

An Earlier Name for *Capuronia Madagascariensis* Lourteig (Lythraceae)

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9. BERRY, Paul E. & Peter B. PHILLIPSON:

An earlier name for *Capuronia madagascariensis* Lourteig (Lythraceae)

Capuronia Lourteig is a monotypic genus of *Lythraceae* that was described from southwestern Madagascar (LOURTEIG, 1960). Its sole species to date, *C. madagascariensis* Lourteig, is a shrub that is widespread in dry forests across the western half of the island, in Antsiranana, Mahajanga, and Toliara Provinces. While examining material of *Euphorbia* from Madagascar at the National Museum of Natural History in Paris, it was discovered that a species described by LEANDRI (1947) as *E. benoistii* Leandri does not belong to the *Euphorbiaceae* at all. After examining floral material from the type, it proved to have lythraceous flowers, and it was eventually matched to *Capuronia madagascariensis*. Since *Euphorbia benoistii* is the earlier name, the corresponding combination needs to be made under *Capuronia*. An update on its known distribution is also provided.

Capuronia benoistii (Leandri) P. E. Berry, **comb. nova**

≡ *Euphorbia benoistii* Leandri in Notul. Syst. (Paris) 13: 117, fig. 8-10. 1947.

Typus: MADAGASCAR. **Prov. Toliara:** basse vallée du Fiherenana, 50-200 m, XI.1933, *Humbert 11547* (holo-: P [P00077908]!; iso-: P [P00077909, P00077910]!).

≡ *Capuronia madagascariensis* Lourteig in Compt. Rend. Hebd. Séances Acad. Sci. 251: 1033. 1960.

Typus: MADAGASCAR. **Prov. Toliara:** bassin moyen du Fiherenana entre Lambomakandro et Sakaraha, 400 m, 10.XII.1946, *Humbert 19695* (holo-: P [P00412924]!; iso-: K [K000310560, K000310561], P [P00412925, P00412926]!, US [US0011 7369]!).

Additional specimens examined. – MADAGASCAR. **Prov. Antsiranana:** Orangea, [12°14'00"S 49°22'00"E], 1-100 m, 22.I.1960, *Cours & Humbert 5397* (P) = *Humbert & Cours 32269* (P); Antsiranana II, Sadjoavato, Forêt Anjiamiaovtra (Sahafary), 12°34'58"S 49°27'12"E, 254 m, 23.II.2006, *Guittou & Colin 266* (CNARP, MO, P, TAN); Collines et Plateaux calcaires de l'Analamera, [12°47'24"S 49°30'E], 50-400 m, II.1938, *Humbert 19234* (P); Mangoaka, Ampasindava, Nosy Hara, 12°15'18"S 49°00'26"E, 50 m,

