter 0.29.

Colour: carapace dark brown; clypeus pale, white pilosity anteriorly; chelicerae dark, orange apically; abdomen pale brown, mottled white; dorsum with faint broad transverse bands, lancet-shaped heart mark; posterior lateral spinnerets and ventrum pale; legs pale yellow; femora and palps with no annulation.

Carapace: as wide as long (CI 0.96); clypeus long,  $1.18 \times$  MOQ length,  $1.18 \times$  MOQ length, sloping; eye tubercle slightly raised; PLE largest; eye ratio: 1: 0.3: 1: 1.1; chelicerae elongate  $1.64 \times$  longer than wide.

Abdomen (Fig. 31e): longer than wide, widest in the posterior third; four pairs of small dorsal muscular pits, third pair largest, oval, similar sized; ventral muscular pits large; posterior lateral spinnerets  $1.19 \times$  longer than abdomen;  $2.02 \times$  carapace width;  $tS$   $4.59 \times$  bS.

Legs: most of the legs were disarticulated; leg measurements: I- Fe 6.75, Pat + Tib 6.98; II-6.75; III-1.5; IV-5.63.

Epigyne (Figs. 31a,b): wide (el/ew 0.67); externally with two tear-shaped lateral openings; copulatory openings widely spaced; copulatory ducts short, simple; seminal receptacles sub-triangular, wide basally, tapering distally; spermathecae tubular, elongate, S-shaped, several small seminal receptacles basally; fertilization ducts curved medially.

**Male.** Unknown.

**Distribution.** Madagascar (Fig. 35).

**Natural history.** None noted.

### 31. *Hersilia woutrinae* sp. nov. (Figs. 32 & 34)

**Types.** Female holotype, **Kenya:** Kenya coast, Taita Discovery Center (3°25'W 38°46'E), Malaise trap, 8-15.i.2002, E. Selembo, MRAC 212943; - paratype: 1 male, same data.

**Etymology.** The specific epithet is named after the mother of author.

**Diagnosis.** Small spiders; legs long; eye tubercle slightly raised (Fig. 32c); clypeus short (Fig. 32d); epigyne with transverse white plate medially (Fig. 32f), spermathecae lobed, elongate (Fig. 32g); male palp with conductor short, apex rounded (Figs.33a,b), embolus straight, apex acute.

**Description. Size.** TL 4.95; CL 2.03; CW 1.8; CLL 0.36; OAL 0.13; AME diameter 0.2; AME-AME 0.2; ALE 0.17; MOQ-AW 0.59; ALE diameter 0.1; PME-PME 0.2; PME diameter 0.18; PME-PLE 0.22; MOQ-PW 0.56; PLE diameter 0.13.

Colour: carapace pale brown, broad, dark lateral border; clypeus anteriorly white; chelicerae with dark medial line; eye area dark around eyes, tridentate white spot posteriorly on eye tubercle; abdomen broad, dark wavy anterolateral border; dorsally pale, broad heart mark; large white patches laterally (Fig. 32e); ventrum pale; legs: patellae red brown, femora with strong annulation.

Carapace: longer than wide (CI 1.13); clypeus short,  $0.68 \times$  MOQ length,  $0.72 \times$  MOQ length; eye area slightly raised; AME largest; eye ratio: 1: 0.53: 0.93: 0.67; chelicerae long,  $1.8 \times$  longer than wide.

Abdomen (Fig. 32e): wider than long, widest in posterior third, four pairs of round dorsal muscular pits; posterior lateral spinnerets  $1.23 \times$  longer than abdomen,  $1.79 \times$  carapace width; tS  $2.91 \times$  bS 2.91.

Legs: leg II longest,  $2.86 \times$  total body length; leg ratio: 1: 1.04: 0.34: 0.93; metatarsus I  $6.27 \times$  longer than tarsus I; distal part of metatarsus  $0.77 \times$  length of

proximal part; leg measurements: I- Fe 3.6, Pat + Tib 4.13, Mt I 2.93, II 2.25, Ta 0.83, total 13.73; II-3.68, 4.43, 3.08, 2.33, 0.83, total 14.33; III-1.5, 1.28, 1.28, 0.6, total 4.65; IV-3.38, 3.75, 3, 1.88, 0.75, total 12.75; Palp- absent (no measurement taken).

Epigyne (Figs. 32f,g): long (el/ew 0.8); externally with transverse white area; crescent-shaped copulatory openings widely spaced; copulatory ducts short; spermathecae lobed with distal apophyses; seminal receptacle cylindrical, with distal apophysis, glandular parts covered by threads present; fertilization ducts medially curved

**Male.** Size (n=1). TL 4.35; CL 2.03; CW 1.88; CLL 0.33 mm; OAL 0.13; AME diameter 0.2; AME-AME 0.21; ALE 0.13; MOQ-AW 0.6; ALE diameter 0.09; PME-PME 0.2; PME diameter 0.16; PME-PLE 0.2; MOQ-PW 0.51; PLE diameter 0.16.

Males resemble females except smaller, especially abdomen; legs very long; leg measurements: I- Fe 6.6, Pat + Tib 7.28, Mt I 6.38, II 3.83, Ta 1.2, total 25.28; II-4.88, 6.6, 5.33, 3.15, 0.98, total 20.93; III-2.1, 2.03, 1.65, 0.38, total 6.15; IV-4.88, 5.25, 4.65, 2.7, 0.83, total 18.3; Palp-1.05, 0.9, 0.9, total 2.85.

Palps (Figs. 32a,b): tibia stout, as long as wide,  $0.42 \times$  cymbium length, no dorsal spines; cymbium elongate,  $2.4 \times$  longer than wide, four spines apically, bulbus with basal swelling, sperm ducts incurved; embolus horizontal, apex acute; conductor small, apex round.

**Distribution.** Kenya (Fig. 34).

**Natural history.** Caught in Malaise trap; type series collected in January.

### *Nomina dubia*

#### ***Hersilia kauderni* Strand, 1908**

*Hersilia kauderni* Strand, 1908: 457.

Strand (1908) described the species based on two juvenile females deposited in the Swedish Museum of Natural History (NRM). Examination of the types suggests that it is impossible to make a positive diagnosis of the species.

**Distribution.** Madagascar.

***Hersilia stumpffi* Strand, 1916**

*Hersilia stumpffi* Strand 1916: 57.

Strand (1925) described *H. stumpffi* based on two juvenile females. He noted that these specimens were very similar to *H. nossibeensis*. The type specimens deposited in the Forschungsinstitut und Naturmuseum Senckenberg (SMFD 2918) has no genitalic characters and the identity of this species is uncertain.

**Distribution.** Madagascar.

***H. fossulata* Karsch, 1881**

*Hersilia fossulata* Karsch, 1881: 195.

Karsch (1881) described *H. fossulata* based on a single female. His main collection was deposited in the Museum für Naturkunde der Humboldt Universität, Berlin, Germany (MNHU), the Museum's hersiliid collection did not contain any types. The species could not be positively identified based on the description alone.

**Distribution.** Madagascar.

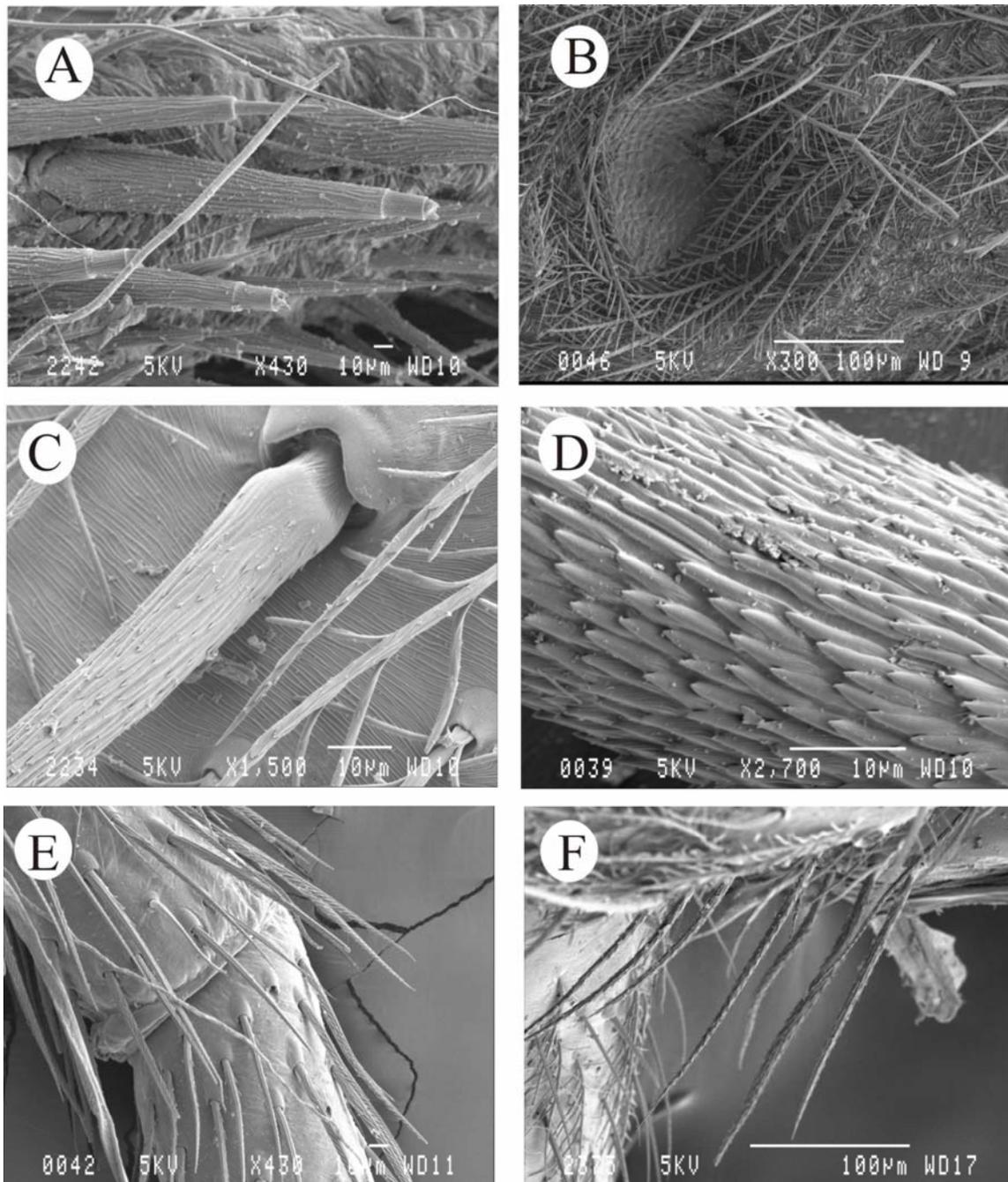
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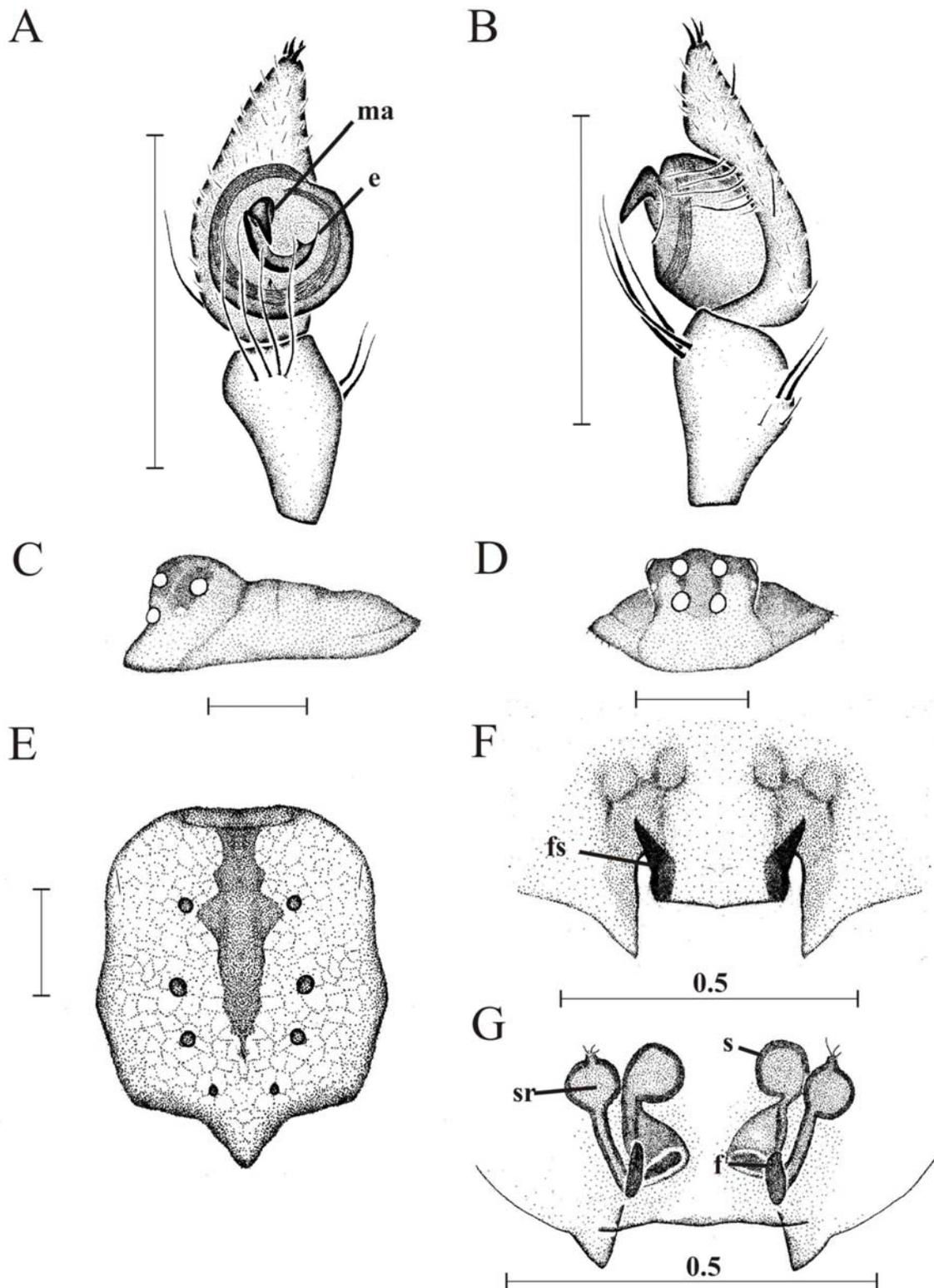
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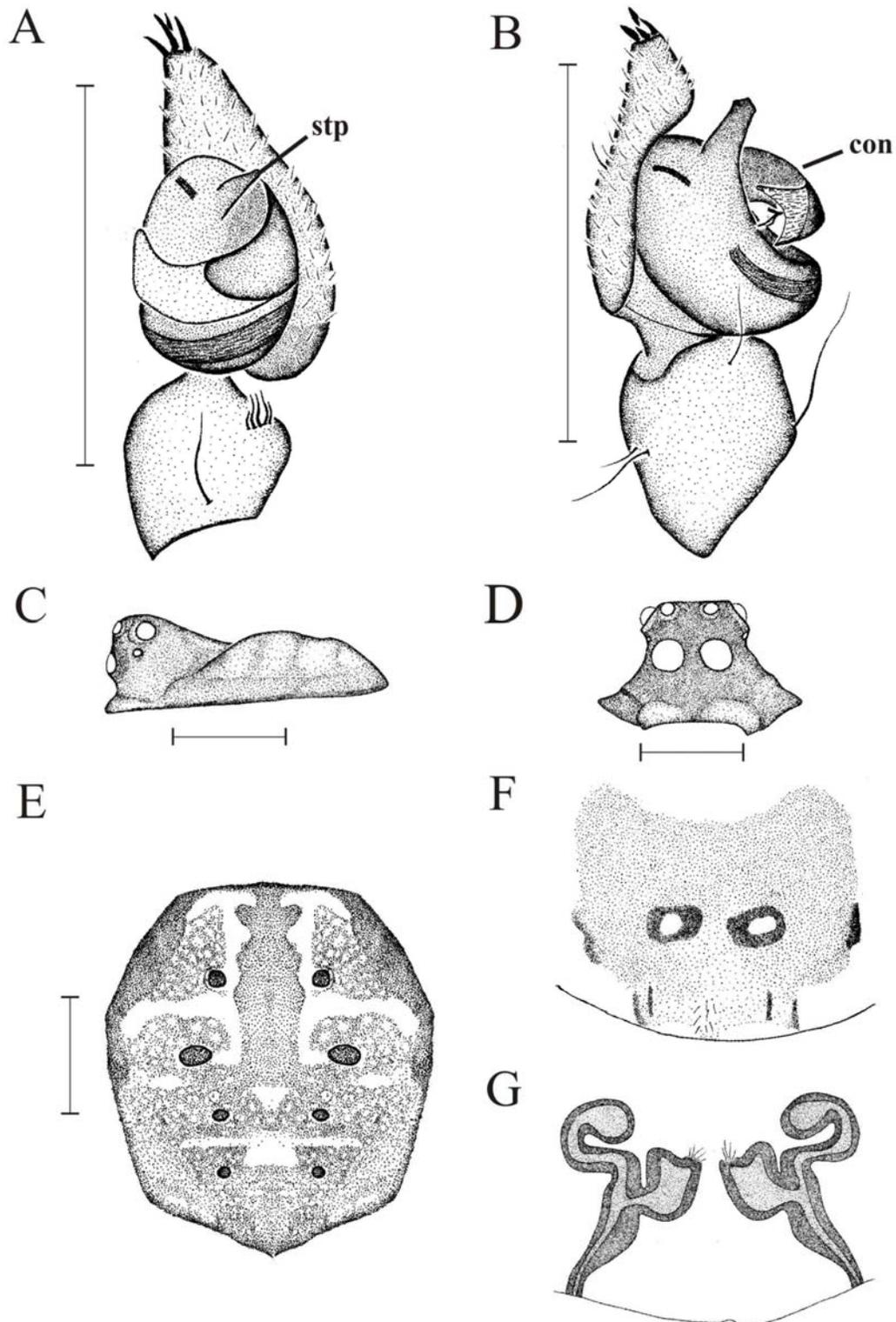
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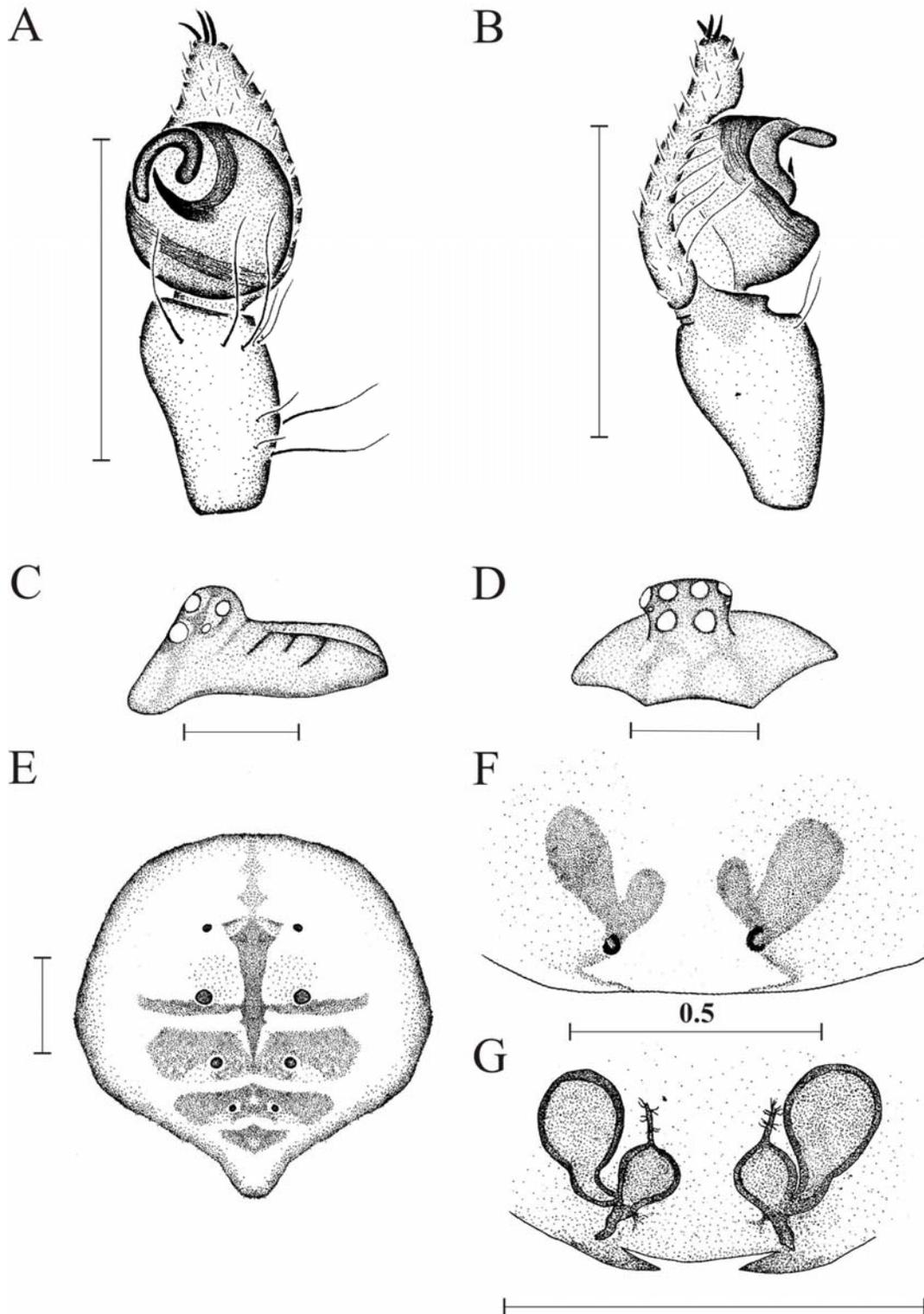
**Figure 1.** Scanning electron micrographs of *Hersilia sericea* from Pretoria, Gauteng, South Africa. **A.** Spinules on posterior lateral spinnerets. **B.** Dorsal muscular pit surrounded by plumose setae. **C.** Plumose setae on femora. **D.** Microstructure on surface of leg spines. **E.** Biarticulation on metatarsi of leg I. **F.** Row of conspicuous setae on border of carapace.



