

# New taxa, names, and combinations in *Erica* (Ericaceae-Ericoideae) from Madagascar and the Comoro Islands

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## KEY WORDS

*Erica*,  
*Philippia*,  
Ericaceae,  
Madagascar,  
Comoro Islands.

## ABSTRACT

Twenty-two new combinations and thirteen new names in *Erica* are proposed for Malagasy and Comorian taxa formerly assigned to *Philippia*. In addition, two new species (*E. bosseri* Dorr, *sp. nov.* and *E. marojejyensis* Dorr, *sp. nov.*) and one new subspecies (*E. lecomtei* subsp. *ravinakely* Dorr, *subsp. nov.*) are described from Madagascar.

## RÉSUMÉ

*Nouveaux taxons, noms et combinaisons dans le genre Erica (Ericaceae-Ericoideae) à Madagascar et aux Comores.*

Vingt-deux combinaisons nouvelles et treize noms de remplacement (nomina nova) sont proposés dans le genre *Erica* pour les taxons malgaches et comoriens antérieurement placés dans le genre *Philippia*. De plus, deux espèces nouvelles (*E. bosseri* Dorr, *sp. nov.* et *E. marojejyensis* Dorr, *sp. nov.*) et une sous-espèce nouvelle (*E. lecomtei* subsp. *ravinakely* Dorr, *subsp. nov.*) sont décrites de Madagascar.

## MOTS CLÉS

*Erica*,  
*Philippia*,  
Ericaceae,  
Madagascar,  
Les Comores.

## INTRODUCTION

In describing *Philippia*, KLOTZSCH (1834) distinguished the genus by its unequal calyx (often referred to as a philippioid calyx) and by the absence of bracts ("bracteae nullae") by which he presumably meant the absence of the single bract and two bracteoles on the pedicel that characterize *Erica* L. He included six species in his new genus: three from the Mascarene Islands (*P. montana*, *P. abietina*, and *P. arborescens*), two from Madagascar (*P. goudotiana* and *P. tenuissima*) and one from the Cape of Good Hope (*P. chamissonis*). Subsequent to KLOTZSCH (1834), all ericoid taxa occurring in tropical Africa and on the islands in the western Indian Ocean that had a philippioid calyx were assigned to *Philippia*.

The unequal calyx, where the outermost segment or lobe was usually larger than the other three, and the absence of bracts, ostensibly sets *Philippia* apart from *Erica*. Traditionally, *Erica* has been interpreted as having "a single bract located anywhere on the pedicel, in varying degrees of recaulescence, but always free from the calyx, two bracteoles between the bract and calyx, and a calyx consisting of four more or less equal segments or lobes" (see OLIVER 1987, fig. 1a-c for a schematic diagram of an *Erica*-type flower). Recaulcescence as defined by WEBERLING (1989, fig. 116.1) is the shifting of the point of insertion of the bract from a basal position to a position along the axis of the flower (pedicel).

Problems with the characters used to distinguish *Philippia* from *Erica* have been noted by authors who have treated *Philippia* on a regional basis, e.g. PICHI-SERMOLLI & HEINIGER (1953), VERDOORN (1954), ROSS (1957), FRIEDMANN (1981), OLIVER (1984), and HILLIARD & BURTT (1985). Most recently OLIVER (1987, 1988), in re-examining the philippias of South Africa, assembled data to support the inclusion of *Philippia* in *Erica*. This requires a broader interpretation of *Erica*, but obviates the serious problems created by taxa that are intermediate between the two genera and by those in which ericoid and philippioid flowers occur in the same inflorescence.

In the Mascarene Islands, *Philippia abietina*

is one of the species that is intermediate between *Philippia* and *Erica*. FRIEDMANN'S (1981) comments with respect to this species are particularly insightful. In *P. abietina*, which apparently lacks the two bracteoles characteristic of *Erica* s.str., often the largest sepal is present as a free, partially recaulescent bract that can be found anywhere along the length of the pedicel from the point of insertion on the stem up to and joined or adnate with the calyx. Some of the flowers with free bracts have four, subequal calyx lobes (like *Erica* s.str.), but sometimes the sepal destined to be replaced by the bract is missing, leaving a space, and these flowers have only three sepals. This corresponds with what OLIVER (1987, fig. 1d) described as the "ericoid/philippioid intermediate" and like OLIVER'S example of *E. anomala* Hilliard & Burtt, inflorescences of *P. abietina* have no flowers with a typical ericoid flower (i.e., a single, free bract and two bracteoles), a significant number of flowers with the intermediate "ericoid/philippioid" condition, and a majority of flowers with the typical philippioid condition in which the bract is fully recaulescent. FRIEDMANN (1981) came to the conclusion that *P. abietina* was intermediate between *Erica* and *Philippia*. He justified keeping the species in *Philippia* because in any given specimen flowers with the *Philippia*-type condition outnumbered those with the intermediate "ericoid/philippioid" condition. It is now postulated (OLIVER, in prep.) that the two bracteoles are not absent in the philippioid flower but are in fact fused with the so-called lateral sepals.

The relationship between *Philippia* and *Erica* has been summarized and illustrated aptly by OLIVER (1987). Following OLIVER (1987, 1988) *Philippia*, as traditionally construed, is considered to be of polyphyletic origin, the tropical African, Malagasy, Mascarene, and South African species arising from different ancestral stock. *Philippia*, therefore, is relegated to synonymy under *Erica*.

The South African species have been transferred to *Erica* (OLIVER 1987) as have the Mascarene species (OLIVER 1993), the Flora Zambesiaca species (OLIVER 1992), and some of the East African species (BEENTJE 1990; DORR 1994). The species of *Philippia* that occur on the island

of Madagascar and on the Comoro Islands are transferred to *Erica* in this paper.

## PREVIOUS TREATMENTS OF MALAGASY AND COMORIAN PHILIPPAS

A monograph of *Philippia* (ALM & FRIES 1927) and a revision of the Malagasy species of the genus (PERRIER DE LA BATHIE 1927b) were published in the same year. While there do not appear to be problems with respect to priority, it is clear that the former was published before the latter<sup>1</sup>. ALM & FRIES (1927) recognized 18 species (two of them segregated as *Mitrastylus* Alm & T.C.E. Fr.) as occurring in Madagascar and two in the Comoro Islands. PERRIER DE LA BATHIE (1927b) recognized 34 species and 10 infraspecific taxa as occurring in Madagascar. (He did not deal with Comorian taxa).

PERRIER DE LA BATHIE's (1927b) revision presents several nomenclatural difficulties. In publishing new species and new varieties he explicitly designated them "sp. nov." and "var. nov.", respectively, and for the new species he also provided Latin diagnoses. In six instances, however, he published new names as trinomials. PERRIER DE LA BATHIE (1927b) clearly indicated that he considered one of these trinomials (i.e., *Philippia ciliata cinerea*) to be a variety. Two others he considered to be races, a rank that has no nomenclatural standing. Vexingly, he also made contradictory statements about the rank of three of the six trinomials suggesting in one case that the taxon (i.e., *Philippia cauliflora gigas*) was a variety or subspecies, or at the very least a well-defined local race! The Code (GREUTER et al.

1994, Art. 25.2) indicates that names published before 1 January 1953 without a clear indication of rank are nonetheless validly published provided that all other requirements for valid publication are fulfilled.

In a subsequent paper on *Philippia*, PERRIER DE LA BATHIE (1930) discussed how his revision and the monograph of ALM & FRIES (1927) differed and he described one new species and two new subspecies of Malagasy *Philippia*. He also reduced two of the species he had described earlier to subspecific rank. PERRIER DE LA BATHIE (1934) had one final occasion to summarize his classification of the Malagasy taxa of *Philippia* when he prepared a treatment of the Ericaceae for his *Catalogue des plantes de Madagascar*. In the *Catalogue* he recognized 33 species and 14 subspecific taxa. All six of the names that he had previously described (PERRIER DE LA BATHIE 1930) as trinomials were assigned subspecific rank in the *Catalogue*. Thus, with the exception of *Philippia ciliata cinerea* that had earlier been assigned the rank of variety in PERRIER DE LA BATHIE's (1927b) revision, the trinomials are first validly published as taxa at the rank of subspecies in PERRIER DE LA BATHIE's *Catalogue* (1934).

## ERICA IN MADAGASCAR

*Erica andringitrensis* (H. Perrier) Dorr & E.G.H. Oliv., **comb. nov.**

*Philippia andringitrensis* H. Perrier, Arch. Bot. Mém. 1(2): 16, t. IV (1927); Perrier de la Bathie, Mém. Acad. Malgache 3: 62 (1927), nom. tant.; Perrier de la Bathie, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935].—Type: *Perrier de la Bathie 14602*, Madagascar, massif de l'Andringitra, brousse éricoïde de 2400 m à la cime, Feb. 1922 (lecto-, P!, here designated; isolecto-, K!, P!). The lectotype was chosen from syntypes.

*Erica armandiana* Dorr & E.G.H. Oliv., **nom. nov.**

*Philippia capitata* Baker, J. Linn. Soc., Bot. 22: 499 (1887); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 28, fig. 10a (1927); Perrier de la Bathie, Arch. Bot. Mém. 1(2): 25 (1927); Perrier de la Bathie, Cat. Pl.

1. For nomenclatural purposes the monograph of ALM AND FRIES (1927) has priority. It was printed 19 Feb. 1927 ("Tryckt den 19 februari 1927"; ALM & FRIES, 1927: 49). In contrast, the revision by PERRIER DE LA BATHIE was ready for the press on 11 Dec. 1927 according to the "Table des Mémoires" in the bound copy of *Archives de botanique, mémoires* at Kew ("Le bon à tirer a été donné: ... pour le Mémoire 2, le 11 décembre 1927 ..."). PERRIER DE LA BATHIE (1927a) used several of the *Philippia* names he published in his revision (1927b) in an account of his explorations of the high mountains of Madagascar, also published in 1927. All of the names in this paper lack descriptions and are considered to be nomina nuda. The exact date of this account has not been determined. Given the late date, however, at which PERRIER DE LA BATHIE's revision (1927b) was published it would seem reasonable to assume that his account of exploration (1927a) appeared earlier.

Madag. (Ericaceae): 8 (1934) [1935]; non *Erica capitata* L., Sp. Pl.: 355 (1753); nec *Erica capitata* Thunb., Eric.: 17 (1785) (= *Erica bruniades* L.).—Type: *Baron 3481*, “Central Madagascar” (holo-, K!; iso-, P!, P-fragm!).

