

# ADDITIONAL NOTES ON THE ERIOCAULACEAE. LXIII

Harold N. Moldenke

## ERIOCAULACEAE Lindl.

Additional & emended bibliography: C. Müll. in Just, Bot. Jahresber. 16 (1): 769—770. 1888; Holm, Bot. Gaz. 31: 17—37, fig. 1—5. 1901; Pilger in Engl. & Prantl, Nat. Pflanzenfam. Ergänz. 2, Nachtr. 3 zu 2: 37—41, fig. 6 & 7. 1908; Lutz & Machado, Mem. Inst. Oswaldo Cruz 7: 15. 1915; Gleason, Bull. Torrey Bot. Club 58: 327—330. 1931; Macbr., Field Mus. Publ. Bot. 11: 8. 1931; Gleason, New Britt. & Br. Illustr. Fl., imp. 1, 1: 372 & 479 (1952) and imp. 1, 3: 561, 568, & 582. 1952; Sonohara, Tawada, & Amano [ed. E. H. Walker, Fl. Okin. 205. 1952; Duvigneaud, Lejeunia 16: 103. 1953; Gleason, New Britt. & Br. Illustr. Fl., imp. 2, 1: 372 & 479 (1958), imp. 2, 3: 561, 568, & 582 (1958), imp. 3, 1: 372 & 479 (1963), and imp. 3, 3: 561, 568, & 582. 1963; Moldenke, Act. Bot. Venez. 2: 153. 1967; Bolkh., Grif, Matvej., & Zakhar., Chrom. Numb. Flow. Pl., imp. 1, 274. 1969; G. W. Thomas, Tex. Pl. Ecolog. Summ. 32. 1969; Whitehead, Ann. Mo. Bot. Gard. 59: 132 & 133. 1972; Thorne in Meggers, Ayensu, & Duckworth, Trop. Forest Ecosyst. Afr. & S. Am. 29 & 30. 1973; Bolkh., Grif, Matvej., & Zakhar., Chrom. Numb. Flow. Pl., imp. 2, 274. 1974; Napp-Zinn, Anat. Blat. 969, 1085, 1157, & 1340. 1974; Beecher, Exxon USA 14 (4): 29. 1975; Greller, Bull. Torrey Bot. Club 102: 415. 1975; Hocking, Excerpt. Bot. A.26: 6, 89, & 90. 1975; Schinini, Bol. Soc. Argent. Bot. 16: 351. 1975; Weberling & Schwantes, Pflanzensyst., ed. 2 [Ulmer, Uni-Taschenb. 62:] 161 & 375. 1975; Moldenke, Phytologia 32: 487—511, fig. 1 & 2 (1975) and 33: 9—58, 130—153, 183—202, 271—275, 373—374, 480, & 509—511. 1976; Jaeger, Boissiera 24: 474. 1976; Liogier, Bol. Jard. Bot. Raf. Moscoso 3 (2): 2. 1976; P. Morat, Adansonia, ser. 2, 15: [463]—469, pl. 1 & 2. 1976.

It should be noted here that the "Index Londinensis" gives "1906" as the proper publication date for the Pilger work cited above.

Macbride (1931) feels that Syngonanthus, Blastocaulon, Philodice, and Lachnocaulon should all be united in one genus, Paepalanthus, "as genera [which] constitute therefore from a purely disinterested standpoint one natural genus". In this opinion I do not concur.

## BLASTOCAULON Ruhl.

Additional bibliography: Pilger in Engl. & Prantl, Nat. Pflanzenfam. Ergänz. 2, Nachtr. 3 zu 2: 37—39, fig. 6. 1908; Macbr., Field Mus. Publ. Bot. 11: 8. 1931; Hocking, Excerpt. Bot. A.26: 89. 1975; Moldenke, Phytologia 32: 460—461 (1975) and 32: 507. 1976.

Stapf (1930) dates the Pilger work referred to above as "1906". Macbride (1931) feels that Blastocaulon, along with Syngonanthus,



Philodice, and Lachnocaulon, should be united in Paepalanthus as a single genus.

**BLASTOCAULON ALBIDUM** (G. Gardn.) Ruhl.

Additional bibliography: Pilger in Engl. & Prantl, Nat. Pflanzenfam. Ergänzt. 2, Nachtr. 3 zu 2: 39. 1908; Moldenke, Phytologia 29: 82. 1974; Hocking, Excerpt. Bot. A.26: 89. 1975.

**BLASTOCAULON PROSTRATUM** (Körn.) Ruhl.

Additional bibliography: Pilger in Engl. & Prantl, Nat. Pflanzenfam. Ergänzt. 2, Nachtr. 3 zu 2: 39. 1908; Moldenke, Phytologia 29: 82. 1974; Hocking, Excerpt. Bot. A.26: 89. 1975.

**BLASTOCAULON RUPESTRE** (G. Gardn.) Ruhl.

Additional bibliography: Pilger in Engl. & Prantl, Nat. Pflanzenfam. Ergänzt. 2, Nachtr. 3 zu 2: 28 & 39, fig. 6. 1908; Hocking, Excerpt. Bot. A.26: 89. 1975; Moldenke, Phytologia 32: 461. 1975.

Additional illustrations: Pilger in Engl. & Prantl, Nat. Pflanzenfam. Ergänzt. 2, Nachtr. 3 zu 2: 39, fig. 6. 1908.

It should be noted here, again, that Stapf (1930) gives "1906" as the actual date of publication of the Pilger work (1908) cited above, but the Library of Congress (Washington) printed card for the work retains the 1908 title-page date.

**BLASTOCAULON SPELEICOLA** Alv. Silv.

Additional bibliography: Moldenke, Phytologia 29: 82. 1974; Hocking, Excerpt. Bot. A.26: 89. 1975.

**CARPTOTEPALA** Moldenke

Additional synonymy: Carptotepala Morat, Adansonia, ser. 2, 15: 466. 1976.

Additional bibliography: Hocking, Excerpt. Bot. A.26: 89. 1975; Moldenke, Phytologia 32: 461 (1975) and 32: 507. 1976; P. Morat, Adansonia, ser. 2, 15: 466. 1976.

**CARPTOTEPALA JENMANI** (Gleason) Moldenke

Additional bibliography: Hocking, Excerpt. Bot. A.26: 89. 1975; Moldenke, Phytologia 32: 461. 1975.

**COMANTHERA** L. B. Sm.

Additional bibliography: Hocking, Excerpt. Bot. A.26: 89. 1975; Moldenke, Phytologia 32: 461 (1975) and 32: 508. 1976; P. Morat, Adansonia, ser. 2, 15: 466. 1976.

