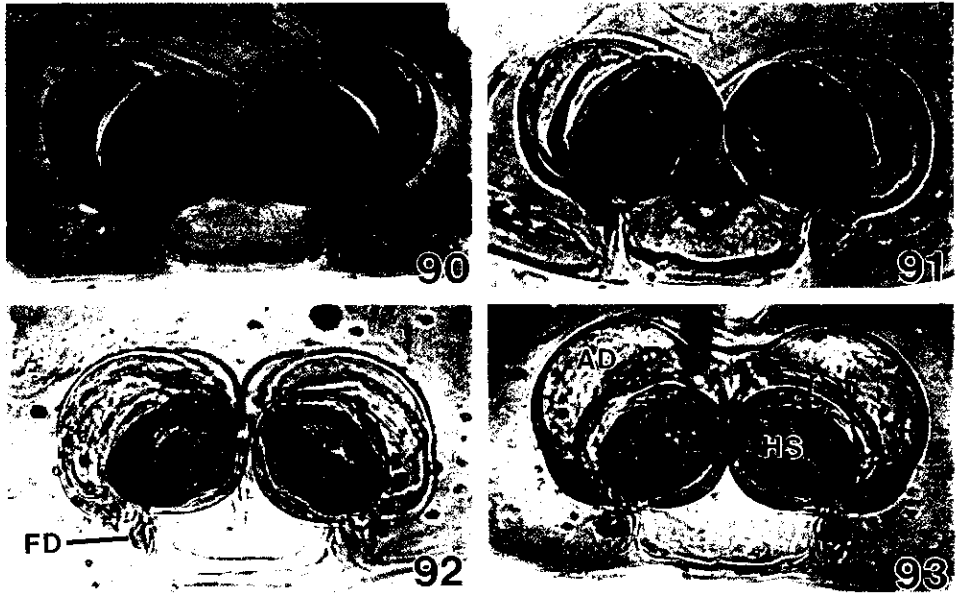


Griswold, C. E. 1997. The spider family Cyatholipidae in Madagascar (Araneae, Araneoidea). *J. Arachnol.* 25: 72-76.



Figures 90–93.—Vulvae of *Alaranea* spp., cleared, dorsal view. 90. *Alaranea betsileo* new species, from 7 km W Ranomafana; 91. *Alaranea merina* new species, Mandraka; 92. *Alaranea alba* new species, paratype; 93. *Alaranea ardua* new species, Marojejy. AD = afferent duct; FD = fertilization duct; HS = spermathecal head. [Griswold, 1997: 80].