The epithet of the new name honors Armand RANDRIANASOLO, who revised the endemic genus *Sarcolaena* Thouars, Sarcolaenaceae (see DORR 1997) and who now is studying Malagasy Anacardiaceae.

***Erica barnettiana* Dorr & E.G.H. Oliv., nom. nov.**

*Philippia oppositifolia* H. Perrier, Arch. Bot. Mém. 1(2): 15, t. III (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935]; non *Erica oppositifolia* Andrews, Heathery 4: t. 178 (1807); Andrews, Col. Engr. Heaths. 3: 192 (1809) (= *Erica lutea* Bergius).—Type: *Perrier de la Bâthie 7410*, Madagascar, Cipolins, 1400 m, Pcc. d'Ambositra, Jun. 1912 (lecto-, P!, here designated; isolecto-, P-2 sheets!). Two sheets were marked “type” and one “chantillon type” by PERRIER DE LA BÂTHIE. The lectotype is the specimen marked “ch. type” and it matches the plate in PERRIER DE LA BÂTHIE’s (1927b, t. III) revision.

The epithet for this new name honors Lisa C. BARNETT, who not only collected plants in Madagascar in the 1980s but also made significant contributions to our understanding of Malagasy Sterculiaceae (see DORR 1997).

***Erica baroniana* Dorr & E.G.H. Oliv., nom. nov.**

*Philippia floribunda* Benth. in DC., Prodr. 7(2): 696 (1839); Baron, Rev. Madag. 7(1): 61 (1905); Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 27, fig. 9r (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 46 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 9 (1934) [1935]; non *Erica floribunda* J.C. Wendl., Eric. Icon. Descr. 2(14): 19 (1805) (= *Erica nudiflora* L.); nec *Erica floribunda* Lodd., Bot. Cab. 2(8): t. 176 (1818) (= *Erica sparsa* Lodd.).—*Salaxis floribunda* (Benth.) D. Dietr., Syn. Pl. 2: 1260 (1840).—Type: [lcg. *Lyall s.n.*?], Madagascar (holo-, K).

? *Philippia floribunda* Benth. subsp. *macrantha* H. Perrier, Arch. Bot. Bull. Mens. 1(2): 32 (1930); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 9 (1934) [1935].—Type: *Humbert 6221*, Madagascar,

massif de l’Andohahelo (Sud-Est), crêtes et rochers siliceux du sommet, 1800-1979 m, 21-22 Oct. 1928 (lecto-, P!, here designated; isolecto-, P-2 sheets!, US!).

The epithet honors the Rev. Richard BARON (1847-1907), who was the most important plant collector in 19th century Madagascar (DORR 1997).

***Erica betsileana* (H. Perrier) Dorr & E.G.H. Oliv., comb. nov.**

*Philippia betsileana* H. Perrier, Arch. Bot. Mém. 1(2): 11, t. II (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935].—Type: *Perrier de la Bâthie 7408*, Madagascar, environs du confluent de la Mania et de l’Ivato, Jun. 1912 (holo-, P!; iso-, P-3 sheets!). A specimen in PERRIER DE LA BÂTHIE’s herbarium marked “type” is considered to be the holotype. One of the isotypes is marked “n.sp.” and another one matches the photograph in PERRIER DE LA BÂTHIE’s (1927b, t. II) revision.

***Erica bojeri* Dorr & E.G.H. Oliv., nom. nov.**

*Philippia aristata* Benth. in DC., Prodr. 7(2): 696 (1839); Baron, Rev. Madag. 7(1): 61 (1905); Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 31, fig. 10f (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 29 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935]; non *Erica aristata* Andrews, Heathery 4: t. 152 (1807); Andrews, Col. Engr. Heaths 3: t. 147 (1809)<sup>2</sup>.—*Salaxis aristata* (Benth.) D. Dietr., Syn. Pl. 2: 1261 (1840).—Type: *Bojer s.n.*, interior of Madagascar (lecto-, K!, here designated). Two specimens at G-DC are possibly isolectotypes. Both were collected by BOJER and are labelled “Prov. Emerina” and annotated “*Salaxis ciliata*”. One was collected in 1833 and the other in 1839. The date, however, on which the holotype was collected is not known.

2. STAFLEU & COWAN (1976) confused two publications by Andrews, viz. *Coloured Engravings of Heaths* (quarto) and *The Heathery* (octavo). They cited the latter as the second edition of the former. Indeed, there were two editions of *The Heathery* (subsequently noted by Stafleu & Cowan, 1992); the first edition (1804-1812) was four volumes and the second edition (1845), corrected and enlarged, was six volumes (see also Sitwell & Blunt, 1956). Many of the plates in *The Heathery* are smaller versions of plates originally published in *Coloured Engravings of Heaths*, an independent work, also in four volumes (1802-1809), but only a single edition. The plates actually appeared in numerous fascicles from 1796-1830, but were mostly bound in four volumes with dated title pages 1802-1809.

The epithet for this new name honors the collector of the type material, Wenceslas BOJER (1795-1856), who first visited Madagascar in 1822 (see DORR 1997).

**Erica bosseri** Dorr, *sp. nov.*

*Erica madagascariensis* (H. Perrier) Dorr & E.G.H. Oliv. *affinis a qua imprimis differt pilis foliorum, forma magnitudineque sepalorum, forma corollae praecipue oris.*

**TYPUS.**—*Bosser 8832*, Madagascar, Ambohimandroso, bords de l'Onive, Dec. 1955 (holo-, P!; iso-, MO!, P-2 sheets!).

Low, erect or decumbent shrub, 0.3 m tall; profusely branched. Branches pubescent, reddish; younger and mature stems hispid with short, simple, nonglandular hairs intermingled with

longer, stouter gland-tipped hairs more or less perpendicular to the stem axis. Leaves 4-nate, spreading, somewhat remote and exposing the internodes, narrowly ovate, 0.8-1.2 mm long, 0.4-0.6 mm wide, base rounded, apex obtuse and terminating in a very stout, 0.8-1 mm long, gland-tipped hair diverging at an acute angle from the plane of the leaf blade, margin with short, simple, nonglandular hairs (also on the base of the apical gland-tipped hair) intermingled with longer, stouter gland-tipped hairs, pubescent abaxially with short, simple nonglandular hairs intermingled with longer, stouter gland-tipped hairs especially near the sulcus, glabrous adaxially, sulcus conspicuous, dilated, open below, and continuous with the petiole; petiole appressed, slightly dilated at the base, 0.4-0.6 mm long, glabrous except for a few simple hairs at the base.

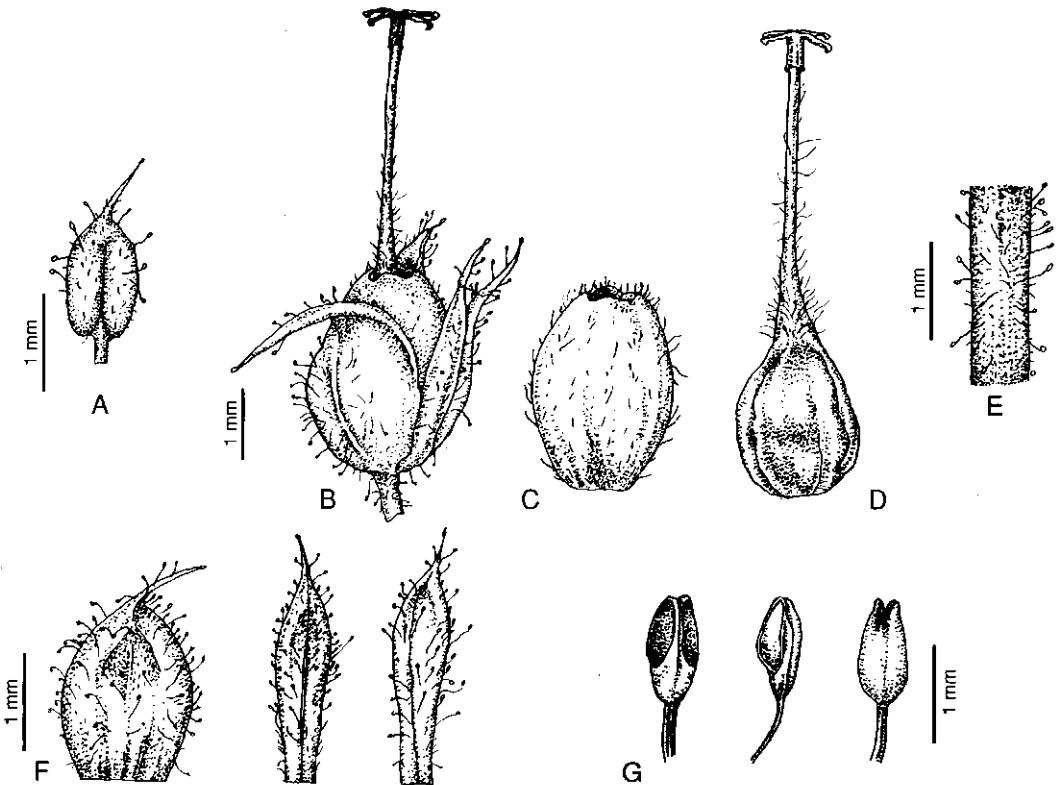


Fig. 1.—*Erica bosseri* Dorr: A, leaf; B, flower; C, corolla; D, gynoecium; E, stem; F, abaxial and two lateral sepals; G, anther, front, side, and back views. All drawn from *Bosser 10939* (MO).