3.X.2007, *Ratovoson & al. 1390* (CNARP, MO, P, TAN); Betroka, Forêt d'Analamiro au Sud Est du village Ambararata, 12°16'40"S 49°23'01"E, 25 m, 9.XII.2004, *Razafitsalama & al. 689* (CNARP, MO, P, TAN); Orangéa, 12°14'39"S 49°22'47"E, [1-100 m], 12.II.2005, *Schatz & al. 4211* (CNARP, MO, P, TAN); Forêt de Sahafary, 12°35'17"S 49°26'05"E, 210 m, 15.II.2005, *Schatz & al. 4305* (CNARP, MO, P, TAN); Forêt d'Analandriana au Nord de Sakaramy, [12°25'S 049°16'E], 300 m, 14.II.1962, *Service Forestier 20963* (P, TEF); Forêt de Sahafary, Bassin de la Saharaina, [12°34'S 49°26'E], c. 200 m, 20.II.1962, *Service Forestier 20997* (P, TEF); Butte calcaire, près d'Andrakaka, à l'Ouest de Diégo-Suarez, [12°16'S 49° 15'E], 17.V.1905, *Service Forestier 23279* (P, TEF); Orangéa, [12°15'S 49°23'E], [1-100 m], s.d., *Service Forestier s.n.* (TEF); Antsahalalina, part of Bobankora Range, Daraina, 13°14'S 49°46'E, 200-600 m, 11.II.1991, *Meyers & Boltz 264* (MO, P, TAN); Daraina, Forêt de Bobankora, à 3 km au Sud de Madirobe. 13°12'28" S 49°46'23"E, 65 m, 16.XII.2007, *Randrianaivo & al. 1537* (CNARP, MO, P, TAN); Vestige de forêt entre Belinta et Ambatrabe, au N.W. de Vohémar, 13°20'S 49°57'E, 1966, *Service Forestier 27335bis* (P, TEF). **Prov. Fianarantsoa:** Forêts tropophylle entre Ihosy et Sakalalina, [22°20'S 45°50'E], 1000-1100 m, 1961, *Service Forestier 20407* (P, TEF); idem, *Service Forestier 20408* (P, TEF). **Prov. Mahajanga:** Massif de l'Ankarafantsika, [16°09'S 47°04'E], s.d., *Service Forestier 112* (P); Antsingy, vers Ambodiriana (E. d'Antsalova), [18°12'S 44°35'E-19°07'S 44°58'E], 100-150 m, 21.I.1960, *Leandri & Saboureau 2669* (P); Antsalova, [18°41'S 44°46'E], 15.V.1905, *Réserves Naturelles 12482* (P, TEF); Forêt d'Amboloando, District de Maintirano, [18°01'S 44°06'E], 1962, *Service Forestier 16361* (P, TEF); Ampombilava-Befandriana N., 15°03'S 48°13'E, 30.II.1942, *Herbier du Jardin Botanique de Tananarive 5444* (P); Mampikony, Forêt d'Ambalafomby, 15°57'05"S 47°26'09"E, 232 m, 4.XII.2004, *Ramananjahary & al. 201* (MO, P, TEF); Analarezy, Ankobakobaka, Befandriana Nord, [15°08'S 48°17'E] 28.VII.1970, *Service Forestier 30036* (TEF). **Prov. Toliara:** Ambovombe (Sud), [25°10'S 46°05'E], X.1956, *Bosser 10200* (TAN); Cap-Sainte-Marie, [25°35'S 45°09'E], IX.1985, *Rakotozafy 2013* (TAN); Réserve d'Andohahela, Parcelle 2, 24°50'S 46°32'E, 100 m, 7.XII.1988, *Phillipson 2831* (G, GRA, K, MO, P, TAN); idem, *Phillipson 2852* (G, GRA, K, MO, P, TAN); Andohahela (parcel 1), Tsimelahy, 24°50'20"S 46°32'17"E, 6.IV.1996, *Randriamampionona 1305* (MO, P, TAN); entre Ankoba et Mahamavo (haut bassin de la Mananara, affluent du Mandrare), [24°53'S 46°49'E], 21.I.1963, *Service Forestier 22435* (P, TEF); La Table de Toliara, 15 km à l'Est de la ville de Toliara, 23°24'35"S 43°46'53"E, 23.XII.2004, *Andriamihajarivo & Ludovic 532* (MO, TAN); Viam de Tulear ad Ampanihy, praecipue ad km 60, 24°41'S 44°45'E, 13.II.1967, *Bernardi 11425* (P); Environs de Tulear, 23°20'S 043°40'E, 1.II.1956, *Bosser 10504* (P, TAN); Forêt de Zombitsy, 22°46'S 44°42'E, 1.XII.1959, *Bosser 13987* (P, TAN); Bush sur calcaire, vallée du