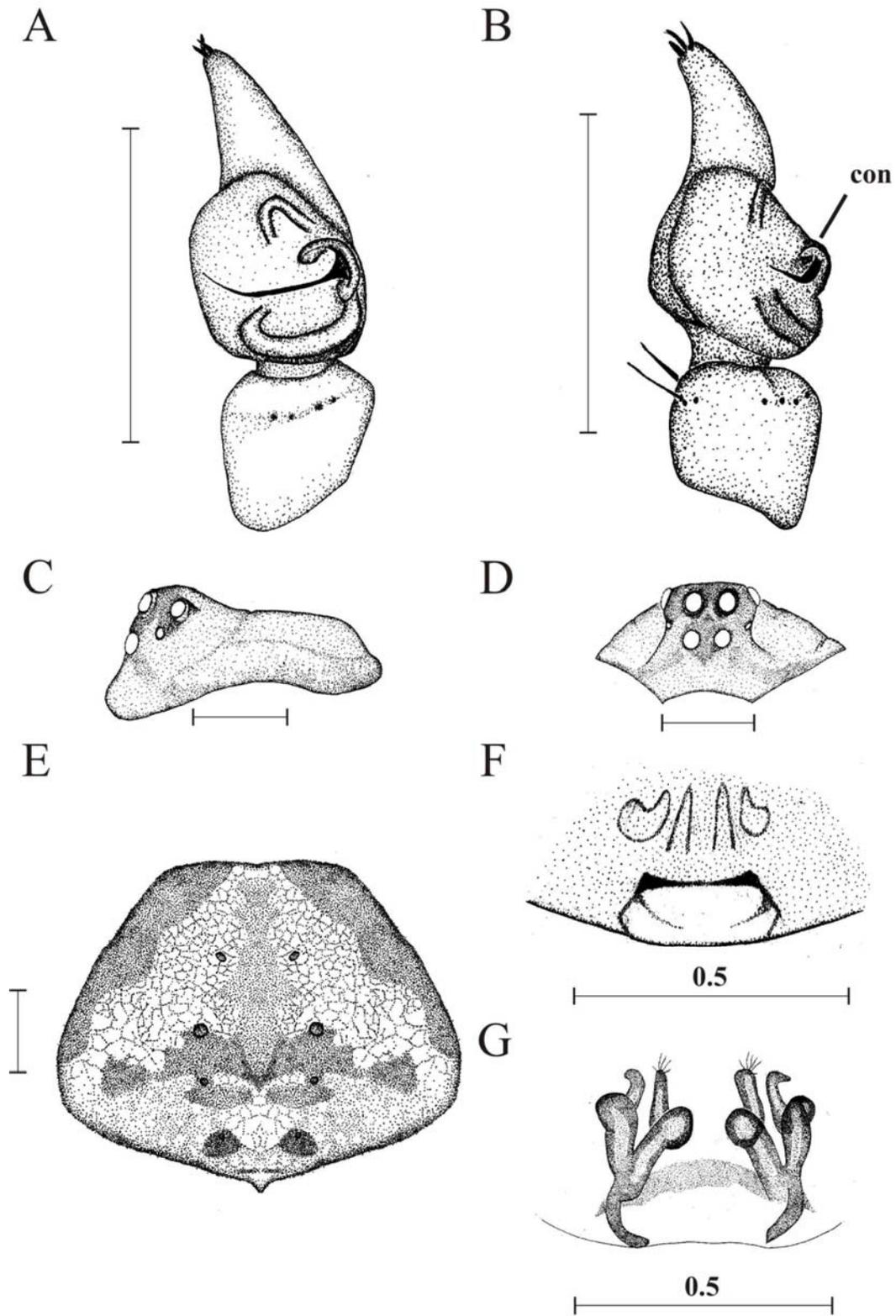
**Figure 2.** *Hersilia albicomis* Simon, 1887. **A.** Right palp ventral view. **B.** Right palp ventral view. **C.** Carapace prolateral view. **D.** Carapace anterior view. **E.** Female abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. e = embolus; ma = median apophysis; fs = fixing structures; s = spermathecae; sr = seminal receptacle; f = fertilization duct. Illustrations by SF.



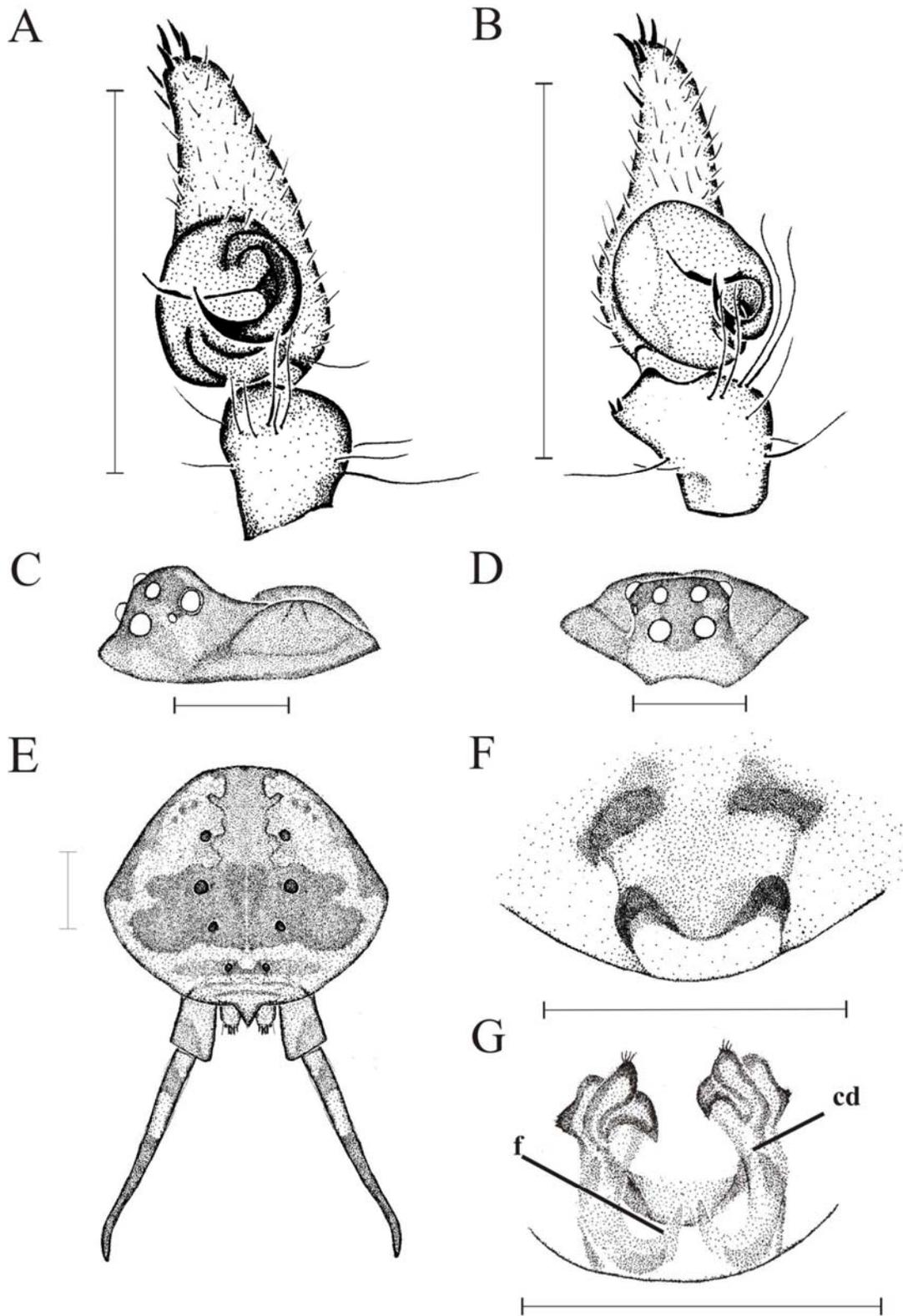
**Figure 3.** *Hersilia alluaudi* Berland, 1919. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view. **D.** Carapace anterior view. **E.** Male abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. stp = sclerotized tegular projection; con = conductor. Illustrations by SF. Figures 3f,g after Benoit (1967)



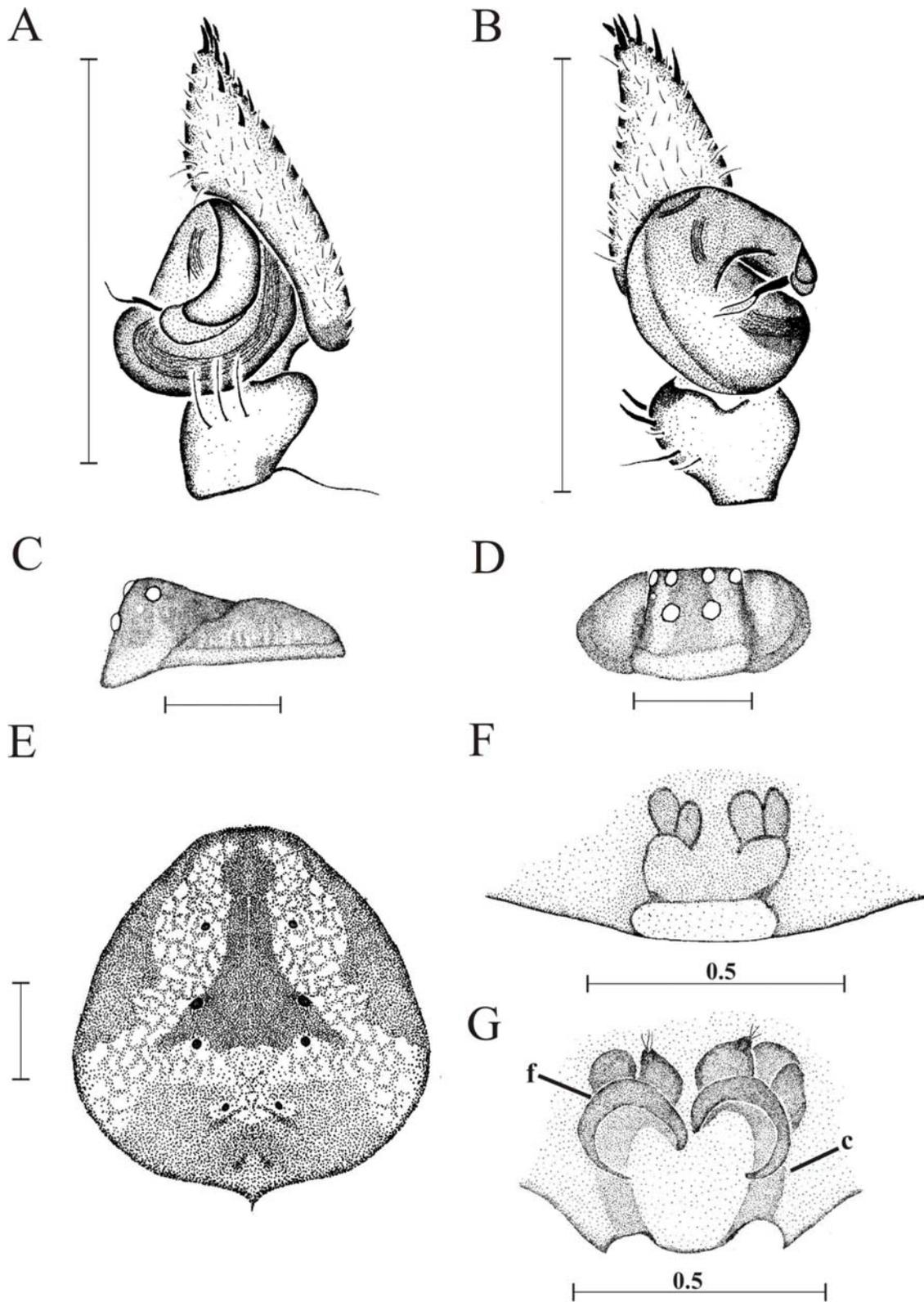
**Figure 4.** *Hersilia arborea* Lawrence, 1928. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view. **D.** Carapace anterior view. **E.** Female abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustrations by SF.



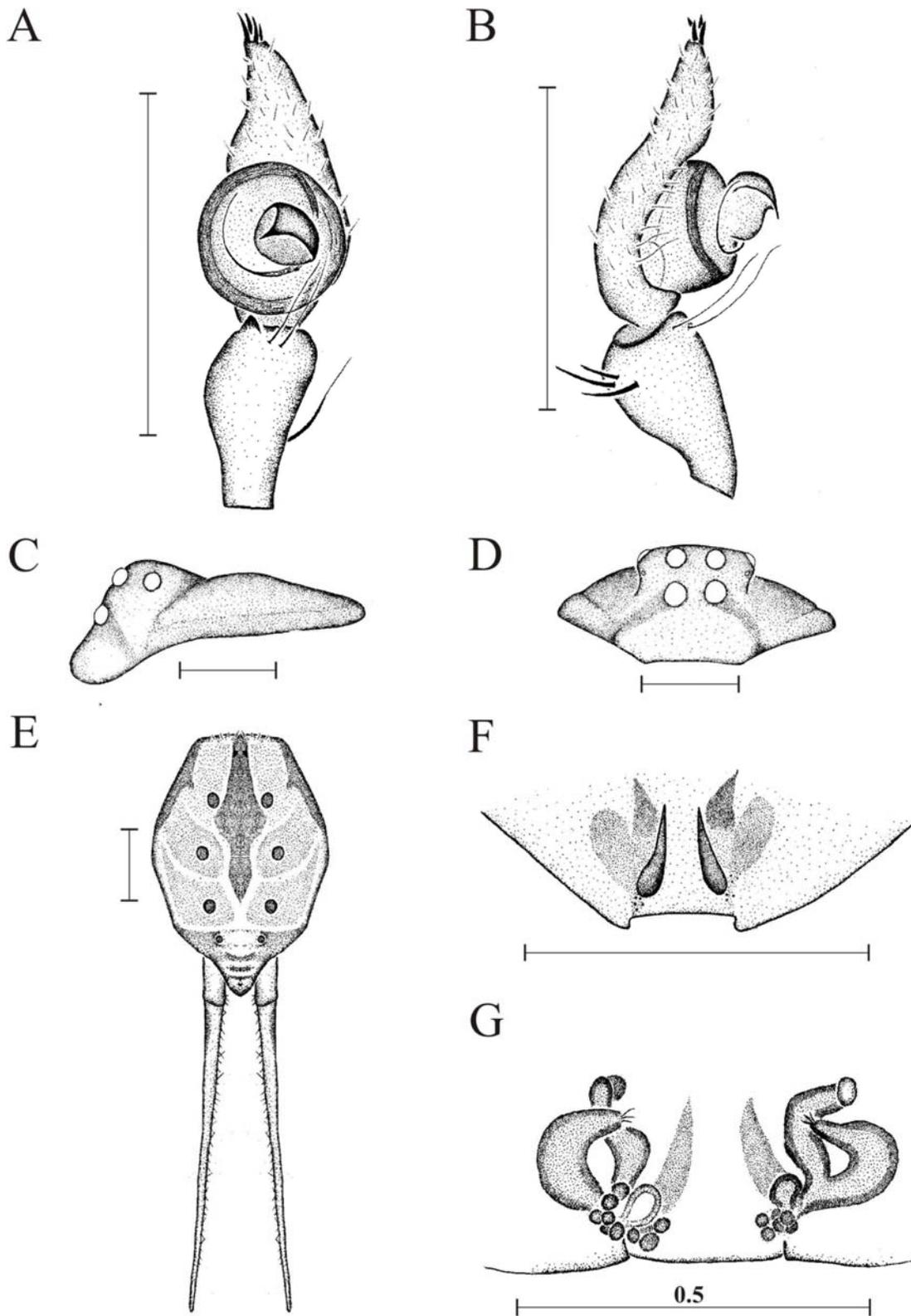
**Figure 5.** *Hersilia baforti* Benoit, 1967. **A.** Left palp ventral view. **B.** Left palp medial view. **C.** Carapace lateral view. **D.** Carapace anterior view. **E.** Female abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. con = conductor. Illustrations by SF.



