

***Paramigas andasibe*** Raven, new species  
(Figs. 29, 30A–G, 31A–H, 32A–C, 65, 68)

Types.—Holotype male from An' Ala, 9 km E Andasibe, 840 m, 15 February 1995, primary rainforest, F. Glaw, deposited in ZFMK.

Note.—Robert Raven provided us with the specimen and descriptive notes. We attribute authorship of the new species to him.

Etymology.—The specific name is a noun in apposition from the type locality.

Diagnosis.—Distinguished from other *Paramigas* males by having pallid, swollen, weakly sclerotized areas on the retrolateral surface of metatarsus I (Figs. 30B, 31D–E) and AME smaller than ALE (Fig. 29).

Description.—Male (holotype): Total length 17.1. Carapace dark red-brown with a dark brown band marginal surrounding; caput with light red-brown areas along lateral margin; ocular area dark red-brown, black behind ALE and between PME and PLE; chelicerae dark red-brown; sternum, coxae, and trochanters orange-brown except sterno-labial junction red-brown; dorsal surface of legs I–IV red-brown gradually fading to yellow-brown on tips of tarsi and on ventral surfaces, femora with dorsal and retrodorsal longitudinal dusky bands; prolateral surface of metatarsus I fading from red-brown to yellow-brown, retrolateral surface yellow-white, bulging, tarsi I and II yellow-brown; pedipalpi yellow-brown; abdomen dark purple-brown; spinnerets and book lung covers yellow-brown.

Carapace 8.0 long, 7.9 wide, height at thoracic fovea  $0.24 \times$  carapace width; strongly rugose. Caput low, height  $1.15 \times$  that at thoracic fovea, width  $0.51 \times$  carapace width; with minute pair of prefoveal setae; median ocular seta present; pair of setae situated anterior of this; clypeus height  $0.34 \times$  length OAL, transversely striate, margin straight. Thoracic fovea tripartite (Fig. 29), weakly recurved, width  $0.15 \times$  that of carapace,  $1.71 \times$  wider than long.

Ocular area width  $0.59 \times$  caput,  $2.13 \times$  wider than long; AER 2.45 wide,  $1.08 \times$  width PER. Ratio of eyes: AME: ALE: PME: PLE: 1.0: 1.3: 0.6: 0.5, diameter AME 0.5; AME separated by  $0.2 \times$  their diameter, PME by  $3.33 \times$  their diameter. Ocular quadrangle  $1.39 \times$  wider than long, posterior width  $1.6 \times$  anterior.

Sternum 6.4 long, 4.2 wide, widest behind coxa II and narrowed anteriorly, sparsely setose laterally and on surface; sigilla irregularly shaped, adjacent to coxa II,  $0.33 \times$  width sternum, distance between  $0.1 \times$  distance from margin. Labium and pedipalpal coxae lacking cuspules; labium 1.5 long, 1.4 wide, pedipalpal coxae 3.3 long, 1.6 wide, apex produced to a blunt point. Chelicerae 1.6 long, promargin of fang furrow with 4–5 teeth and retromargin with 1 basal tooth and 4–5 distal denticles (Fig. 31G)

Femur I 1.15, tibia I 0.83, femur IV 1.08, and tibia IV  $0.89 \times$  width carapace. Scopulae beneath distal  $\frac{1}{2}$  of tarsus I and beneath entire tarsi II–IV (Figs. 31E, F). Spination: leg I: patella p 0-2-2, v 0-0-4, tibia p 1-0-0-0, r 2-3-1-1a, metatarsus p 2-2-0-1, r 1-0-1-1, tarsus p 1-1-1, r 1-1-1; leg II: patella r 0-0-1, tibia p 0-0-1-1, r 2-3-0-2, tibia p 2-2-2-1, r 2-0-0-2, tarsus p 1-1-1-1, r 1-1-0-0; leg III: patellae with approximately 41 prodorsal and 18 retrodorsal spinules, tibia with approximately 50 apical spinules, metatarsus v 0-0-0-4; leg IV: patella with approximately 150 prodorsal spinules, metatarsus v 0-0-2-3. STC teeth (pro, retro): I, II (1-2), III, IV (1-1) (Fig. 31H). Leg measurements (Femur + Patella + Tibia + Metatarsus + Tarsus = [Total]): I:  $9.1 + 4.5 + 6.6 + 6.1 + 2.0 = [28.3]$ ; II:  $8.0 + 4.0 + 5.6 + 5.3 + 2.2 = [25.1]$ ; III:  $6.1 + 3.2 + 4.2 + 4.1 + 2.7 = [20.3]$ ; IV:  $8.6 + 3.9 + 7.1 + 5.8 + 3.5 = [28.9]$ ; pedipalpus:  $4.9 + 2.2 + 3.7 + (\text{absent}) + 1.5 = [12.3]$ .

