

Unplaced material

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Unplaced material

The following specimens mapped on Fig. 68, could not be confidently accommodated within any of the species recognized here due to intermediate morphologies and/or incompleteness of material, which is mostly problematic for specimens taken from young individuals that exhibit juvenile morphology. Some of these specimens were initially analyzed statistically (HONG-WA & BESNARD, 2014) but were subsequently removed for being uninformative due to insufficient sampling and/or missing data. The collection of additional specimens and molecular data may help to clarify their identity. It is likely that some of this unplaced material represents new species.

MADAGASCAR. Prov. Antananarivo: Ankazobe, Manerinerina, 17°57'31"S 47°07'35"E, 1470 m, 19.XI.2006, *Ranaivojaona et al.* 1624 (MO, P, TAN). **Prov. Antsiranana:** Ampasindava, forêt de Bongomihiravavy, 13°45'26"S 48°05'34"E, 400 m, 26.XI.2008, *Ammann et al.* 87 (G, MO, TEF); Ampasindava, Tsarabanja, 13°45'42"S 48°05'32"E, 411 m, 10.XI.2008, *Bernard et al.* 1185 (G, MO, P, TAN); Andranomalaza, Manongarivo RS, 14°02'S 48°25'E, 1660 m, 1.VI.2000, *Gautier* 3729 (G, MO); Daraina, forêt de Binara, 13°16'15"S 49°35'56"E, 1030 m, 29.XI.2006, *Gautier & Chatelain* 4956 (Daraina, G, K, MO, TEF); Montagne d'Ambre PN, 12°30'55"S 49°10'34"E, 891 m, 24.I.2009, *Hong-Wa* 588 (MO, P, TAN); Anjangoveratra, forêt d'Andalibe, 14°07'35"S, 50°03'07"E, 115 m, 23.III.2009, *Hong-Wa* 635 (MO, P, TAN); Anivorano-Nord, Andrafiabe, Mont Antsahabe, 12°54'50"S 49°19'41"E, 408 m, 3.VII.2010, *Hong-Wa* 724 (TAN); Vallée de la Lokoho (NE), [14°39'S 49°44'E], 250-550 m, 11.I.1949, *Humbert* 22983 (P); Andapa, Ambodisatrana, 14°32'S 49°26'E, 1100-1200 m, 3.VIII.1997, *McPherson* 17201 (K, MO, TAN); 35 km S of Vohémar, 13°42'56"S, 50°06'11"E, 5 m, 25.X.2002, *McPherson et al.* 18811 (G, MO, P, TEF); Daraina, forêt d'Antsahabe, 13°14'02"S 49°33'11"E, 950 m, 15.I.2004, *Nusbaumer* 980 (Daraina, G, K, MO, P, TAN); Ampasindava, 13°46'34"S 47°59'54"E, 250 m, 1.XI.2008, *Nusbaumer & Tahinarivony* 2958 (G, MO, TEF); Manongarivo RS, Ankaramibe, Bekolosy, 14°03'05"S 48°17'07"E, 600-800 m, 8.XII.1993, *Rakotomalala* 66 (G, MO, P); Ambilobe, Marivorahona, Ankatsaka, forêt d'Andavakoera, 13°06'01"S 49°10'36"E, 50 m, 13.IX.2004, *Randrianaivo et al.* 1092 (CNARP, MO, P, TAN); Anjangoveratra, Ambavala, 14°05'40"S, 50°02'37"E, 160 m, 21.IV.2008, *Randrianarivony et al.* 145 (MO, P, TAN); Andapa, Marojejy PN, 14°27'30"S 49°34'54"E, 920-1040 m, 15-29.V.1995, *Rasoavimbahoaka* 690 (MO, P, TAN); Andrafiabe, Mont Andrahona, 3 km au NE d'Andrafiabe, 12°28'49"S 49°26'56"E, 400 m, 31.I.2005, *Ratovoson et al.* 809 (CNARP, MO, P, TAN); Sambava, Andratamarina, Bemanasy, 14°24'04"S 49°51'40"E, 418 m, 20.X.2010, *Ravelonarivo & Raharivelo* 3535 (MO, P, TAN); Tsaratanana RNI, Beangona, 14°01'33"S 48°39'05"E, 1487-1550 m, 1.XII.2000, *Razakamalala et al.* 43 (MO, P, TAN); Marosena, Ampanovoana, [15°17'S 50°11'E], 4.II.1955, *Réserves Naturelles* 6938 (MO, P, TEF); Antalaha, Andrakaraka, [14°53'S 50°15'E], 90 m, 24.VI.1953, *Service Forestier* 7436 (MO, TEF); Massif de l'Ankarana (partie S du massif de Mafokovo), [13°15'S 49°50'E], 50-450 m, 17.XII.1966, *Service Forestier* 27384 (MO, TEF); Massif de Manongarivo, Maitsamalaza, Antsatrotro, 14°04'17"S 48°23'48"E, 1600 m, 27.XI.2000, *Wohlhauser* 408 (G,

