

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). [Griswold, 1997: 73].

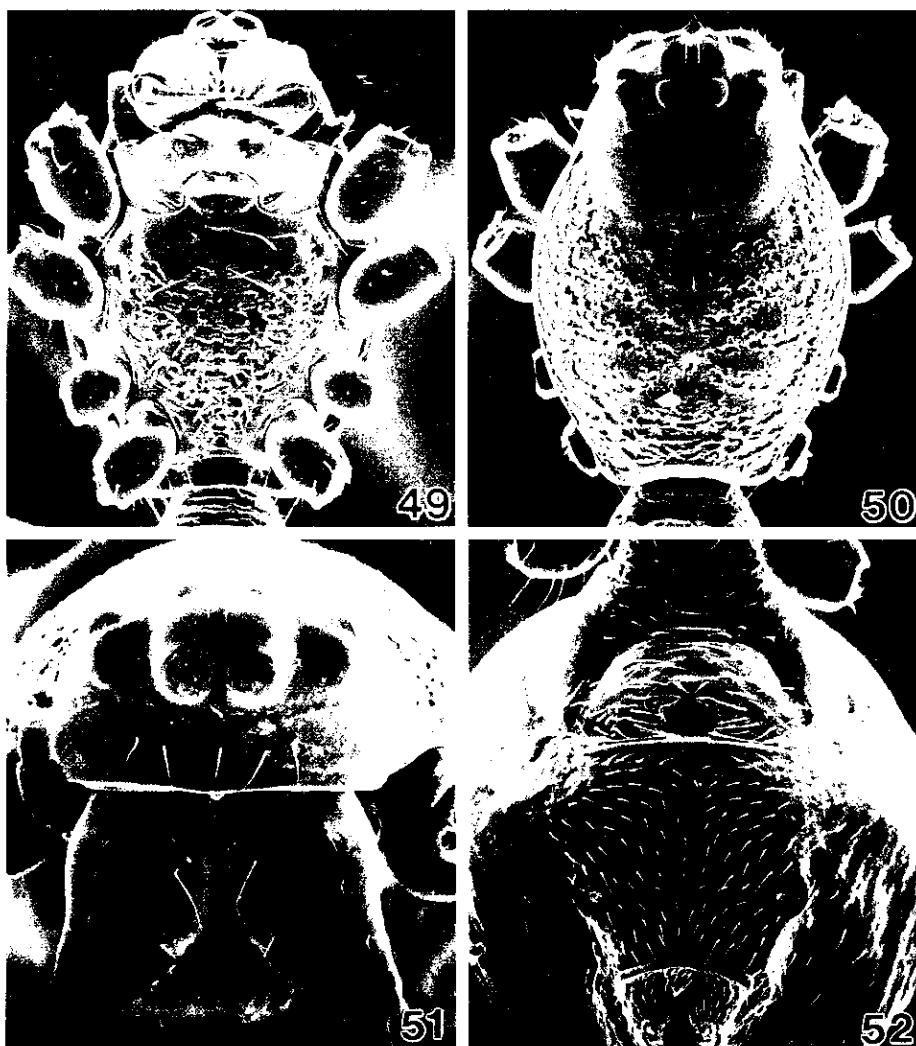
#### *Alaranea betsileo* new species

Figs. 2-4, 6-14, 49-54, 56, 59-64, 74, 75,  
90, 98

**Types.**—Male holotype and female paratype from Madagascar, Fianarantsoa Province, Parc National Ranomafana, Talatakely, montane rain forest, 21°15'S, 47°25'E, elev. 900 m, 5-7 November 1993 (C. Griswold) (CAS).