Pedipalpus (Figs. 31A–C) with femur 0.62, tibia  $0.46 \times$  carapace width; femur 3.26, tibia  $2.46 \times$  length tarsus; tibia widest basally, height  $0.48 \times$  length; tarsus with approximately 10 slender apical spinules; bulb width  $1.06 \times$  tarsus length; embolus length  $0.34 \times$  bulb width. Abdomen 7.5 long, 5.3 wide, sparsely covered with short setae.

Variation (N=4).—Total length 8.15–17.1. The size difference between the largest and smallest specimens is dramatic but specimens of intermediate size exhibit intermediate development of most distinctive characters. Prosoma yellow-brown to dark red-brown, legs orange-brown to dark red-brown. Caput  $0.52$ – $0.6 \times$  carapace width, height  $1.28$ – $1.6 \times$  that at fovea; thoracic fovea width  $0.28$ – $0.29 \times$  caput width, straight to slightly recurved; fang furrow with or without denticles (Figs. 30C, 31G). Spines of leg I small and inconspicuous in smallest individual (Fig. 30B) to stout in largest (Figs. 31D0150E). STC II with 2–3 teeth (Fig. 30G). Femur I  $0.48$ – $1.15 \times$  carapace width; pedipalpal femur  $0.55$ – $0.62 \times$ , tibia  $0.35$ – $0.47 \times$  carapace width; embolus length  $0.25$ – $0.37 \times$  bulb (Figs. 30D–F, 31A–C, 32A–C).

Natural History.—The Ambohitantely specimen was collected in pitfall traps at 1450m in disturbed transitional montane mossy forest; other specimens are recorded from forest.

Additional Material Examined.—MADAGASCAR: Toamasina: Manakambahiny near Vavatene, forêt, February 1995, A. Pauly (2 males, MRAC). Antananarivo: 1450m in R.S. d'Ambohitantely, 24 km NE Ankazobe ( $18^{\circ}10.1'S$ ,  $47^{\circ}16.6'E$ ), in pitfall traps, 7–12 December 1997, S. Goodman (1 female, FMNH).

Distribution.—East central Madagascar in Antananarivo and Toamasina provinces (Fig. 68).