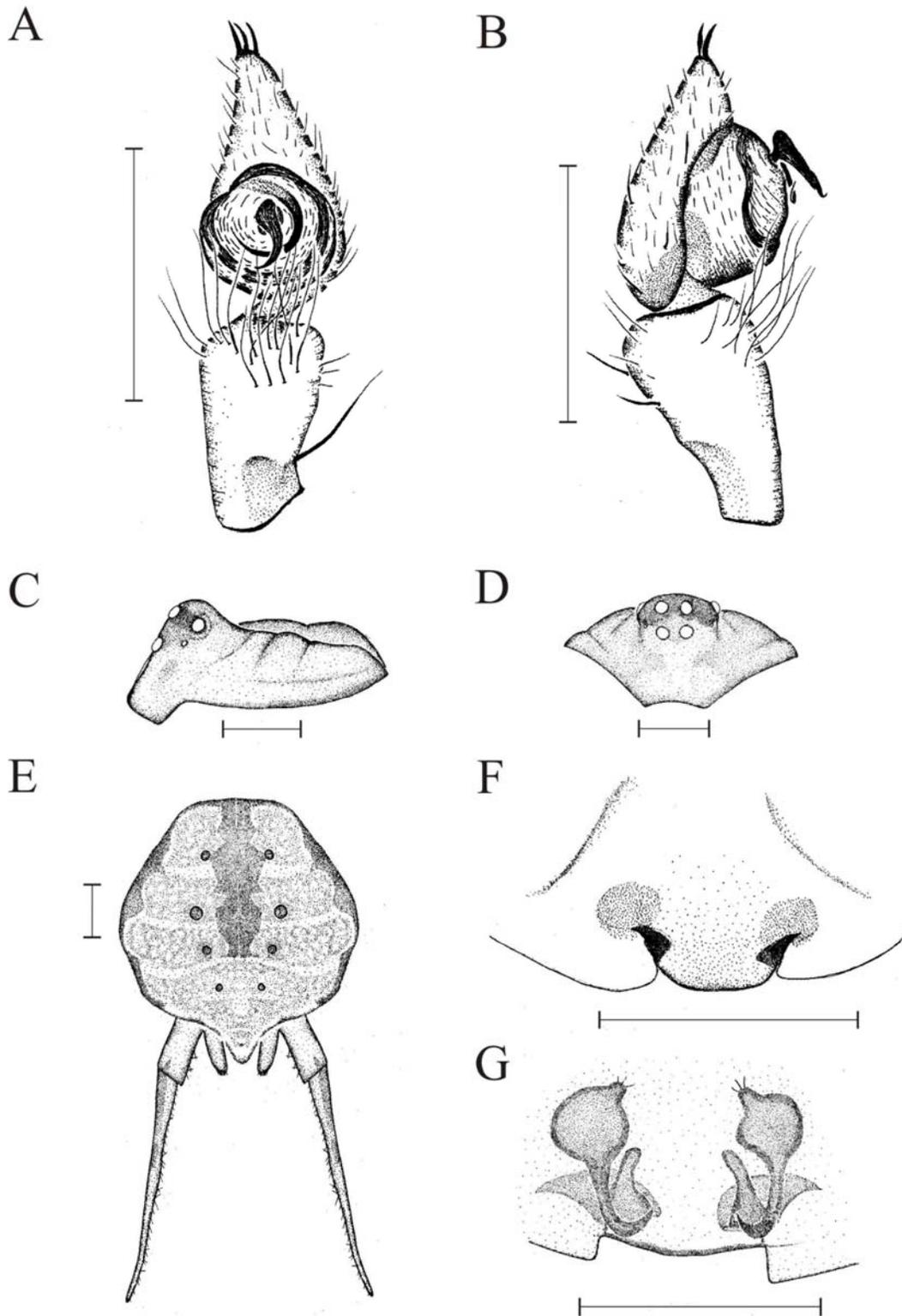
**Figure 6.** *Hersilia beva* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Female abdomen dorsal view with spinnerets. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. f = fertilisation duct; cd =



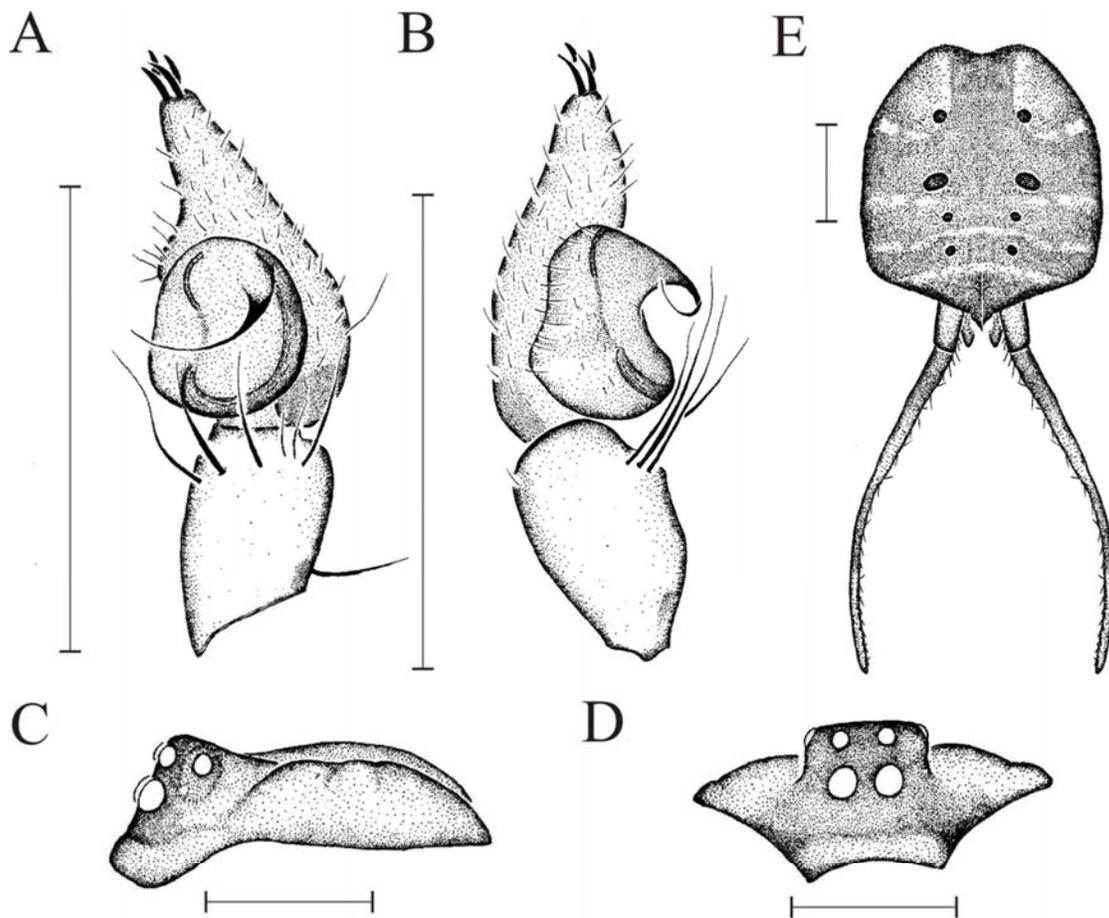
**Figure 7.** *Hersilia bubi* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Female abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. c = copulatory duct; f = fertilization duct.



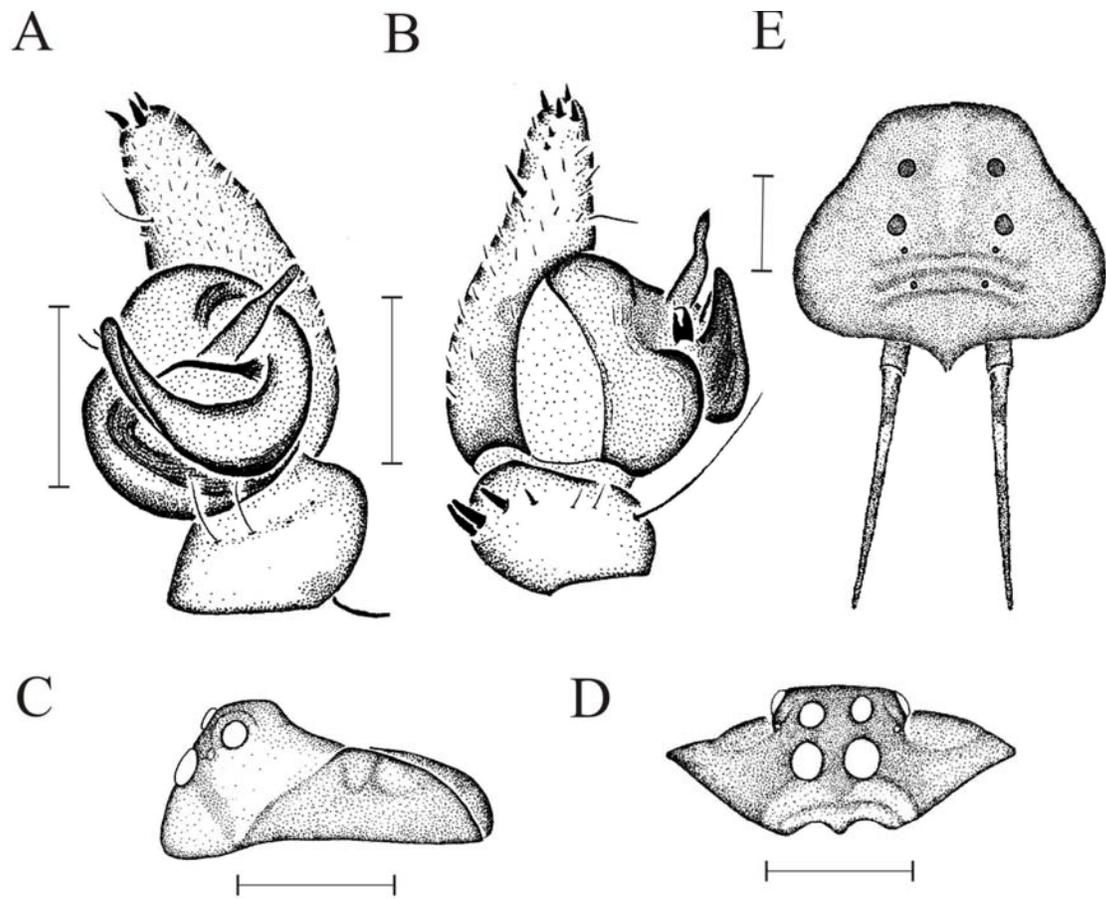
**Figure 8.** *Hersilia caronae* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Female abdomen dorsal view with spinnerets. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustrations by SF.



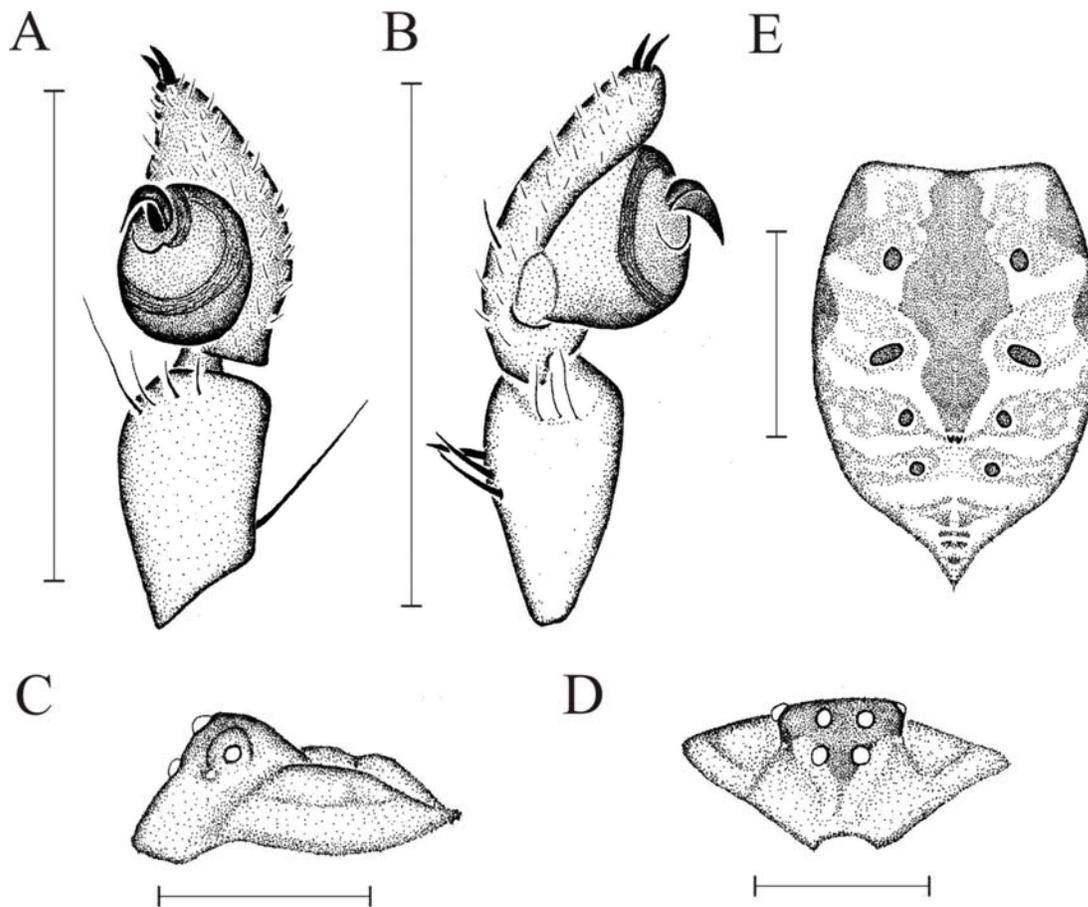
**Figure 9.** *Hersilia caudata* Audouin, 1826. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Female abdomen dorsal view with spinnerets. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustrations by SF.



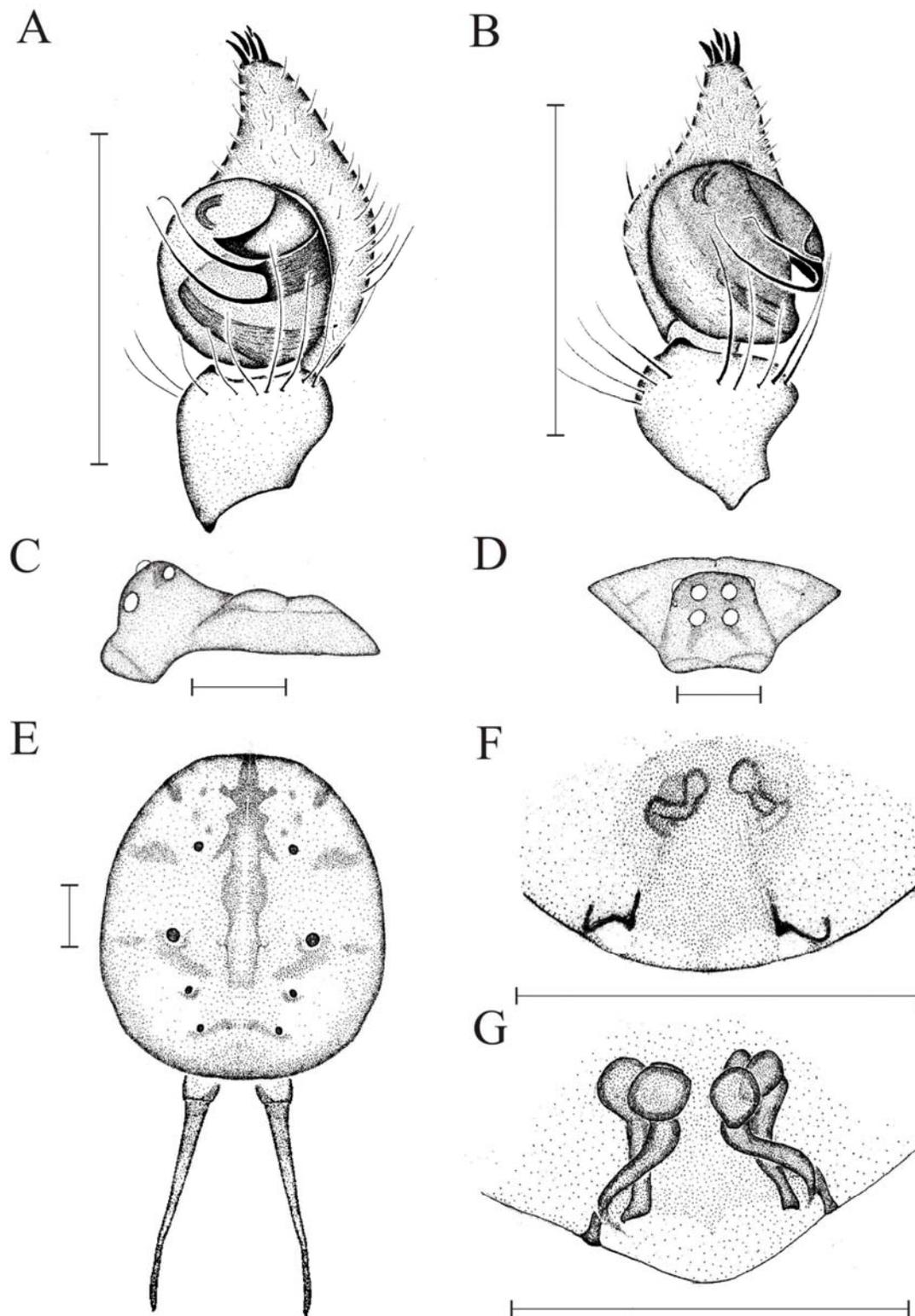
**Figure 10.** *Hersilia clarki* Benoit, 1967. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Male abdomen dorsal view with spinnerets. Illustrations by SF.