**Inflorescence:** flowers 4-5-nate, terminal on short lateral branchlets clustered toward the ends of the branches, in nutant, subcalyculate umbels or subumbels, the calyculus formed by an involucre of ca. 15-20 slightly differentiated leaves; pedicel 0.8-1 mm long, sparsely pubescent with gland-tipped hairs; bract fully recalcrescent as the abaxial lobe of the calyx; bracteoles wanting. Calyx 4-lobed, the lobes unequal, all lobes with a broad, dorsal sulcus toward the apex; the largest lobe abaxial, broadly obovate, 2.8-3 mm long, 1.4-1.6 mm wide, exceeding the corolla in length, almost separate from the other lobes; lateral lobes more or less equal, narrowly oblanceolate to oblanceolate, 1.6-2.5 mm long, 0.5-0.6 mm wide, slightly joined at the base; all lobes terminated by a stout, gland-tipped hair and hispid with short, simple nonglandular hairs intermingled with larger, stouter gland-tipped hairs. Corolla 4-lobed, 2.2-2.4 mm long, globose urceolate, the mouth noticeably constricted, sparingly pubescent with simple nonglandular hairs especially on the margins of the lobes; lobes ca. 0.2 mm long. Stamens 6, included; filaments free or slightly joined at the base, ribbon-like, 0.6 mm long, glabrous; anthers sub-basally attached, 1.2-1.4 mm long, muticous, free, minutely papillate at the apex; pore large, 2/3 the length of the cell; pollen in tetrads. Ovary (3-)4-locular with numerous ovules per locule, ovoid, 1-0.8 mm tall, faintly longitudinally ridged, glabrous; style long, 3.6-4 mm long, tomentose with simple, nonglandular hairs; stigma recurved, sheathing the apex of the style, stigmatic lobes 4, conspicuous, perpendicular to the style, 0.5-0.6 mm long, exerted, glabrous. Fruit a loculicidal capsule; seeds numerous per locule, orbicular, 0.4 × 0.4 mm, smooth.—Fig. 1.

**DISTRIBUTION AND HABITAT.**—Apparently confined to marshes dominated by *Paratheria prostrata* Griseb. (Poaceae) in the Ankaratra Mountains; 1500-2000 m.

**PARATYPES.**—MADAGASCAR (Center): *Bosser* 8697, Nanokely (Ankaratra), Nov. 1955 (GH, K, MO, P); *Bosser* 10939, Ankaratra, entre Antsampandravana et Nanokely, Feb. 1957 (MO); *Peltier* 4575, Nanokely, 28 Dec. 1963 (P).

*Erica bosseri* appears to be related to *E. madagascariensis*, but differs with respect to leaf shape, orientation, and pubescence; sepal shape and pubescence; and corolla shape. In *E. bosseri* the leaves terminate in glandular spines that form an acute angle with the plane of the leaf blade; the calyx lobes are broadly obovate or narrowly oblanceolate to oblanceolate and have glandular pubescence; the corolla mouth is very narrow; and the anthers are included within the corolla.

The specific epithet honors Jean BOSSER who first collected this species and who has contributed greatly to our knowledge of the floras of Madagascar and the Mascarene Islands (see DORR 1997).

***Erica boutonii* Dorr & E.G.H. Oliv.,  
nom. nov.**

*Philippia ciliata* Benth. in DC., Prodr. 7(2): 695 (1839); Baron, Rev. Madag. 7(1): 61 (1905); Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 19, fig. 9d (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 17, t. V (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935]; non *Erica ciliata* Bubani, Fl. Pyren. 2: 10 (1899) (= *Erica ciliaris* L.).—*Salaxis ciliata* (Benth.) D. Dietr., Syn. Pl. 2: 1260 (1840), non *Salaxis ciliata* Benth. in DC., Prodr. 7(2): 711 (1839) (= *Nagelocarpus serratus* (Thunb.) Bullock).—Type: *Bouton s.n.*, Madagascar, "Environs de Tananarive", 1838 (lecto-, K!, here designated; isolecto-, G-DC!).

*Philippia ciliata* Benth. var. *cinerea* H. Perrier, Arch. Bot. Mém. 1(2): 18 (1927), "*Philippia ciliata cinerea*".—*Philippia ciliata* Benth. subsp. *cinerea* (H. Perrier) H. Perrier, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935].—Type: *Perrier de la Bâthie* 16944, Madagascar, Tsinjoarivo, *savoka* à *Philippia*, 1400 m, Feb. 1925 (K, P-3 sheets). A lectotype is still to be designated from among the duplicates at P.

The epithet of this new name honors Louis S. BOUTON (1799-1878), who collected the type material, and who played a prominent role in the Royal Society of Arts and Sciences of Mauritius (see DORR 1997).

***Erica cryptoclada* (Baker) Dorr & E.G.H. Oliv.,  
comb. nov.**

*Philippia cryptoclada* Baker, J. Linn. Soc., Bot. 22: 499

(1887); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 24, t. 1b, fig. 9k (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 40 (1927), excl. synonym; Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935].—Type: *Baron 3499*, "Central Madagascar" (holo-, K!; iso-, P-2 sheets!, P-fragm!). The type locality may be "Sommet du Vavavato" (see BARON 1905).

*Philippia senescens* Baker, J. Linn. Soc., Bot. 25: 331 (1890); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 22 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 24, fig. 9j (1927).—Type: *Baron 5541*, Madagascar, North Ankap (lecto-, K!, here designated; isolecto-, P!, P-fragm!).

? *Philippia cryptoclada* Baker var. *hybrida* H. Perrier, Arch. Bot. Mém. 1(2): 42 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 9 (1934) [1935].—Type: *Perrier de la Bâthie 16689*, Madagascar, Isalo, sous les *Tapia*, 900 m, Oct. 1924 (lecto-, P!, here designated; isolecto-, P-2 sheets!). The lectotype was chosen from the three syntypes cited by PERRIER de la BÂTHIE (1927b) since it was the only collection number marked "type" by PERRIER de la BÂTHIE. The lectotype is the sheet marked "var. *hybrida* nov. var. (type)". The isolectotypes are the sheets marked "var. *hybrida* type".

***Erica danguyana* (H. Perrier) Dorr & E.G.H. Oliv., comb. nov.**

*Philippia danguyana* H. Perrier, Arch. Bot. Mém. 1(2): 17 (1927), "*Danguyana*"; Perrier de la Bâthie, Arch. Bot. Bull. Mens. 4(3): 32 (1930), "*Danguyana*"; Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 9 (1934) [1935], "*Danguyana*".—Type: *Perrier de la Bâthie 7337*, Madagascar, bois de *Tapia* des environs d'Antsirabe, 1600 m, Oct. 1913 (lecto-, P!, here designated; isolecto-, P!).

***Erica densata* Dorr & E.G.H. Oliv., nom. nov.**

*Philippia densa* Benth. in DC., Prodr. 7(2): 695 (1839); Baron, Rev. Madag. 7(1): 61 (1905); Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 23, fig. 9m (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 22 (1927), pro parte, quoad *Baron 3497*; Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 9 (1934) [1935], pro parte; non *Erica densa* Andrews, Col. Engr. Hearths 3: t. 163 (1809) (= *Erica ventricosa* Thunb.).—*Salaxis densa* (Benth.) D. Dietr., Syn. Pl. 2: 1260 (1840).—Type: *Bojer s.n.*, Madagascar (holo-, G-DC!; iso-, K!).

*Salaxis densa* Bojer ex Benth. in DC., Prodr. 7(2): 695 (1839), nom. nud., pro syn.

PERRIER DE LA BÂTHIE (1927b, 1934) took a broad view of *Philippia densa* and among the specimens he cited only *Baron 3497* agrees with the type.

***Erica goudotiana* (Klotzsch) Dorr & E.G.H. Oliv., comb. nov.**

*Philippia goudotiana* Klotzsch, Linnaea 9: 355 (1834) [1835], "*Goudotiana*"; Benth. in DC., Prodr. 7(2): 695 (1839), "*Goudotiana*"; Vathek, Abh. Naturwiss. Vereine Bremen 9(2): 123 (1885); Baron, Rev. Madag. 7(1): 61 (1905), "*Goudotiana*"; Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 25, t. 1c,d, fig. 9n (1927), "*Goudotiana*".—*Salaxis goudotiana* (Klotzsch) D. Dietr., Syn. Pl. 2: 1260 (1840).—*Philippia floribunda* Benth. var. *goudotiana* (Klotzsch) H. Perrier, Arch. Bot. Mém. 1(2): 50 (1927), "*Goudotiana*".—*Philippia floribunda* Benth. subsp. *goudotiana* (Klotzsch) H. Perrier, Cat. Pl. Madag. (Ericaceae): 9 (1934) [1935], "*Goudotiana*".—Syntypes: *Goudot s.n.*, Madagascar (B†); *Bojer s.n.*, Madagascar (B†). A lectotype is still to be designated from among what appear to be duplicates of these collections.

*Philippia tenuifolia* Benth. in DC., Prodr. 7(2): 696 (1839); Baron, Rev. Madag. 7(1): 61 (1905); Palacky, Cat. 3: 22 (1907).—*Salaxis tenuifolia* (Benth.) D. Dietr., Syn. Pl. 2: 1260 (1840).—Type: [leg. *Bouton?*], Madagascar (holo-, K). Type material ("v. s. sp. in herb. Hooker") is still to be located at Kew.

*Philippia spontanea* Bojer ex Palacky, Cat. 3: 22 (1907), nom. tant.

*Philippia cauliflora* Hochr., Annuaire Conserv. Jard. Bot. Genève 11: 81 [47] (1908); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 32 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935].—Type: *Rusillon 23*, Madagascar, Imerina, fossés à Marmarivo (Miarimarivo), 1300 m, Mar. 1902 (holo-, G!; iso-, P-fragm!).

*Philippia cauliflora* Hochr. var. *gigas* H. Perrier, Mém. Acad. Malgache 3: 53 (1927), nom. tant.—*Philippia cauliflora gigas* H. Perrier, Arch. Bot. Mém. 1(2): 34 (1927) [rank ambiguous].—*Philippia cauliflora* Hochr. subsp. *gigas* (H. Perrier) H. Perrier, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935].—Syntypes: *Perrier de la Bâthie 7357*, Mt. Tsaratanana, Oct. 1912 (syn-, P!); *Perrier de la Bâthie 16138*, Mt. Tsaratanana, Apr. 1924 (P-3 sheets!). A lectotype is still to be designated.

*Philippia cauliflora tenuis* H. Perrier, Arch. Bot. Mém. 1(2): 34 (1927) [rank ambiguous].—*Philippia cauli-*

*flora* Hochr. subsp. *tenuis* (H. Perrier) H. Perrier, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935].—Syntypes: *Bojer s.n.*, “Madagascar” (K); *Humbert 2211*, Madagascar, “Gorges de la Mandraka”, ca. 1200 m (P); *Perrier de la Bâthie 12474*, Madagascar, “des environs d’Itremo (W. Betsileo)”, ca. 1500 m (P); *Perrier de la Bâthie 17129*, Madagascar, “Beparasy sur le Mangoro”, ca. 800 m (P); *Perrier de la Bâthie 17225*, Madagascar, “I’sinjoarivo”, 1400 m (P); *Scott Elliot 2238*, Madagascar, Angalampena (Interior), Feb. (P!). A lectotype is still to be designated.