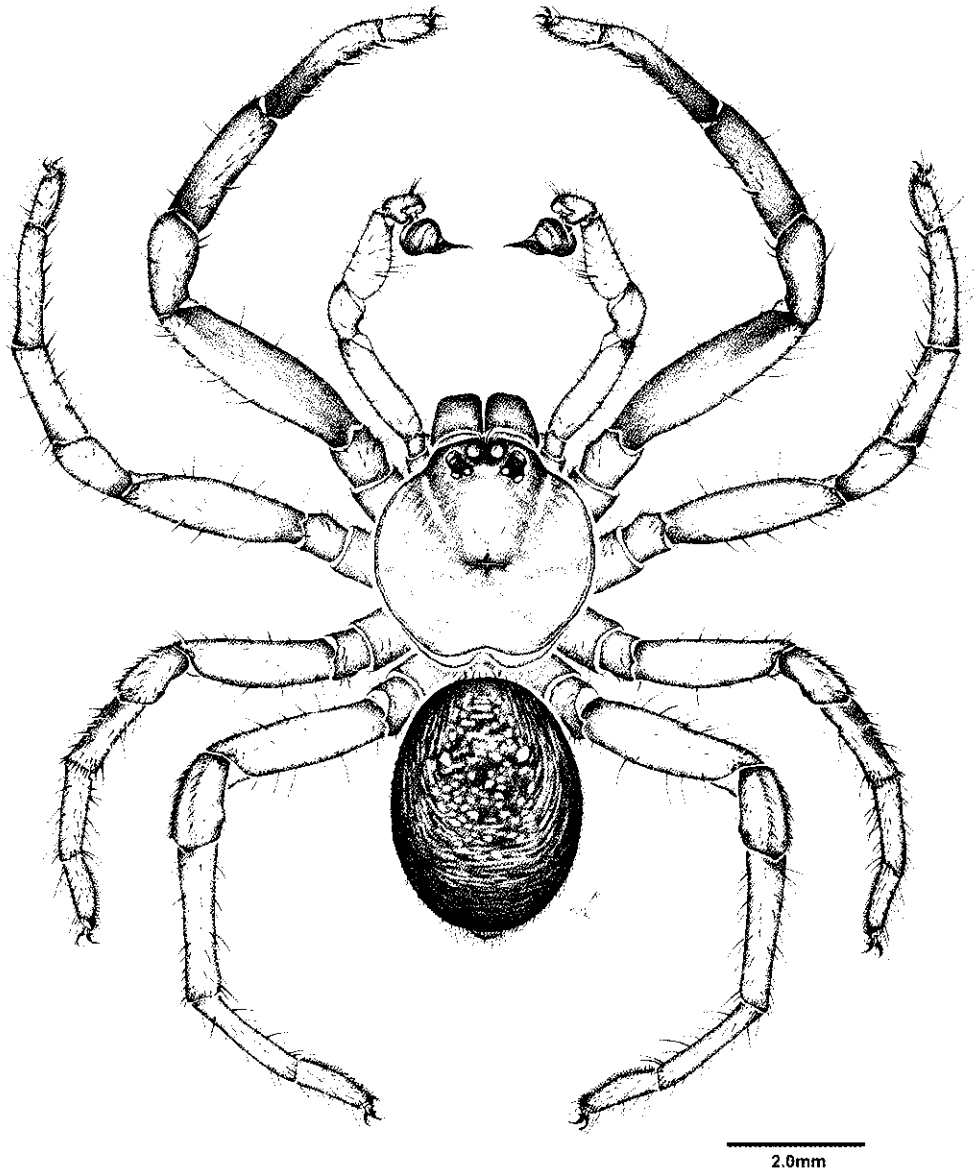


FIGURE 29. *Paramigas andasibe* Raven, new species, male from Ambohitantely, Madagascar, dorsal. Illustration by JS.  
[From Griswold, C. E. & J. Ledford, 2001. A monograph of the migid trap door spiders of Madagascar and review of the world genera (Araneae, Mygalomorphae, Migidae). Occas. Pap. Calif. Acad. Sci. 151: 79].