**COMANTHERA KEGELIANA** (Körn.) Moldenke

Additional & emended bibliography: Ruhl. in Engl., Pflanzenreich 13 (4-30): 271, 273, 290, & 293. 1903; Moldenke, Known Geogr. Distrib. Erioc. 7, 30, 50, & 58. 1946; Moldenke, Phytologia 4: 322. 1953; Moldenke, Résumé Suppl. 1: 5, 16, 21, 23, 25, & 26 (1959) and 14: 10. 1966; Hocking, Excerpt. Bot. A.26: 89. 1975; Moldenke, Phytologia 32: 461. 1975.



The Lockhart s.n. [Caracas] collection, previously cited (and repeated below), is a mixture with Syngonanthus gracilis (Bong.) Ruhl. Sandwith, in a communication to me dated May 12, 1956, has verified that this collection was actually made at or near to Caracas.

Emended citations: VENEZUELA: Federal District: Lockhart s.n. [Caracas] in part (K).

#### ERIOCAULON Gron.

Additional & emended bibliography: Holm, Bot. Gaz. 31: 17--37, fig. 1--5. 1901; Pilger in Engl. & Prantl, Nat. Pflanzenfam. Ergänzt 2, Nachtr. 3 zu 2: 37 & 38. 1908; Gleason, New Britt. & Br. Illustr. Fl., imp. 1, 1: 372, 373, & 479 (1952) and imp. 1, 3: 562. 1952; Sonohara, Tawada, & Amano [ed. E. H. Walker], Fl. Okin. 205. 1952; Gleason, New Britt. & Br. Illustr. Fl., imp. 2, 1: 372, 373, & 479 (1958), imp. 2, 3: 562 (1958), imp. 3, 1: 372, 373, & 479 (1963), and imp. 3, 3: 562. 1963; G. W. Thomas, Tex. Pl. Ecolog. Summ. 32. 1969; Bolkh., Grif, Matvej, & Zakhar., Chrom. Numb. Flow. Pl., imp. 1, 274. 1969; Whitehead, Ann. Mo. Bot. Gard. 59: 132 & 133. 1972; Bolkh., Grif, Matvej, & Zakhar., Chrom. Numb. Flow. Pl., imp. 2, 274. 1974; Napp-Zinn, Anat. Blat. 969, 1157, & 1340. 1974; Beecher, Exxon USA 14 (4): 29. 1975; Greller, Bull. Torrey Bot. Club 102: 415. 1975; Hocking, Excerpt. Bot. A.26: 89 & 90. 1975; Moldenke, Phytologia 32: 488--506, 508, 509, & 511 (1975) and 33: 9--20, 130, 131, 135, 151, 153, 183--186, 189--191, 200, 201, 274, 275, 373--374, 508, & 509. 1976; P. Morat, Adansonia, ser. 2, 15: [463] & 464. 1976.

It should be noted here, again, that Stapf (1930) regards "1906" as the correct date of publication for the Pilger work (1908) cited above.

#### ERIOCAULON ABYSSINICUM Hochst.

Additional bibliography: Hocking, Excerpt. Bot. A.26: 89. 1975; Moldenke, Phytologia 32: 463. 1975.

#### ERIOCAULON ACHITON Körn.

Additional bibliography: Moldenke, Phytologia 32: 463 & 466. 1975.

Maxwell encountered this plant "in open wet marshy zone on bare rock" in Thailand and refers to the heads as grayish and the anthers black, while Hooper & Gandhi state that it is a "common" herb "in full sun in marshy ground" in India, the heads white, misidentifying it as E. diana var. longibracteatum Fyson.

Additional citations: INDIA: Karnataka: Hooper & Gandhi HFP. 2432 (N). THAILAND: Maxwell 71-563 (Ac), 73-446 (Ac), 74-893 (Ac).

#### ERIOCAULON AFZELIANUM Wikstr.

Additional bibliography: Moldenke, Phytologia 29: 88. 1974; Hocking, Excerpt. Bot. A.26: 89. 1975.



ERIOCAULON ALPESTRE Hook. f. & Thoms.

Additional bibliography: Moldenke, Phytologia 32: 464. 1975.

Copeland encountered this plant in flower and fruit in October. The Collector undetermined s.n. [Musashi: Tabata, 27 Sept. 1910] and Faurie 891, distributed as E. alpestre, actually represent E. robustius (Maxim.) Mak.

Additional citations: SIKKIM: Hooker s.n. [8--12,000 ped.] (W--2501697). INDIA: Khasi States: Hooker f. & Thomson s.n. [Mont. Khasia 5--6000 ped.] (W--2495292). PHILIPPINE ISLANDS: Mindanao: E. B. Copeland 1431 (W--628555).

ERIOCAULON ALPINUM Van Royen

Additional bibliography: Moldenke, Phytologia 32: 464. 1975.

Recent collectors refer to this plant as a "rosette herb in clumps, leaves glossy medium-green, inflorescence light-brown" and have encountered it in bogs and open grassland of terraced intermontane basins, at altitudes of 2700--3600 meters, flowering and fruiting in June and July.

Additional citations: NEW GUINEA: Papua: Croft & Lelean LAE. 41747 (Mu); Croft & al. LAE. 61649 (Mu, Mu), LAE. 61652 (Mu, Mu).

ERIOCAULON AMBOENSE Schinz

Additional bibliography: Moldenke, Phytologia 29: 88 & 232. 1974.

Giess describes this plant as having leaves to 3 cm. long, peduncles to 6 cm. long, and the flowering-heads black.

Additional citations: NAMIBIA: Giess 9372 (Mu).

ERIOCAULON AQUATICUM (J. Hill) Druce

Additional & emended bibliography: Bolkh., Grif, Matvej., & Zakhar., Chrom. Numb. Flow. Pl., imp. 1, 274 (1969) and imp. 2, 274. 1974; Napp-Zinn, Anat. Blat. 969 & 1157. 1974; Hocking, Excerpt. Bot. A.26: 89 & 90. 1975; Moldenke, Phytologia 32: 464 (1975) and 32: 505. 1976.

Additional citations: GREAT BRITAIN: Scotland: Herb. U. S. Dept. Agr. s.n. [Dumochty Lake, Aug. 8, 1825] (W--45295); Winterbottom s.n. [1838--1842] (Sd--23691). ISLE OF SKYE: Boettcher s.n. [Aug. 8, 1829] (W--1273845). EIRE: Galway: J. Ball s.n. [Sept. 5th, 1837] (W--297369); Linton s.n. [Connemara, 12.viii. 1885] (W--1312420); Lomax s.n. [2 Augusti 1886] (W--1275380); Praeger s.n. [14 July 1899] (W--1275313).