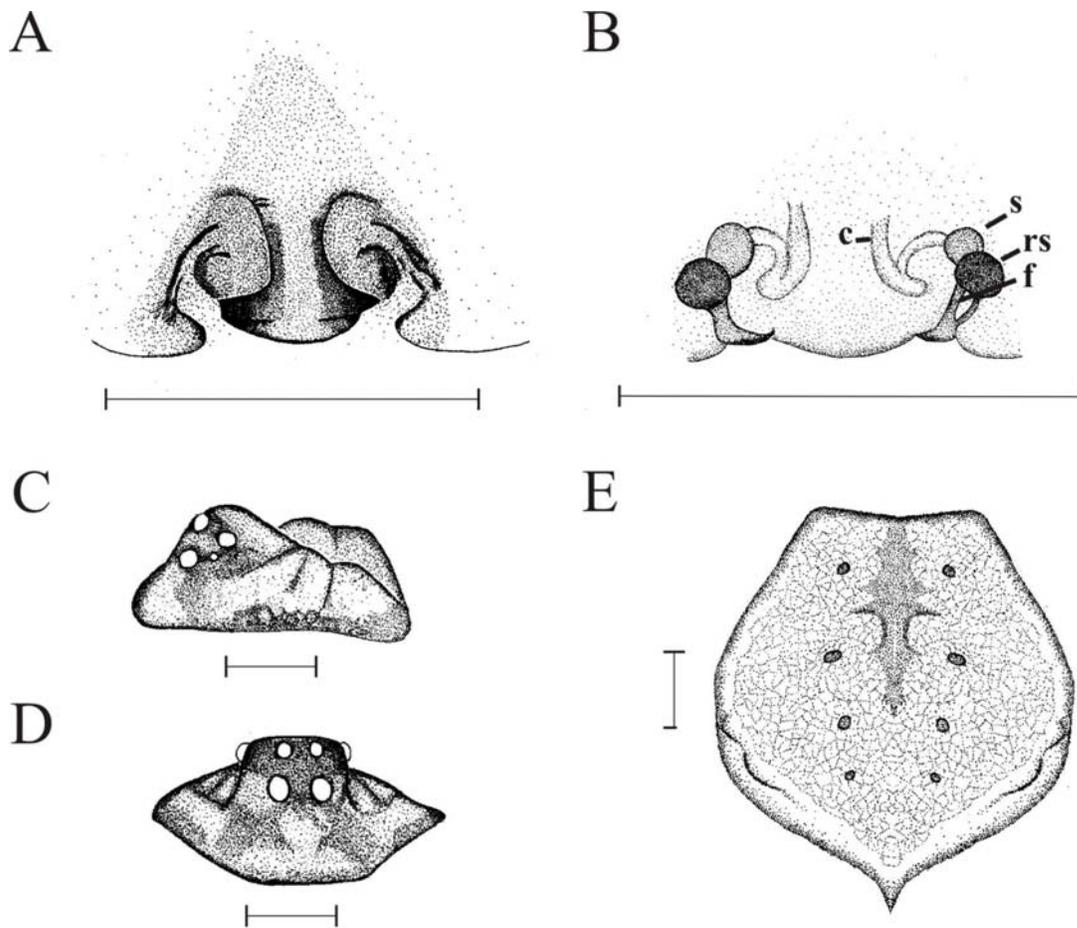
**Figure 11.** *Hersilia dilumen* sp. nov. **A.** Left palp ventral view. **B.** Left palp medial view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Male abdomen dorsal view with spinnerets. Illustrations by SF.



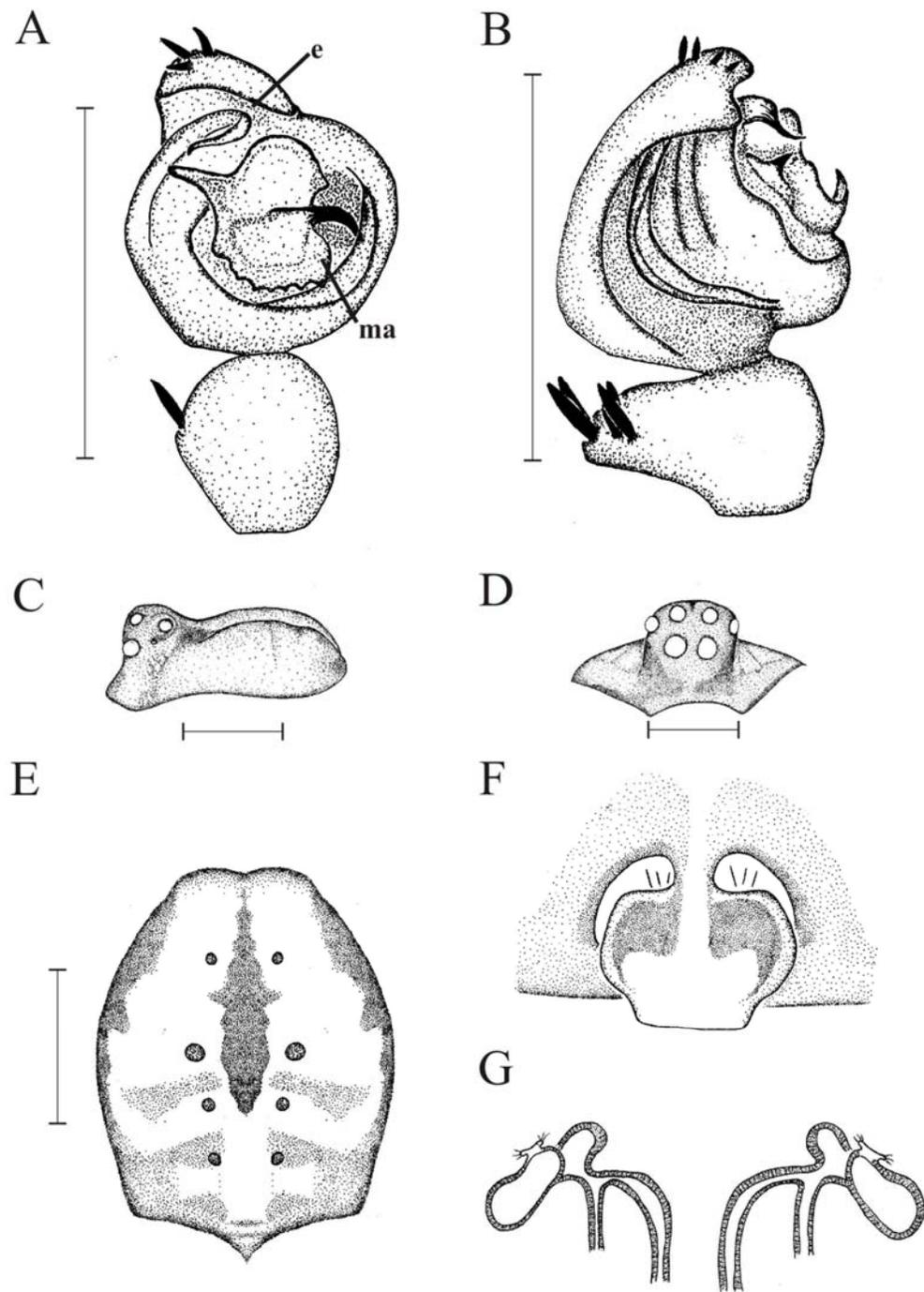
**Figure 12.** *Hersilia eloetsensis* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Male abdomen dorsal view. Illustrations by SF.



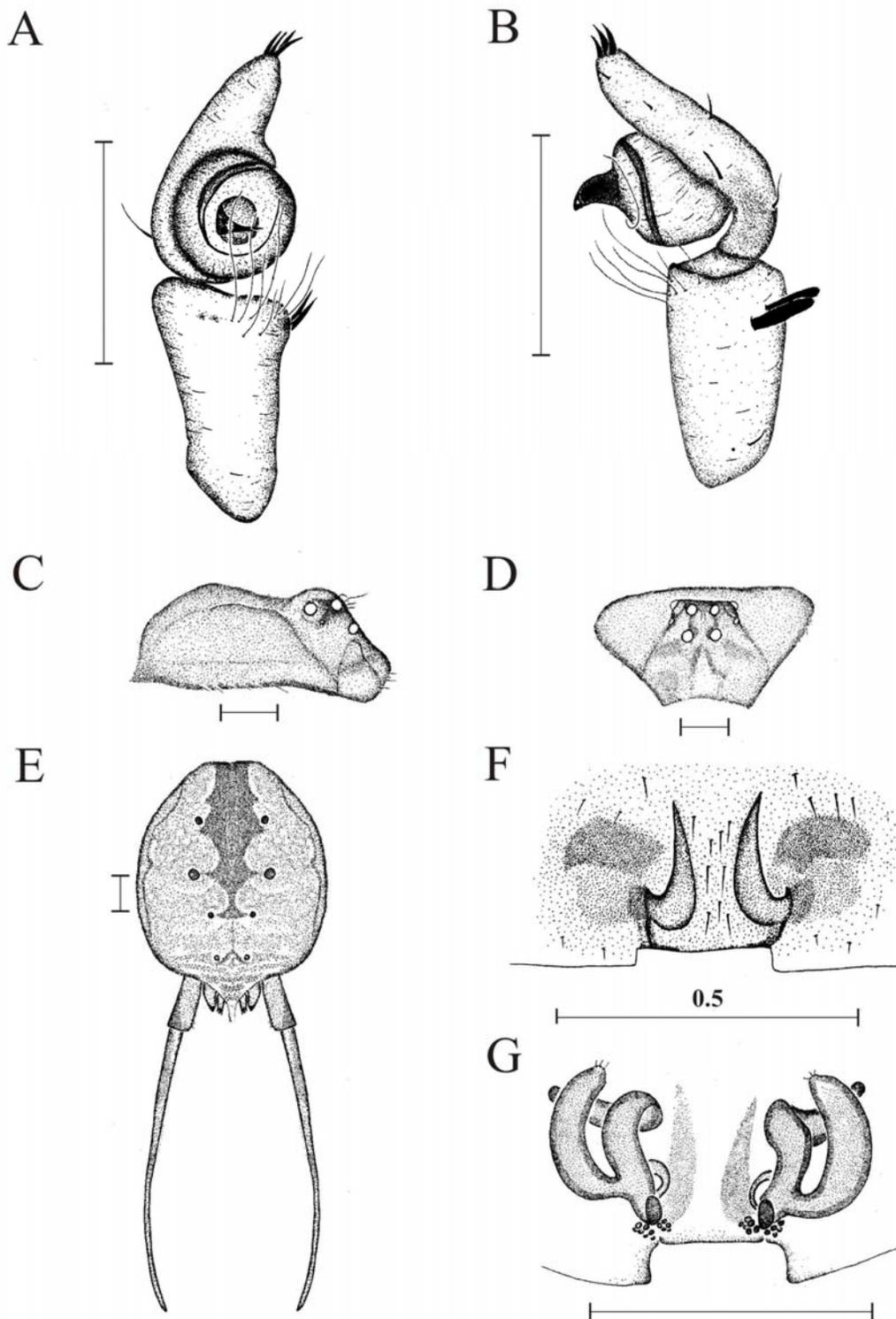
**Figure 13.** *Hersilia ferra* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view. **D.** Carapace anterior view. **E.** Female abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustrations by SF.



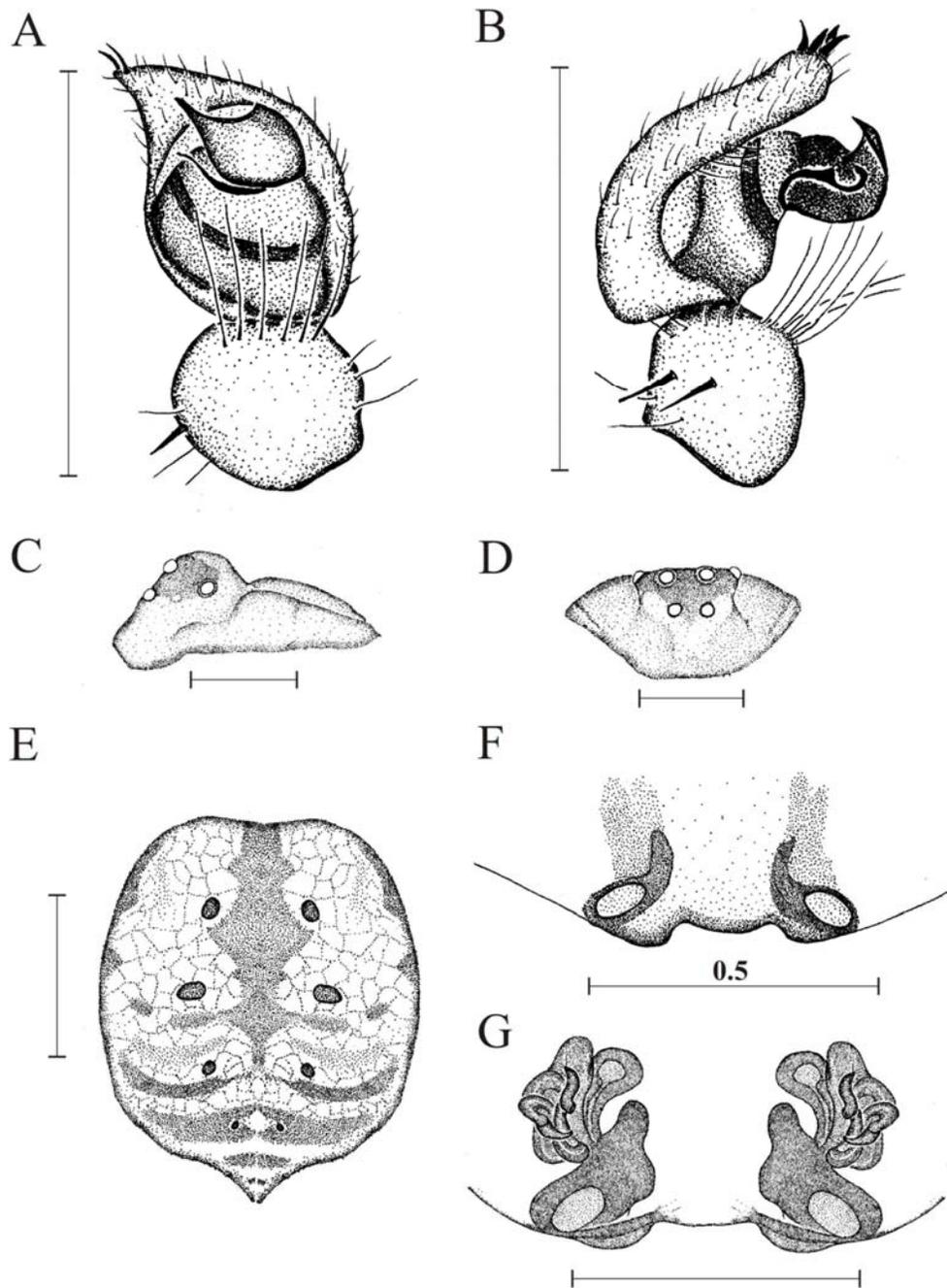
**Figure 14.** *Hersilia hildebrandti* Karsch, 1878. **A.** Epigyne ventral view. **B.** Epigyne dorsal view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Female abdomen dorsal view. Illustration by SF.



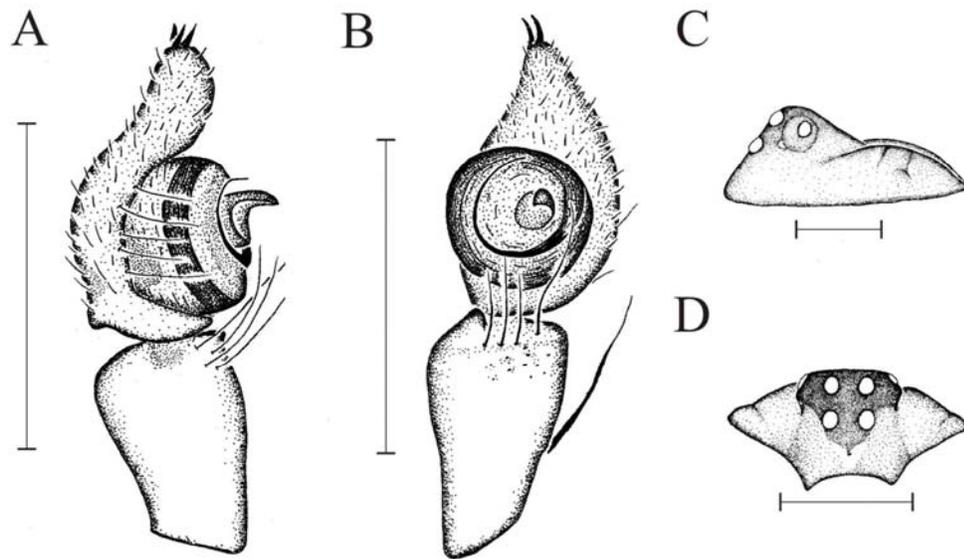
**Figure 15.** *Hersilia incompta* Benoit, 1971. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view. **D.** Carapace anterior view. **E.** Male abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. e = embolus; ma = median apophysis. Illustrations by SF.



