
Three New Species of *Erica* (Ericaceae) from South Africa

E. G. H. Oliver & I. M. Oliver

Compton Herbarium, National Botanical Institute, P. Bag X7, Claremont 7735, South Africa

ABSTRACT. Three new species of *Erica* from the Western Cape Province of South Africa are described and illustrated. Their probable affinities and known distributions are discussed. *Erica cabernetea* is a very restricted endemic in the Elgin Basin, *E. navigatoris* is known only from two well-separated inland mountains, and *E. cedromontana* occurs widespread in the Cedarberg mountains on rock faces.

The genus *Erica* L., occurring from Norway to southern Africa, currently comprises 760 species, of which 90% are endemic in the southern part of South Africa. Our research on the genus in this region has revealed numerous new species that need to be described formally and species complexes that need to be resolved. Despite the large number of species known, it is sometimes difficult to ascertain the precise affinities of new species with our present knowledge of the genus.

Erica cabernetea E. G. H. Oliver, sp. nov. TYPE: South Africa. Western Cape: 3418BD, Caledon District, Elgin area, Arieskraal, slopes above the Klein Palmiet River, 800 ft. (244 m), 9 Nov. 1970, *Oliver 3188* (holotype, NBG; isotypes, BM, BOL, E, K, MO, NY, P, PRE, S). Figure 1.

Fruticulus parvus compactus, unicaulis. Rami pilis paucis brevibus reflexis et glandibus subsessilibus. Folia ternata oblonga brevis apiculata anguste sulcata pilis paucis praecipue in apice; petiolum appressum, glabrum, ciliolatum. Flores ternati 1–2(3) fasciculati terminales breves racemosi; bractea mediana lanceolata ad linearis, sulcata, glabra, glandibus subsessilibus; bracteolae 2 bracteae similes. Calyx quadripartitus, segmentis oblongis anguste et longe sulcatis, sulcus ad basim late et distincte V-formis, brevis apiculatis marginibus puberulis et glandibus subsessilibus elongatis. Corolla quadrilobata, cyathiformis ad semiglobosa, glabra, atrovinosa, lobis erectis triangularibus suberosis. Stamina 8 inclusa; filamenta linearia glabra, flexu sigmoideo; antherae bipartitae, subbasifixae, ovatae, thecae late ovato-ellipticae calcaris decurrentibus angustis; pollen in tetradis. Ovarium quadriloculare, late obovoideum stipa lata brevi, emarginatum, glabrum, ovulis 2 vel 3 in quoque loculo erectis in columella basali; stylum inclusum rectum glabrum; stigma capitata. Capsulum obovoideum tenellum, seminibus ellipsoideis luteis alveolatis.

Compact, rounded, much-branched shrublet 100–150 mm tall, single-stemmed reseeder.

Branches numerous, up to 10 mm long with no, or rarely few, secondary branchlets of the same season, internodes 1.0–1.5 mm long with a few very short reflexed hairs and a few subsessile glands, becoming glabrous when old. *Leaves* ternate, imbricate to subspreading, 4.0 × 0.8 mm, oblong, shortly apiculate, adaxially flattened, abaxially rounded and narrowly sulcate with a distinct acute edge, the younger with very short scattered hairs especially on the margins and apex, glabrous when old, edges ciliolate and with short-stalked, white, nonsticky glands; petiole appressed, about 0.6 mm long, glabrous, ciliolate. *Inflorescence*: flowers 3-nate in 1–2(–3) whorls, in a condensed terminal raceme on most branches; pedicel 5 mm long, minutely puberulous, red; bract partially recaulescent in middle position, 1.5 × 0.3 mm, lanceolate to linear, sulcate for 1/3 its length, glabrous, edges with subsessile glands, mostly reddish, occasionally with apex green; bracteoles 2, about 3/4 up pedicel, 1.2–1.5 × 0.3 mm, lanceolate or oblanceolate, otherwise like the bract. *Calyx* 4-partite, segments overlapping slightly at base, 1.6–2.1 × 0.7 mm, oblong, narrowly sulcate for most of their length flaring out into distinct V-shape at base, apex shortly apiculate, puberulous toward edges, edges lined with subsessile nonsticky white elongate glands, reddish green to dark red, shiny when dry. *Corolla* 4-lobed, 4.2 × 4.2 mm, cyathiform to semiglobose, glabrous, deep wine-red, lobes erect triangular, subacute, edges entire to slightly erose. *Stamens* 8, included; filaments 1/3 as long as corolla, linear widening slightly toward apex, with very marked sigmoid bend below anther, glabrous, white; anthers bipartite, subbasifixed, ovate, smooth, golden brown, appendiculate; thecae 1.0 × 0.7 mm, broadly ovate-elliptic; spurs decurrent along apex of filament, narrow, just shorter than theca, straight, pendulous to spreading abaxially due to sigmoid bend of filament; pollen in tetrads. *Ovary* 4-locular, 1.6 × 1.2 mm, broadly obovoid with a short broad basal stipe surrounded by dark red nectaries, emarginate, glabrous, red, shiny; ovules 2 or 3 per locule, erect from a placenta on basal half of columella; style included, straight, as long as ovary, glabrous; stigma capitata. *Capsule* obovoid up to 3 mm long, the