ERIOCAULON ATRATUM Körn.

Additional bibliography: Holm, Bot. Gaz. 31: 18. 1901; Moldenke, Phytologia 32: 464--465. 1975.

Recent collectors have found this plant growing in tussock grassland on mountaintops, on sand-and-gravel bars in rivers, in small areas of marshy grassland in forest openings, and in shallow soil among low trees around the margins of flat rock outcrops with grassy areas, refer to it as caespitose, with white heads,



and found it flowering and fruiting in October.

Additional citations: SRI LANKA: Davidse & Sumithraarachchi 8002 (Ld), 8035 (Ld), 8596 (Ld), 8636 (Ld).

*ERIOCAULON ATRATUM* var. *MAJOR* Thwaites

Additional bibliography: Moldenke, *Phytologia* 29: 86, 91--92, & 205 (1974) and 30: 124. 1975.

Recent collectors have found this plant growing among shrubby and herbaceous vegetation on steep cliffs near the tops of mountain peaks, in cracks of wet cliff faces, and in small open areas of grassland in marshy forest clearings, flowering and fruiting in November. They describe the plants as having more or less extended and curved basal stems and white heads.

Additional citations: SRI LANKA: Davidse & Sumithraarachchi 7952 (Ld), 8000 (Z), 8003 (Ld), 8651 (Ld).

*ERIOCAULON ATRUM* Nakai

Additional bibliography: Moldenke, *Phytologia* 29: 92. 1974.

Material of this species has been misidentified and distributed in some herbaria as *E. nipponicum* Maxim.

Additional citations: JAPAN: Honshu: Collector undetermined s.n. [Imashiro, Ose, 24 August 1911] (W--1310120).

*ERIOCAULON AUSTRALE* R. Br.

Additional bibliography: Moldenke, *Phytologia* 32: 465 (1975) and 33: 373. 1976.

Recent collectors refer to this plant as an erect annual herb, the leaf-bases rather fleshy, the scapes to 27 inches tall, with white flower-heads and flowers and have found it growing in marshy ground, along roadsides, in tufts at the edges of mangrove swamps, near swamps and in swampy areas near streams, in ponds and ditches, in and about puddles in roads through savannas, and in inundated soil and culverts in catchment areas, at altitudes of 5--20 m., flowering and fruiting from March to May and July to October. Cushing reports that on Yap it is called "kai", a name also applied there to the orchid, *Taeniophyllum*, an octopus, and a spider, all of which are characterized by "a sunburst growth pattern". Collectors have also encountered this plant in shallow freshwater at the edges of streams and in open seasonally wet grass-sedge plains with a thin sand cover over clay. Pullen refers to it as a "locally common tussocky herb".

Material has been misidentified and distributed in some herbaria under the names *E. longifolium* Nees & Kunth, *E. sexangulare* L., and *E. truncatum* Mart. On the other hand, the *L. A. S. Johnson* 17733 and *C. Wright* 549, distributed as *E. australe*, are better regarded as *E. willdenovianum* Moldenke.

Additional citations: NICOBAR ISLANDS: Teressa: Kamphoven 2478 (W--1080994). CHINA: Kwangtung: C. O. Levine s.n. [Canton Chr. Coll. 833] (W--1091660); Tso 20015 (W--1431973). MALAYA: Perak: Carrick 837 (Kl--3807). Selangor: Kasim bin Rajab 80



(Kl—1080); Poore 95b (Kl—95). Trengganu: Carrick s.n. [3-5-1965] (Kl—3828), A. J. 4003 (Kl—6908); Kasim bin Rajab 5022 (Kl—5022); Soepadmo KLU.9133 (Kl—12929). PALAU ISLANDS: Yap: Cushing 431 (Kl—8353). GREATER SUNDA ISLANDS: Labuan: E. D. Merrill "O" (W—438748). Sarawak: Gaudet M.212 (Kl—6979), M. 231 (Kl—6994). NEW GUINEA: Papua: Pullen 7154 (W—2636066). AUSTRALIA: Northern Territory: Specht 890 (W—2125012). Queensland: M. S. Clemens s.n. [2 April 1945] (Mi).

ERIOCAULON AUSTRALE f. PROLIFERUM Moldenke, Phytologia 33: 373. 1976.

Bibliography: Moldenke, Phytologia 33: 373. 1976.

This form has been encountered at altitudes of 300—400 feet, flowering and fruiting in April.

Citations: MALAYA: Johore: Khatijah & Bastiah KLU.18541 (Kl—18541—type, Z—photo of type). GREATER SUNDA ISLANDS: Sarawak: Carrick & Enoch JC.148 (Kl—3137).

ERIOCAULON BEAUVERDI Moldenke

Emended synonymy: Eriocaulon giganteum Beauverd, Bull. Herb. Boiss., ser. 2, 8: 987. 1909 [not E. giganteum Afzel., 1856, nor Mart., 1975, nor Riedel, 1959].

Additional bibliography: Moldenke, Phytologia 29: 93 (1974) and 33: 26, 189, & 191. 1976

ERIOCAULON BIFISTULOSUM Van Heurck & Muell.—Arg.

Additional bibliography: Moldenke, Phytologia 32: 465 (1975) and 33: 13 & 14. 1976; P. Morat, Adansonia, ser. 2, 15: [463]. 1976.

ERIOCAULON BLUMEI Körn.

Additional bibliography: Moldenke, Phytologia 29: 94 & 206. 1974.

Gaudet found this plant in anthesis in March.

Additional citations: GREATER SUNDA ISLANDS: Sarawak: Gaudet M.255 (Kl—2929).

ERIOCAULON BROWNIANUM var. LATIFOLIUM Moldenke

Additional bibliography: Moldenke, Phytologia 32: 468. 1975.

Recent collectors have found this plant growing in marshy ground along streamlets and on wet rocks of riverbanks in the shade of the forest edge, flowering and fruiting in November and December. They describe the plant as cespitose, with erect stems, the plants growing singly or in clumps of up to 6 plants, the old roots and stems extending backwards up to 30 cm., the leaves holding water like bromeliad leaves, and the flowering heads white.

Additional citations: SRI LANKA: Davidse & Sumithraarachchi 8701 (Ld), 8902 (Ld).



**ERIOCAULON BUERGERIANUM Körn.**

Additional bibliography: Sonohara, Tamada, & Amano [ed. E. H. Walker], Fl. Okin. 205. 1952; Moldenke, Phytologia 32: 468. 1975.

