

Jocqué, R. 1994. Halidae, a new spider family from Madagascar (Araneae).
Bull. Br. arachnol. Soc. 9: 284-285.

Hala, new genus

Diagnosis: Representatives of this genus have the ALS with a huge seta next to the major ampullate gland spigot; the male palp has a simple cymbium and no patellar apophysis; the lateral tegular apophysis is split; the epigyne is provided with two large depressions at the base of which are the entrance openings.

Etymology: *Hala* is the name for spider in Merina, the language of central Madagascar. The gender is feminine.

Description: Small to medium sized (3–5) with smooth tegument. Carapace very broad; widest at level of coxae II, narrowed at level of clypeus to half maximum width in females, to about 0.45 maximum width in males. Profile domed with highest point behind fovea, then falling sharply towards posterior margin. Colour: carapace, chelicerae, legs and sternum yellowish brown, sometimes with faint darker network pattern; abdomen variable; dorsal pattern faint, usually consisting of few chevrons behind pale median stripe.

Eyes in three groups; anterior one almost straight or slightly procurved as seen from in front, second row in two well-separated groups far apart. Posterior eyes larger than anterior, or AME, PLE and PME subequal, ALE smaller. Direction of eyes strongly pronounced: AME upwards, ALE forwards; PME upwards, PLE sideways. All eyes circular and pale except ALE dark. Chilum well developed, convex upper margin much wider than inferior margin; with some tiny bristles. Chelicerae slender with long hairs along margin; 2 teeth on anterior margin, 3 on posterior margin. Labium wider than long (1.4 times). Endites roughly rectangular, slightly constricted in middle; with well-developed serula and anteromesal scopula. Sternum triangular with sinuous sides, and long posterior tip extending between posterior coxae. No inter- or precoxal sclerites.

Legs: formula 4123 or 1423; long and slender, T and Mt up to 20 times as long as their diameter in middle. Spination: spines numerous and long, longer on anterior legs. Tarsal claws with 5–8 teeth. Single claw on well-developed onychium. Trichobothria in three rows on tibiae, forming proximal group on T III and IV, in one row on Mt, in two rows on t. No claw tufts or scopulae.

Abdomen oval; muscle points faint. Tracheal system absent or poorly developed; spiracle small, not sclerotised, just in front of spinnerets. Spinnerets six, all two-segmented: ALS strongest, PMS smallest; ALS with huge seta near major ampullate gland spigot (Figs. 7, 9); PMS and PLS apparently with aciniform gland spigots only. Colulus present; with about 6 setae.

Male palp: patella without apophysis but with one strong spine. Tibia with retrolateral apophysis and two strong setae. Cymbium not modified; no paracymbium; subtegulum well developed, occupying basal part of bulb. Tegulum with strongly sclerotised mesal part and membranous lateral part; proximal apophysis large, flat and rounded; lateral apophysis split, accommodating distal part of embolus which arises from central concavity delimited by tegular apophyses; embolus

slender and short.

Female palp with tarsal claw; several long spines. Epigyne: simple; with large depressions containing entrance holes, separated by central protrusion or lip. Vulva rather simple; fertilisation ducts situated in anterior half and thick-walled spermathecae in posterior half.

Type species: *Hala impigra*, new species.

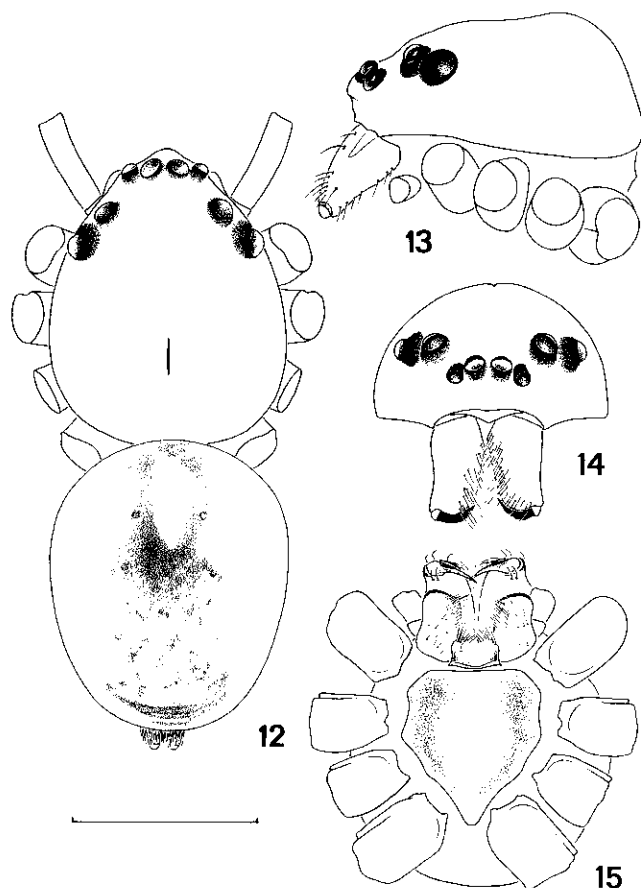
Other species included: *Hala paulyi*, new species.