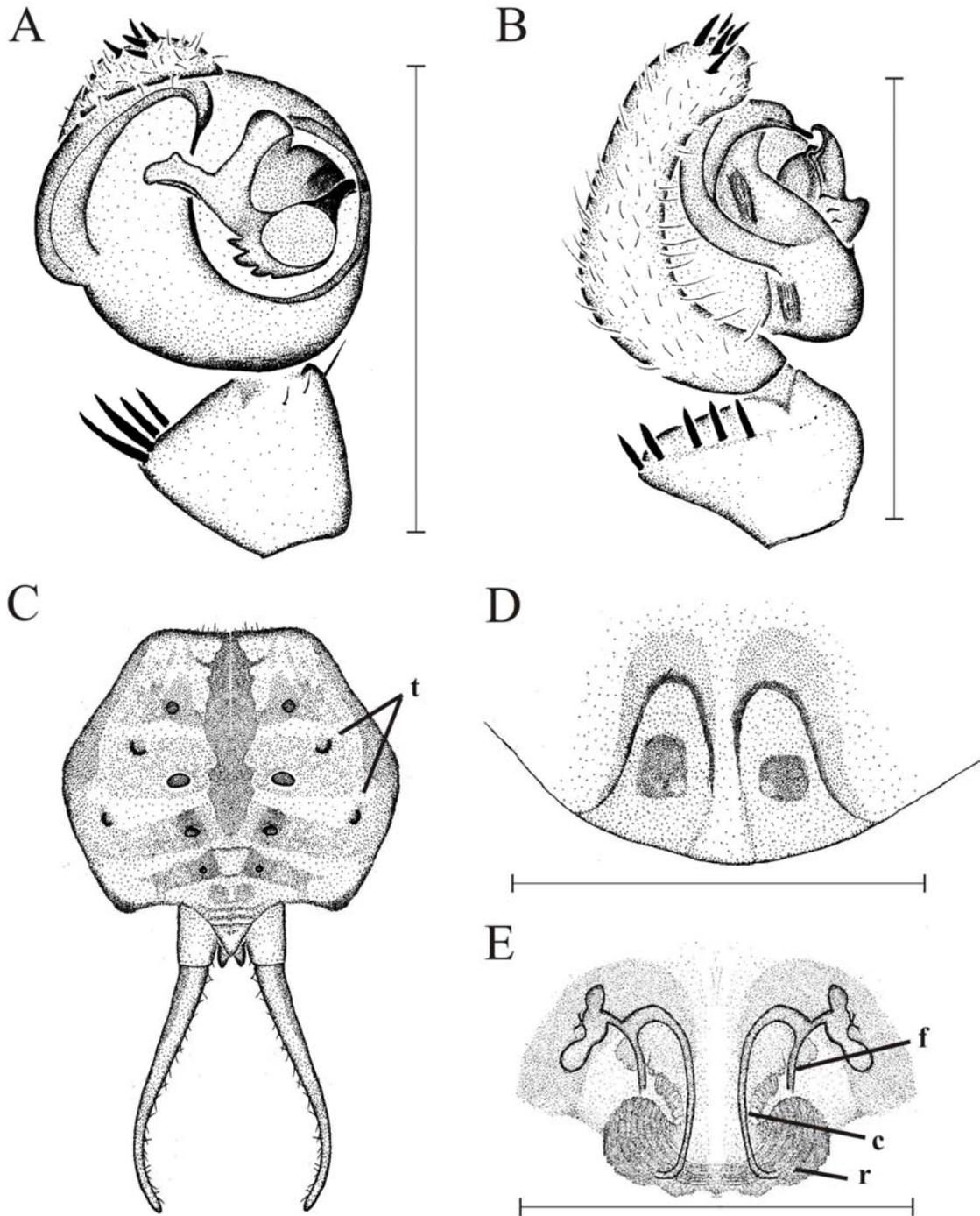
**Figure 16.** *Hersilia insulana* Strand, 1907. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Male abdomen dorsal view with spinnerets. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustrations by SF.



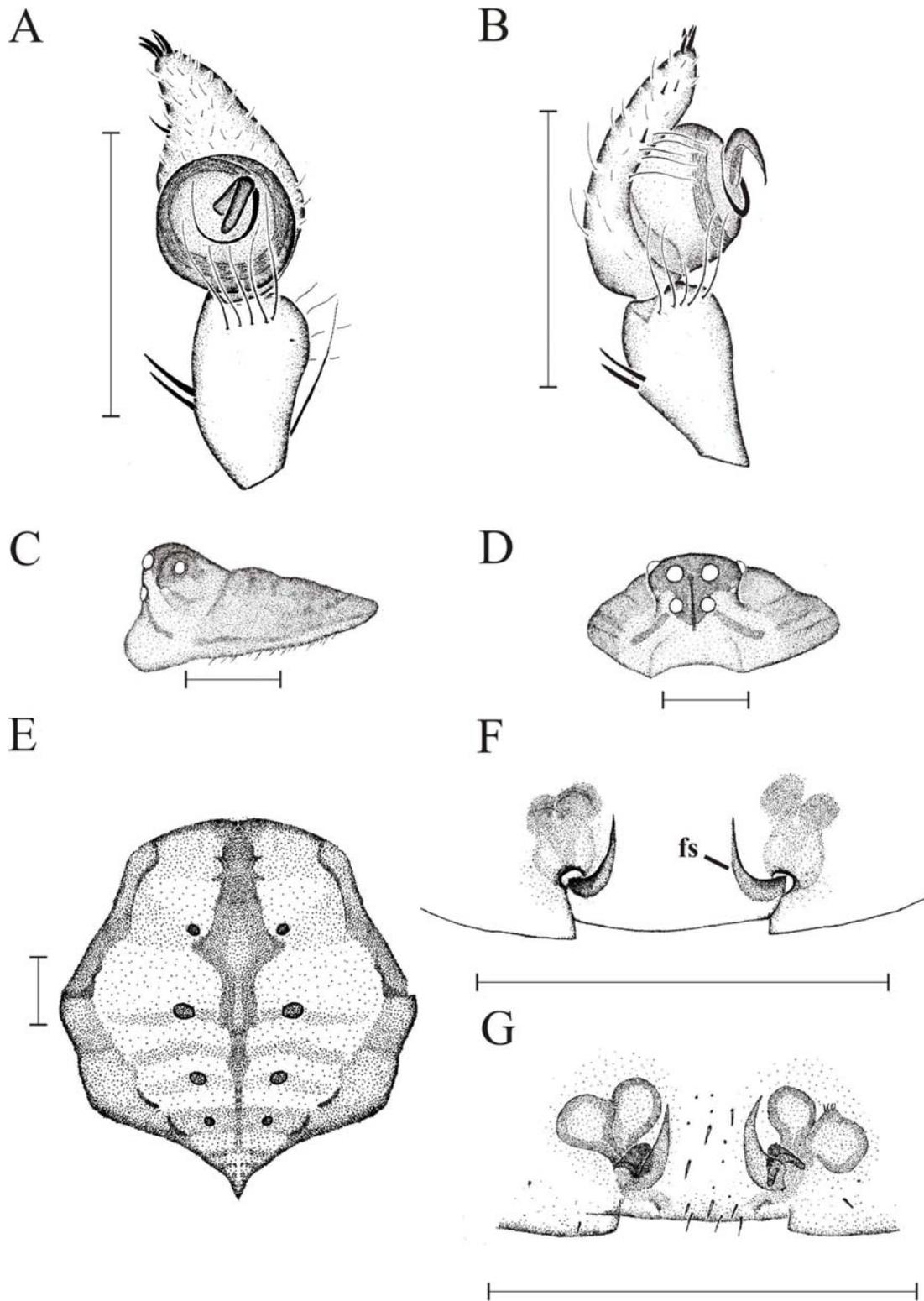
**Figure 17.** *Hersilia madagascariensis* (Wunderlich 2004). **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view. **D.** Carapace anterior view. **E.** Male abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustrations by SF.



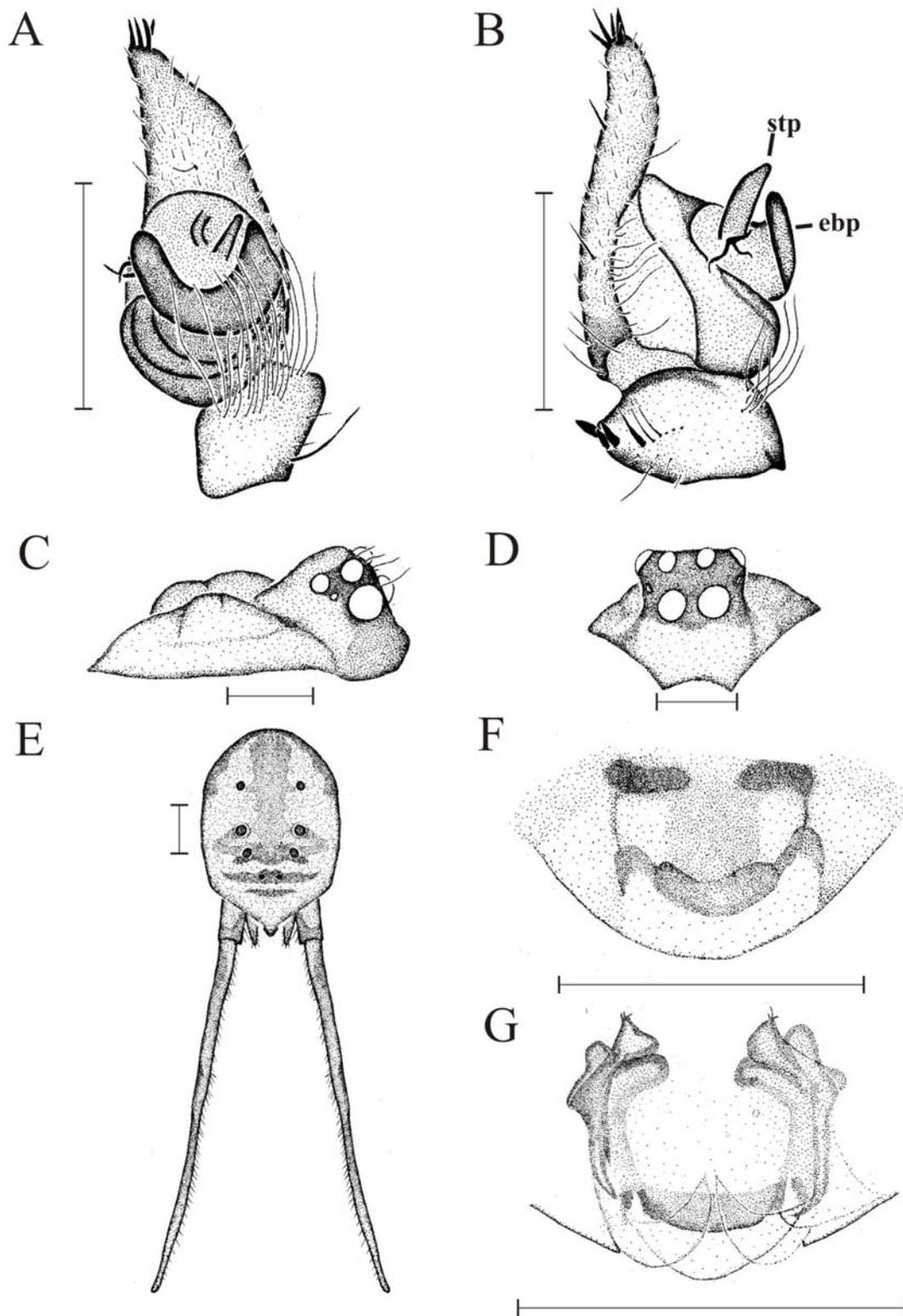
**Figure 18.** *Hersilia moheliensis* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. Illustrations by SF.



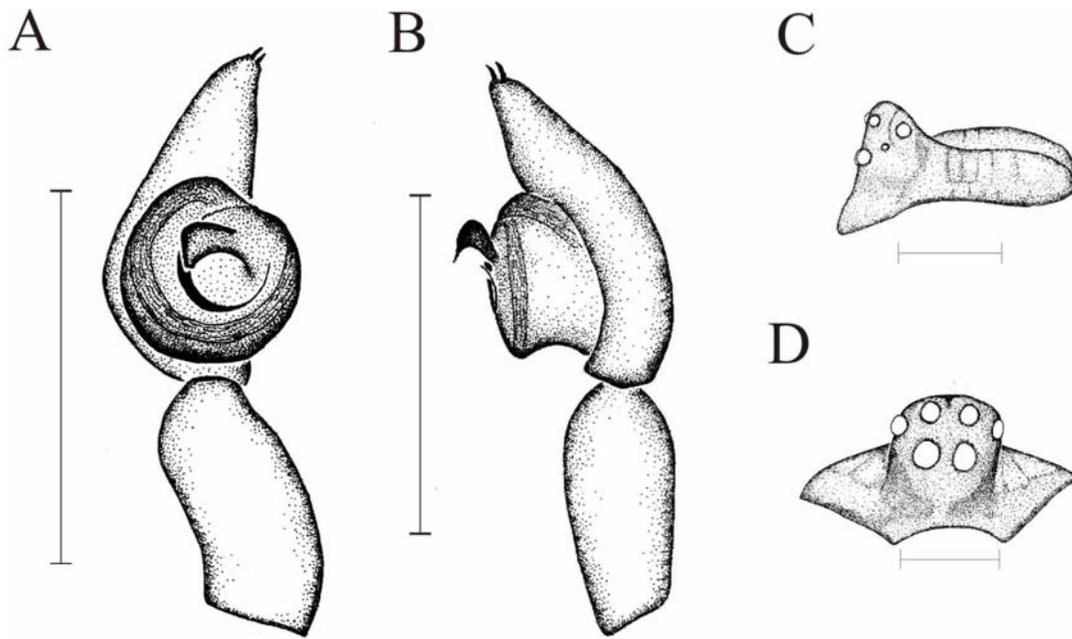
**Figure 19.** *Hersilia nicolae* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Female abdomen dorsal view with spinnerets . **D.** Epigyne ventral view. **E.** Epigyne dorsal view; c = copulatory duct; f = fertilization duct; r = ruffles; t = tubercle.. Illustrations by SF.



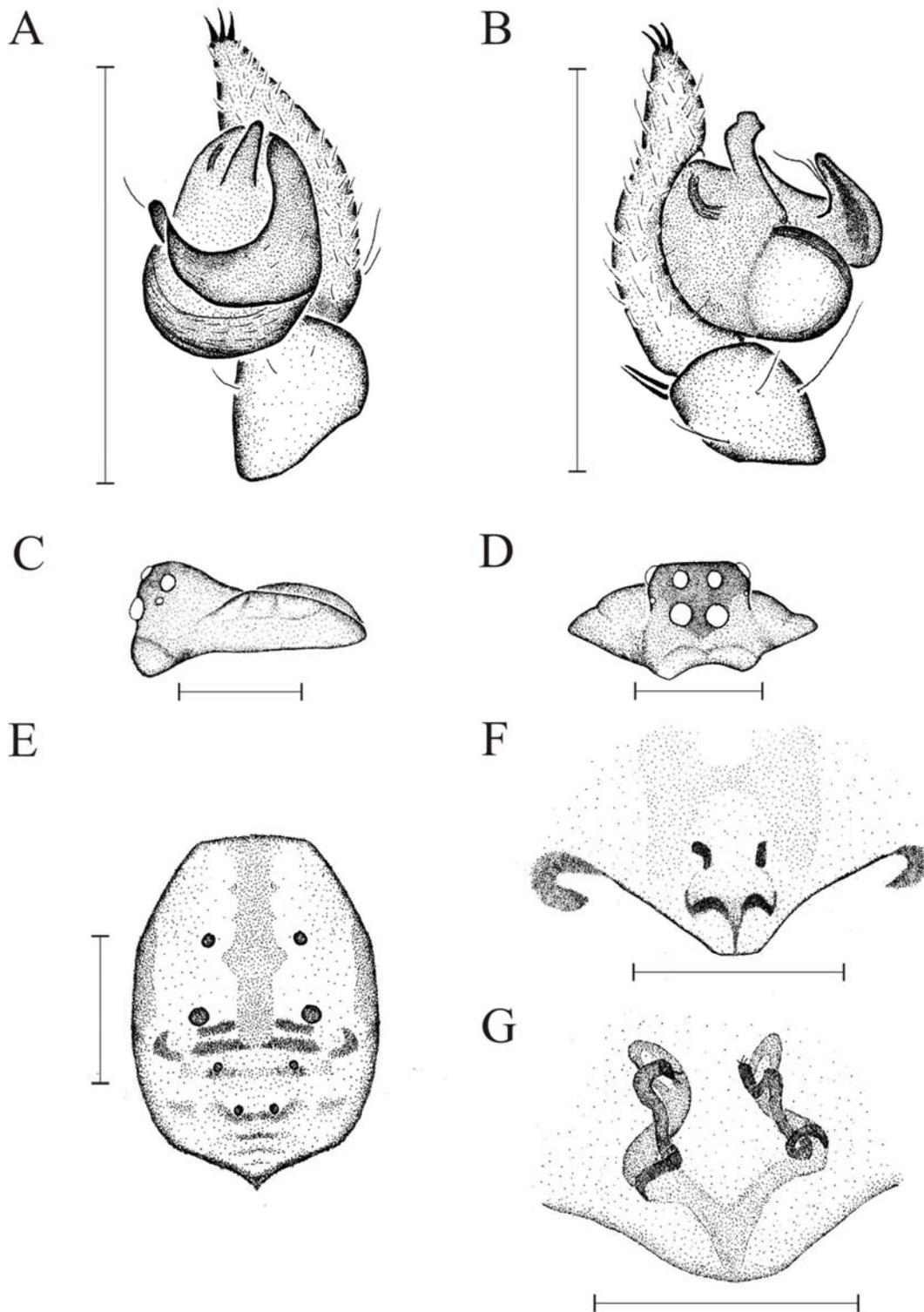
**Figure 20.** *Hersilia occidentalis* Simon, 1907. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Male abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. fs = fixing structure.