Ching refers to this plant as a tufted rush-like herb common on the open banks of rice fields. He found it in flower and fruit in October.

Eriocaulon pachypetalum seems to be based on Shimada s.n. [Herb. Taiwan 5558] from Formosa.

The Ching 8939, cited below, bears a striking habital resemblance to E. nudicuspe Maxim., but Ching 8829 is plainly what I regard as typical E. buergerianum.

Material of E. buergerianum has been misidentified and distributed in some herbaria as E. truncatum Hamilt. On the other hand, the Bohnhof 294, Collector undetermined s.n. [Shimura, Oct. 20, 1893], J. Matsumura s.n. [Tokio, October 5, 1879], and Tsang 20687, distributed as E. buergerianum and in some cases even so cited by me in previous publications, are actually E. robustius (Maxim.) Mak., while Walker, Sonohara, Tawada, & Amano 7120 and Walker, Tawada, & Amano 6479 are E. suishaense Hayata. Ching 7814 is a mixture with something in the Cyperaceae.

Sonohara and his associates (1952) report this species from "In wet soil in Kunigami, Nakagami, Ishigati, and Iriomote", but I strongly suspect that the plant referred to is actually E. suishaense; the vernacular names, "oh-hoshikusa" and "pipewort", reported by them, probably also belong to the latter taxon.

Additional citations: CHINA: Anhwei: Ching 8829 (W--1279831), 8939 (W--1279832). Kwangsi: Ching 7814, in part (W--1508962). Yunnan: Delavay s.n. [Tchen-fong-chan 1894] (W--2494893). FORMOSA: Shimada s.n. [Herb. Taiwan 5558] (W--photo).

**ERIOCAULON CEYLANICUM Körn.**

Additional bibliography: Moldenke, Phytologia 32: 468 (1975) and 32: 488. 1976.

Davidse found this plant in flower in October, growing in compact patches in montane tussock grassland on slopes above a river, the flower-heads white.

Additional citations: SRI LANKA: Davidse 7607 (2).

**ERIOCAULON CINEREUM R. Br.**

Additional & emended bibliography: Sonohara, Tawada, & Amano [ed. E. H. Walker], Fl. Okin. 205. 1962; Bolkh., Grif, Matvej., & Zakhar., Chrom. Numb. Flow. Pl., imp. 1, 274 (1969) and imp. 2, 274. 1974; Moldenke, Phytologia 32: 463 & 468--469 (1975) and 32: 503. 1976.

Recent collectors describe this plant as an annual herb, 3--4 inches tall, the leaves 1 to 1 1/2 inches long, light-green, "radiant" [i.e., radiating from the base], flat, the inflorescences erect and white. They have found it in flower in April, June, July, and September and in fruit in July and October (in



addition to the months previously reported), growing at altitudes of 3—2100 meters, and report the vernacular name, "hishi-gusa". Dorsett & Morse refer to it as quite abundant in paddy fields, the flowers "white", while Ching describes the flowers as "whitish" and found the species to be common in Kwangsi. Hatusima refers to it as a common annual in paddy fields on Ishigaki island. Fosberg found it "occasional in drying mud in rice patches between harvest and plowing" on Miyakojima island. Other recent collectors have encountered it in moist rice paddies, at the edges of Melaleuca leucodendron lagoons, in damp areas at the foot of sandstone hills, and at the "edge of freshwater pools in stream-bed on top of sandstone scarp".

Eriocaulon formosanum Hayata appears to be based on Shimada s. n. [Oct. 8, 1915; Herb. Taiwan 5544] from Formosa, a photograph of which is in the United States National Herbarium in Washington.

Sonohara and his associates (1952) record E. cinereum from "In wet soil in Kunigami, Nakagami, Ishigaki, and Yonaguni" in the Ryukyu Islands and list the vernacular name, "hoshikusa". Philippine material of E. cinereum has been misidentified and distributed in some herbaria as E. merrillii Ruhl.

The Ching 8829 & 8939, distributed as E. cinereum, actually are E. buergerianum Körn., McGregor s. n. [Herb. Philip. Bur. Sci. 19980 & 20172] are E. merrillii Ruhl., M. Ramos s. n. [Herb. Philip. Bur. Sci. 24089] seems to be a mixture with E. merrillii and something non-ericaulaceous, Clemens & Clemens 3275, C. B. Robinson 1043, and Squires 91 are E. robinsonii Moldenke (of which the second-mentioned is the type collection), Tanaka & Shimada 13574 is E. robustius (Maxim.) Mak., and Reillo s. n. [Herb. Philip. Bur. Sci. 19267] and Toroos 2581, 4572, & 5024 are E. truncatum Hamilt.

Additional citations: AFGHANISTAN: Podlech 16790 (Mu). INDIA: Mysore: G. Thomson s. n. [Maisor & Carnatic] (W—2500545). SRI LANKA: Thwaites C.P.795 (W—2500531). CHINA: Chekiang: Chiao 18882 (W—1554079). Kwangsi: Ching 7263 ["2763"] (W—1508805). CHINESE COASTAL ISLANDS: Honam: C. O. Levine s. n. [Herb. Canton Chr. Coll. 912] (W—1091690). HONG KONG: C. Wright s. n. [Hong Kong] (W—46455). THAILAND: Maxwell 73-457 (Ac). KOREA: Dorsett & Morse 6328 (W—1554391). JAPAN: Honshu: Collector undetermined s. n. [Wada-mura, Musashi, Oct. 30, 1893] (W—205475), s. n. [Musashi: Otaia, 20 Sept. 1911] (W—1310115); Hashimoto 1624 (W—2335115); Itô & Koyama 826 (W—2188463). Miyakojima: F. R. Fosberg 38594 (W—2459575). RYUKYU ISLAND ARCHIPELAGO: Ishigaki: Hatusima 19025 (W—2243622). FORMOSA: Shimada s. n. [Oct. 8, 1915; Herb. Taiwan 5544] (W—photo). PHILIPPINE ISLANDS: Luzon: E. D. Merrill 293 (W—1310073); M. Ramos s. n. [Herb. Philip. Bur. Sci. 24072] (W—1239259); Rogerson 1099 (W—1940735). AUSTRALIA: Northern Territory: Specht 336 (W—2094618), 461 (W—2094712), 1092 (W—2125160). MOUNTED ILLUSTRATIONS: Siddiqui in Fl. W.



Pakist. Pl. ined. (N).

*ERIOCAULON COLLINUM* Hook. f.