Distribution: Central Madagascar.

Hala impigra, new species (Figs. 7, 9, 12–19)

Type material: Male holotype: Madagascar, Tamatave, Manakambahiny Est, 17°45'S, 48°43'E, forest, 1–15 April 1991, yellow plate, A. Pauly (MRAC 174.639). Paratypes: 8 ♂ 1 ♀, together with Ht (MRAC 174.391); 2 ♂, 1–17 January 1991, other data as Ht (MRAC 174.499).

Diagnosis: The male is recognised by the shape of the tibial apophysis which is twisted and bifid at its extremity; the female epigyne has a long narrow lip extending backwards from the anterior margin.



Figs. 12–15: *Hala impigra*. 12 Male habitus; 13 Male carapace, lateral view; 14 Male carapace, frontal view; 15 Mouthparts and sternum. Scale line=1 mm.

Etymology: *impiger* (Latin: zealous) refers to the fact that this species is an excellent example of the Halidae.

Description: Note: most specimens have lost the hair cover and many spines and setae.

Male (range of paratypes in brackets): Total length 3.01 (3.01–3.40); carapace 1.54 (1.48–1.75) long, 1.26 (1.23–1.46) wide. Colour: carapace pale yellowish brown, with darker central area separated from margin by large paler band, darkened by dark network pattern. Eyes on small dark spots. Chelicerae uniform pale yellowish brown. Sternum brownish yellow suffused with dark on sides. Legs pale brownish yellow; femora with dark pro- and retrolateral stripes; metatarsi suffused with grey, contrasting with pale yellow tarsi. Abdomen pale with faint darker pattern of few chevrons behind paler longitudinal central stripe in front; sides dark, venter paler in middle.

Carapace (Figs. 12–14) much higher at back than in front, falling sharply behind fovea. With sparse cover of short dark hairs and flattened pale hairs in eye region. With boss in front of AME. Eyes: a=0.11, b=0.07, c=0.11, d=0.12; e=0.03, f=0.03, g=0.48, h=0.12.

Clypeus 0.14 high or 2.0 times diameter of ALE. Labium (Fig. 15) 0.26 wide, 0.19 long. Sternum (Fig. 15) 0.84 long, 0.78 wide; with sinuous sides, protruding between posterior coxae.

Legs: Spination:

	F	P	T	Mt
I	pl2*d3*r1l	d1	pl2*d1r1lv2-2-2	pl2*r13*v2
II	pl2*d3*r14*	d1	pl2*d1r1lv2-2-2	pl2*r13*v2
III	pl2*d3*r12*	d1	pl1d2*r1lv2-2	pl3*d1r13*v2-1-1
IV	d3*r1l	d1	pl1d2*r1lv1-1	pl2*r12*v2*

Spines long, lateral spines of Mt I 4.4 and ventral spines of T I 5.0 times diameter of segment; less long on posterior legs. Femora sparsely covered with small dark hairs as on carapace. Trichobothria long and numerous; in three rows on T III and IV, forming proximal group on T III; in one row on Mt, in two rows on tarsi. Measurements:

	F	P	T	Mt	t	Total
I	1.99	0.47	2.04	2.12	0.86	7.48
II	1.65	0.37	1.61	1.61	0.68	5.92
III	1.34	0.41	1.17	1.23	0.56	4.71
IV	2.14	0.45	1.83	2.02	0.78	7.22

Abdomen oval; AS with large seta inserted near major ampullate gland spigot (Figs. 7, 9).