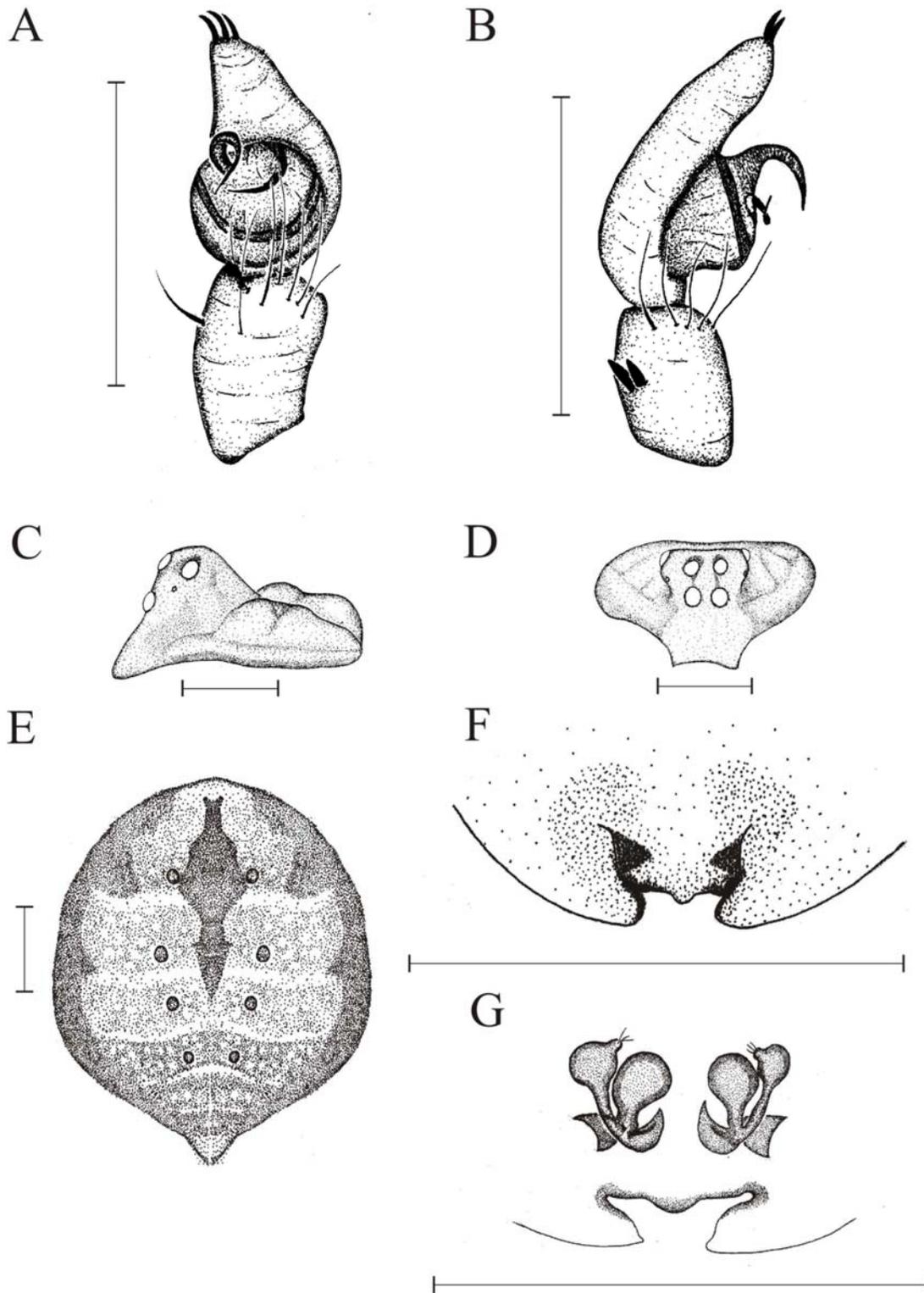
**Figure 21.** *Hersilia plara* sp. nov. **A.** Left palp ventral view. **B.** Left palp medial view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Male abdomen dorsal view with spinnerets. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. ebp = basal embolar process.



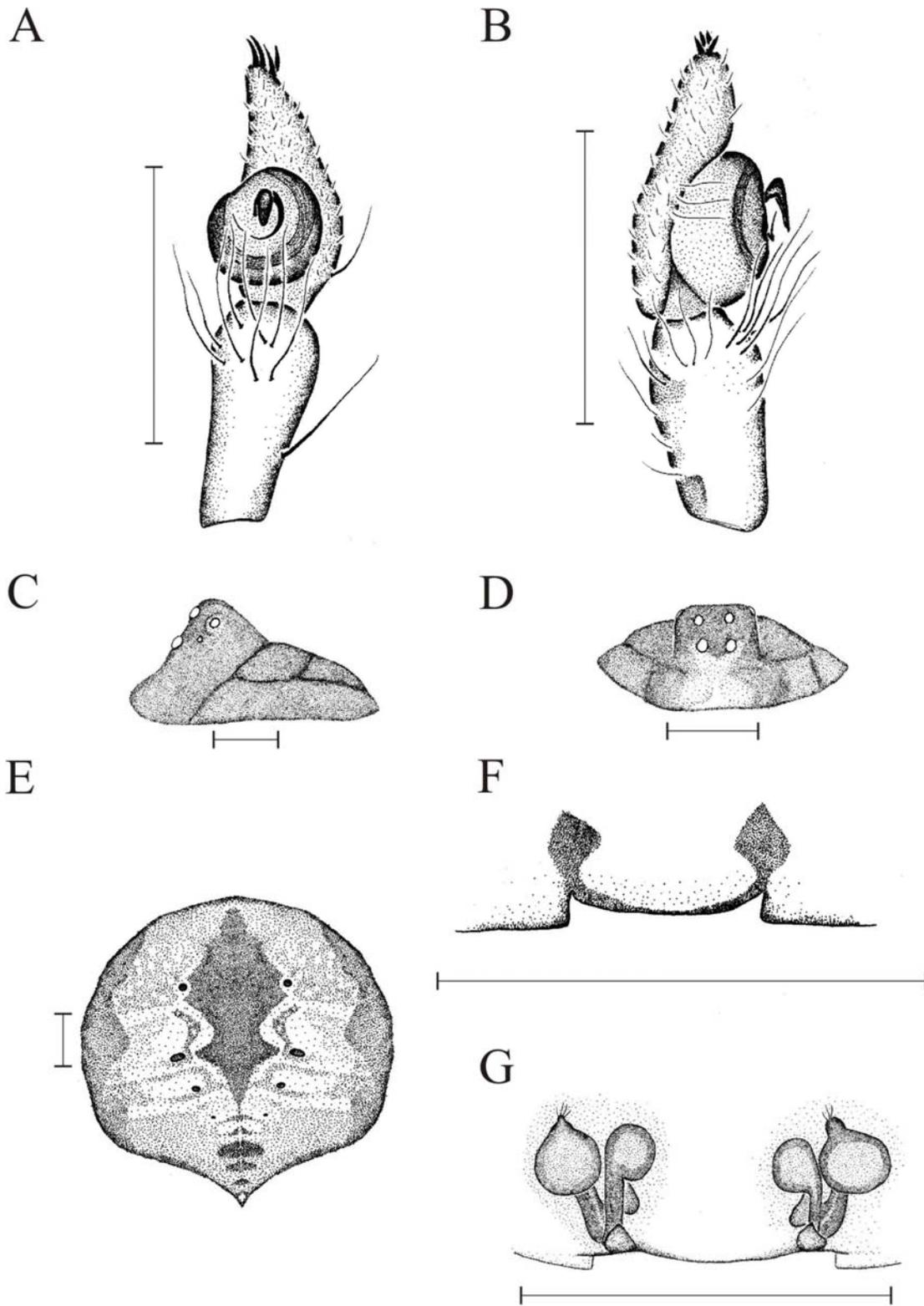
**Figure 22.** *Hersilia pungwensis* Tucker, 1920. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. Illustration by SF.



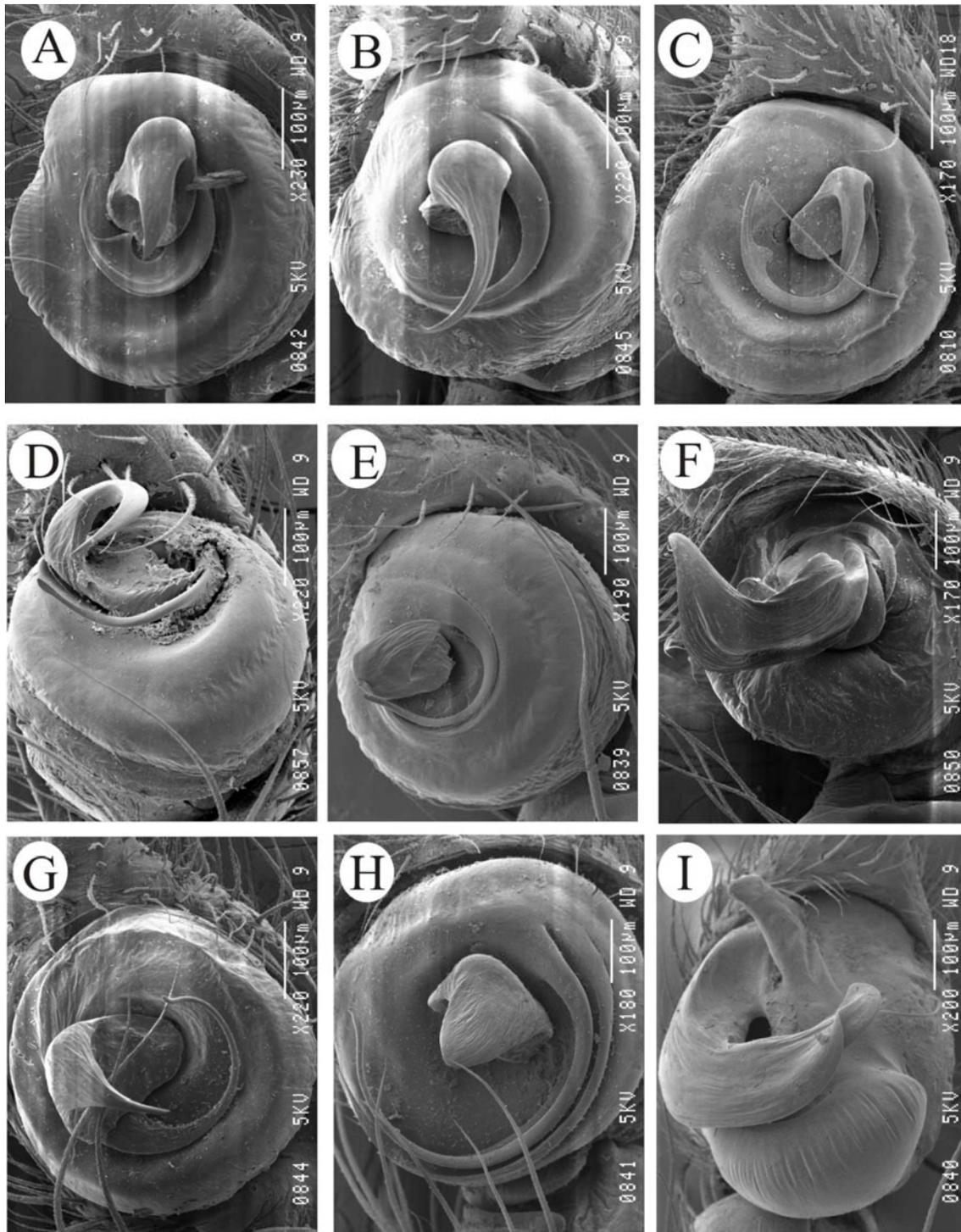
**Figure 23.** *Hersilia salda* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view. **D.** Carapace anterior view. **E.** Male abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustration by SF.



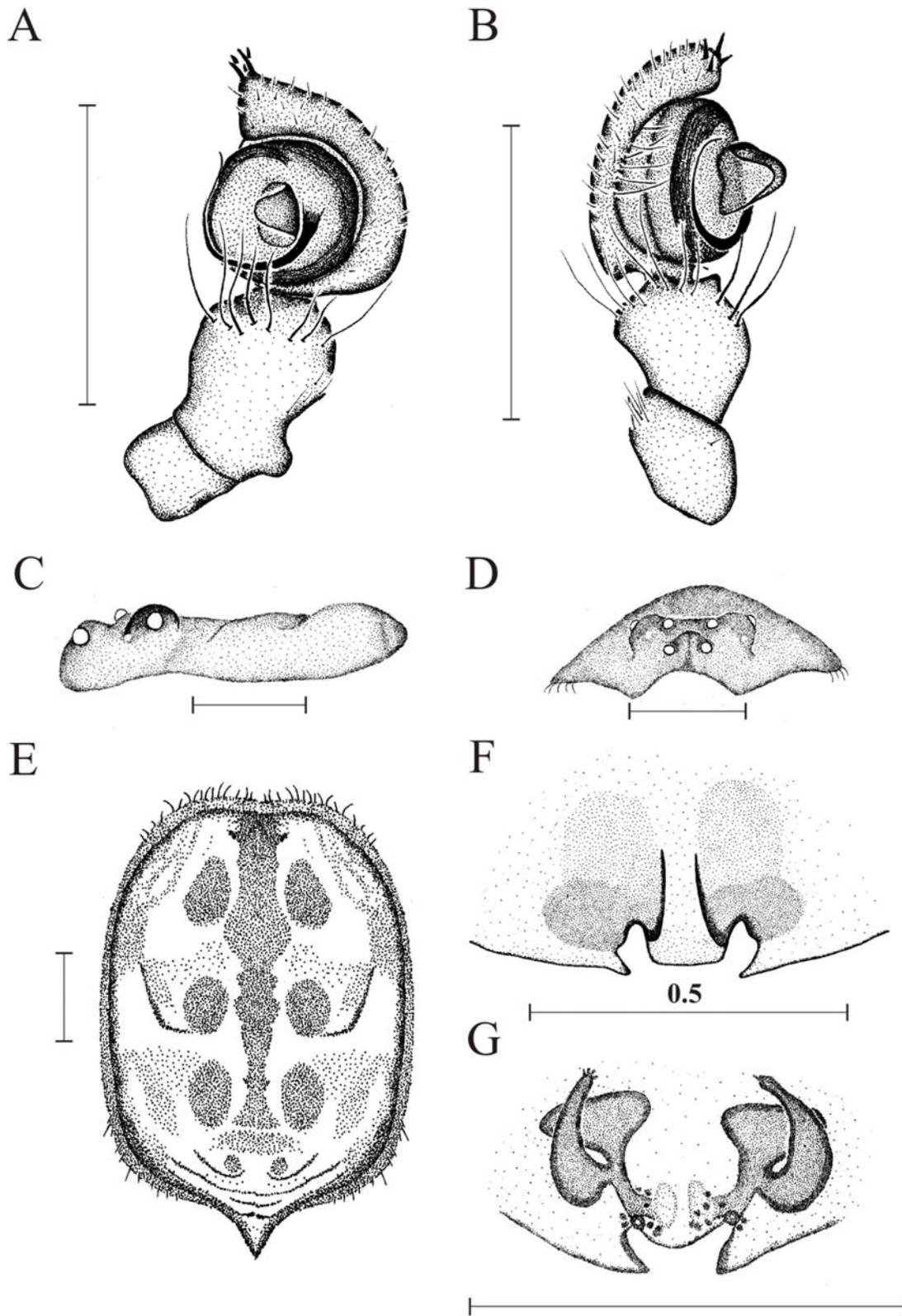
**Figure 24.** *Hersilia sericea* (Pocock 1898). **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view. **D.** Carapace anterior view. **E.** Female abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustration by SF.



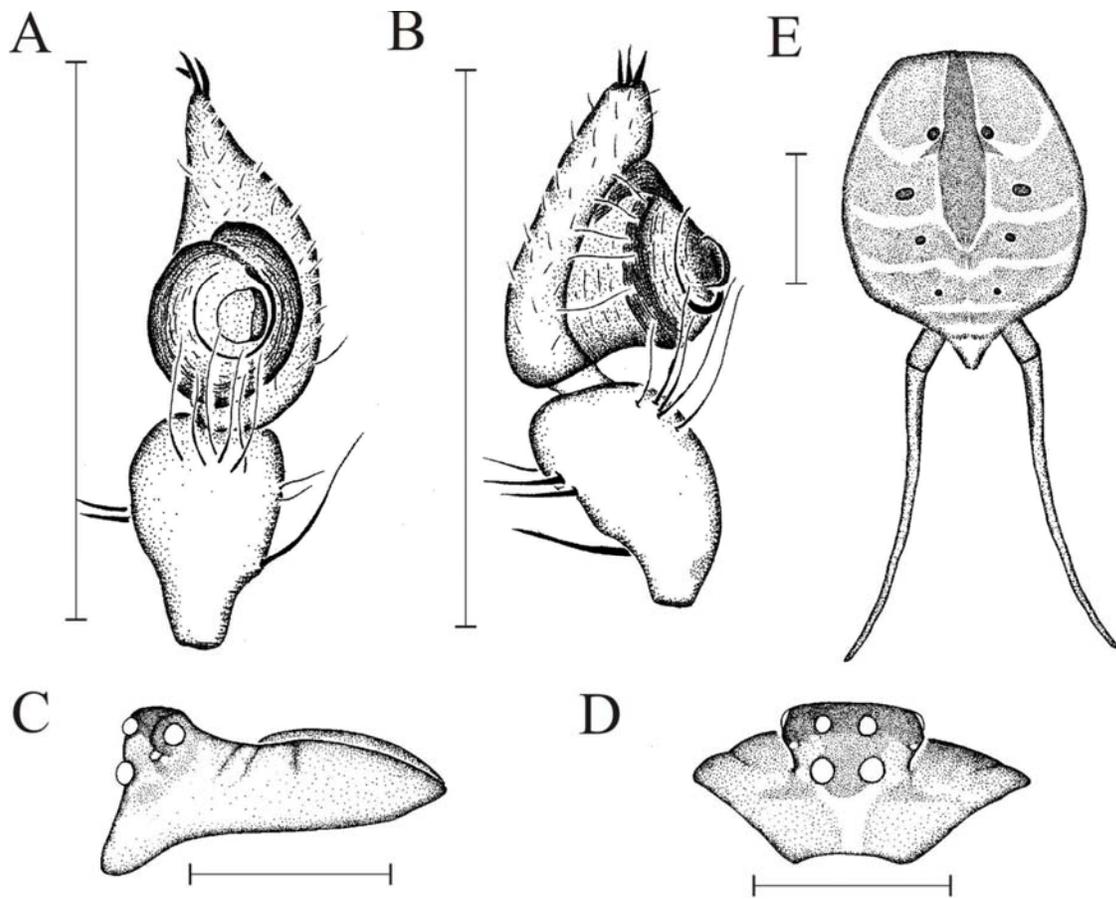
**Figure 25.** *Hersilia setifrons* Lawrence, 1928. **A.** Left palp ventral view. **B.** Left palp prolateral view. Cephalothorax. **C.** Cephalothorax lateral view. **D.** Carapace anterior view. **E.** Abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustration by SF.