*Alaranea merina* new species

Figs. 5, 65, 66, 70–73, 76, 77, 91, 98

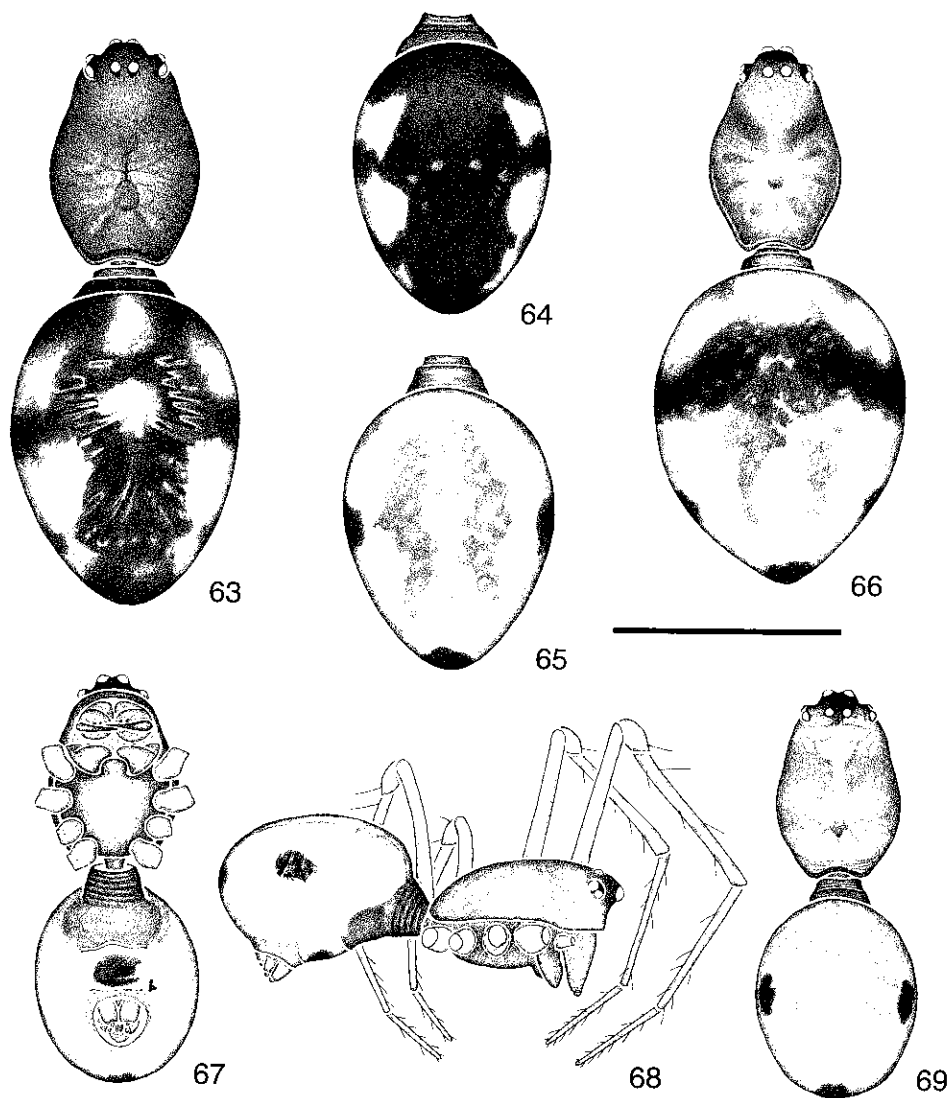
**Types.**—Male holotype and female paratype from Madagascar, Toamasina Province, Parc National Perinét, near Andasibe, 18°56'S, 48°24'E, elev. 1000 m, montane rain forest, 4–5 November 1993 (C.E. Griswold) (CAS).

**Etymology.**—Named for the indigenous people of Antananarive Province.

**Diagnosis.**—Conductor simple, proximal point narrower than cup (Figs. 70–72); dor-

sum of abdomen with sinuate longitudinal dark bands diverging from apex to middle and converging posteriorly (Figs. 65, 66). There seem to be no consistent characters to separate females of *merina* new species from *ardua* new species, though in the former the carapace is pale yellow-brown with darker markings along the borders of the pars cephalica (Fig. 66), whereas the carapace of *ardua* tends to be darker (Fig. 96).

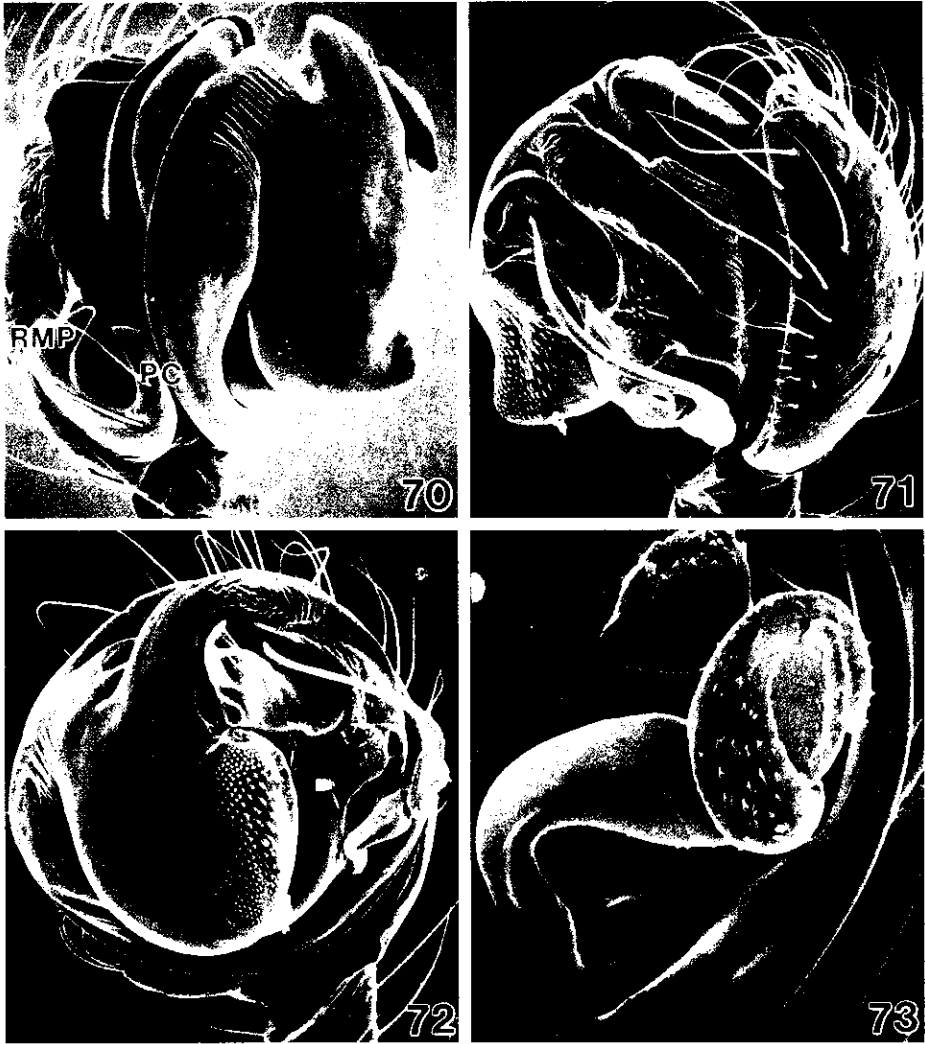
**Description.**—*Male* (7 km. W Ranomafana): Total length 2.32. Carapace yellow-