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

**Diagnosis.**—Conductor bipartite, with thin, broad proximal piece separate from C proper

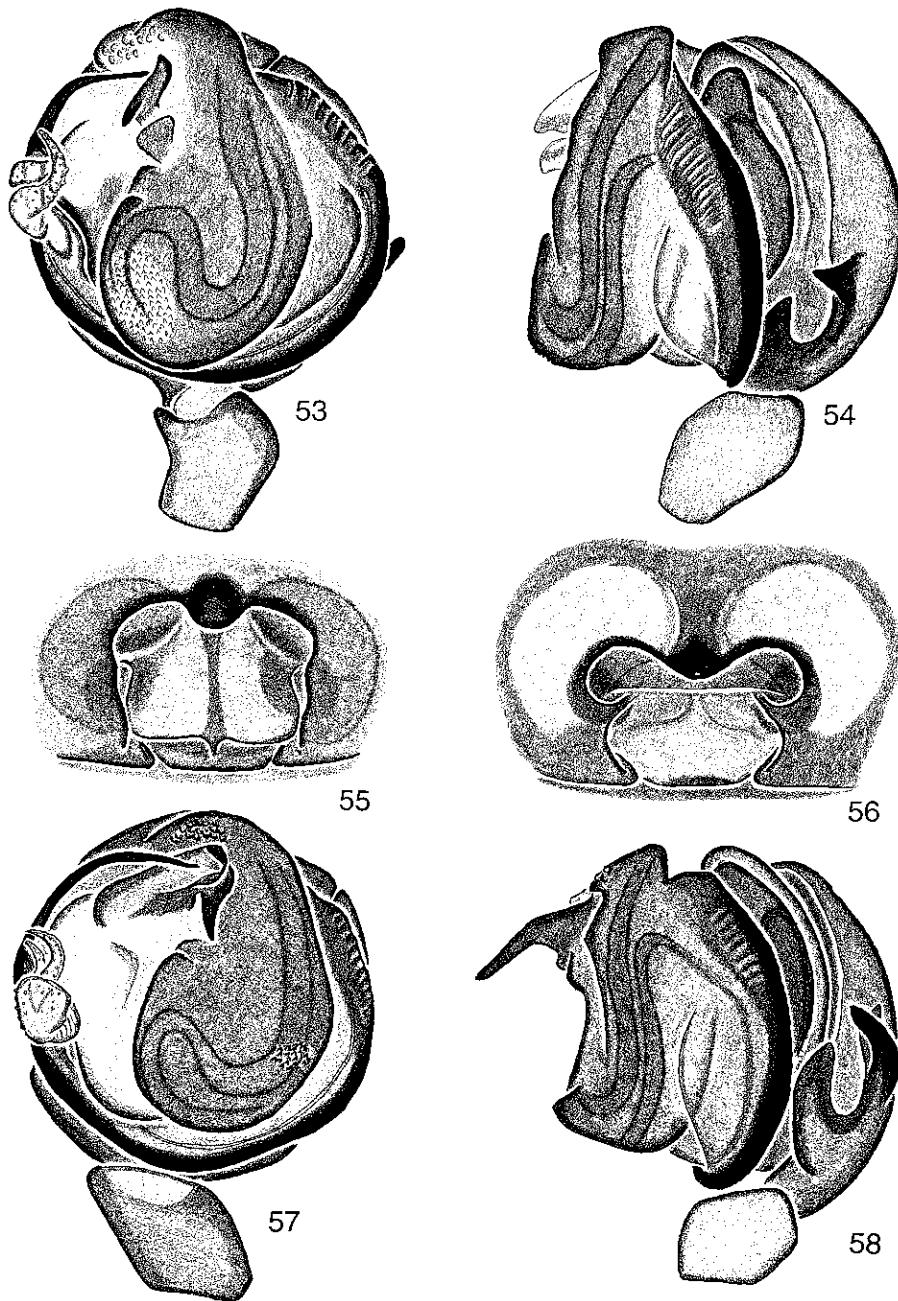


Figures 49–52.—Morphology of *Alaranea betsileo* new species, from Talatakely. 49. Carapace, ventral view; 50. Carapace, dorsal view; 51. Carapace, anterior view; 52. Abdomen, ventral view; 49, 50. Male; 51, 52. Female.

(Figs. 53, 61); in both sexes sternum dark reddish brown to black, abdomen of most specimens with extensive dark markings, dorsum lacking sinuate longitudinal dark bands, with median black band surrounding 1–2 anterior white spots (Figs. 63, 64).

**Description.**—*Male* (*7 km W Ranomafana*): Total length 2.24. Carapace dark reddish brown, unmarked, ocular area with diffuse dark grey surrounding AM, black surrounding AL-PL; clypeus dusky grey in center, chelicerae red-brown, with faint dark anterobasal streaks; palpal coxae red-brown, lighter at