*Philippia floribunda orientalis* H. Perrier, Arch. Bot. Mém. 1(2): 51 (1927) [“as race”].—*Philippia floribunda* Benth. subsp. *orientalis* (H. Perrier) H. Perrier, Cat. Pl. Madag. (Ericaceae): 9 (1934) [1935].—*Philippia floribunda* Benth. var. *orientalis* (H. Perrier) Lavier-George, Bull. Mus. Natl. Hist. Nat., sér. 2, 8(2): 186 (1936).—Syntypes: *Perrier de la Bâthie 7345*, Madagascar, sur les dunes des environs de Tamatave, Jul. 1914 (P-2 sheets!); *Perrier de la Bâthie 7394*, Madagascar, dunes littorales, Bas Matitanana, Oct. 1911 (P!); *Perrier de la Bâthie 12595*, Madagascar, alluvions sèches du haut Tankara [= Iantara], ca. 700 m, (bassin du Manampatra), May 1919 (P-3 sheets!). A lectotype is still to be designated.

There appear to be several well-marked infra-specific taxa within the *Erica goudotiana* species-complex. Formal recognition of these taxa awaits further study.

***Erica hebeclada* Dorr & E.G.H. Oliv.,  
nom. nov.**

*Philippia trichoclada* Baker, J. Linn. Soc., Bot. 22: 500 (1887); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 22 (1907); Alm & Fries, Kungl. Svenska Vetenskapskad. Handl., ser. 3, 4(4): 17, fig. 9b (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 26 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 12 (1934) [1935]; non *Erica trichoclada* Guthrie & Bolus in Dyer, Fl. Cap. 4(1): 147 (1905).—Type: *Baron 3480*, “Central Madagascar” (holo-, K!; iso-, K!, P!, P-fragm.).

? *Philippia trichoclada* Baker subsp. *latisejala* H. Perrier, Arch. Bot. Bull. Mens. 4(3): 30 (1930); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 12 (1934) [1935].—Type: *Humbert 2862*, Madagascar, Isalo, haute vallée de la Sambalineto, grès, 1000 m, Oct. 1924 (P-2 sheets!). A lectotype is still to be designated.

? *Philippia trichoclada* Baker var. *albescens* H. Perrier, Arch. Bot. Mém. 1(2): 28 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 12 (1934) [1935].—Syntypes: *Perrier de la Bâthie 13601*, Madagascar, Massif de l’Andringitra de 1800 m à la

cime, Apr. 1922 (K-2 sheets!, P-3 sheets!, TAN!); *Perrier de la Bâthie 14731*, Madagascar, Mt. Tsiafajavona, ca. 2000 m. (P!). A lectotype is still to be designated.

? *Philippia trichoclada* Baker var. *subalbida* H. Perrier, Arch. Bot. Mém. 1(2): 27 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 12 (1934) [1935].—Syntypes: *Perrier de la Bâthie 7379*, Madagascar, Massif de l’Andringitra, 2000 m, Sep. 1911 (P!); *Perrier de la Bâthie 7396*, Madagascar, Massif de l’Andringitra, 1600 m (P!); *Perrier de la Bâthie 7397*, Madagascar, Massif de l’Andringitra, 1600 m, Sep. 1911 (P-3 sheets!). A lectotype is still to be designated.

***Erica humbertii* (H. Perrier) Dorr &  
E.G.H. Oliv., comb. nov.**

*Philippia humbertii* H. Perrier, Arch. Bot. Mém. 1(2): 8, t. II (1927), “*Humberti*”; Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935] “*Humberti*” non *Philippia humbertii* Staner, Ann. Soc. Sci. Bruxelles, sér. B, 53: 160 (1933), “*Humberti*” (= *Erica trimera* (Engl.) Beentje).—Type: *Perrier de la Bâthie 14596*, Madagascar, Domaine Central, brousse éricoïde, versant Est du Massif de l’Andringitra, vers 2500 m, Feb. 1921 (lecto-, P!, here designated; isolecto-, P!). The lectotype was chosen from among the duplicates of the type.

***Erica ibityensis* (H. Perrier) Dorr &  
E.G.H. Oliv., comb. nov.**

*Philippia ibityensis* H. Perrier, Arch. Bot. Mém. 1(2): 21, t. III (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935]; Lavier-George, Bull. Mus. Natl. Hist. Nat., sér. 2, 8(2): 193 (1936), “*ibityensis*”.—Type: *Perrier de la Bâthie 7412*, Madagascar, Quartzite, Mt. Ibity, jusqu’à 2200 m (la cime) depuis 1400 m, June 1912 (lecto-, P!, here designated; isolecto-, P-2 sheets!). PERRIER DE LA BÂTHIE marked one duplicate of the lectotype “n.sp.”, a second “type”, and a third “Echantillon type”. The last, which also matches the material figured in his revision (1927b, t. III), is selected as lectotype.

***Erica imerinensis* (H. Perrier) Dorr &  
E.G.H. Oliv., comb. nov.**

*Philippia imerinensis* H. Perrier, Arch. Bot. Mém. 1(2): 39, t. IX (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935].—Type: *Perrier de la Bâthie 17082*, Madagascar, très commun sur la rive droite de l’Onive au sud de



Tsinjoarivo, savoka à *Philippia* vers 1400 m (lecto-, P!, here designated; isolecto-, G!, K-2 sheets!, P-2 sheets!, TAN!). The lectotype is the specimen, chosen from the syntypes, that was marked "échantillon type" by PERRIER DE LA BÂTHIE. There are three branchlets on the sheet. The right-hand one matches the right-hand branchlet in the plate in PERRIER DE LA BÂTHIE's (1927b, t. IX) revision.

**Erica isaloensis** (H. Perrier) Dorr & E.G.H. Oliv., **comb. nov.**

*Philippia isaloensis* H. Perrier, Arch. Bot. Mém. 1(2): 13 (1927); Perrier de la Bâthie, Arch. Bot. Bull. Mens. 4(3): 30 (1930); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935].—Type: Perrier de la Bâthie 16608, Madagascar, Rocailles, Isalo, vers 900 m, Oct. 1924 (lecto-, P!, here designated; isolecto-, P-2 sheets!). All three of the sheets in the herbarium at P are marked "n.sp." and two of these are also marked "type" by PERRIER DE LA BÂTHIE. One of the latter two sheets is selected as the lectotype.

PERRIER DE LA BÂTHIE (1930) cited this species as an example of a species with a stigma type intermediate between *Philippia* and *Mitrastylus*.

**Erica jumellei** (H. Perrier) Dorr & E.G.H. Oliv., **comb. nov.**

*Philippia jumellei* H. Perrier, Arch. Bot. Mém. 1(2): 19 (1927), "Jumellei"; Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935], "Jumellei".—Type: Perrier de la Bâthie 17590, Madagascar, parmlés *Tapia* (*Uapaca* sp.) près d'Arivonimamo, 1400 m, Mar. 1926 (lecto-, P!, here designated; isolecto-, G!, K!, P-3 sheets!). The lectotype is the specimen marked "échantillon type". Other duplicates are marked "sp. nov." or "sp. nov. type".

**Erica lecomtei** (H. Perrier) Dorr & E.G.H. Oliv., **comb. nov.**

*Philippia lecomtei* H. Perrier, Arch. Bot. Mém. 1(2): 38, t. VIII (1927), "Lecomtei"; Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935], "Lecomtei".—Type: Perrier de la Bâthie 7354, Madagascar, Mont Ibity au sud d'Antsirabe, brousse éricoïde de 2000 à 2300 m, Feb. 1914 (lecto-, P!, here designated; isolecto-, P-3 sheets!). The specimen chosen as lectotype is from PERRIER DE LA BÂTHIE's herbarium. The specimen that was figured in his revision (1927b, t. VIII) could not be located.

### Key to subspecies of *Erica lecomtei*

1. Leaves narrowly linear-lanceolate, 5-10 mm long; petiole 1.2-1.6(-2) mm long. Pedicel 1.5-2.5 mm long. Filaments slightly joined at the base, appearing free. Stigma conspicuously exerted ..... 1a. **E. lecomtei** subsp. **lecomtei**
- 1'. Leaves lanceolate, 2-4 mm long; petiole 0.5-1 mm long. Pedicel subsessile, to ca. 0.5 mm long. Filaments joined for 3/4 their length. Stigma slightly to not exerted ..... 1b. **E. lecomtei** subsp. **ravinakely**

#### 1a. *Erica lecomtei* subsp. **lecomtei**

Erect, virgate shrubs, 0.75-2(-4) m tall. Leaves 5-10 mm long, 0.8-1.5 mm wide, narrowly linear-lanceolate; petiole 1.2-1.6(-2) mm long. Inflorescence: flowers (2-)3-5-nate, involucre bracts ca. 4-5 mm long; pedicel 1.5-2.5 mm long. Calyx 4-lobed, the largest lobe broadly ovate, 3.5-5 mm long, 2-2.5 mm wide, lateral lobes narrowly ovate to ovate, 3-3.5 mm long, 1.5-2 mm wide. Corolla ca. 4.5 mm long. Filaments slightly joined at the base (appearing free), ca. 1-1.5 mm long; anthers densely papillate; pore 2/3 to 3/4 the length of the cell. Style 2.5 mm long, sparingly pubescent with simple, nonglandular hairs; stigma ca. 1.5-2 mm broad,

conspicuously exerted. Seeds 0.8 × 0.4 mm.

DISTRIBUTION AND HABITAT.—Open woodland, heath thicket, and especially rocky (quartzite) outcrops on Ibity, Itremo, and other high mountains in the Central Plateau; 1500-2500 m.