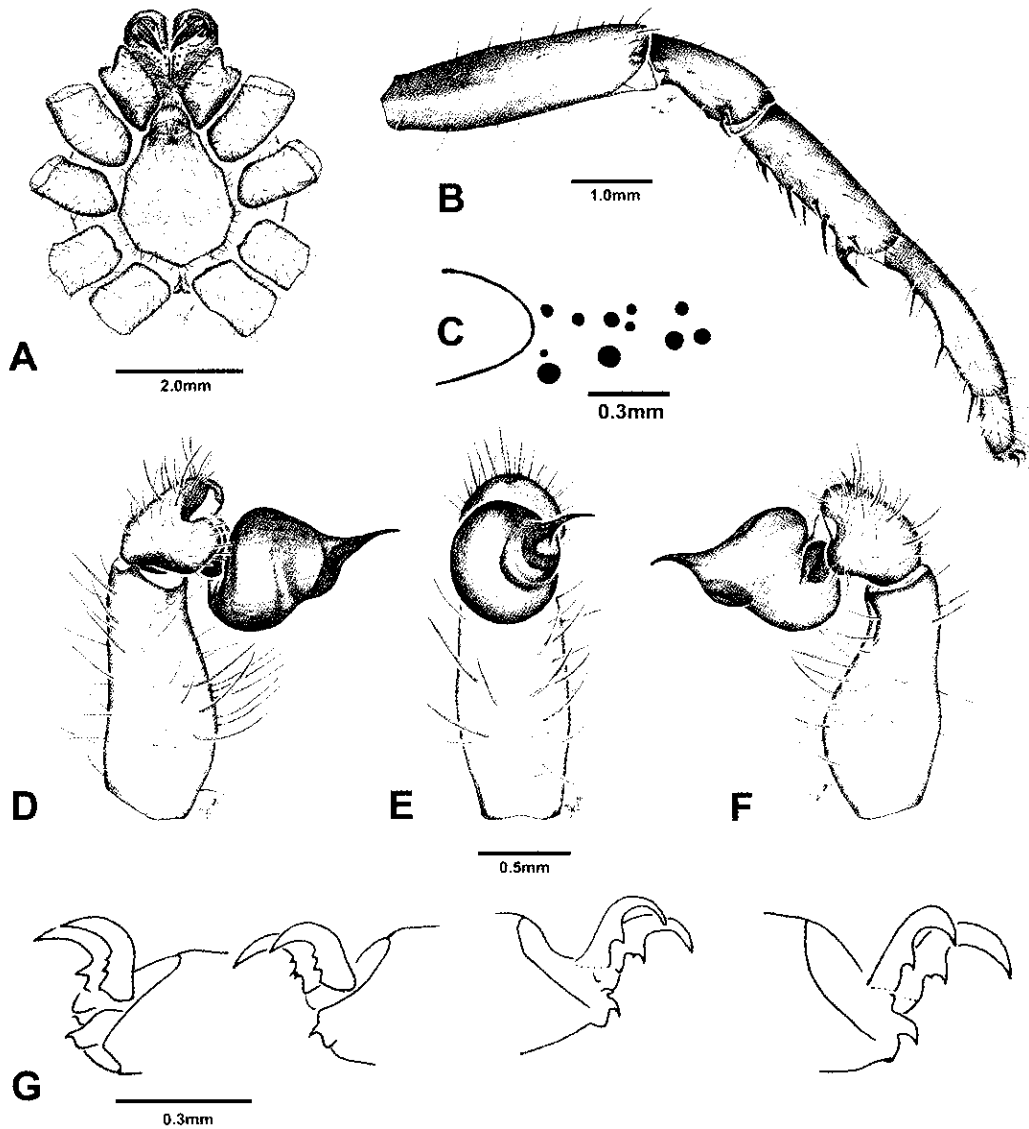


FIGURE 30. *Paramigas andasibe* Raven, new species, male from Ambohitantely, Madagascar. A. Cephalothorax, ventral. B. Right leg I, retrolateral. C. Dentition of right chelicera. D–F. Left pedipalp tibia-tarsus. D. Prolateral. E. Ventral. F. Retrolateral. G. Left tarsal claws: leg I retrolateral, leg II retrolateral, leg III prolateral, leg IV prolateral. Illustrations A, B, D–F by JS, C by JL, G by CG.

[From Griswold, C. E. & J. Ledford. 2001. A monograph of the migid trap door spiders of Madagascar and review of the world genera (Araneae, Mygalomorphae, Migidae). Occas. Pap. Calif. Acad. Sci. 151: 80].