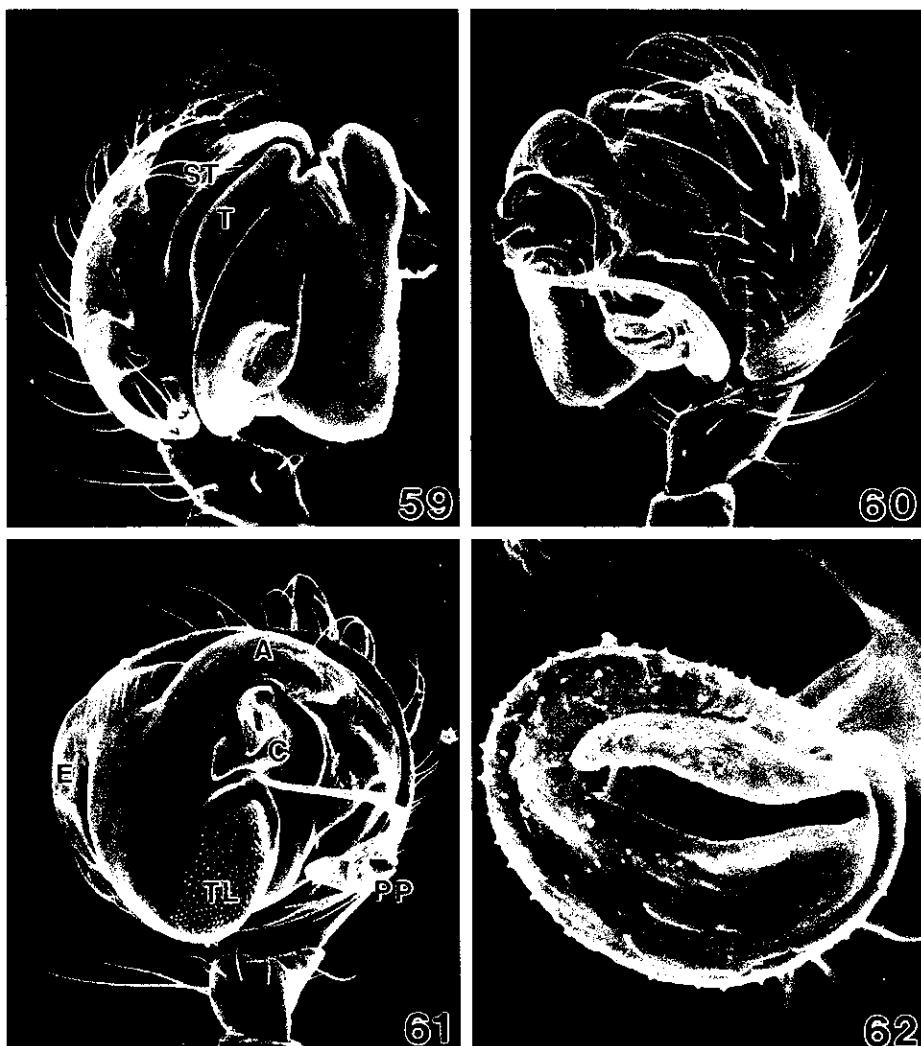
tips; labium and sternum dark brown to nearly black; coxae, legs, and palpi yellow-white, unmarked, cymbium dusky yellow-brown; abdomen black dorsally beneath shiny transparent scutum, dark transverse bands extending laterally from midpoint and posterior those in middle nearly meeting ventrally, dark brown sclerotization extending from epigastric furrow to and surrounding pedicel to form annulate petiole, sclerotization very broad anterodorsally. Carapace 1.04 long, 0.64 wide, 0.26 high, trapezoidal in dorsal view; PER 0.38 wide, AER 0.39 wide, OAL 0.19; ratio AM:



Figures 53–58.—Genitalia of *Alaranea* spp. 53, 54, 57, 58. Left male palpus; 55, 56. Epigynum; 53, 55–57. Ventral view; 54, 58. Retrolateral view; 53, 54, 56. *Alaranea betsileo* new species, from 7 km W Ranomafana; 55. *A. alba* new species, paratype; 57, 58. *A. alba* new species, holotype.

AL:PM:PL. 1.33:1.0:1.0:1.0, PM diameter 0.06. Clypeus 0.14 high, chelicerae 0.33 long. Sternum 0.50 long, 0.50 wide; labium 0.10 long, 0.14 wide; palpal coxae 0.16 long, 0.12

wide. Leg measurements (femur + patella + tibia + metatarsus + tarsus = [Total]): I: 2.60 + 0.42 + 2.08 + 2.20 + 1.36 = [8.66]; II: 2.32 + 0.40 + 2.32 + 1.96 + 1.28 = [8.28];



Figures 59–62.—*Alaranea betsileo* new species, male from Talatakely, right palpus. 59. Retrolateral view; 60. Prolateral view; 61. Ventral view; 62. Parembolic process. A = apical lobe of tegulum; C = conductor; E = embolus; PP = parembolic process; ST = subtegulum; T = tegulum; TL = ventromedian tegular lobe.

