

Jocqué, R. 1994. Halidae, a new spider family from Madagascar (Araneae).
 Bull. Br. arachnol. Soc. 9: 285-287.

Hala, new genus [page 284].

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 serrula 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 paulyi, new species (Figs. 20–23)

Type material: Male holotype: Madagascar, Tamatave, Manakambahiny Est, 17°45'S, 48°43'E, forest, 1–7 February 1991, yellow plate, A. Pauly (MRAC 174.464). Paratypes: 1 ♂ 1 ♀, together with Ht (MRAC 174.642); 1 ♀, 17–23 March 1991, other data as Ht (MRAC 174.560); 2 ♂ 2 ♀, 1–15 April 1991, other data as Ht (MRAC 174.640); 1 ♂ 1 ♀, 1–17 January 1991, other data as Ht (MRAC 174.641).

Diagnosis: The male is characterised by the shape of the tibial apophysis which is rounded at its extremity; the female epigyne has two large entrance holes, each flanked by a strongly sclerotised crescent-shaped swelling and separated by a sclerotised oval protrusion.

Etymology: *paulyi* is a patronym in honour of the entomologist Alain Pauly who collected all the specimens of the Halidae so far known.

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

Male (range of paratypes in brackets): Total length 3.81 (only one male with abdomen); carapace 1.96 (1.75–1.96) long, 1.75 (1.57–1.75) wide. Colour: carapace pale yellowish brown, with darker radiating striae ending near broad paler band; margin darker; eyes on small dark spots. Chelicerae uniform pale yellowish brown. Sternum yellow slightly suffused with dark on sides. Legs uniform pale yellow. Abdomen pale with faint darker pattern of few chevrons behind paler longitudinal central stripe near front; sides dark, venter paler in middle.

Carapace higher at back than in front, falling sharply behind fovea. With sparse cover of short dark hairs. With swelling in front of AME. Eyes: a=0.13, b=0.09, c=0.12, d=0.14; e=0.06, f=0.04, g=0.50, h=0.13. Clypeus 0.24 high or 2.7 times diameter of ALE. Labium 0.28 wide, 0.25 long. Chelicerae slender; with two teeth on promargin, three teeth on retromargin. Sternum 0.97 long, 0.95 wide.

Legs: Spination:

	F	P	T	Mt
I	p12*d4*r13*	d1	p12*d1r1r2v2-2-2-2	p13*r13*v1
II	p12*d3*r13*	d1	p12*d1r1r2v2-2-2-2	p13*r13*
III	p13*d3*r12*	d1	p12*d2*r12*v2-2-2	p12*r12*v2-2-2
IV	p13*d3*r12*	d1	p12*d2*r1r1v1-1	p13*r13*v4

Spines relatively short, never longer than 3.6 times diameter of segment; longest on T I. Femora sparsely covered with short dark hairs as on carapace. Trichobothria long and numerous; in three rows on T III and IV, forming proximal group on T III and IV; in one row on Mt, in two rows on tarsi. Measurements:

	F	P	T	Mt	t	Total
I	2.73	0.59	2.94	2.77	1.36	10.39
II	2.47	0.55	2.43	2.21	1.10	8.76
III	1.79	0.51	1.53	1.49	0.68	6.00
IV	2.81	0.55	2.56	2.51	1.15	9.58

Abdomen oval, sparsely covered with rather long hairs. ALS as in *H. impigra*.

Palp (Figs. 20–21): patella with long dorsal seta, tibia with one dorsal and two mesal setae; lateral tibial apophysis mesolaterally flattened, with parallel dorsal and ventral margins, extremity strongly tapering with rounded tip. Tegulum with strongly sclerotised distal apophysis, pointing forwards, transverse posterior part and poorly sclerotised lateral part together forming central concavity from where embolus emerges; embolus short, slender, slightly curving outwards; extremity closely adjacent to hook-shaped tegular excrescence.

Female (range of female paratypes in brackets): Total length 4.88 (3.91); carapace 2.20 (2.10–2.24) long, 1.96 (1.85–2.04) wide. Colour: carapace darker than in male, pale band between margin and centre less well defined; legs pale yellow faintly annulated with pale brown.

Abdomen dark with three faint chevrons behind poorly-defined pale longitudinal central stripe; dorsum with three types of setae: short black ones dispersed all over, long black ones more numerous towards front and white ones forming patches near back; sides dark, venter paler in middle. Carapace as in male. Eyes: a=0.15, b=0.12, c=0.15, d=0.16; e=0.06, f=0.07, g=0.63, h=0.15. Clypeus 0.23 high or 1.9 times diameter of ALE. Sternum 1.17 long, 1.11 wide.