Palp (Figs. 17–19): patella with long dorsal seta, tibia with one dorsal and two mesal setae; lateral tibial apophysis twisted, slightly curved down and with tiny tooth along dorsal margin; extremity turned up, bifid, dorsal tip sharp, ventral one rounded. Tegulum with membranous lateral part and large sickle-shaped distal apophysis forming central hole from where strongly curved embolus originates. Tip of embolus resting against sclerotised extremity of tegulum.

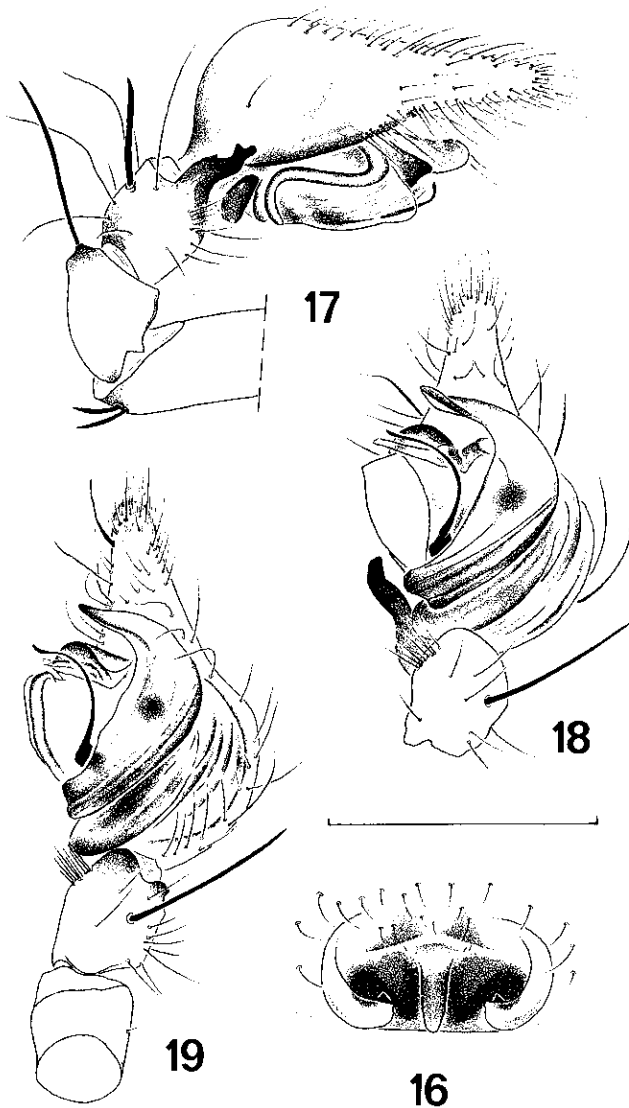
Female: Total length 3.44; carapace 1.75 long, 1.48 wide. Colour: carapace darker than in male, pale band between margin and centre less well defined; femora with broad dark pro- and retrolateral stripes; otherwise as in male. Abdomen dark without chevrons, but with well-defined pale longitudinal central stripe; sides dark, venter pale in middle. Carapace much higher at back than in front. With boss in front of AME. Eyes: a=0.11, b=0.08, c=0.12, d=0.16; e=0.03, f=0.03, g=0.51, h=0.03. Clypeus 0.13 high or 1.6 times diameter of ALE.

Legs: Chaetotaxy as in male. Measurements:

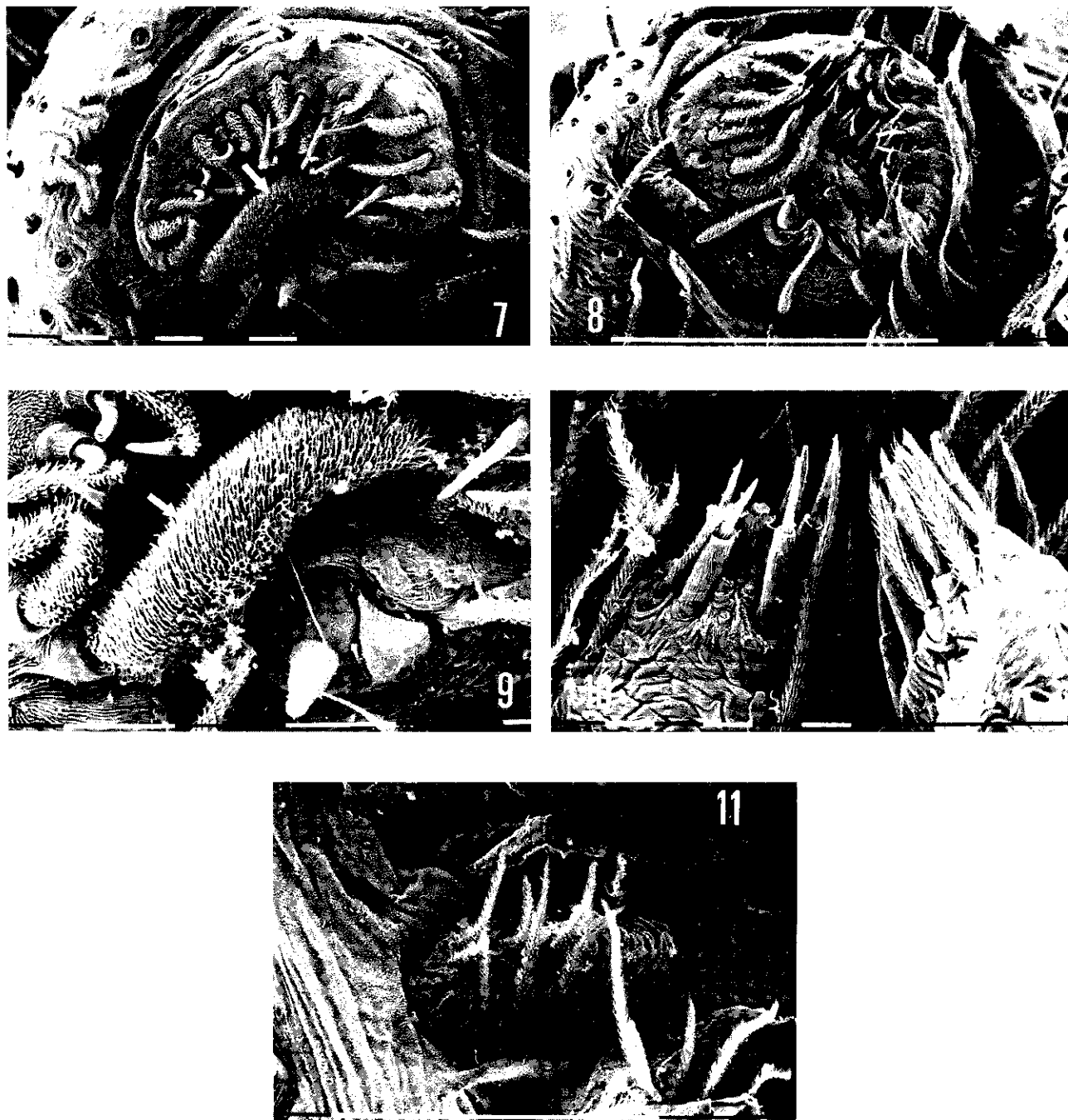
	F	P	T	Mt	t	Total
I	2.01	0.49	2.24	2.18	0.89	7.81
II	1.87	0.49	1.85	1.89	0.74	6.84
III	1.57	0.49	1.30	1.54	0.62	5.52
IV	2.31	0.56	2.18	2.35	0.84	8.24

Epigyne (Fig. 16): with large lateral openings; anterior margin with long narrow lip projecting backwards.

Distribution: Known only from type locality.



Figs. 16–19: *Hala impigra*. 16 Epigyne, ventral view; 17 Male palp, lateral view; 18 Male palp, ventral view; 19 Male palp, ventromesal view. Scale line=0.5 mm.



Figs. 7–11: **7, 9** *Hala impigra*, male; **8, 10, 11** *Tolma toreuta*, male. **7–9** ALS, showing huge seta (arrowed in 7, 9, absent in *Tolma*) near ampullate gland spigot, and field with piriform gland spigots in *H. impigra*; **10** PMS and PLS; **11** Colulus. Scale lines=0.01 mm.