MATERIAL EXAMINED.—MADAGASCAR (Centre-Ouest): Bosser 9995, Itremo, Sep. 1956 (P, TAN); Bosser 19604, Ambatomenaloha, Itremo, Apr. 1964 (MO, P, TAN); Capuron 22664-SF, sur la crête terminale du massif de l'Ibity, au Sud d'Antsirabe, 16 Apr. 1963 (P, TEF); Decary 13065, environs d'Ambatofinandrahana, 19 Feb. 1938 (P); Decary 13248, *ibid.*, 23 Feb. 1938 (P, TAN); Descoings 935, Mt. d'Itremo, Jun. 1955 (MO, TAN); Dorr & Rakotozafy 4500, Prov. Fianarantsoa, Mt. Ibity (Sud), W of Ambohimanjaka, 21 Dec. 1985 (BR, GH, K,

MO, NY, P, STE, TAN); *Dorr et al.* 3858, Prov. Fianarantsoa, Mt. Ibity (Sud), 6 Mar. 1985 (MO, P, TAN); *Guillaumet* 3603bis, Itremo, 1 Dec. 1970 (P, TAN); *Guillaumet* 4258, crête d'itacolumnite, Itremo, 12 Jan. 1973 (P, TAN); *Guillaumet s.n.*, Ibity sud, Jan. 1973 (P); *Homolle* 1849, entre Ambodivoangy et les Chutes, 13 Dec. 1944 (P); *Humbert* 28253, montagnes à l'Ouest d'Itremo (Ouest Betsileo), 17-22 Jan. & 18-22 Apr. 1955 (P); *Keraudren-Aymonin & Aymonin* 25782, Itremo, 1 Dec. 1970 (P); *Perrier de la Bâthie* 7354, Mt. Ibity au sud d'Antsirabe, Feb. 1914 (lecto-, P!; isolecto-, P-3 sheets!); *Perrier de la Bâthie* 12371, entre la Mania et l'Ivato, Feb. 1919 (syntype of *Philippia lecomtei*, P-3 sheets!); *Perrier de la Bâthie* 17890, Mt. Ibity, Feb. 1927 (G, K, P); *Phillipson et al.* 4022, Prov. Antananarivo, N end of Mt. Ibity, 27 km SW of Antsirabe, near cement works (20°05'30"S, 47°00'00"E), 2 Apr. 1992 (MO, US).

**1b. *Erica lecomtei* subsp. *ravinakely* Dorr, subsp. nov.**

A *Erica lecomtei* (H. Perrier) Dorr & E.G.H. Oliv. subsp. *lecomtei*, *foliis brevioribus; flores brevioribus sessilibusque, differt.*

**TYPUS.**—*Humbert* 28743, Madagascar, Plateaux et vallées de l'Isalo à l'Ouest de Ranohira, 29 Jan.-2 Feb. & 8-10 Apr. 1955 (holo-, P!).

Erect shrubs to 1.5 m tall. Leaves 2-4 mm long, 0.8-1.5 mm wide, lanceolate; petiole 0.5-1 mm long. Inflorescence: flowers (1)-2-5-nate, involucral bracts 2-2.8 mm long; pedicel to ca. 0.5 mm long. Calyx 4-lobed, the largest lobe narrowly to broadly ovate, 3-3.5 mm long, 1.2-2 mm wide, lateral lobes lanceolate to ovate, 2-2.5 mm long, 0.7-1.5 mm wide. Corolla ca. 3-3.5 mm long. Filaments joined for 3/4 their length, ca. 0.8 mm long; anthers papillate, sparingly pubescent with simple hairs; pore 2/3 the length of the cell. Style 1.5 mm long, glabrous; stigma ca. 1.5 mm broad, slightly to not exerted. Seeds 0.6 × 0.4 mm.—Fig. 2.

**DISTRIBUTION AND HABITAT.**—Confined to sandstone and siliceous sand on the Isalo Plateau and vicinity; 700-1250 m.

**PARATYPES.**—MADAGASCAR (Centre, Pentec Occidentales): *Cours* 5044, Distr. d'Ihosy, poste de Ranohira, canton de Ranohira, entre Tametsoa et Sahanafa au Nord de l'Isalo, 30 Jan. 1955 (P); *Decary* 16369, massif de l'Isalo, 1 Nov. 1940 (P); *Decary*

16373, *ibid.* (P); *Humbert* 19536, plateaux et vallées de l'Isalo, partie Nord, 28 Nov.-4 Dec. 1946 (P); *Humbert* 29851, plateaux et vallées de l'Isalo à l'Ouest de Ranohira, 29 Jan.-2 Feb. & 8-10 Apr. 1955 (P); *Jacquemin* H368J, Isalo, lisière Est du Plateau de Korobe en bordure des Cañons, 24 May 1967 (P); *Perrier de la Bâthie* 7403, Isalo, Jul. 1910 (P).

This subspecies differs from the nominate subspecies in a large number of quantitative characters; leaf length (2-4 versus 5-10 mm long), petiole length (0.5-1 versus 1.2-1.6(-2) mm long), pedicel length (ca. 0.5 versus 1.5-2.5 mm long), abaxial calyx lobe size (3-3.5 versus 3.5-5 mm long), lateral calyx lobe size (2-2.5 versus 3-3.5 mm long), corolla length (ca. 3-3.5 versus ca. 4.5 mm long), and style length (1.5 versus 2.5 mm long). In addition, leaf shape is different (lanceolate versus narrowly linear-lanceolate); degree of connation of filaments is marked (joined 3/4 their length versus slightly joined at the base and appearing free); and degree of exertion of stigmas is distinct (slightly to not exerted versus conspicuously exerted). In other characters, especially those relating to pubescence and general aspects of the stem, leaves, ovary, style, and stigma the nominate and new subspecies are similar.

The epithet of the new subspecies is composed of the Malagasy words "ravina" and "kely", which combined translate as "small leaf".

***Erica leucoclada* (Baker) Dorr & E.G.H. Oliv., comb. nov.**

*Philippia leucoclada* Baker, J. Linn. Soc., Bot. 25: 331 (1890); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 23, fig. 9f (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 20 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935].—Type: *Baron* 5485, Madagascar, North Antsihanaka (lecto-, here designated, K!; isolecto-, K!, P!). The lectotype was chosen from among the two collections at Kew available to J.G. BAKER for study.

***Erica lyallii* Dorr & E.G.H. Oliv., nom. nov.**

*Philippia parviflora* Benth. in DC., Prodr. 7(2): 695 (1839); Vatke, Abh. Naturwiss. Vereine Bremen

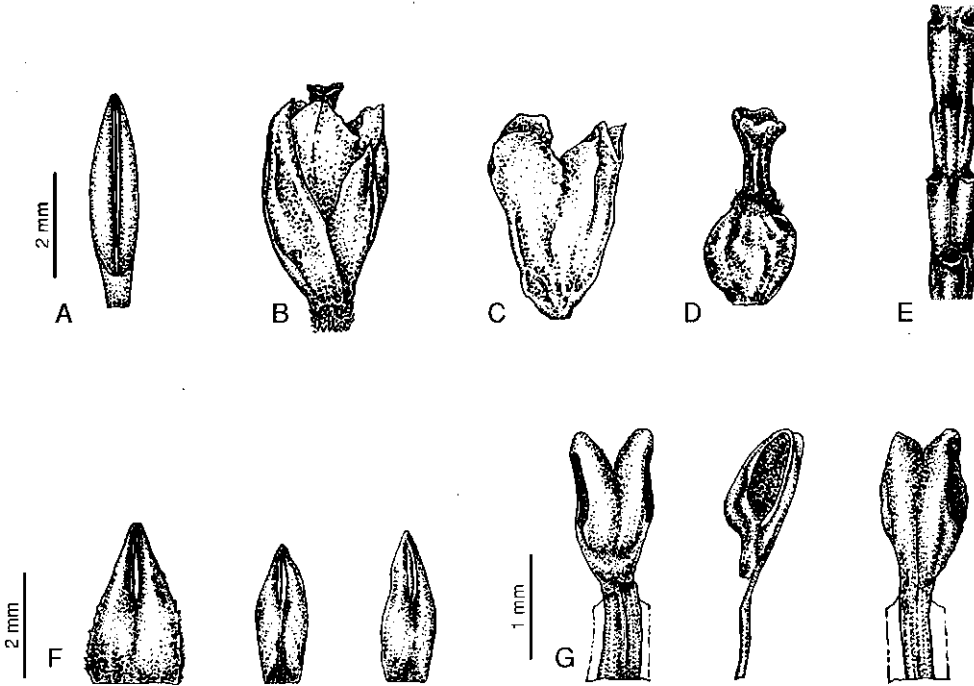


Fig. 2.—*Erica lecomtei* subsp. *ravinakely* Dorr: A, leaf; B, flower; C, corolla; D, gynoecium; E, stem; F, abaxial and two lateral sepals; G, anther, front, side, and back views. All drawn from Humbert 28743 (P).

9(2): 123 (1885); Baron, Rev. Madag. 7(1): 61 (1905); Palacky, Cat. 3: 22 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 26, fig. 9q (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 52 (1927); non *Erica parviflora* L., Sp. Pl., ed. 2.: 506 (1762).—*Salaxis parviflora* (Benth.) D. Dietr., Syn. Pl. 2: 1260 (1840).—*Philippia floribunda* Benth. subsp. *parviflora* (Benth.) H. Perrier, Arch. Bot. Bull. Mens. 4(3): 32 (1930); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935].—Type: *Lyall 351*, Madagascar (holo-, K!).

*Philippia floribunda glandulosa* H. Perrier, Arch. Bot. Mém. 1(2): 50 (1927) [as "race"].—*Philippia floribunda* Benth. subsp. *glandulosa* (H. Perrier) H. Perrier, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935].—*Philippia floribunda* Benth. var. *glandulosa* (H. Perrier) Lavier-George, Bull. Mus. Natl. Hist. Nat., sér. 2, 8(2): 188 (1936).—Syntypes: *Perrier de la Bâthie 7335*, Madagascar, *savoka* à *Philippia*, ca. 200 m, Mt. Tsiafajavona (P); *Perrier de la Bâthie 7417*, Madagascar, rocailles du Mt. Ibity, 1800 m (P); *Perrier de la Bâthie 14727*, Madagascar, *savoka* à *Philippia*, ca. 200 m, Mt. Tsiafajavona (P). A lectotype is still to be designated.

*Philippia tenuifolia* auct. non Benth.: Hochr.,

Annuaire Conserv. Jard. Bot. Genève 11: 81 [47] (1908).

*Philippia floribunda* auct. non Benth.: Hochr., Annuaire Conserv. Jard. Bot. Genève 11: 82 [48] (1908).

Robert LYALL (1790-1831), who visited Madagascar to represent British interests, made an important collection of plants in 1828-1829 while awaiting permission to leave the island (see DORR 1997).

***Erica macrocalyx* (Baker) Dorr & E.G.H. Oliv., comb. nov.**

*Philippia macrocalyx* Baker, J. Linn. Soc., Bot. 20: 195 (1883); Baron, Rev. Madag. 7(1): 61 (1905); Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 20, fig. 9e (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 21 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935].—Type: *Baron 1804*, "Central Madagascar" (lecto-, K!, here designated; isolecto-, BM!, P!, P-fragm!). The type

locality may be "Pied Nord de l'Ankaratra" (see BARON 1905).