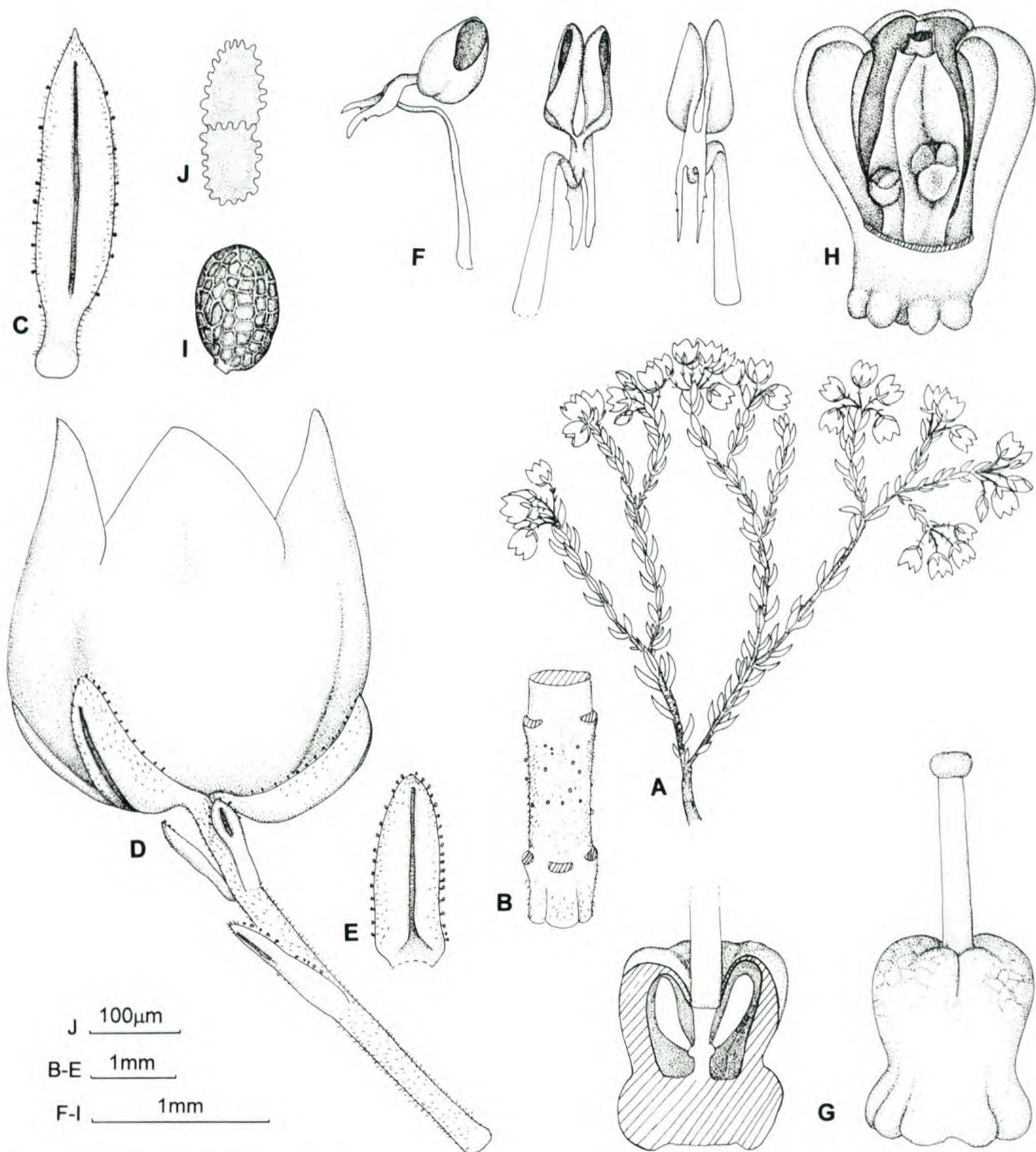


Figure 1. *Erica cabernetea* E. G. H. Oliver. —A. Flowering branch, natural size. —B. Stem. —C. Leaf. —D. Flower. —E. Sepal. —F. Stamen, side, front, and back views. —G. Gynoecium (right), with ovary cut in half longitudinally. —H. Capsule, with one valve removed. —I. Seed. —J. Testa cells. All drawn from the type collection, *Oliver 3188* (del. Inge Oliver).

valves delicate, not much thickened, the septa well developed and mostly on the columella; seeds ellipsoid, yellow, alveolate, testa cells subequal with undulate anticlinal walls, pits present.

This new species is closely allied to *Erica extrusa* Compton in having the few erect basally attached ovules, apiculate sepals and leaves, decurrently spurred anthers, and long-sulcate sepals with a characteristic V-shaped basal portion to the sulcus. It can, however, easily be distinguished from

that species by the wine-red flowers (not white to pale pink), short broad stipe below the ovary (not sessile), leaves shortly apiculate (not long apiculate), narrow brown spurs (not broad, lobed white spurs), lack of conspicuous ridges between the sepals, and less hairy stems. Both species are endemic to the same small area.

These two species have an affinity with the complex formed by *Erica curvirostris* Salisbury and *E. lateralis* Willdenow because of the distinctive

shape of their sepals with their narrow sulcus and distinct V-shaped basal portion. *Erica curvirostris* and *E. lateralis*, however, both have 21 pendulous ovules per locule. When Compton described *E. extrusa* he did not ally his species to any other one, but placed it in section *Hermes* with hesitation—"separating it from other species of the section *Hermes* (into which, as a matter of fact, it does not fit very well)." Within section *Hermes* it has a number of characteristics in common with *E. collina* Guthrie & Bolus from the Hermanus area, with its basally ridged corolla, only 4 ovules per locule, and bipartite anthers, but that species has the ovules erect, a