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Fiherenana, [22°57'S 44°19'E], 1960, *Bosser 14425* (P, TAN); Env. de Tuléar, bas de la Table, [23°24'S 43°47'E], 20.II.1961, *Chauvet 40* (P); La Table, [23°24'S 43°47'E], 4.III.1961, *Chauvet 55* (P, TEF); PK 30 route de Tuléar-Tananarive, [23°20'S 43°52'E], 4.II.1962, *Chauvet 261* (P); PK 28 route Tuléar-Tananarive, [23°24'S 43°47'E], 11.II.1962, *Chauvet 355* (P); Gorges du Fiherenana, [22°57'S 44°19'E], 18.II.1962, *Chauvet 368* (P, TEF); 8-16 km E of Tulear on road to Tananarive, [23°25'S 43°47'E], 50 m, 7.II.1975, *Croat 30956* (MO, P, TAN); Road from Tulear to Ankilimalinika 36.6 km N of Tulear, 23°03'S 43°35'E, 0-50 m, 22.III.1985, *Dorr & al. 4118* (MO, P, TAN); Road to Saint Augustin (Anatsogno), 23°33'S 43°46'E, 50 m, 23.III.1985, *Dorr & al. 4136* (G, K, MO, P, TAN); Gorges du Fiherenana, rive gauche entre Beantsy et Anjamala, [23°12'S 43°56'E], 30-300 m, 16.I.1947, *Humbert 19933* (P); Plateau au Sud des gorges du Fiherenana, entre Andranohinaly et Andranovory, [23°12'S 44°03'E], 300-400 m, 3-4.II.1947, *Humbert 20123* (P); Falaise côtière vers l'embouchure de la Menarandra : Bevoalava – Ankazondrato, [25°10'S 44°31'E], 1-150 m, 12.III.1955, *Humbert & Capuron 29362* (P); Env. de Tuléar, Gorges du Fiherenana, à quelques km de Miary, [23°17'34"S 43°48'53"E], III.1960, *Keraudren 680* (P); Réserve de Tsimanampetsotsa, 24°04'S 43°46'E, 50 m, 11.I.1989, *Phillipson & Rabsihanaka 3148* (G, GRA, K, MO, P, TAN); Forêt de Mikea, axe Belo-Ankilimihavotse, 22°05'S 43°22'E, 0-50 m, 30.I.2000, *Ranaivojaona & al. 303* (MO, P, TAN); Vallée de l'Isahaina, au Sud de Beroroha, [21°40'S 45°10'E], [780 m], 24.II.1949, *Service Forestier 531* (P, TEF); Route Tuléar-Sakaraha vers les PK 65-55, [23°12'S 44°03'E], [450 m], 1961, *Service Forestier 20724* (P, TEF); idem, *Service Forestier 20728* (P, TEF); idem, *Service Forestier 20733* (TEF); idem, *Service Forestier 20241* (TEF); Forêt d'Herea au N de Mitia dans le haut bassin de l'Ikona, [22°15'S 44°16'E], 600-700 m, 16.XII.1962, *Service Forestier 22215* (P, TEF); Route Tuléar-Sakaraha PK 38, piste Analamitsivalana, [23°16'30"S 43°58'30"E], [200 m], 8.I.1962, *Service Forestier 20772* (P, TEF); Forêt de Marosalaza, 50 km N de Morondava, [20°02'S 44°33'E], 0 m, 4.V.1974, *Abraham 53 bis* (P); Morondava; in private reserve of Analabe 1 km S of Beroboka, 19°59'S 44°36'E, 30 m, 15.II.1986, *Nicoll 146* (K, MO, P, TAN); 55 Km NE of Morondava, Kirindy Forest, 20°04'S 44°40'E, 35 m, 14-16.III.1992, *Noyes & al. 1022* (G, K, MO, P, TAN); Morondava, Kirindy, Marofandilia, [20°05'S 44°38'E], [25 m], 26.II.1988, *Service Forestier 31891* (TEF); Morondava, entre Andranomena et Marofandilia, [20°11'S 44°31'E], 50 m, 19.I.1962, *Service Forestier 20898* (P, TEF); Piste d'Ifaty, [23°09'S 43°36'E], 1.II.1975, *Rakotozafy 1595* (TAN).

Observations. – LEANDRI (1947) evidently mistook the perigynous hypanthium of the type of *Euphorbia benoistii* for a cyathium. Although he assigned the species to *Euphorbia* sect. *Anisophyllum* Roep. (the former genus *Chamaesyce* Gray), because of its opposite leaves, Leandri did note that it was anomalous there by virtue of its symmetrical leaves and lack of cyathial glands. *Capuronia* is the only genus of *Lythraceae* that is morphologically dioecious (LOURTEIG, 1960; GRAHAM, 2007). Although most plants of *C. benoistii* are 6-merous, as in the type of *C. madagascariensis* (LOURTEIG, 1960), the type of *C. benoistii* is 5-merous (LEANDRI, 1947). However, genera of *Lythraceae* are well known to be variable in floral merosity (GRAHAM, 2007), and therefore this is not deemed to be of any taxonomic significance. There are six mounted duplicates at P of the type of *Euphorbia benoistii*, *Humbert 11547*, five of these have been filed under *E. benoistii* and were annotated by Leandri, but the sixth was presumably separated from the others before this since it was not annotated by him. This specimen was eventually examined by