Figures 63–69.—Morphology of *Alaranea* spp. 63–66, 69. Dorsal view, 64 and 65 abdomen only; 67. Ventral view; 68. Lateral view; 63, 64. *Alaranea betsileo* new species, females from Talatakely; 65, 66. *Alaranea merina* new species, females from Perinét; 67–69. *Alaranea alba* new species, holotype male. (Scale bar = 1 mm)

brown, brown along margins of pars cephalica and on thoracic fovea; ocular area dark grey beginning just anterior of PER, black between AM and AL-PL; clypeus yellow-brown, dark grey in center from AM to clypeal margin; chelicerae and palpal coxae orange-brown; sternum and labium black; legs and palpi yellow-white, unmarked, cymbium yellow-brown, tegulum orange-brown; abdomen white, with brown sclerotization extending from epigastric furrow to and surrounding

pedicel to form annulate petiole, dorsum with faint longitudinal brown bands beneath transparent scutum, with dorsolateral elongate black spot and posterior lateral wavy line, posterior apex with black spot, venter dark gray between epigastric furrow and spiracle. Carapace 1.00 long, 0.64 wide, 0.28 high, trapezoidal in dorsal view; PER 0.39 wide, AER 0.38, OAL 0.19; ratio AM:AL:PM:PL 1.5:1.17:1.0:1.17, PM diameter 0.06. Clypeus 0.12 high, chelicerae 0.30 long. Sternum 0.50

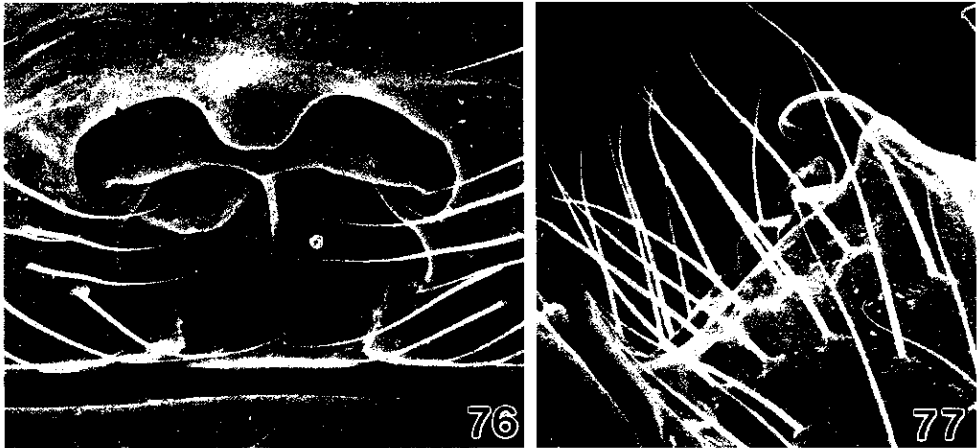


Figures 70–73.—*Alaranea merina* new species, male from Perinét, right palpus. 70. Retrolateral view; 71. Prolateral view; 72. Ventral view; 73. Parembolic process. PC = paracymbium; RMP = retromedian cymbial process.