MO); *ibid. loc.*, 14°04'28"S 48°23'34"E, 1570 m, 27.XI.2000, *Wohlhauser 413* (G, MO). **Prov. Fianarantsoa**: Anankara, Manombo RS, 23°00'S 47°42'E, 5.III.2009, *Hong-Wa et al. 615* (MO, P, TAN); Ranomafana PN, Vatoharanana, 21°16'06"S 47°25'30"E, 923 m, 8.V.2010, *Hong-Wa & Ortiz 668* (MO, TAN); Ranomafana PN, Parcelle 1, near village of Miaranony, Anosimasina, 21°09'S 47°32'E, 900-100 m, 22.IX.1992, *Malcomber et al. 1620* (K, MO, P, TAN); Ranomafana PN, Vatoharanana, 21°16'S 47°26'E, 1000-1100 m, 18-31.I.1993, *Malcomber et al. 2063* (MO, TAN); Ranomafana PN, Vohiparara, 21°16'S 47°24'E, 1300 m, 20.IV.1993, *Malcomber & Randriamanantena 2391* (K, MO, TAN). **Prov. Mahajanga**: Maintirano, Belitsaky, Ankilimanarivo, forêt de Beanka, 18°00'07"S 44°27'43"E, 210 m, 20.X.2009, *Andriamihajarivo et al. 1785* (MO, P, TAN, TEF); Kimanambolo, Belitsaka, 18°02'09"S 44°19'28"E, 18.X.2009, *Rakotonasolo et al. 1390* (MO, P, TAN). **Prov. Toamasina**: Maroantsetra, Anjahana, Hiaraka, 15°28'43"S 49°54'07"E, 200 m, 3.IX.2002, *Antilahimena 1319* (MO, P); Antsirabe Sahatany, Anjiahely, 15°24'45"S 49°22'29"E, 1201 m, 19.VI.2004, *Antilahimena 2526* (MO, P); Ambatovy, 18°50'27"S 48°18'17"E, 1084 m, 13.V.2010, *Bernard et al. 1567* (MO, P, TAN); Analamazaotra RS, 18°56'12"S 48°25'09"E, 953 m, 2.V.2010, *Hong-Wa & Ortiz 646* (TAN); *ibid. loc.*, 18°49'32"S 48°26'04"E, 941 m, 3.V.2010, *Hong-Wa & Ortiz 664* (MO, P, TAN); Tampolo STF, [17°17'00"S 49°23'30"E], 10 m, 1-2.XI.1963, *Service Forestier 22814* (MO, P, TEF); Foulpointe, Analalava, 17°42'18"S 49°27'17"E, 30.V.2005, *Skema et al. 69* (MO, P, TAN). **Prov. Toliara**: Iabakoho, Antsotso Avaratra, Ivohibe, 24°34'10"S 47°12'26"E, 105 m, 24.V.2006, *Birkinshaw 1646* (MO, P, TAN); *ibid. loc.*, 24°33'52"S 47°14'25"E, 112 m, 26.XI.2005, *Razakamalala et al. 2314* (MO, P, TAN); *ibid. loc.*, 24°33'52"S 47°11'43"E, 386 m, 1.XI.2005, *Razakamalala et al. 2565* (MO, P, TAN); Iaboko, Antsotso Avaratra, 24°33'54"S 47°11'55"E, 432 m, 11.XII.2007, *Razakamalala et al. 3900* (MO, P, TAN); *ibid. loc.*, forêt de Tsitongambarika, 24°34'16"S 47°12'05"E, 271 m, 1.IV.2008, *Razakamalala et al. 4122* (MO, TAN).

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