III:  $1.48 + 0.36 + 1.48 + 1.04 + 0.80 = [5.16]$ ; IV:  $2.20 + 0.40 + 1.72 + 1.56 + 0.88 = [6.76]$ ; Palp:  $0.28 + 0.10 + 0.09 + (\text{absent}) + 0.24 = [0.71]$ . Palp (Figs. 53, 54, 59–62) with cymbial RMP short, acutely pointed, with distal blunt projection. PC broad in lateral view; tegulum apex pustulate, TL large, convex, dentation extensive; C large, double, with flattened translucent lower article nearly as large as C proper; PP with apical recurved hook.

*Variation:* ( $n = 3$ ). Total length 2.12–2.61;

ratios of carapace length/width 1.54–1.62, height/width 0.39–0.42; ratios of PER/OQP 2.37–2.53, PER/OAL 1.85–2.16, OQP/OQA 0.88–0.94 distance PM-PL/diameter PM 1.14–1.40, diameter AM/PM 1.00–1.60; ratios of clypeal height/AM diameter 1.62–1.86, cheliceral length/clypeal height 2.36–2.46; ratio of sternum length/width 0.88–1.00; ratio of length femur I/carapace width 1.87–2.07. Markings of carapace dark brown to nearly black; legs pale yellow white to dusky gray; abdomen with dorsolateral transverse

marks entire to broken to rarely absent, dorsal black area ranges from narrow median band to totally covering dorsum.

**Female** (7 km. W Ranomafana): Total length 2.24. Carapace red-brown, dusky on pars cephalica and around thoracic fovea, with median yellow-brown area between thoracic fovea and posterior margin of pars cephalica, ocular area dark grey between AM-PM and AL-PL, dusky marking extending below AM to lower margin of clypeus; chelicerae and palpal coxae yellow-brown, unmarked; labium and sternum dark brown to black; coxae, legs, and palpi yellow-white, unmarked; abdomen yellow-white, dorsum with broad longitudinal black mark, this mark forming lateral transverse bands near middle, small black spot at posterior apex, venter yellow-white, unmarked; dark brown sclerotization extending from epigastric furrow to and surrounding pedicel to form annulate petiole, sclerotization much less extensive anteriorly than in male. Carapace 0.94 long, 0.60 wide, 0.25 high; PER 0.37 wide, AER 0.36 wide, OAL 0.18; ratio 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 0.50 long, 0.47 wide; labium 0.10 long, 0.16 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 as in Figs. 56, 74, 75; vulva as in Fig. 90.

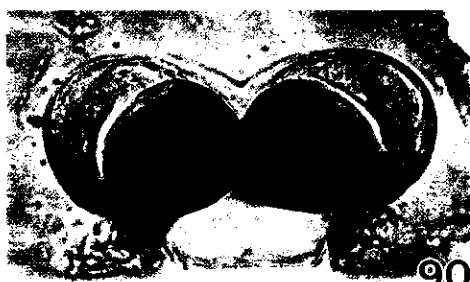


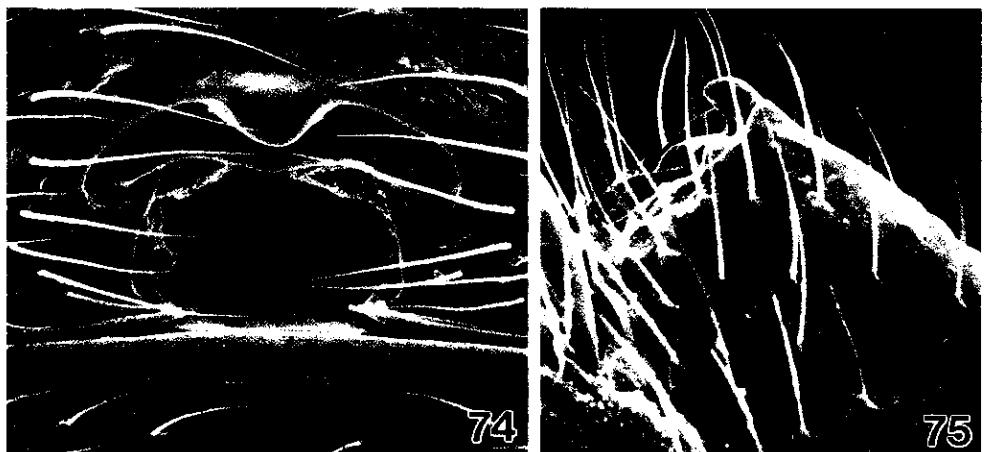
Figure 90.—Vulvae of *Alaranea* spp., cleared, dorsal view. 90. *Alaranea betsileo* new species, from 7 km W Ranomafana; AD = afferent duct; FD = fertilization duct; HS = spermathecal head. [Griswold, 1997: 80].