long and wide; labium 0.12 long, 0.15 wide; palpal coxae 0.18 long, 0.14 wide. Leg measurements (femur + patella + tibia + metatarsus + tarsus = [Total]): I:  $2.44 + 0.44 + 1.96 + 1.84 + 1.08 = [7.76]$ ; II:  $2.12 + 0.44 + 1.72 + 1.72 + 0.96 = [6.96]$ ; III:  $1.30 + 0.38 + 1.00 + 0.96 + 0.64 = [4.28]$ ; IV:  $2.00 + 0.40 + 1.48 + 1.40 + 0.72 = [6.00]$ ; Palp:  $0.32 + 0.14 + 0.10 + (\text{absent}) + 0.26 = [0.82]$ . Palp (Figs. 70–73) with bulb marked as in *Alaranea betsileo* new species (Figs. 53, 54), cymbial RMP simple, pointed, PC slender in lateral view; tegulum apex strongly pustule-

late, TL large, projecting ventrally to form blunt point, denticulate over large area; C small, single; PP with apical recurved hook.

*Variation:* ( $n = 3$ ). Total length 2.29–2.71; ratios of carapace length/width 1.53–1.67, height/width 0.34–0.47; ratios of PER/OQP 2.18–2.44, PER/OAL 2.00–2.09, OQP/OQA 0.82–1.00, distance PM-PL/diameter PM 1.00–1.67, diameter AM/PM 1.25–1.67; ratios of clypeal height/AM diameter 1.36–1.60, cheliceral length/clypeal height 2.55–3.28; ratio of sternum length/width 1.03–1.11; ratio of length femur I/carapace width 1.89–2.12. Car-



Figures 74–77.—Epigyna of *Alaranea* spp. 74, 76. Ventral view; 75, 77. Lateral view; 76–77. *Alaranea merina* new species, Perinét.

apace with or without faint dusky radii extending from thoracic fovea; abdominal dorsum (Figs. 65, 66) clear with dorsolateral markings visible to obscured to varying degrees by black, these markings range from median transverse band or U to large dark area, lateral black marks present or absent.

*Female (7 km. W Ranomafana)*: Total length 2.28. Markings as in male except abdomen having dorsomedian brown bands fainter, lateral black spots larger, and posterior spot smaller. Carapace 0.92 long, 0.58 wide, 0.24 high; PER 0.33 wide, AER 0.36 wide, OAL 0.18; ratio of eyes AM:AL:PM:PL: 1.6:1.2:1.0:1.2, PM diameter 0.06. Clypeus 0.11 high, chelicerae 0.28 long. Sternum 0.46 long, 0.48 wide; labium 0.11 long, 0.14 wide; palpal coxae 0.17 long, 0.12 wide. Leg measurements (femur + patella + tibia + metatarsus

+ tarsus = [Total]): I: 2.24 + 0.44 + 1.80 + 1.72 + 1.06 = [7.26]; II: 2.00 + 0.42 + 1.60 + 1.48 + 1.02 = [6.52]; III: 1.24 + 0.36 + 0.92 + 0.84 + 0.76 = [4.12]; IV: 1.84 + 0.40 + 1.36 + 1.20 + 0.78 = [5.58]; Palp: 0.21 + 0.09 + 0.11 + (absent) + 0.22 = [0.63]. Epigynum and vulva as in *Alaranea betsileo* new species, epigynum as in Figs. 76, 77; vulva as in Fig. 91.