Legs: Spination:

	F	P	T	Mt
I	pl3*d3*r13*	d1	pl2*d1r1lv2-2-2-2	pl2*r13*v2-2-1
II	pl3*d3*r13*	d1	pl2*d1r12*v2-2-2-2	pl3*r12*v2-2
III	pl3*d3*r13*	d1	pl2*d1r12*v2-2-2	pl2*d1r12*v2-2-1
IV	pl3*d3*r11*	d1	pl1d2*r12*v2-1-2	pl3*d1r13*v3

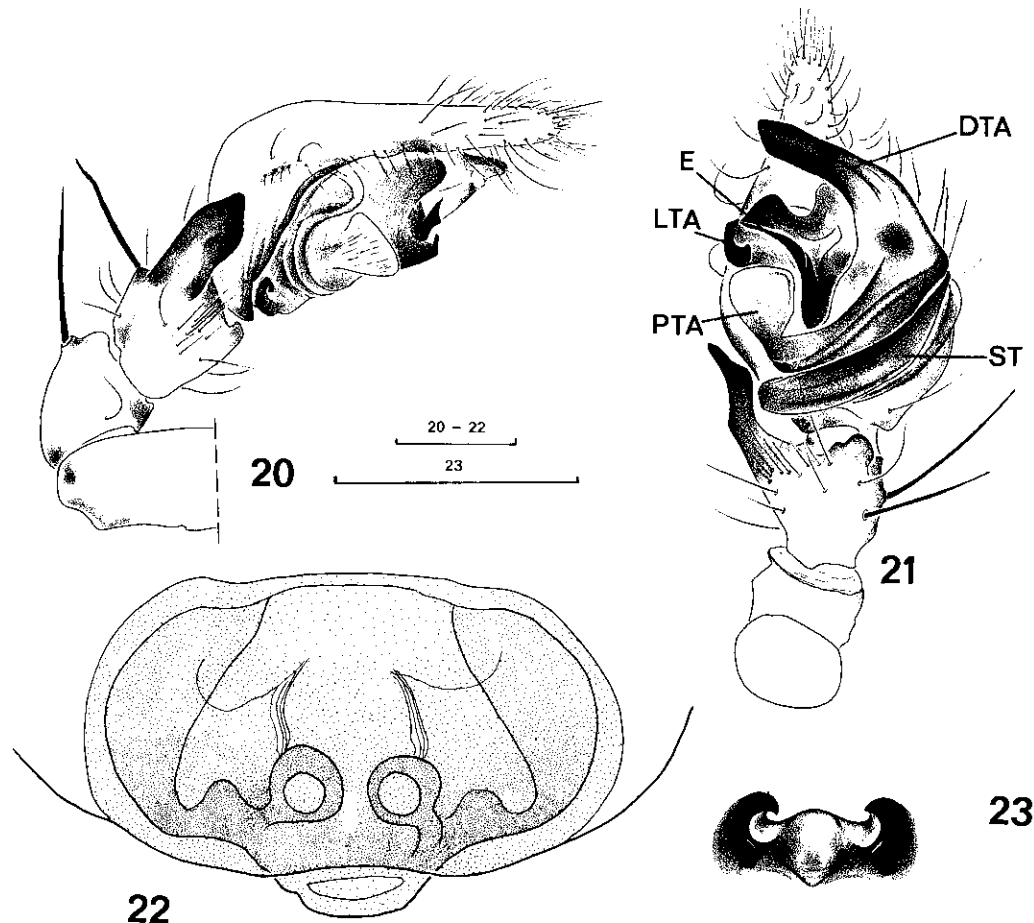
Spines longer than in male; up to 4.6 times diameter of segment on Mt I. Otherwise as in male. Measurements:

	F	P	T	Mt	t	Total
I	2.77	0.55	3.11	2.47	1.15	10.05
II	2.60	0.55	2.60	2.13	0.98	8.86
III	2.04	0.51	1.70	1.66	0.68	6.59
IV	2.81	0.68	1.58	2.73	1.11	8.91

Female palp with long spines: F4 P1 T3 t4; with tarsal claw.

Epigyne (Fig. 22–23): large entrance holes flanked by strongly sclerotised crescent-shaped swelling and separated by slightly sclerotised oval protrusion. Abdomen as in male.

Distribution: Known only from type locality.



Figs. 20–23: *Hala paulyi*. **20** Male palp, lateral view; **21** Male palp, ventral view (E=embolus, DTA=distal tegular apophysis, LTA=lateral tegular apophysis, PTA=proximal tegular apophysis, ST=subtegulum); **22** Vulva, dorsal view; **23** Epigyne, ventral view. Scale lines=0.25 mm.