Additional bibliography: Moldenke, *Phytologia* 32: 469. 1975.

Davidse encountered this plant "in small streamlets down brushy slopes", at 1200 meters altitude, flowering and fruiting in November, and describes the heads as grayish-white.

Additional citations: SRI LANKA: G. Davidse 8481 (Ld).

*ERIOCAULON COMPRESSUM* Lam.

Additional bibliography: Holm, *Bot. Gaz.* 31: 33. 1901; Gleason, *New Britt. & Br. Illustr. Fl.*, imp. 1, 1: 373 & 374 (1952), imp. 1, 3: 562 & 568 (1952), imp. 2, 1: 373 & 374 (1958), imp. 2, 3: 562 & 568 (1958), imp. 3, 1: 373 & 374 (1963), and imp. 3, 3: 562 & 568. 1963; G. W. Thomas, *Tex. Pl. Ecol. Summ.* 32. 1969; Moldenke, *Phytologia* 32: 469—470. 1975.

Additional illustrations: Gleason, *New Britt. & Br. Illustr. Fl.*, imp. 1, 1: 373 (1952), imp. 2, 1: 373 (1958), and imp. 3, 1: 373. 1963.

D'Arcy refers to the heads of this species as "grayish-white" and found the plant growing in wet ditches.

The Thomas, Dorris, & Drane 13921, distributed as *E. compressum*, actually is *E. decangulare* L.

Additional citations: FLORIDA: Gilchrist Co.: D'Arcy 1493 (Sd—86739).

*ERIOCAULON DECANGULARE* L.

Additional & emended bibliography: Holm, *Bot. Gaz.* 31: 17—37, fig. 1—5. 1901; Pilger in *Engl. & Prantl, Nat. Pflanzenfam. Ergänzt. 2, Nachtr. 3 zu 2*: 37. 1908; Gleason, *New Britt. & Br. Illustr. Fl.*, imp. 1, 1: 373 (1952), imp. 1, 3: 562 & 568 (1952), imp. 2, 1: 373 (1958), imp. 2, 3: 562 & 568 (1958), imp. 3, 1: 373 (1963), and imp. 3, 3: 562 & 568. 1963; G. W. Thomas, *Tex. Pl. Ecol. Summ.* 32. 1969; Beecher, *Exxon USA 14* (4): 29. 1975; Moldenke, *Phytologia* 32: 488—489. 1975.

Additional illustrations: Holm, *Bot. Gaz.* 31: 21, fig. 1—5. 1901; Gleason, *New Britt. & Br. Illustr. Fl.*, imp. 1, 1: 373 (1952), imp. 2, 1: 373 (1958), and imp. 3: 373. 1963; Beecher, *Exxon USA 14* (4): 29 [in color]. 1975.

Stapf (1930) regards "1906" as the date of publication for the Pilger work (1908) cited above, but the United States Library of Congress printed card retains the 1908 title-page date. The Holm (1901) reference, also referred to above, is sometimes misdated "1904".

Thomas (1969) calls this species the "tenangle pipewort". Webster & Wilbur encountered it in savanna areas of longleaf and loblolly pine.

Additional citations: MISSISSIPPI: Covington Co.: Webster & Wilbur 3373 (Mi). Hancock Co.: Gander 7605 (Sd—25492). LOUISIANA: Jackson Par.: Thomas, Dorris, & Drane 13921 (Kl—11795). St. Tammany Par.: C. A. Brown 2568 (Mi).



ERIOCAULON DEPAUPERATUM Merr.

Additional bibliography: Moldenke, *Phytologia* 29: 113. 1974; Hocking, *Excerpt. Bot. A.26*: 89. 1975.

Ramos & Edaño found this plant in flower and fruit in September.

Additional citations: PHILIPPINE ISLANDS: Luzon: Ramos & Edaño s.n. [Herb. Philip. Bur. Sci. 40528] (W--1261525).

ERIOCAULON DEPRESSUM R. Br.

Additional bibliography: Hocking, *Excerpt. Bot. A.26*: 89. 1975; Moldenke, *Phytologia* 32: 489. 1976.

Specht refers to this species as an annual herb, the flowers white, the fruiting heads light-brown, and found it growing in damp areas at the foot of sandstone hills and at the edge of freshwater pools in streambeds on top of sandstone scarps, flowering in September, fruiting in June.

Additional citations: AUSTRALIA: Northern Territory: Specht 462 (W--2094713), 1091 (W--2125159, Z).

ERIOCAULON DIANAE var. LONGIBRACTEATUM Fyson

Additional bibliography: Moldenke, *Phytologia* 32: 489. 1976.

The Hooker & Gandhi HFP.2432, distributed as E. dianae var. longibracteatum, actually is E. achiton Körn.

ERIOCAULON DICTYOPHYLLUM f. VIVIPARUM Moldenke

Additional bibliography: Moldenke, *Phytologia* 29: 194--195. 1974.

The Eitens have encountered this plant with its "base in water at brookside, rooted in brown sand in light shade of narrow gallery scrub" and describe the heads as white.

Additional citations: BRAZIL: Mato Grosso: Eiten & Eiten 8625 (N).

ERIOCAULON DIMORPHOPETALUM Moldenke

Additional bibliography: Moldenke, *Phytologia* 29: 283. 1974.

Davidse has found this plant growing "submerged in shallow water, except for the inflorescence, in shallow pond with about 1 foot of standing open water in Trachypogon-Curatella savanna", at 40 m. altitude, flowering and fruiting in November.

Additional citations: VENEZUELA: Bolívar: G. Davidse 4400 (Z).

ERIOCAULON DREGEI Hochst.

Additional bibliography: Holm, *Bot. Gaz.* 31: 18. 1901; Moldenke, *Phytologia* 29: 195. 1974.

ERIOCAULON ECHINULATUM Mart.

Additional bibliography: Moldenke, *Phytologia* 32: 490. 1976.

Ramos found this plant in flower and fruit in October.

Additional citations: INDIA: State undetermined: Griffith s.n. [Herb. Van Heurck 579] (W--2595296). CHINA: Kwangtung: Sampson 13453 (W--2495296). THAILAND: Maxwell 71-564 (Ac).



PHILIPPINE ISLANDS: Cullion: M. Ramos s.n. [Herb. Philip. Sur. Sci. 41325] (W--1261859).

ERIOCAULON ELICHRYSOIDES Bong.

Additional bibliography: C. Müll. in Just, Bot. Jahresber. 16 (1): 769. 1888; Holm, Bot. Gaz. 31: 19, 30, & 36. 1901; Moldenke, Phytologia 29: 196. 1974.