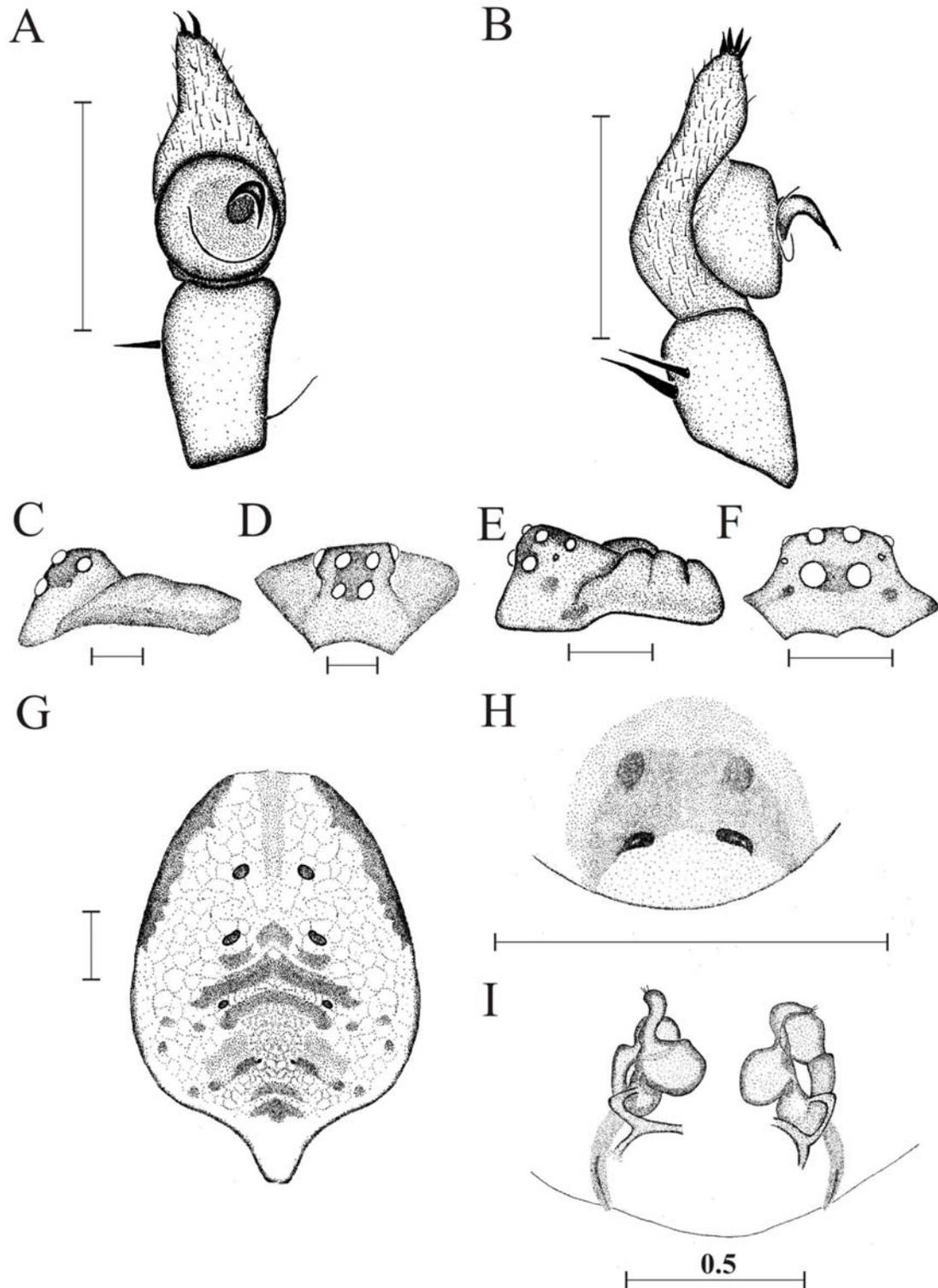
**Figure 26.** Left palps of males *Hersilia*. **A.** *H. albicomis* from Oguta Lake, Nigeria, **B.** *H. caudata* from Fogo island, Cape Verde, **C.** *H. occidentalis* from Butar, Rwanda, **D.** *H. sericea* from Pretoria, South Africa, **E.** *H. setifrons*. from Nylsvlei, South Africa, **F.** *H. madagascariensis* (Wunderlich) from Ranomfana, Fianarantsoa Province, Madagascar, **G.** *H. caronae*, right palp of male from Aldabra Island Group, Malabar Island, **H.** *H. sigillata*, male from District, Masindi, Budongo Forest, near Sonso, Uganda, **I.** *H. salda* from Shimba Hills Natur Reserve, Kenya.



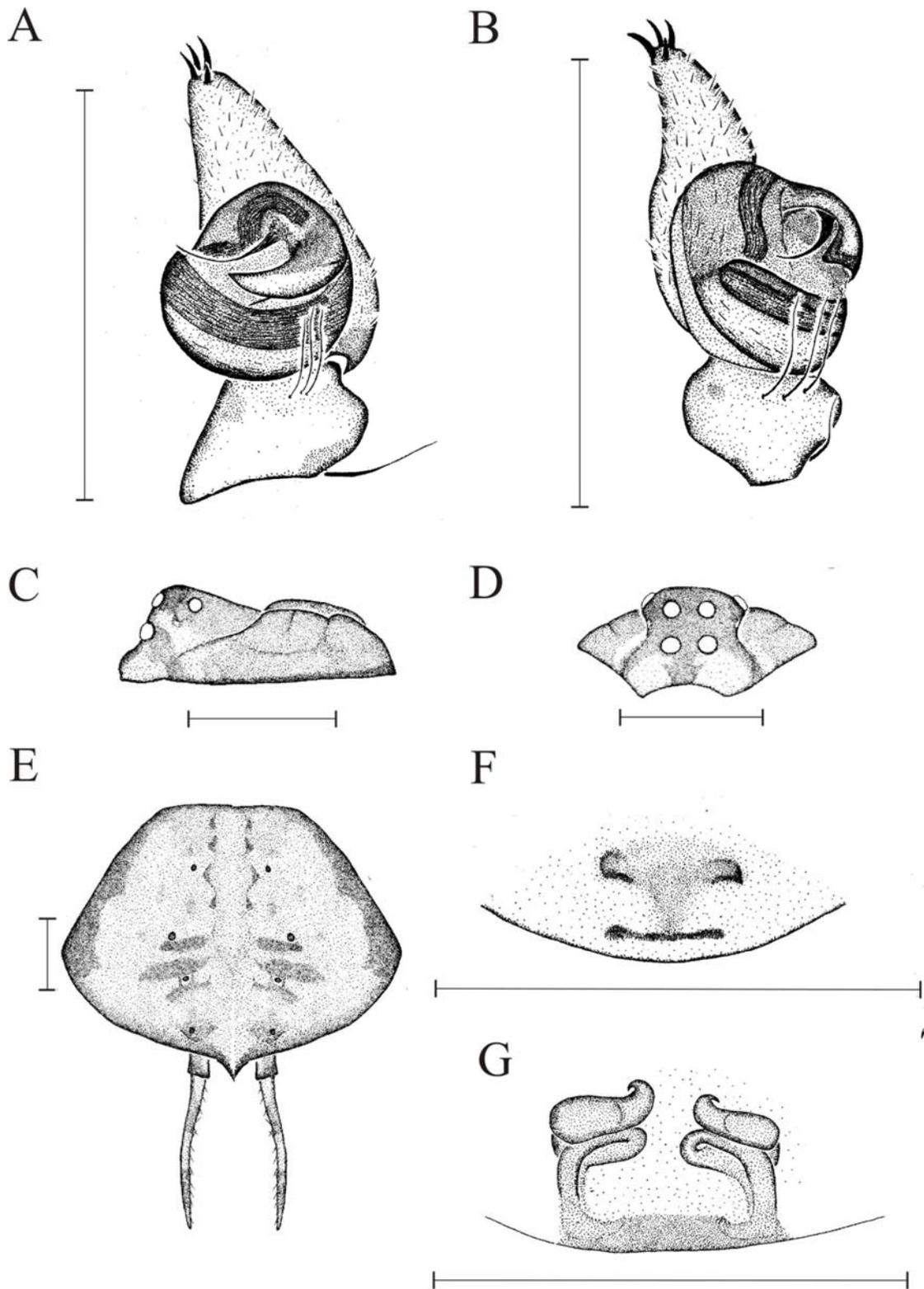
**Figure 27.** *Hersilia sigillata* Benoit, 1967. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Female abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view..



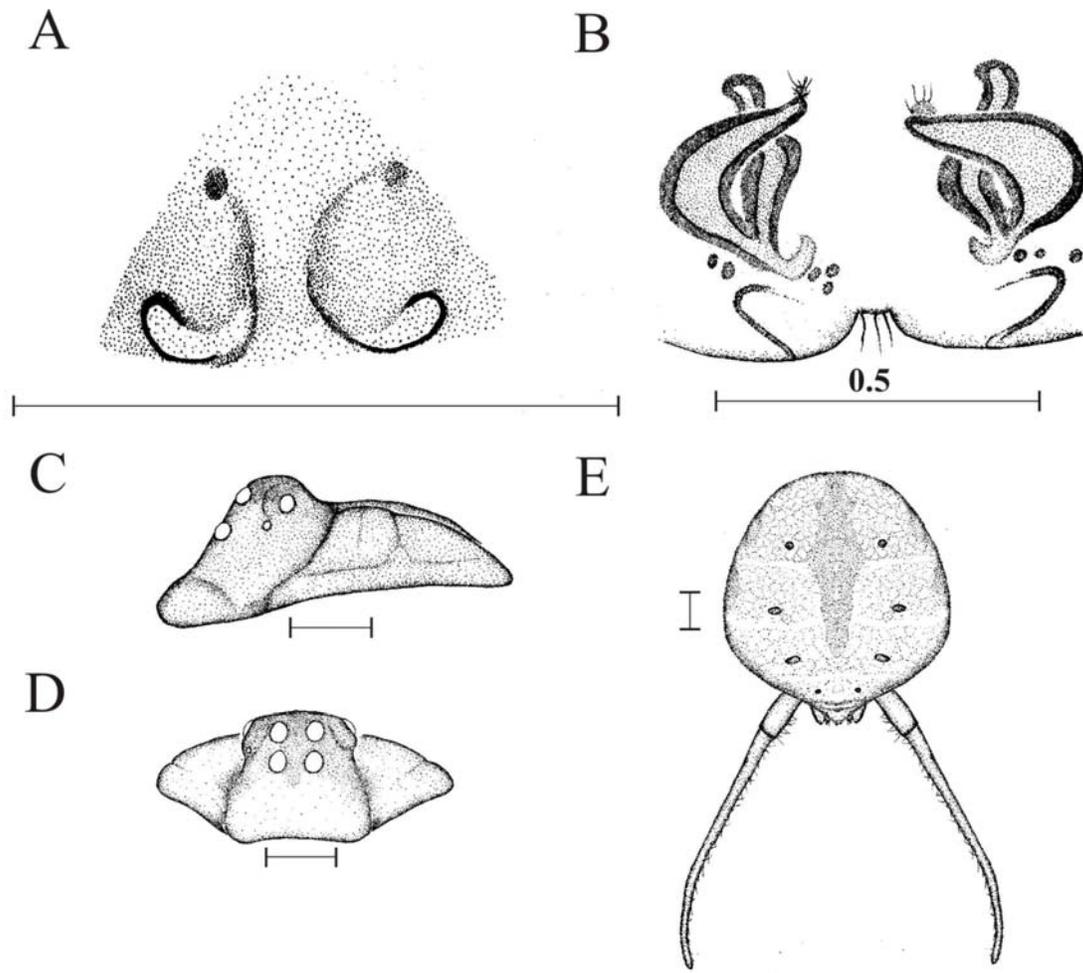
**Figure 28.** *Hersilia taita* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Male abdomen dorsal view. Illustrations by SF.



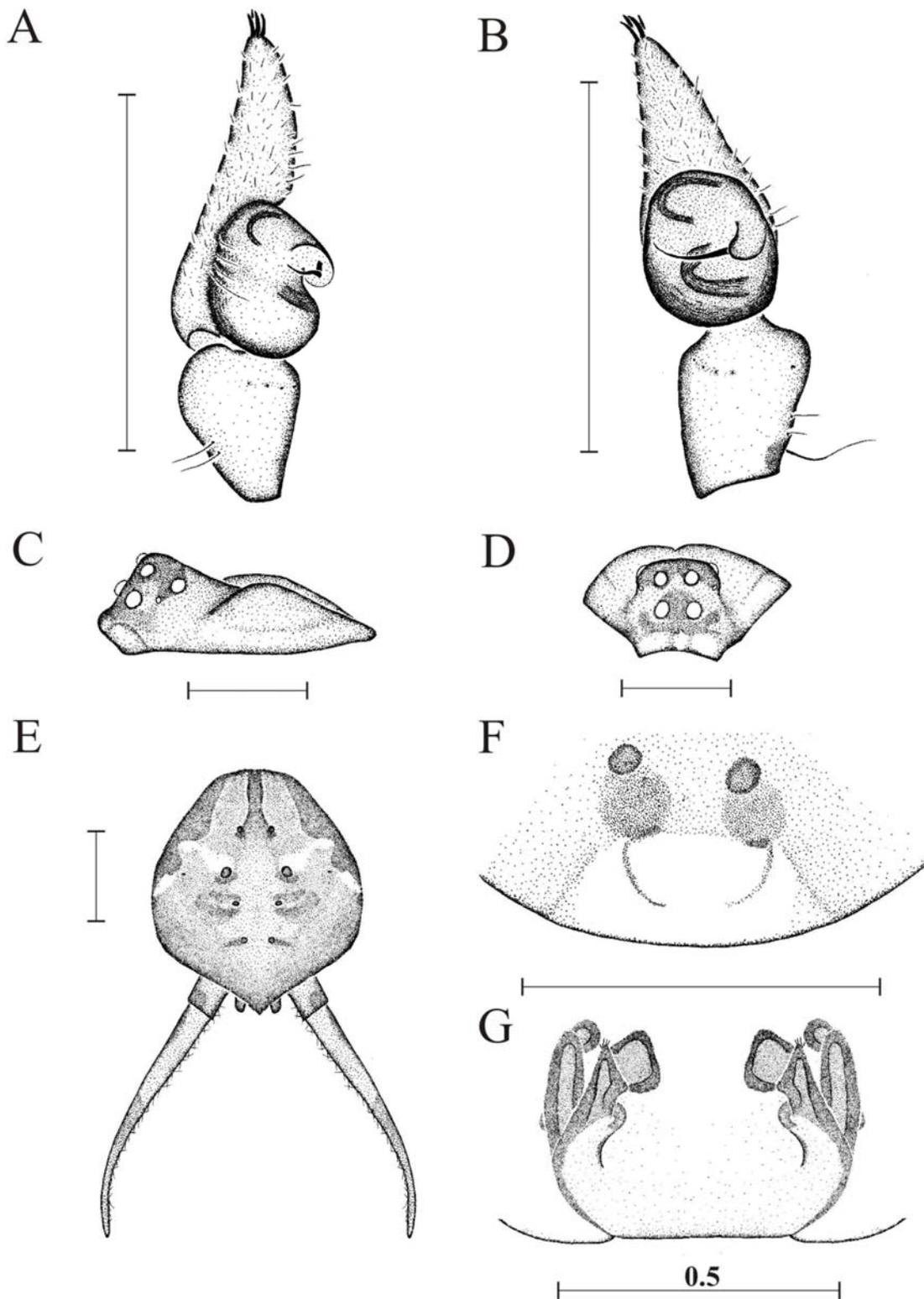
**Figure 29.** *Hersilia tamatavensis* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. *Hersilia unca* sp. nov. **E.** Epigyne ventral view. **F.** Epigyne dorsal view. **G.** Carapace lateral view **H.** Carapace anterior view. **I.** Abdomen dorsal view. Illustration by SF.