**Variation:** ( $n = 3$ ). Total length 2.18–2.89; ratios of carapace length/width 1.56–1.69, height/width 0.34–0.43; ratios of PER/OQP 1.91–2.30, PER/OAL 1.28–2.00, OQP/OQA 0.80–1.00, distance PM-PL/PM diameter 1.28–2.00, diameter AM/PM 1.14–1.67; ratios of clypeal height/AM diameter 1.40–2.00, cheliceral length/clypeal height 2.22–3.71; ratio of sternum length/width 1.03–1.10; ratio of length femur I/carapace width 1.92–2.17. Carapace of most specimens dark brown to black, in rare specimens orange-brown, unmarked; dorsal abdominal dark markings range from narrow, broken laterally (Fig. 63) to broad, almost obscuring dorsum (Fig. 64), anteromedian white spot rarely obscure.

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

**Distribution.**—Known only from montane forests near Ranomafana in Fianarantsoa Province (Fig. 98).

**Material examined.**—**MADAGASCAR:** Fianarantsoa Province: Parc National Ranomafana, Talatakely, montane rain forest, 21°15'S, 47°25'E, elev. 900 m, 34♂ 74♀ (including holotype and paratype), 5–7 November 1993 (N. Scharff, S. Larcher, C. Griswold, and R. Andriamasamanana) (one pair in MRAC, remainder divided among CAS, USNM, and ZMUC). Parc National Ranomafana, Vohiparara, 21°14'S, 47°24'E, elev. 900 m, 6♂ 6♀, 5–7 December 1993 (N. Scharff, S. Larcher, C. Griswold, and R. Andriamasamanana) (CAS, ZMUC, USNM); Parc National Ranomafana, 200 m N research Cabin, trail G, beating, 1♂ 2♀ (CAS) 2♂ 2♀ (MCZ), 23 March 1992 (S. Kariko, V. Roth); Parc National Ranomafana, beating in forest, 1♂ 4♀ (CAS), 4♂ 12♀ (MCZ), 25 March 1992 (Emile); Parc National Ranomafana, 200 m N research Cabin, trail G, beating, 2♂ 4♀, 25 March 1992 (B. Roth) (CAS); Parc National Ranomafana, 21°12'S, 47°27'E, from foliage, elev. 1000 m, 4♀ (CAS) 3♀ (MCZ) April 1992 (V. & B. Roth); Parc National Ranomafana, 7 km W Ranomafana, elev. 900 m, 21°12'S, 47°27'E, 2♂, 20–24 March 1990, elev. 1100 m, 1♂ 1♀, 8–21 October 1988, 1♂, 21–30 October 1988, 2♂, 1–7 November 1988 (W. Steiner) (USNM).



Figures 74–77.—Epigyna of *Alaranea* spp. 74, 76. Ventral view; 75, 77. Lateral view; 74, 75. *Alaranea betsileo* new species, Talatakely. [Griswold, 1997: 75].

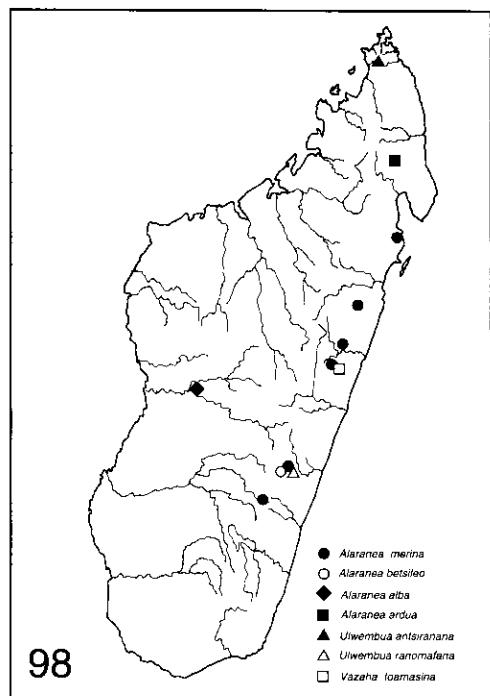


Figure 98.—Map showing distributions of Cyatholipidae in Madagascar. [Griswold, 1997: 82].