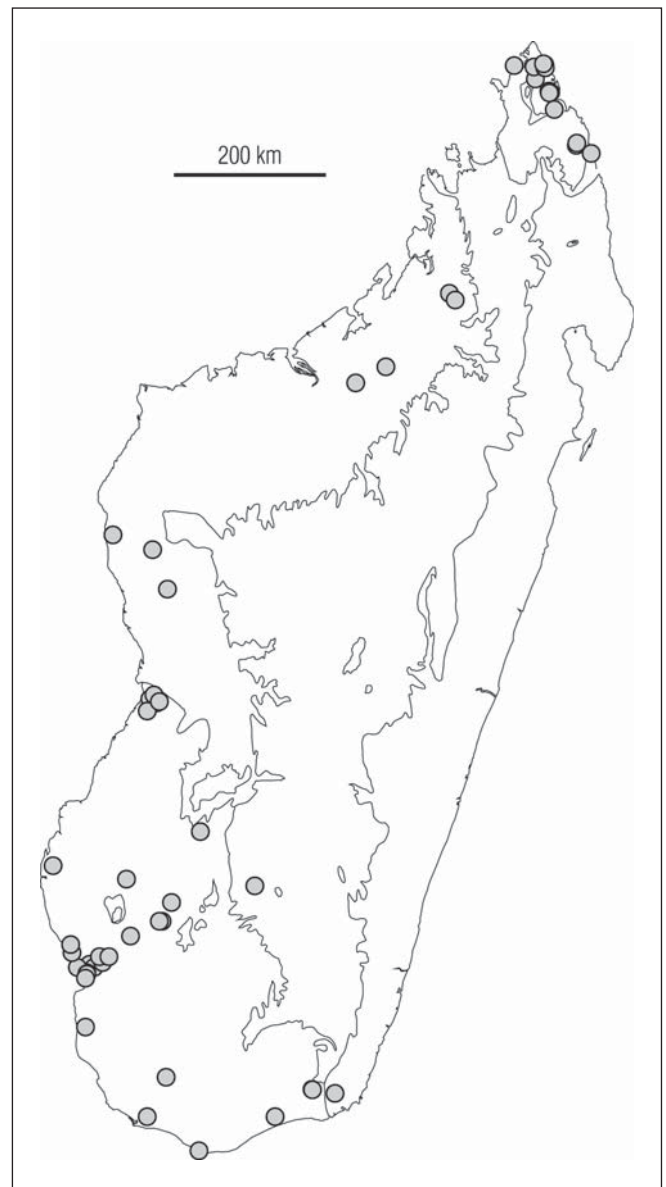


Fig. 1. – Distribution of *Capuronia benoistii* (Leandri) P. E. Berry in Madagascar mapped on the bioclimatic zones of Madagascar (after CORNET, 1974; see SCHATZ, 2000).

Lourteig (1960), and was cited by as a paratype of *Croton madagascariensis*, but it bears no other determination or any indication that it is a duplicate of the type collection of *Euphorbia benoistii*. If there was any evidence that Lourteig was aware that the collection was the type of another species, then following Art 52 of the ICBN, *Capuronia madagascariensis* would be regarded as an illegitimate name, but this is not the case. Nuclear and chloroplast phylogenies of *Lythraceae* (GRAHAM, 2007), as well as studies of wood anatomy (BAAS, 1986), show *Capuronia* to be most closely related to *Galpinia* N. E. Br., a monotypic genus from South Africa.

Since the publication of *Capuronia* by LOURTEIG (1960), many additional specimens have been collected that broaden the known range and habitat of *C. benoistii*. An updated map of the species' distribution is provided in Fig. 1.

Acknowledgements

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