ERIOCAULON FISTULOSUM R. Br.

Additional bibliography: Moldenke, Phytologia 32: 492. 1976.

Additional citations: AUSTRALIA: Queensland: Banks & Solander s.n. [1770] (W--1276298).

ERIOCAULON HENRYANUM Ruhl.

Additional bibliography: Moldenke, Phytologia 29: 199 (1974) and 33: 373. 1976.

Recent collectors have encountered this plant in swampy ground, bogs, and "swampy holes in rock face", flowering in July. The flowers are said to have been "white" on Rock 24927.

Material of this species has been misidentified and distributed in some herbaria as E. cristatum Mart. and as E. cristatum var. mackii Hook. f.

Additional citations: CHINA: Fukien: J. B. Norton 1187 (W--1050933). Yunnan: A. Henry 9443 (W--457065--isotype); Rock 4587 (W--1512229), 5349 (W--1512254), 5459 (W--1512260), 5882 (W--1718104), 10704 (W--1512322), 24927 (W--1513627). Province undetermined: Delevay s.n. [Tsong so, 28 avril 1890] (W--2495295).

ERIOCAULON HENRYANUM f. VIVIPARUM Moldenke, Phytologia 33: 373--374. 1976.

Bibliography: Moldenke, Phytologia 33: 373--374. 1976.

Citations: CHINA: Fukien: J. B. Norton 1188 (W--1050934--type).

ERIOCAULON HETEROCHITON Körn.

Additional bibliography: Moldenke, Phytologia 29: 199. 1974; P. Morat, Adansonia, ser. 2, 15: [463]. 1976.

ERIOCAULON HETEROGYNUM F. Muell.

Additional bibliography: Moldenke, Phytologia 32: 494. 1976.

Perry describes this species as a small herb, 4 inches tall, with yellow heads, and encountered it in sandy creekbeds, flowering and fruiting in July.

Additional citations: AUSTRALIA: Northern Territory: R. A. Perry 2643 (W--2156548, Z).

ERIOCAULON HONDOENSE Satake

Additional bibliography: Moldenke, Phytologia 29: 200. 1974.

This plant has been collected in fruit in October and the name, "inu-no-hige", is reported for it.

Additional citations: JAPAN: Honshu: Collector undetermined



s.n. [Arai-mura, Musashi, Oct. 22, 1893] (W--205476), s.n. [Shimousa: Nakayama, 26 Sept. 1910] (W--1310119); Hashimoto 399 (W--2242168); Ohwi & Koyama 1124 (W--2211650); Togasi 722 (W--2156649), 914 (W--2188534), 1101 (W--2211632); Togashi MT.6849 [Fl. Jap. Exsicc. 67] (Mu). Shikoku: Collector undetermined s.n. [Sakawa, Tosa, Sept. 20, 1894] (W--248163).

#### ERIOCAULON HOOKERIANUM Stapf

Additional bibliography: Moldenke, Phytologia 32: 495. 1976.

Croft and his associates describe this plant as a rosette herb with semi-glossy midgreen leaves and white inflorescences and have found it in swampy grasslands at 2000 meters altitude, in flower and fruit in July.

The H. H. Bartlett 7457, distributed as E. hookerianum, appears to be E. infirmum var. puberulentum (Moldenke) Van Royen, not E. merrillii Ruhl. as previously reported by me.

Additional citations: GREATER SUNDA ISLANDS: Sabah: Topping 1885 (W--1376760), 1887 (W--1376762). Sumatra: H. H. Bartlett 7883 (W--1552471). NEW GUINEA: Papua: Croft & al. LAE.61929 (Mu).

#### ERIOCAULON HUIANUM Ruhl.

Additional bibliography: Moldenke, Phytologia 26: 26. 1973.

Additional citations: CHINA: Kiangsi: Lau 4229 (W--1752934).

#### ERIOCAULON HUMBOLDTII Kunth

Additional bibliography: Moldenke, Phytologia 32: 495. 1976.

Pursell and his associates found this plant growing in standing water, while Goodland encountered it in grassland with scattered trees, Curatella, Byrsonima, Trachypogon, and Fimbristylis dominant. Schulz found it "frecuente en el borde de un 'morichal' (con Mauritia flexuosa en la parte central), sitio inundado (5--15 cm de agua), pero con ausencia de agua superficial en la época seca, suelo rico en mat. orgán., subsuelo grava arena, vegetac. dominada por Cyperac. No. 622, Gram./Cyp. 626-627-628, Xyris savan., estrata arbustiva original de Jussiaea lithospermifolia eliminada por quema anual y pastoreo." Davidse & Llanos found it growing "in marshy area around lake margins dominated by scattered sedges and Mauritia flexuosa palms", but make the curious statement "plants with stilt roots" -- a character never before reported. They state that the heads are white.

Additional citations: COLOMBIA: Vichada: Davidse & Llanos 5228 (Ld). VENEZUELA: Guárico: J. P. Schulz 623 (Ut--320384). Monagas: Pursell, Curry, & Kremer 8310 (W--2546258). GUYANA: Goodland 888 (W--2548126).

#### ERIOCAULON INFIRMUM var. PUBERULENTUM (Moldenke) Van Royen

Additional bibliography: Moldenke, Phytologia 32: 496. 1976.

Recent collectors describe the inflorescence-heads of this plant as "bluish-white" and have found it growing on a high



plateau, flowering and fruiting in April and October. Material has been misidentified and distributed in some herbaria as E. hookerianum Stapf, E. merrillii Ruhl., and E. truncatum Hamilt.

Additional citations: PHILIPPINE ISLANDS: Culion: M. Ramos s.n. [Herb. Philip. Bur. Sci. 41340] (W--1261867).

ERIOCAULON KÖRNICKIANUM Van Heurck & Muell.-Arg.

Additional bibliography: G. W. Thomas, Tex. Pl. Ecolog. Summ. 32. 1969; Moldenke, Phytologia 32: 497 (1976) and 33: 21. 1976.

Thomas (1969) calls this species the "smallhead pipewort".

ERIOCAULON LATIFOLIUM J. E. Sm.

Additional bibliography: Moldenke, Phytologia 32: 488 & 497 (1976) and 33: 26, 153, & 183. 1976.

Additional citations: LIBERIA: J. T. Baldwin 10382 (W--2070152), 10946 (W--2070175).

ERIOCAULON LIGULATUM (Vell.) L. B. Sm.

Additional bibliography: Holm, Bot. Gaz. 31: 18. 1901; Moldenke, Phytologia 32: 497. 1976.