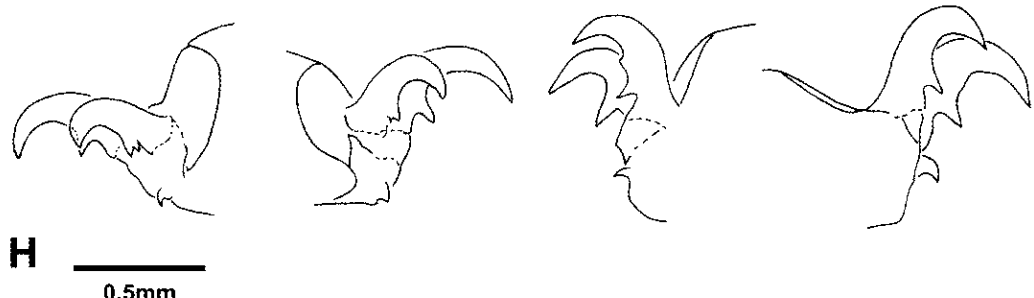
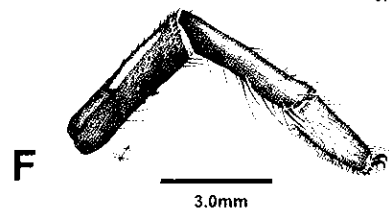
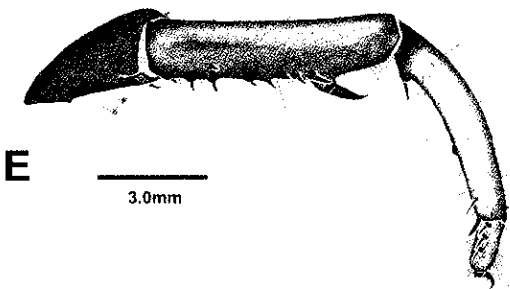
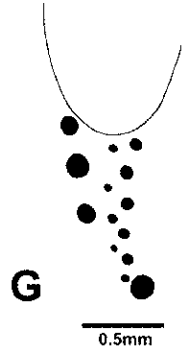
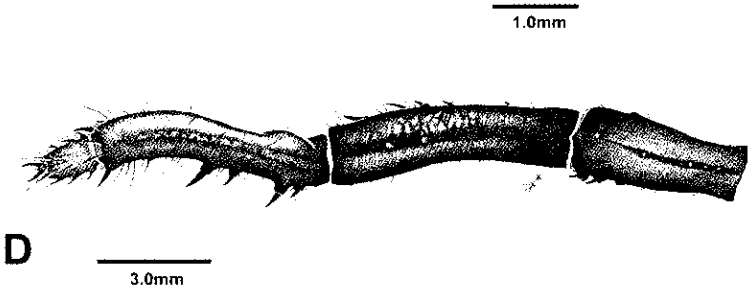
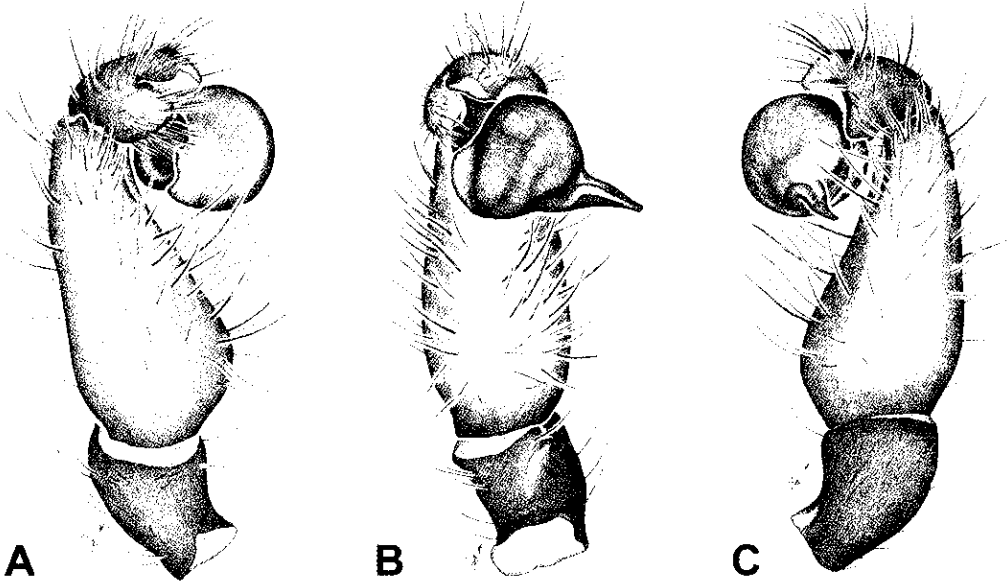


FIGURE 31 *Paramigas andasibe* Raven, new species, holotype male. A C. Left pedipalp patella-tarsus I. A. Prolateral. B. Ventral. C. Retrolateral. D. Right patella-tarsus I, dorsal. E. Right patella-tarsus I, retrolateral. F. Left tibia-tarsus III, retrolateral. G. Dentition of right chelicera. H. Tarsal claws: right leg I, retrolateral, left leg II retrolateral, left leg III and right IV, prolateral. Illustrations A F by JS, G by JL, H by CG.

[From Griswold, C. E. & J. Ledford, 2001. A monograph of the migid trap door spiders of Madagascar and review of the world genera (Araneae, Mygalomorphae, Migidae). Occas. Pap. Calif. Acad. Sci. 151: 81].