*Variation*: ( $n = 4$ ). Total length 2.00–2.82; ratios of carapace length/width 1.55–1.60, height/width 0.31–0.39; ratios of PER/OQP 2.09–2.55, PER/OAL 1.83–2.44, OQP/OQA 0.86–1.00, distance PM-PL/diameter PM 0.88–1.50, diameter AM/PM 1.25–1.67; ratios of clypeal height/AM diameter 1.10–1.50, cheliceral length/clypeal height 2.83–3.67; ratio of sternum length/width 1.03–1.15; ratio of length femur I/carapace width 1.87–2.17. Car-

apace yellow-brown to orange-brown, may be darker along margins of pars cephalica; abdominal dorsum with faint longitudinal brown bands exposed (Fig. 65) or obscured by small to large dorsolateral black spot (Fig. 66), may have posterior lateral dark spot or wavy line.

**Natural history.**—Common inside forest hanging beneath sheet webs between 0.2–2 m above ground.

**Distribution.**—Widespread in mid-elevation forests along the eastern side of the escarpment (Fig. 98).

**Material examined.**—**MADAGASCAR:** *Fianarantsoa Province:* 43 km. S Ambalavao, Reserve Andringitra, 22°14'S, 47°00'E, elev. 825 m, sifted litter, rainforest, 1♂, 5 October 1993 (B. L. Fisher) (CAS); Massif Andringitra, Mahasoa, elev. 2100 m, 1♀, October 1971 (B. Ranson) (MRAC); Parc National de Ranomafana: around research cabin, 2♂3♀, 26 March 1992 (V. & B. Roth, S. Kariko) (MCZ). Parc National de Ranomafana, from foliage, ca. 21°12'S, 47°27'E, elev. ca. 1000 m, 1♂3♀, April 1992 (V. & B. Roth, S. Kariko) (CAS); 7 km. W Ranomafana, elev. 1100 m, 1♀, 22–31 October 1988, 2♂3♀, 1–7 November 1988 (W.E. Steiner) (USNM); Elev. 1200 m, 1♀, 22 October 1988 (W. Steiner, C. Kremen, R. Van Epps) (USNM); Parc National de Ranomafana, Vohiparara, ca. 21°14'S, 47°24'E, elev. 1100 m, 4♀, 5–7 November 1993 (N. Scharff, S. Larcher, C. Griswold, R. Andriamasamanana) (CAS, USNM, ZMUC). Parc National de Ranomafana, Talatakeley, 21°15'S, 47°25'E, elev. 900 m, 7♂21♀, 5–7 December 1993 (C. Griswold, N. Scharff, S. Larcher, and R. Andriamasamanana) (CAS, USNM, ZMUC). *Toamasina Province:* Parc National Perinét, near Andasibe, 18°56'S, 48°24'E, elev. 1000 m, montane rain forest, 40♂30♀, 4–5 November 1993 (J. Coddington, S. Larcher, C. Griswold, R. Andriamasamanana, & N. Scharff)(CAS, USNM, ZMUC); Perinét, 18°55'S, 48°25'E, 1♀, 1–3 August 1992 (V. & B. Roth) (CAS); Foret de Didy, arbustes, 1♂, March 1947 (MNHN); Mandraka, battage, 3♂7♀, December 1946 (J. Millot) (MNHN); Beanana, 15°44'S, 49°28'E, 1♂, February 1970 (A. Lambillon)(MRAC).

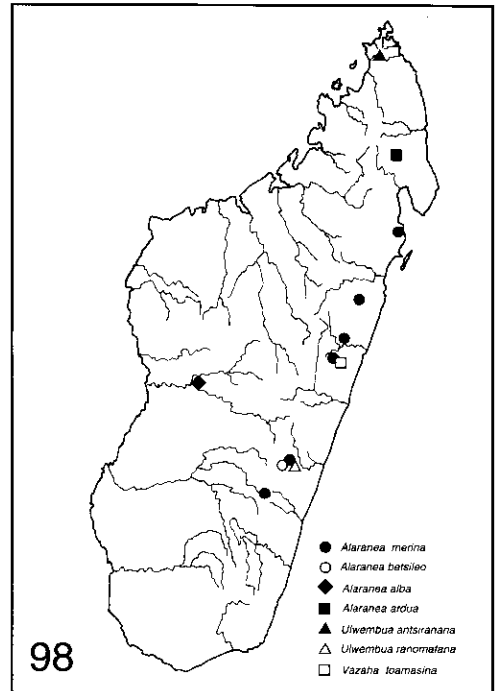


Figure 98.—Map showing distributions of Cyatholipidae in Madagascar. [Griswold, 1997: 82].