Lindeman and his associates describe this species as a "locally abundant herb, grayish, the leaf rosette on an up to 30 cm. long stem clothed by old sheaths, the heads white, the involucre yellowish, the bracts with white hyaline margins, the "calyx" [involucre?] dark-green, the florets white, and the anthers dark" or black. They encountered it on yellow-brown clay soil of campos, along creeklets on campos, and in "banhado em Sphagnum", flowering and fruiting in July. It is depicted on their "slide L.11.10,11".

Additional citations: BRAZIL: Paraná: Hatschbach 37922 (Ld); Lindeman & Haas 2419 (Ld), 5670 (Ut--320405). Rio Grande do Sul: Lindeman & Irgang ICN.8116 (Ut--320397). Santa Catarina: Smith & Klein 15591a (W--2653317).

ERIOCAULON LINEARE Small

Additional bibliography: Hocking, Excerpt. Bot. A.26: 89. 1975; Moldenke, Phytologia 32: 498. 1976.

ERIOCAULON LINEARE var. GIGAS Moldenke

Additional bibliography: Moldenke, Phytologia 29: 204. 1974; Hocking, Excerpt. Bot. A.26: 89. 1975.

ERIOCAULON LIVIDUM F. Muell.

Additional bibliography: Moldenke, Phytologia 29: 204--205. 1974.

Latz refers to this plant as an "erect ephemeral, heads white, rare in damp clayey loam in mixed grassland fringing lagoon" and found it in flower and fruit in May. It has also been misidentified and distributed in some herbaria as "E. quinquangulare L. sens. lat., also close to E. schultzei" Benth.

Additional citations: AUSTRALIA: Northern Territory: Latz 3703 (Z).



ERIOCAULON MAGNIFICUM Ruhl.

Additional bibliography: Moldenke, *Phytologia* 29: 206. 1974.

Rambo (1950) comments that "Até o momento só o conhecimento de Sombrio; sua constatação ao sul de Torres é questão de ulteriores pesquisas. Seja dito de passagem, que após comparação minuciosa do material com E. megapotamicum, não estou convencido duma verdadeira diferença entre as duas espécies". He is certainly correct in saying that the two taxa are extremely similar.

Additional citations: BRAZIL: Rio Grande do Sul: J. Vidal IV. 288 [Herb. Mus. Nac. Rio Jan. 105086] (W-2653329).

ERIOCAULON MAGNUM Abbiatti

Additional bibliography: Moldenke, *Phytologia* 32: 498. 1976.

Recent collectors have found this plant in fruit in November.

Additional citations: ARGENTINA: Corrientes: Achinini & Carnevali 10313 (Ld).

ERIOCAULON MEGAPOTAMICUM Malme

Additional bibliography: Moldenke, *Phytologia* 29: 207. 1974.

Rambo (1950) comments that "O lugar típico desta espécie é Povo Novo perto de Pelotas; entretanto, é o Eriocaulon predominante dos arredores de Osório, onde cresce de mistura com o Syn-gonanthus acima mencionado". He also affirms that he is unable to differentiate this species from E. magnificum Ruhl.

ERIOCAULON MELANOCEPHALUM Kunth

Additional bibliography: Moldenke, *Phytologia* 32: 499. 1976; P. Morat, *Adansonia*, ser. 2, 15: [463]. 1976.

Bunting and his associates describe this plant as an aquatic herb with the flower-heads above the water, the floral bracts dark, and the flowers whitish. Hatschbach & Kummrow report finding it in "lake water", flowering and fruiting in March.

Additional citations: VENEZUELA: Amazonas: Bunting, Akkermans, & Van Rooden 3457 (Ut-320386). BRAZIL: Goiás: Hatschbach & Kummrow 38331 (Ld).

ERIOCAULON MERRILLII Ruhl.

Additional bibliography: Moldenke, *Phytologia* 26: 461. 1973.

The E. sollyanum var. sumatranum Van Royen, previously regarded by me as a synonym of E. merrillii, seems, rather, to be a distinct, albeit very closely related, taxon.

Recent collectors have found E. merrillii in flower and fruit in September and October. Material has been misidentified and distributed in some herbaria as E. cinereum R. Br. and as E. nigriceps Merr. The M. Ramos s.n. [Herb. Philip. Bur. Sci. 24089] collection, cited below, is a mixture with something non-ericaulaceous and may also include some E. cinereum material.

The H. H. Bartlett 7457 and Boeea 5963, 6008, 8764, & 10343, distributed and previously cited by me as E. merrillii, apparently are E. sollyanum var. sumatranum Van Royen instead.



Additional citations: PHILIPPINE ISLANDS: Luzon: Elmer 14350 (W--1050497); E. D. Merrill 3624 (W--438487); M. Ramos s.n. [Herb. Philip. Bur. Sci. 24089, in part] (W--1239271); R. S. Williams 946 (W--707273), 1004 (W--707312). Polillo: C. B. Robinson s.n. [Herb. Philip. Bur. Sci. 9031] (W--629562). Sibuyan: Elmer 12248 (W--872870).

#### ERIOCAULON MIQUELIANUM Körn.

Additional bibliography: Moldenke, Phytologia 29: 209. 1974.

Togashi reports encountering this plant in "wet fields near rice fields".

The Collector undetermined s.n. [Sakawa, Tosa, Sept. 20, 1894], s.n. [Arai-mura, Musashi, Oct. 22, 1893], and s.n. [Shimousa: Nakayama, 26 Sept. 1910], distributed as E. miquelianum, are actually E. hondoense Satake, while Collector undetermined 494 is E. nipponicum Maxim.

Additional citations: JAPAN: Honshu: Togashi MT.6857 [Fl. Jap. Exsicc. 68] (Mu).

#### ERIOCAULON MIQUELIANUM var. LUTCHUENSE (Koidz.) T. Koyama

Additional bibliography: Sonohara, Tawada, & Amano [ed. E. H. Walker], Fl. Okin. 205. 1952; Moldenke, Phytologia 24: 478. 1972.

Sonohara and his associates (1952) record this plant from "In wet soil in Kunigami, Nakagami, Kume, and Ishigaki" in the Ryukyu Islands, as well as Okinawa, and record the vernacular name, "Okinawa-hoshikusa".

#### ERIOCAULON MODESTUM Kunth

Additional bibliography: Moldenke, Phytologia 32: 501. 1976.