***Erica madagascariensis*** (H. Perrier) Dorr & E.G.H. Oliv., **comb. nov.**

*Philippia pilosa* Baker, J. Linn. Soc., Bot. 25: 332 (1890); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 22 (1907); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 8 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 12 (1934) [1935]; non *Erica pilosa* Lodd., Bot. Cab. 7(1): t. 606 (1822) (= *Erica villosa* J.C. Wendl.).—*Mitrastylus pilosus* (Baker) Alm & T.C.E. Fr., Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 44, t. 5b,c, fig. 13b (1927).—Type: *Baron 5186*, Madagascar, "Ankaratra Mountain" (lecto-, K!, here designated; isolecto-, P!, P-fragm.). BARON (1905) later gave the distribution of this species as "Près de l'Ankaratra".

*Philippia madagascariensis* H. Perrier, Arch. Bot. Mém. 1(2): 7, t. I (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935].—Type: *Perrier de la Bâthie 1317bis*, Madagascar, montagnes de la haute Mania, rocailles humides, quartzites, 1800 m, May 1920 (lecto-, P!, here designated; isolecto-, K-2 sheets!, P!, TAN!). The specimen selected as lectotype was marked "n. sp." by PERRIER DE LA BATHIE and is the plant figured in the left-hand portion of the plate in his revision (1927b, t. I).

***Erica marojejyensis*** Dorr, **sp. nov.**

*Erica viguieri* (H. Perrier) Dorr & E.G.H. Oliv. *affinis a qua imprimis differt foliis brevioribus et inflorescentia paucifloribus.*

TYPUS.—*Jacquemin H626f*, Madagascar, sommet du Marojejy, 29 Oct. 1967 (holo-, P!).

Low shrub or shrubby tree, 0.5(-?) m tall; somewhat branched. Branches glabrate in age, with reddish, fibrous bark; younger stems grayish-white tomentose, completely covered by infrafoliar ridges that slough off with age, the infrafoliar ridges densely grayish-white tomentose with short, simple, nonglandular hairs; older stems essentially lacking infrafoliar ridges. Leaves 3-nate, spreading (rarely ascending), clustered at the ends of branchlets and concealing the stem, 2.5-5.2 mm long, 1.5-2 mm wide, lanceolate, base cuneate to truncate, apex acute, margin scarious, very slightly denticulate, sulcus conspicuous, narrow, ca. 3/4 the length of the blade, not

continuous with the petiole, blade glabrous abaxially, pubescent adaxially, especially toward the base and middle with short, simple, nonglandular hairs; petiole appressed, slightly dilated at the base, 0.7-1 mm long, glabrous except for a few simple, nonglandular hairs along the margin.

Inflorescence: flowers 3-nate, in two whorls, in terminal, nutant, umbel-like racemes, subtended by an involucre of slightly-differentiated leaves, involucre bracts 3-3.5 mm long, dilated basally, ciliate along the margins of the base; pedicel short, to 2-3 mm long, densely whitish-tomentose; bract fully recaulescent as the abaxial lobe of the calyx; bracteoles wanting. Calyx 4-lobed, glabrous, the lobes unequal, all lobes with a narrow, dorsal sulcus toward the apex; the largest lobe abaxial, narrowly or broadly ovate, 4-5 mm long, 1.8-2.8 mm wide, slightly longer than the corolla in length, almost separate from the other lobes, lateral lobes more or less equal, lanceolate or narrowly ovate to ovate, often asymmetrical, 2.6-4 mm long, 1.5-2.5 mm wide, slightly joined at the base; all lobes glabrous, the margins ciliate with simple, nonglandular hairs and small glands. Corolla 4-lobed, ca. 3-4.5 mm long, narrowly ovoid, glabrous, lobes ca. 0.7-1 mm long, incurved. Stamens 8, included; filaments joined for ca. 3/4 their length, geniculate, ribbon-like, ca. 0.8-1.5 mm long, glabrous; anthers included, basally attached, ca. 1.5-2.5 mm long, muticous, free, densely papillate, glabrous; pore large, 2/3 to 3/4 the length of the cell; pollen in tetrads. Ovary 4(-5)-locular with numerous ovules per locule, broadly ovate, ca. 1.5-3 mm tall, faintly longitudinally ridged, glabrous; style stout, 1.5-2.5 mm long, sparingly pubescent with simple, nonglandular hairs or glabrous; stigma large, ca. 1.8-2.5 mm broad, deeply funnel-shaped, conspicuously exerted or slightly to not exerted, glabrous. Fruit a loculicidal capsule; mature seeds not seen.—Fig. 3.

DISTRIBUTION AND HABITAT.—Found in heath thickets and lichen woodlands on igneous rock (gneiss, granite, and quartzite) on the slopes and summit of Marojejy; (1000-)1400-2137 m.

PARATYPES.—MADAGASCAR (Centre Nord): *Cours 3476*, sommet du Marojejy, 27 Mar. 1949 (P); *Cours*

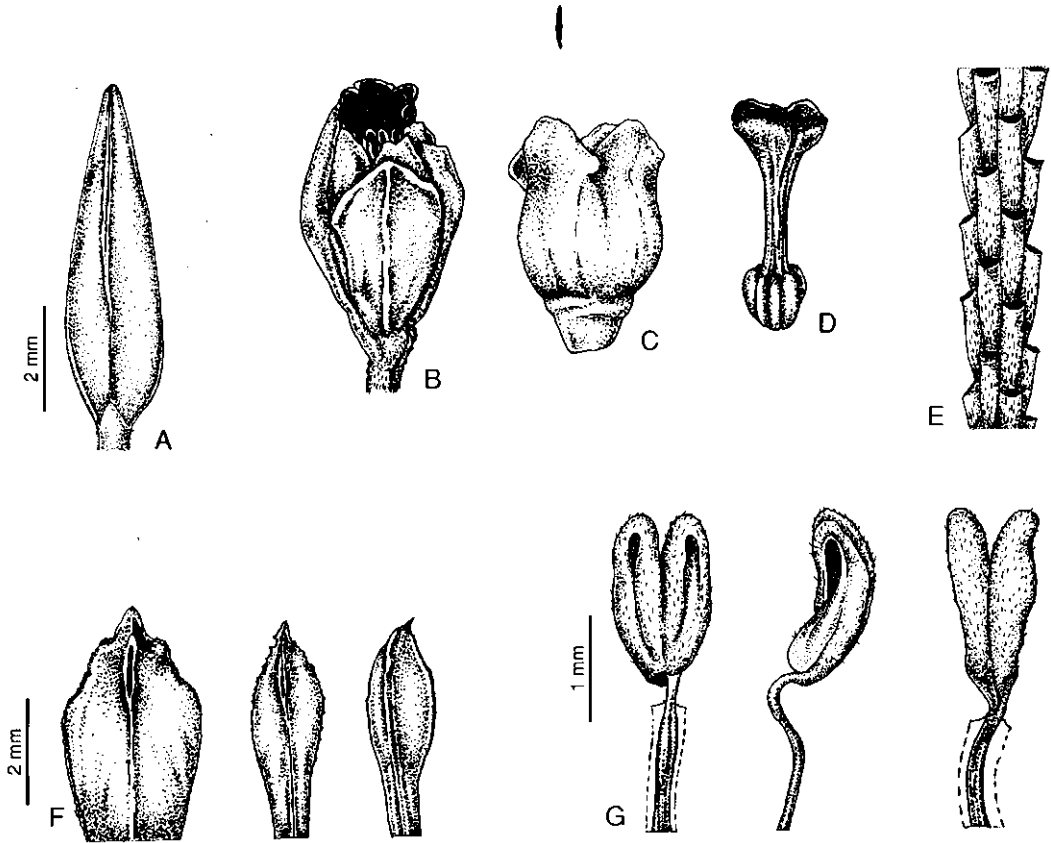


Fig. 3.—*Erica marojejensis* Dorr: A, leaf; B, flower; C, corolla; D, gynoecium; E, stem; F, abaxial and two lateral sepals; G, anther, front, side, and back views. All vegetative parts drawn from Jacquemin H626J (P). All floral parts drawn from Humbert & Saboureau 31901 (P).

3478, *ibid.* (P); *Guillaumet* 4096, R.N. du Marojej, Nov. 1972 (P); *Humbert* 22639, pentes occidentales du massif du Marojej (Nord-Est) à l'Ouest de la rivière Manantenina, affluent de la Lokoho, 15-25 Dec. 1948 (P); *Humbert* 22738, sommet oriental du Massif de Marojej (Nord-Est) à l'Ouest de la Haute Manantenina, affluent de la Lokoho, 17-20 Dec. 1948 (P); *Humbert* 22742, *ibid.* (P); *Humbert* 23610bis, vallée de la Lokoho (Nord-Est), Mt. Beandroka au Nord de Maroambihy, 17-22 Mar. 1949 (P); *Humbert & Saboureau* 31895, partie occidentale du massif de Marojej (Nord-Est) de la vallée de l'Ambatoharanana au bassin supérieur de l'Antsahaberoka, 15-25 Nov. 1959 (P); *Humbert & Saboureau* 31901, *ibid.* (P).

*Erica marojejensis* appears to be related to *E. lecomtei* and *E. viguieri*. The species all have 3-nate leaves, umbel-like inflorescences with nutant flowers, 8 stamens, and funnel-shaped stigmas. *Erica marojejensis* can be distinguished

from *E. lecomtei* by its spreading (versus imbricate and rigidly ascending) leaves that are pubescent (versus glabrous) adaxially and by its calyx in which the longest calyx lobe slightly exceeds the corolla in length. The longest calyx lobe in *E. lecomtei* is shorter than the corolla in length. *Erica marojejensis* can be distinguished from *E. viguieri* by its shorter (2.5-5.2 versus 6.5-12 mm long) and narrower (1.5-2 versus 2-2.8 mm wide) leaves that have a closed (versus open) sulcus. Additionally, the inflorescences of *E. marojejensis* have many fewer (3 versus 9) flowers than those of *E. viguieri*.