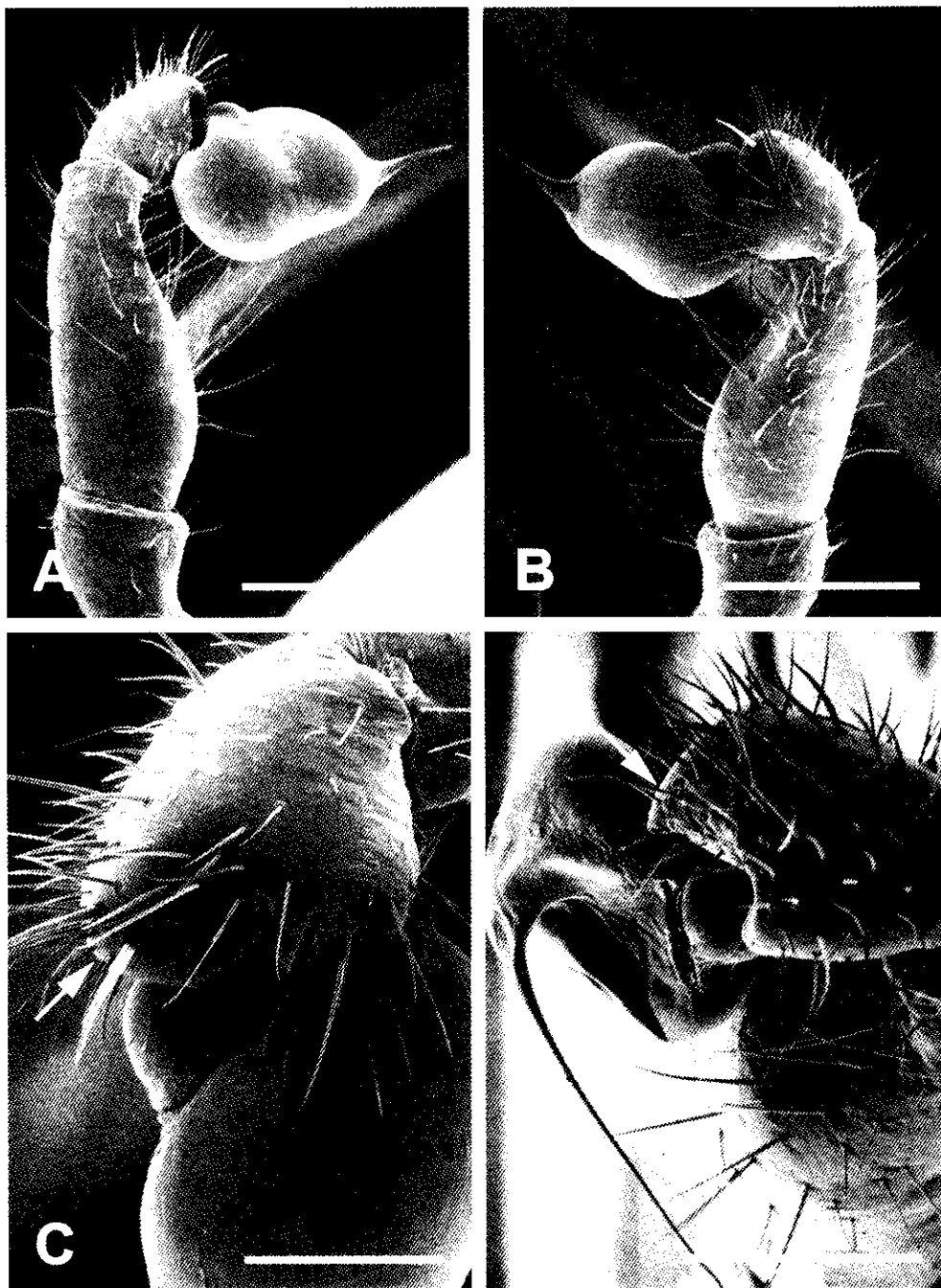


FIGURE 32. Pedipalpi of male Migidae. A–C. *Paramigas andasibe* Raven, new species, from Manakambahiny, Madagascar, right pedipalp. A. Patella-tarsus, retrolateral. B. Patella-tarsus, prolateral. C. Tarsus, dorsal. D. *Moggridgea pseudocrudeni* from Alicedale, South Africa, apex of pedipalpal tarsus. Arrows to ectal lobe of tarsus. Scale bars: A, B = 1000  $\mu$ m, C, D = 380  $\mu$ m.