Rambo (1950) comments that "Citada por FB para a Ilha de Sta. Catarina, foi constatada em Mostardas por um exemplar da Herbário Anchieta, para os arredores da cidade do Rio Grande por Malme, e para o Uruguai por Herter; no litoral norte ainda não a encontrei." Lindeman encountered the species in a "pequena lagoa atrás das dunas primárias.....na margem em humus úmido", flowering and fruiting in November.

Additional citations: BRAZIL: Rio Grande do Sul: Lindeman ICN. 20908 (Ut--320392); J. Vidal IV.174 [Herb. Mus. Nac. Rio Jan. 105083] (W--2653327), s.n. [Herb. Mus. Nac. Rio Jan. 126570] (W--2653328).

#### ERIOCAULON MOKALENSE Moldenke

Additional bibliography: Moldenke, Phytologia 24: 480. 1972; P. Morat, Adansonia, ser. 2, 15: [463]. 1976.

#### ERIOCAULON MONTANUM Van Royen

Additional bibliography: Moldenke, Phytologia 32: 502. 1976.

Croft and his associates describe this species as an "herb forming compact cushions" or "rosettes forming large cushions", the leaves dull medium-green or "semi-glossy mid-green", and the



inflorescence pale-green, the flowers medium green, and have encountered it in subalpine grassland or along the banks of streams in intermontane grassland basins, at 2800—3300 m. altitude, flowering and fruiting in July.

Additional citations: NEW GUINEA: Papua: Croft & al. LAE.611489 (Mu, Z), LAE.65250 (Mu).

ERIOCAULON MUTATUM N. E. Br.

Additional bibliography: Moldenke, *Phytologia* 29: 210. 1974; P. Morat, *Adansonia*, ser. 2, 15: [463]. 1976.

ERIOCAULON NANTOENSE Hayata

Additional bibliography: Moldenke, *Phytologia* 29: 210. 1974.

Additional citations: FORMOSA: Kawakami s.n. [Herb. Taiwan 5553] (W—photo of isotype).

ERIOCAULON NEO-CALEDONICUM Schlecht.

Additional bibliography: Moldenke, *Phytologia* 24: 483. 1972.

Additional citations: NEW CALEDONIAN ISLANDS: New Caledonia: Franc A.266, in part (W—1370830—cotype); McKee 3383 (W—2210249).

ERIOCAULON NEPALENSE Prescott

Additional bibliography: Moldenke, *Phytologia* 32: 502. 1976.

Nicolson refers to this plant as "occasional" in wet swampy areas or wet places in general, at 1500—1800 m. altitude, and collected it in flower in September. Inexplicably, he describes the flowers as "blue" on his no. 2361 — perhaps through an error in transcription.

Additional citations: NEPAL: Nicolson 2264 (W—2571147), 2361 (W—2571148).

ERIOCAULON NIGERICUM Meikle

Additional bibliography: Moldenke, *Phytologia* 26: 461. 1973.

The United States National Herbarium sheet of Baldwin 9145 includes a photographic copy of the original illustration of this species as published by Meikle & Baldwin (1952).

Additional citations: LIBERIA: J. T. Baldwin 9145 (W—2070083, Z), 9456 (W—2070100), 10088 (W—2070123), 10336 (W—2070145).

ERIOCAULON NIGRUM H. Lecomte

Additional bibliography: Moldenke, *Phytologia* 26: 31. 1973.

Additional citations: INDOCHINA: Tonkin: Pételot 113bis (W—1597267, Z).

ERIOCAULON NILAGIRENSE Steud.

Additional bibliography: Moldenke, *Phytologia* 32: 502—503. 1976.

Sohmer and his associates encountered this plant as common "in water of small stream" and describe the flower-heads as "grayish-colored", in anthesis in November. Stone refers to the plant as "a large species often embedded in dense mats of a small



Panicum sp., occasionally in small open pools in very moist grass-obscured rivulets in patanas in open patches of disturbed ericaceous forest". He describes the flowers as "grayish-white" and found the plant in anthesis in April. Other recent collectors refer to it as "fairly common marshy herbs with prominent heads, peduncles to 50 cm., in partial shade of wet deciduous regions", along trails in montane forests, and at the edges of streams in open marshy grassy areas, the stems and leaves erect, dark-green, and the heads white.

Additional citations: INDIA: Karnataka: Jarrett & Ramamoorthy HFP.995 (N). SRI LANKA: Davidse & Sumithraarachchi 7993 (Ld), 8624 (Ld); Sohmer, Jayasuriya, & Eliezer 8542 (Lc, N); B. C. Stone 11278 (K1-18852).

ERIOCAULON NILAGIRENSE f. PARVIFOLIUM Moldenke

Additional bibliography: Moldenke, *Phytologia* 32: 502-503. 1976.

Davidse refers to this plant as caespitose, with white flower-heads, and found it growing in marshy montane tussock grassland along streamlets, flowering and fruiting in October.

Additional citations: SRI LANKA: G. Davidse 7604 (Ld).

ERIOCAULON NIPPONICUM Maxim.

Additional bibliography: Moldenke, *Phytologia* 29: 212. 1974.

Recent collectors refer to this plant as an annual herb, 10-20 cm. tall, have found it growing in grassy fields and in "water in neglected paddies", at altitudes of 1000-3000 feet as well as at sealevel, flowering and fruiting from July to October, and report the vernacular names, "shiro-inunohige" and "shiro-inu-no-hige".

Material of this taxon has been misidentified and distributed in some herbaria as E. miquelianum Körn. On the other hand, the Collector undetermined s.n. [Imashiro, Ose, 24 August 1911], distributed as E. nipponicum, actually is E. atrum Nakai

Additional citations: CHINA: Fukien: J. B. Norton 1185 (W-1347913). KOREA: D. E. Davis 15 (W-2128326). JAPAN: Honshu: Collector undetermined 494 (W-45280), s.n. [Wada-mura, Musashi, Sept. 6, 1893] (W-205474), s.n. [Musashi: Shinako, 17 Sept. 1910] (W-1310116); E. Elliott 128 (W-1942957); Ohwi & Koyama 137 (W-2037348).

ERIOCAULON NUDICUSPE Maxim.

Additional bibliography: Moldenke, *Phytologia* 26: 32. 1973.

Additional citations: JAPAN: Honshu: Inami 956 (W-2188573).

ERIOCAULON NUTANS F. Muell.

This taxon should be deleted from the list of accepted taxa. The name is obviously a misspelling of "Eriocaulon natans F. Muell.", a synonym of E. setaceum L.





Moldenke, Harold N. 1976. "Additional notes on the Eriocaulaceae. LXIII." *Phytologia* 34(4), 390–406.

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