***Erica minutifolia* (Baker) Dorr & E.G.H. Oliv., comb. nov.**

*Philippia minutifolia* Baker, J. Linn. Soc., Bot. 22: 500 (1887); Baron, Rev. Madag. 7(1): 62 (1905);

Palacky, Cat. 3: 22 (1907), "*minutiflora*"; Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 30 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935].—Type: *Baron 4458*, "Central Madagascar" (holo-, K!; iso-, BM!, P-3 sheets!, P-fragm!).

*Philippia oophylla* Baker, J. Linn. Soc., Bot. 20: 195 (1883); Baron, J. Linn. Soc., Bot. 25: 281 (1890); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 22 (1907), "*oophylla*"; Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 30, t. 3a, fig. 10c (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 29 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935]; non *Erica oophylla* Benth. in DC., Prodr. 7: 672 (1839).—Type: *Baron 2129*, "Central Madagascar" (holo-, K!; iso-, K!, P!, P-fragm!). The type locality may be "Ankaratra" (see BARON 1905).

***Erica myriadenia* (Baker) Dorr & E.G.H. Oliv.,  
comb. nov.**

*Philippia myriadenia* Baker, J. Linn. Soc., Bot. 25: 331 (1890); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 22 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 17, fig. 9a (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 23 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935].—Type: *Baron 5543*, "Imerina", North-west Madagascar (holo-, K!; iso-, K-mounted with holotype!, P-2 sheets, all fragm!). The holotype and isotype at Kew were acquired at different times. Only the holotype was available to BAKER when this name was published.

***Erica parkeri* (Baker) Dorr & E.G.H. Oliv.,  
comb. nov.**

*Philippia parkeri* Baker, J. Bot. 20: 171 (1882), "*Parkeri*"; Baron, Rev. Madag. 7(1): 61 (1905) "*Parkeri*"; Palacky, Cat. 3: 22 (1907); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 9 (1927) "*Parkeri*"; Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935], "*Parkeri*".—*Mitrastylus parkeri* (Baker) Alm & T.C.E. Fr., Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 44, t. 5a, fig. 13a (1927), "*Parkeri*".—Type: *Parker s.n.*, Madagascar, "Central Madagascar" (holo-, K!; iso-, P-fragm!).

***Erica perhispida* Dorr & E.G.H. Oliv.,  
nom. nov.**

*Philippia hispida* Baker, J. Linn. Soc., Bot. 22: 499 (1887); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 21 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 19, t.

1a, fig. 9c (1927); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 12 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935]; non *Erica hispida* Burm. f., Fl. Cap. Prodr.: 11 (1768)<sup>3</sup> (= *Erica* sp.?)<sup>2</sup> (= *Erica hispidula* Thunb., *Erica*: 19 (1785) (= *Erica hispidula* L.); nec *Erica hispida* Andrews, Heathery 2: t. 69 (1804); Andrews, Col. Engr. Heaths 2: t. 100 (1805; plate dated very faintly as 1803)<sup>2</sup> (= *Erica racemosa* Thunb.).—Type: *Baron 3335*, "Central Madagascar" (holo-, K!; iso-, P-fragm!). The type locality may be "Ankaratra" (see BARON 1905).

*Philippia adenophylla* Baker, J. Linn. Soc., Bot. 25: 332 (1890); Baron, Rev. Madag. 7(1): 62 (1905); Palacky, Cat. 3: 21 (1907) ("*adenophylla*"); Perrier de la Bâthie, Arch. Bot. Mém. 1(2): 28 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 8 (1934) [1935]; non *Erica adenophylla* Bolus, J. Linn. Soc., Bot. 24: 181 (1887) (= *Erica odorata* Andrews).—Type: *Baron 5542*, "North-West Madagascar" (holo-, K!; iso-, P-2 sheets, both fragm!). BARON (1905) cited "Imer[ina]" for the distribution of this species.

The following taxon appears to be related to this species. We, however, prefer to leave it incertae sedis until we see more material. We explicitly refrain from following either PERRIER DE LA BÂTHIE (1934) who recognized it at subspecific rank or LAVIER-GEORGE (1936) who elevated it to species rank.

*Philippia hispida angustifolia* H. Perrier, Arch. Bot. Mém. 1(2): 13 (1927) [rank ambiguous].—*Philippia hispida* Baker subsp. *angustifolia* (H. Perrier) H. Perrier, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935].—*Philippia angustifolia* (H. Perrier) Lavier-George, Bull. Mus. Natl. Hist. Nat., sér. 2, 8(2): 178 (1936).—Type: *Perrier de la Bâthie 16291*, Madagascar, Mt. Tsaratanana, 2600 m (K, P-3 sheets). A lectotype is still to be designated from among the material at P.

***Erica perrieri* Dorr & E.G.H. Oliv., nom. nov.**

*Philippia latifolia* H. Perrier, Arch. Bot. Mém. 1(2): 36 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 11 (1934) [1935]; non *Erica latifolia* Andrews, Heathery 2: t. 72 (1804); Andrews, Col. Engr. Heaths 2: t. 105 (1805)<sup>2</sup>.—Type: *Perrier de la Bâthie 14417*, Madagascar, brousse éricoïde, massif d'Andringitra, rocailles vers 2400 m, Feb. 1922

3. The *Florae Capensis Prodomus* is part of BURMAN'S *Flora Indica* (STAFLEU & COWAN 1976, 1995). It contains a Latin description of *Erica hispida*, which DULFER (1965) listed as a name of uncertain affinity.

(lecto-, P!, here designated; isolecto-, G!, P-2 sheets!). The specimen chosen as lectotype is from PERRIER DE LA BÂTHIE's herbarium.

Henri PERRIER DE LA BÂTHIE (1873-1958), who travelled extensively throughout Madagascar collecting natural history specimens, built an extensive herbarium that he donated to the Muséum national d'Histoire naturelle, Paris (see DORR 1997).

**Erica quadratiflora** (H. Perrier) Dorr & E.G.H. Oliv., **comb. nov.**

*Philippia quadratiflora* H. Perrier, Arch. Bot. Bull. Mens. 4(3): 31 (1930); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 12 (1934) [1935].—Type: Humbert 6220, Madagascar, Massif de l'Andohahelo (Sud-Est), crêtes et rochers silicieux du sommet, 1800-1979 m, 21-22 Oct. 1928 (lecto-, P!, here designated; isolecto-, A!, BM!, G!, K-2 sheets!, P-4 sheets!, TAN!, US-2 sheets!). The specimen selected as lectotype was labelled by PERRIER DE LA BÂTHIE. His manuscript notes concerning changes in the key in his revision (PERRIER DE LA BÂTHIE 1927b) also are attached to the sheet.

The epithet of this new combination should not be confused with *Erica quadriflora*, a name with several homonyms that are either now placed in synonymy or poorly known. These include *E. quadriflora* Klotzsch (= *E. dichrus* Spreng.), *E. quadriflora* Andrews (= *E. bergiana* L.), and *E. quadriflora* Willd. (= *Erica sp.?*).

**Erica rakotozafyana** Dorr & E.G.H. Oliv., **nom. nov.**

*Philippia tenuissima* Klotzsch, Linnæa 9: 358 (1834) [1835]; Benth. in DC., Prodr. 7(2): 696 (1839); Baron, Rev. Madag. 7(1): 61 (1905); Palacky, Cat. 3: 22 (1907); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 33, fig. 10j (1927); non *Erica tenuissima* J.C. Wendl., Eric. Icon. Descr. 1(6): 9 (1800) (= *Erica gracilis* J.C. Wendl.).—*Salaxis tenuissima* (Klotzsch) D. Dietr., Syn. Pl. 2: 1261 (1840).—Type: Bojer s.n., Madagascar (B<sup>+</sup>). A neotype is still to be designated.

*Ericinella gracilis* Benth. in DC., Prodr. 7(2): 697 (1839); Baron, Rev. Madag. 7(2): 62 (1905); Palacky, Cat. 3: 22 (1907); non *Erica gracilis* J.C. Wendl., Bot. Beob.: 47 (1798); nec *Erica gracilis* Salisb., Trans. Linn. Soc. 6: 375 (1802) (= *Erica sp.?*).—*Salaxis gracilis* (Benth.) D. Dietr., Syn. Pl. 2:

1261 (1840).—*Philippia gracilis* (Benth.) H. Perrier, Arch. Bot. Mém. 1(2): 43 (1927); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935].—Syntypes: Bojer s.n., Madagascar, "prov. Emerina" (G-DC, K!). A lectotype is still to be designated.

The epithet honors Armand RAKOTOZAFY, who served as director of the herbarium (TAN) at the Parc de Tsimbazaza, Antananarivo, for many years and who now is a research associate of the Institut Malgache des Recherches Appliquées, Antananarivo (see DORR 1997).

**Erica spinifera** (H. Perrier) Dorr & E.G.H. Oliv., **comb. nov.**

*Philippia spinifera* H. Perrier, Arch. Bot. Mém. 1(2): 35 (1927); Perrier de la Bâthie, Mém. Acad. Malgache 3: 62 (1927), nom. tant.; Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 12 (1934) [1935].—Type: Perrier de la Bâthie 7389, Madagascar, versant SW du massif d'Andringitra, rocailles au dessus de 1600 m, Sep. 1911 (lecto-, P!, here designated; isolecto-, P-2 sheets!). All three type specimens were labelled by PERRIER de la BÂTHIE; one is marked "Échantillon type" and the other two "type". The lectotype is the specimen marked "Éch. type" and it is figured also, with a different label, in PERRIER de la BÂTHIE's (1927b, t. VI) revision.

**Erica sylvainiana** Dorr & E.G.H. Oliv., **nom. nov.**

*Philippia heterophylla* H. Perrier, Arch. Bot. Mém. 1(2): 46 (1927); non *Erica heterophylla* Guthrie & Bolus, Dyer, Fl. Cap. 4(1): 142 (1905).—*Philippia floribunda* Benth. subsp. *heterophylla* (H. Perrier) H. Perrier, Arch. Bot. Bull. Mens. 4(3): 34 (1930); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 9 (1934) [1935].—Type: Perrier de la Bâthie 14597, Madagascar, brousse éricoïde, 2200 m, massif de l'Andringitra, Feb. 1922 (lecto-, P!, here designated; isolecto-, P-2 sheets!).

The epithet honors Sylvain RAZAFIMANDIMBISON, who served as curator of the herbarium (TAN) and then director of the flora department of the Parque Botanique et Zoologique de Tsimbazaza before leaving the latter post to undertake graduate studies in botany (see DORR 1997).