[From Griswold, C. E. & J. Ledford, 2001. A monograph of the migid trap door spiders of Madagascar and review of the world genera (Araneae, Mygalomorphae, Migidae). Occas. Pap. Calif. Acad. Sci. 151: 82].



A *Thyropoeus malagasus*

B *Thyropoeus mirandus*

C *Paramigas alluaudi*

D *Paramigas andasibe*

E *Paramigas goodmani*

F *Paramigas macrops*

G *Paramigas manakambus*

H *Paramigas milloti*

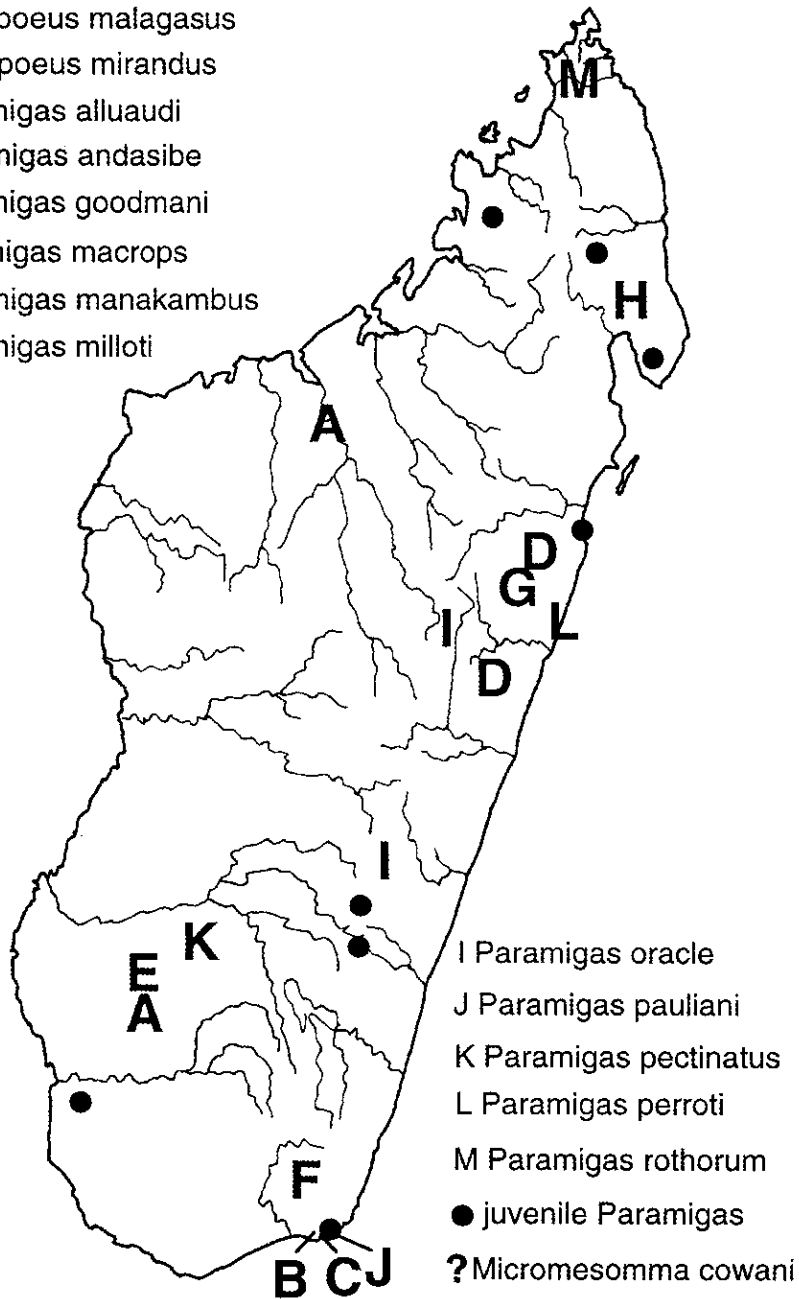


FIGURE 68. Map of Madagascar showing records of Migidae. Locality data for juvenile *Paramigas* are listed in Table 1

[From Griswold, C. E. & J. Ledford. 2001. A monograph of the migid trap door spiders of Madagascar and review of the world genera (Araneae, Mygalomorphae, Migidae). Occas. Pap. Calif. Acad. Sci. 151: 117].