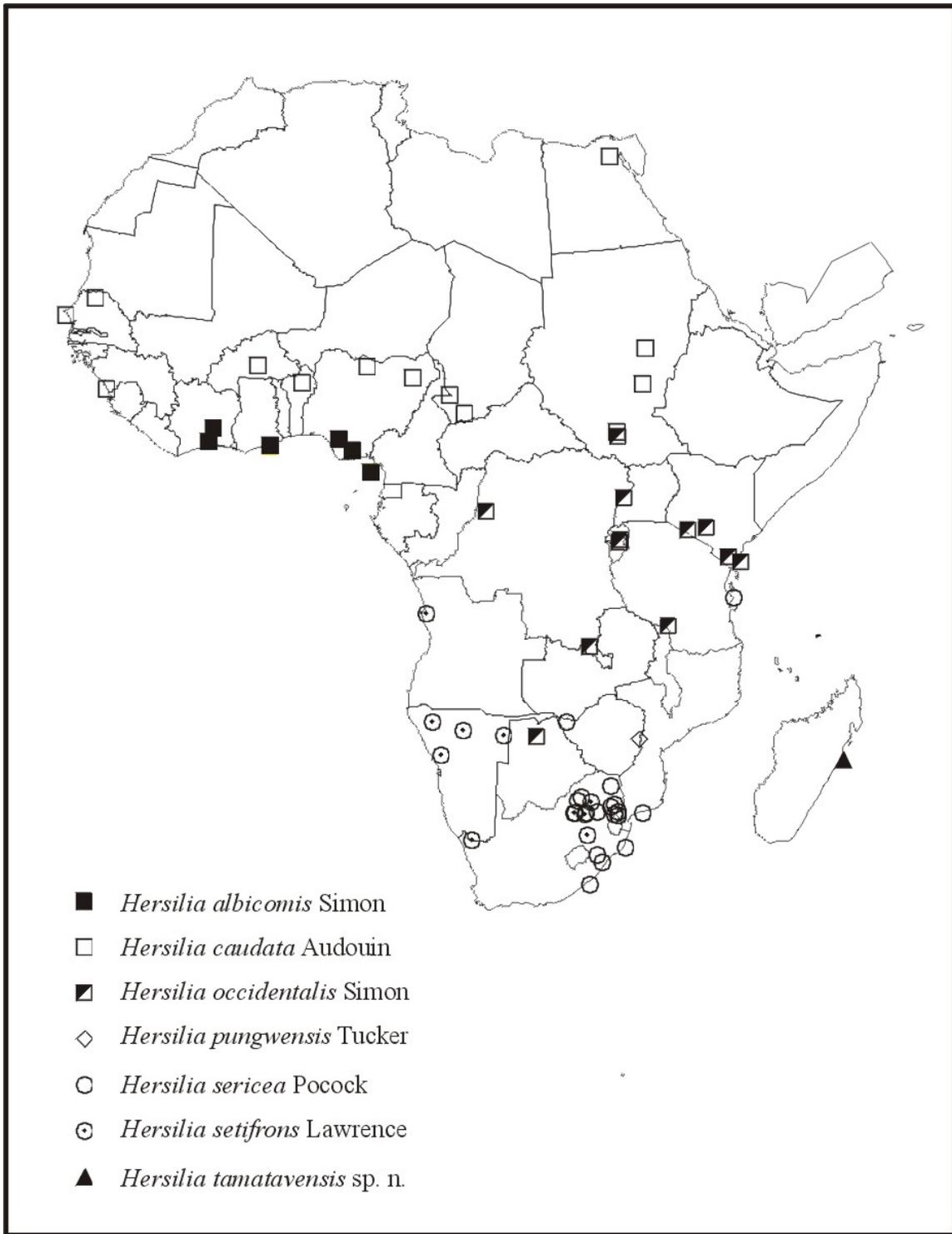
**Figure 30.** *Hersilia vanmoli* Benoit, 1971. Palp. **A.** Left palp ventral view. **B.** Left palp medial view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Male abdomen dorsal view with spinneret **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustration by SF



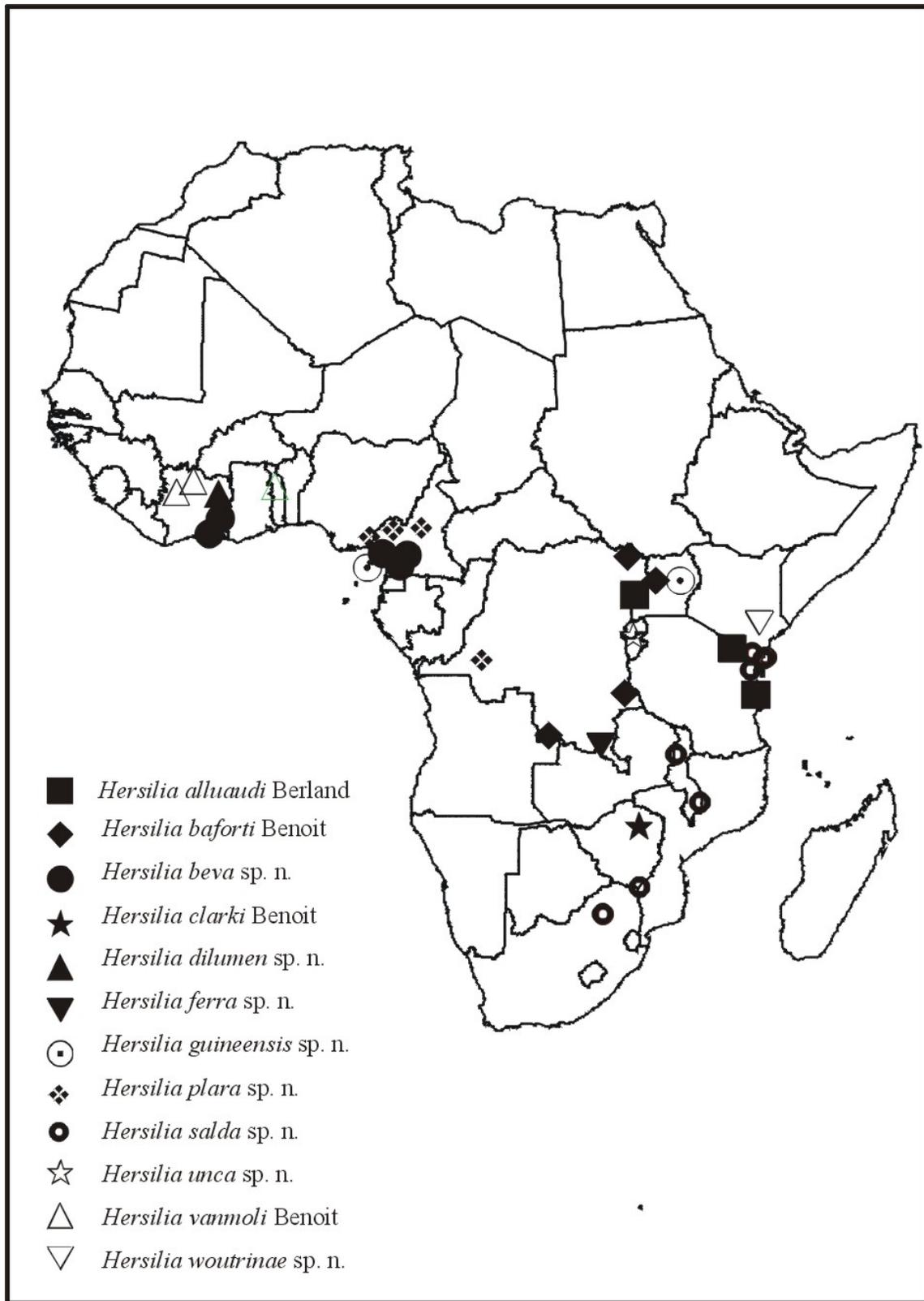
**Figure 31.** *Hersilia vinsoni*, Lucas, 1869. **A.** Epigyne ventral view. **B.** Epigyne dorsal view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Female abdomen dorsal view with spinnerets.. Illustration by SF



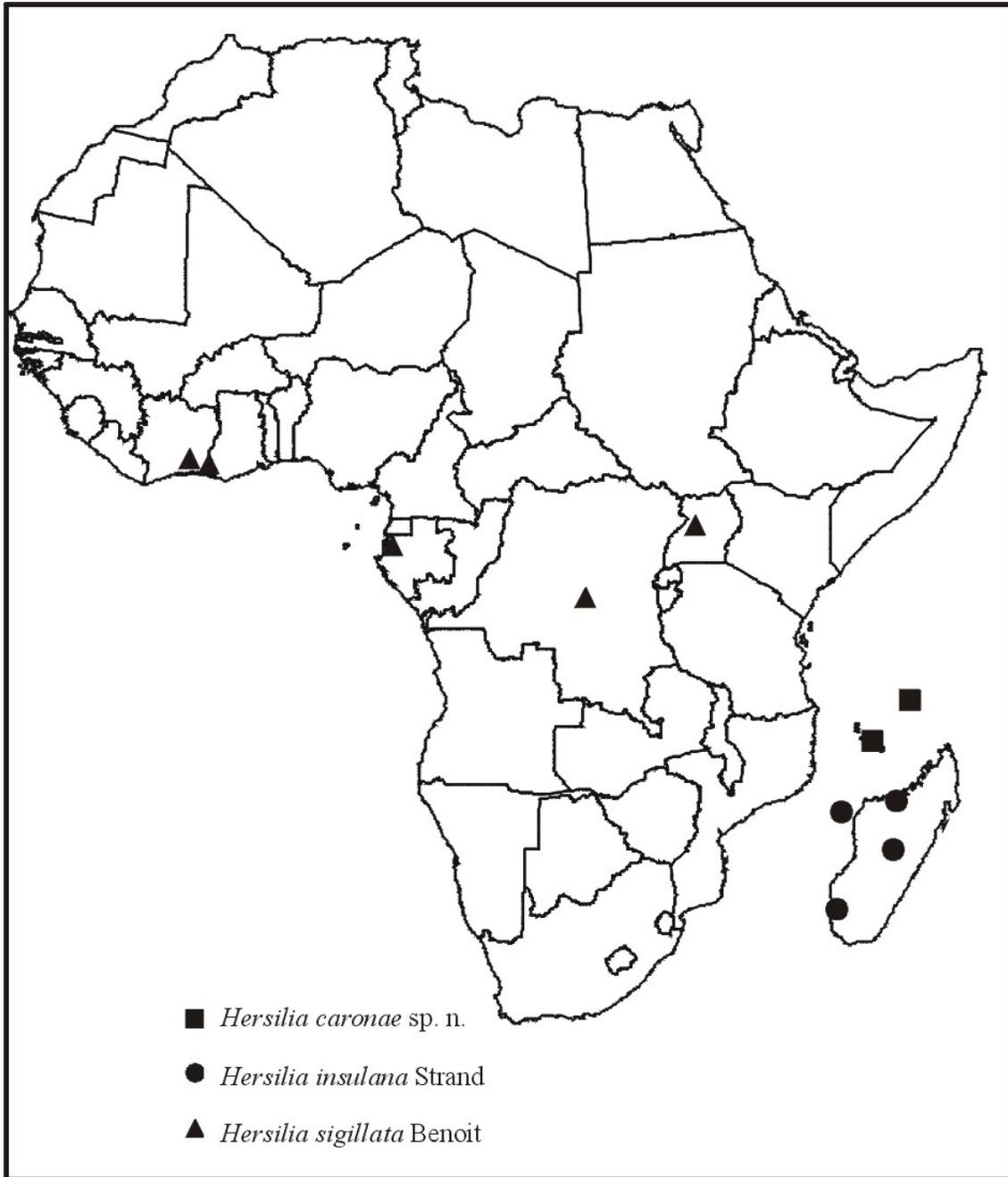
**Figure 32.** *Hersilia woutrinae* sp. nov. **A.** Left palp ventral view. **B.** Left palp prolateral view. **C.** Carapace lateral view **D.** Carapace anterior view. **E.** Female abdomen dorsal view. **F.** Epigyne ventral view. **G.** Epigyne dorsal view. Illustration by SF.



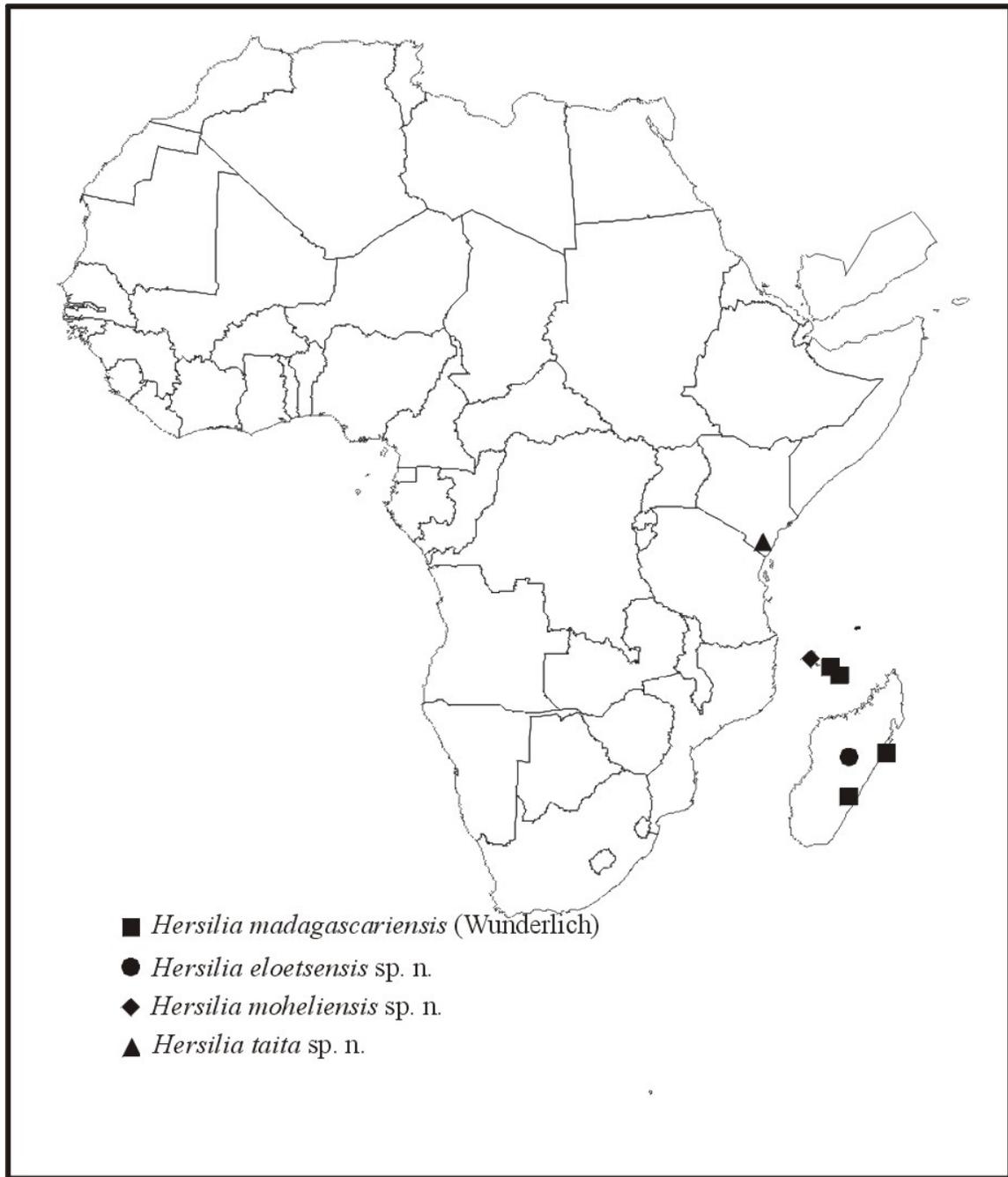
**Figure 33.** Distribution map of *Hersilia caudata* species group.



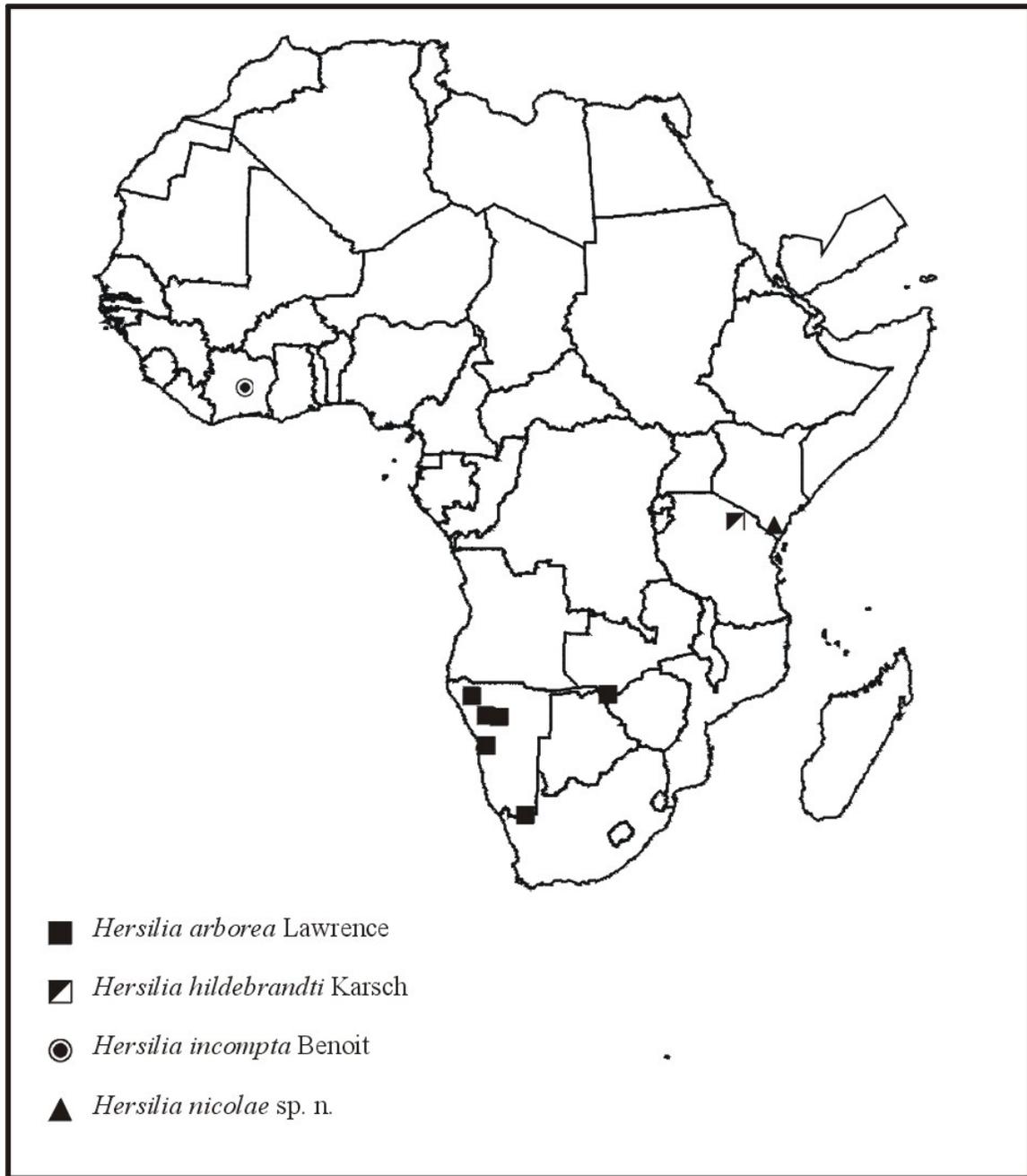
**Figure 34.** Distribution map for Afrotropical species of *Hersilia baforti* species group.



**Figure 35.** Distribution map for Afrotropical species of *Hersilia sigillata* species group.



**Figure 36.** Distribution map for Afrotropical species of *Hersilia madagascariensis* species group.



**Figure 37.** Distribution map for Afrotropical species of *Hersilia incompta* species group and *Hersilia arborea*.