***Erica viguieri* (H. Perrier) Dorr & E.G.H. Oliv.,  
comb. nov.**

*Philippia viguieri* H. Perrier, Arch. Bot. Mém. 1(2): 37 (1927) "*Viguieri*", Perrier de la Bâthie, Mém. Acad. Malgache 3: 62 (1927), "*Viguieri*", nom. tant.; Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 12 (1934) [1935], "*Viguieri*".—Type: *Perrier de la Bâthie* 7402, Madagascar, Col du Tandroka, versant SW du Massif de l'Andringitra, vers 1700 m, Sep. 1911 (lecto-, P!, here designated; isolecto-, P-2 sheets!). PERRIER DE LA BÂTHIE (1927b, t. VIII) illustrated the specimen here chosen as lectotype.

***Erica wangfatiana* Dorr & E.G.H. Oliv.,  
nom. nov.**

*Philippia pilulifera* H. Perrier, Arch. Bot. Mém. 1(2): 45, t. X (1927); Perrier de la Bâthie, Mém. Acad. Malgache 3: 62 (1927), nom. tant.; non *Erica pilulifera* L., Sp. Pl.: 355 (1753); nec *Erica pilulifera* Bergius, Descr. Pl. Cap.: 111 (1767) (= *Erica multumbellifera* Bergius)<sup>2</sup>; nec *Erica pilulifera* J.C. Wendl., Eric. Icon. Descr. 2(19): 107, t. 41 (1809) (= *Erica strigosa* Solander); nec *Erica pilulifera* Andrews, Heathery, ed. 2, 6: t. 278 (1845) (= *Erica ferrea* Bergius)<sup>2</sup>.—*Philippia floribunda* Benth. subsp. *pilulifera* (H. Perrier) H. Perrier, Arch. Bot. Bull. Mens. 4(3): 34 (1930); Perrier de la Bâthie, Cat. Pl. Madag. (Ericaceae): 10 (1934) [1935].—Type: *Perrier de la Bâthie* 14383, Madagascar, brousse éricoïde, 2500 m, massif de l'Andringitra, Feb. 1922

(lecto-, P!, here designated; isolecto-, K-3 sheets!, P!). Neither of the two specimens found at P matches the plate in PERRIER DE LA BÂTHIE's (1927b, t. X) revision.

The epithet for this new name honors Roger WANG-FAT who did much to assist L.J. DORR during his three years in Madagascar, not the least of which was to offer him a home away from home at the Restaurant Tonkinois, which now prospers as the Restaurant and Hotel Shanghai, Antsavola, Antananarivo.

**ERICA IN THE COMORO ISLANDS**

***Erica comorensis* (Engl.) Dorr & E.G.H. Oliv.,  
comb. nov.**

*Philippia comorensis* Engl., Bot. Jahrb. Syst. 43: 368 (1909); Voeltzkow, Fl. Fauna Comoren: 431, 450 (1916); Alm & Fries, Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 36, fig. 101 (1927).—Type: *Schlieben* 11271, Comoro Islands, Grand Comore, Karthala Vulkan, 1 Dec. 1968 (neo-, K!, here designated; isoneo-, BR!, MO!, NBG!). Syntype material cited by ENGLER in his protologue (i.e., *Karsten s.n.*, *Schmidt* 228, and *Voeltzkow* 205) was destroyed at Berlin and no isotypes have been located.

**Key to the subspecies of *Erica comorensis***

- 1. Calyx lobes more or less equal in length ..... 1a. ***E. comorensis* subsp. *comorensis***
- 1'. Calyx lobes unequal in length, one conspicuously longer than the others ..... 1b. ***E. comorensis* subsp. *anjurensis***

**1a. *Erica comorensis* subsp. *comorensis***

**1b. *Erica comorensis* subsp. *anjurensis* (Alm & T.C.E. Fr.) Dorr & E.G.H. Oliv.,  
comb. et stat. nov.**

*Philippia anjurensis* Alm & T.C.E. Fr., Kungl. Svenska Vetenskapsakad. Handl., ser. 3, 4(4): 37, fig. 10o (1927).—Type: *Hildebrandt* 1608, Comoro Islands, Johanna [= Anjouan Island], Im Gebirge an sonnigen stellen, Jun.-Aug. 1875 (holo-, B†; lecto-, P!, here designated). An isotype is chosen as lectotype since the holotype, deposited at Berlin, was destroyed.

*Ericinella mannii* auct. non Hook. f.: Engler, Hochgebirgsflora trop. Afr.: 325 (1892), pro parte, quoad *Hildebrandt* 1608.

**Acknowledgements**

We appreciate the courtesies extended to us by the curators and keepers of the herbaria cited in the text, especially those extended by Prof. Ph. MORAT (Paris) who invited us to prepare a treatment of the Ericaceae for the *Flore de Madagascar et des Comores*. We also thank two anonymous reviewers for making helpful suggestions that improved the manuscript. The illustrations are the work of Patricia PARKER.



## REFERENCES

- ALM C.G. & FRIES T.C.F. 1927.—Monographie der Gattungen *Philippia* Klotzsch, *Mitrasstylus* nov. gen. und *Ericinella* Klotzsch. *Kungl. Svenska Vetenskapsakad. Handl.*, sér. 3, 4: 1-49.
- BARON R. 1905.—Ericaceae: 60-62, in *Compendium des Plantes Malgaches*. Fascicule XV. *Rev. Madag.* 7: 60-67.
- BEENTJE H.J. 1990.—Name changes in East African Ericaceae. *Utafiti* 3: 13.
- DORR L.J. 1994.—A new name and a new combination in East African *Erica* (Ericaceae: Ericoideae). *Novon* 4: 220.
- DORR L.J. 1997.—*Plant collectors in Madagascar and the Comoro Islands*. Royal Botanic Gardens, Kew.
- DULFER H. 1965.—Revision der südafrikanischen Arten der Gattung *Erica* L. *Ann. Naturhist. Mus. Wien* 68: 25-177.
- FRIEDMANN F. 1981.—Ericacées: 1-15, in BOSSER J., CADET Th., GUÉHO J. & MARAIS W. (eds.), *Flore des Mascareignes* 112, Port Louis, Ile Maurice.
- GREUTER W., BARRIE F.R., BURDET H.M., CHALONER W.G., DEMOULIN V., HAWKSWORTH D.L., JØRGENSEN P.M., NICOLSON D.H., SILVA P.C., TREHANE P. & MCNEILL J. (eds.) 1994.—International Code of Botanical Nomenclature (Tokyo Code). *Regnum Veg.* 131: [i]-xviii, 1-389.
- HILLIARD O.M. & BURTT B.L. 1985.—Notes on some plants of southern Africa chiefly from Natal: XI. *Notes Roy. Bot. Gard. Edinburgh* 42: 227-260.
- KLOTZSCH J.F. 1834.—Ericarum a cel. Adelberto de Chamisso descriptorum. *Linnaea* 9: 350-367.
- LAVIER-GEORGE L. 1936.—Recherches sur les épidermes foliaires des *Philippia* de Madagascar; utilisation de leurs caractères comme bases d'une classification. *Bull. Mus. Natl. Hist. Nat.*, sér. 2, 8: 173-199.
- OLIVER E.G.H. 1984.—Studies in the Ericoideae. IV. New species and some taxonomic and nomenclatural changes in the Cape Flora region. *S. African J. Bot.* 3: 267-284.
- OLIVER E.G.H. 1987.—Studies in the Ericoideae (Ericaceae). VII. The placing of the genus *Philippia* into synonymy under *Erica*; the southern African species. *S. African J. Bot.* 53: 455-458.
- OLIVER E.G.H. 1988.—Studies in the Ericoideae (Ericaceae). VI. The generic relationship between *Erica* and *Philippia* in southern Africa. *Bothalia* 18: 1-10.
- OLIVER E.G.H. 1992.—Studies in the Ericoideae (Ericaceae). VIII. New combinations for *Philippia* are made in *Erica* for the Flora Zambesiaca region. *Kew Bull.* 47: 665-668.
- OLIVER E.G.H. 1993.—Studies in the Ericoideae (Ericaceae). X. Nomenclatural changes for the Flore des Mascareignes region. *Kew Bull.* 48: 767-769.
- PERRIER DE LA BATHIE H. 1927a.—Le Tsaratanana, l'Ankaratra et l'Andringitra. *Mém. Acad. Malgache* 3: 1-71.
- PERRIER DE LA BATHIE H. 1927b.—Les *Philippia* de Madagascar. *Arch. Bot. Mém.* 1: 1-68, t. 1-10.
- PERRIER DE LA BATHIE H. 1930.—Au sujet des *Philippia* de Madagascar et de quelques espèces ou variétés nouvelles recueillies par M. H. HUMBERT au cours de ses dernières missions. *Arch. Bot. Bull. Mens.* 4: 25-34.
- PERRIER DE LA BATHIE H. 1934 [1935].—Ericaceae et Vacciniaceae: 1-12, in *Catalogue des Plantes de Madagascar*. Imprimerie G. Pitot & C<sup>ie</sup>, Tananarive.
- PICHI-SERMOLI R. & HEINIGER H. 1953.—Adumbratio florum Aethiopicarum. II. Ericaceae. *Webbia* 9: 9-48.
- ROSS R. 1957.—Notes on *Philippia*. *Bull. Jard. Bot. État* 27: 733-754.
- STAFLEU F.A. & COWAN R.S. 1976.—Taxonomic Literature. Vol. 1: A-G. Ed. 2. *Regnum Veg.* 94: [i]-xl, 1-1136.
- STAFLEU F.A. & COWAN R.S. 1983.—Taxonomic Literature. Vol. 4: P-Sak. Ed. 2. *Regnum Veg.* 110: [i]-ix, 1-1214.
- STAFLEU F.A. & COWAN R.S. 1992.—Taxonomic Literature. Suppl. I: A-Ba. ed. 2. *Regnum Veg.* 125: [i]-viii, 1-453.
- STAFLEU F.A. & COWAN R.S. 1995.—Taxonomic Literature. Suppl. III: Br-Ca. ed. 2. *Regnum Veg.* 132: [i]-vi, 1-550.
- VERDOORN I.C. 1954.—The Transvaal Ericaceae. *S. Afr. J. Bot.* 20: 1-26.
- WEBERLING F. 1989.—*Morphology of flowers and inflorescences*. [Translated by R.J. PANKHURST]. Cambridge University Press, Cambridge.

Manuscript received 19 October 1998;  
revised version accepted 15 February 1999.