nonmarginate ovary, plumose hairs on the pedicel, leaves that are not apiculate or incurved apically, and the bract being always nonrecaulescent. In both *E. extrusa* and *E. cabernetea* the flowers are borne in condensed terminal racemes with the bract partially recaulescent quite unlike those in section *Hermes*. It would appear that the relationships of these two species from the Elgin Basin lie in section *Orophanes* with *E. curvirostris* and *E. lateralis*.

The flowers of *Erica cabernetea* are a dark wine-red color and when held up to the light are reminiscent of a glass of vintage cabernet sauvignon wine (-eus: indicates material or color or resemblance in quality). This dark color is unusual in *Erica* and is shared by only a few rather unrelated species such as *E. sicifolia* Salisbury, *E. haematocodon* Salter, *E. cunoniensis* E. G. H. Oliver, *E. atrovinosa* E. G. H. Oliver, the very localized Rooi Els form of *E. pulchella* Houttuyn, and one of the many color forms of *E. mammosa* L. The significance of this color in these species cannot be explained at present. These species occur in very different habitats, from sandy flats to high-altitude rocky slopes to moist rock ledges. *Erica mammosa* is the only one with a large tubular flower that in its other color forms is known to be bird pollinated. No pollinators were recorded visiting the plants of *E. cabernetea*, whose flowers were noticeably inconspicuous to the human eye due to their dark color and the very white background of the quartzitic sand.

Both of the related species, *Erica cabernetea* and *E. extrusa*, are highly restricted endemics occurring only on the sandy, quartzitic flats and lower slopes in the Arieskraal/Somersfontein area of the apple-growing Elgin basin (Fig. 2). In this area they are likely to become rare due to the reduction of their habitat for agriculture and major water-storage dams. The Elgin basin is a high-rainfall zone due to the convergence of good winter- and summer-rainfall patterns in that specific part of the Western

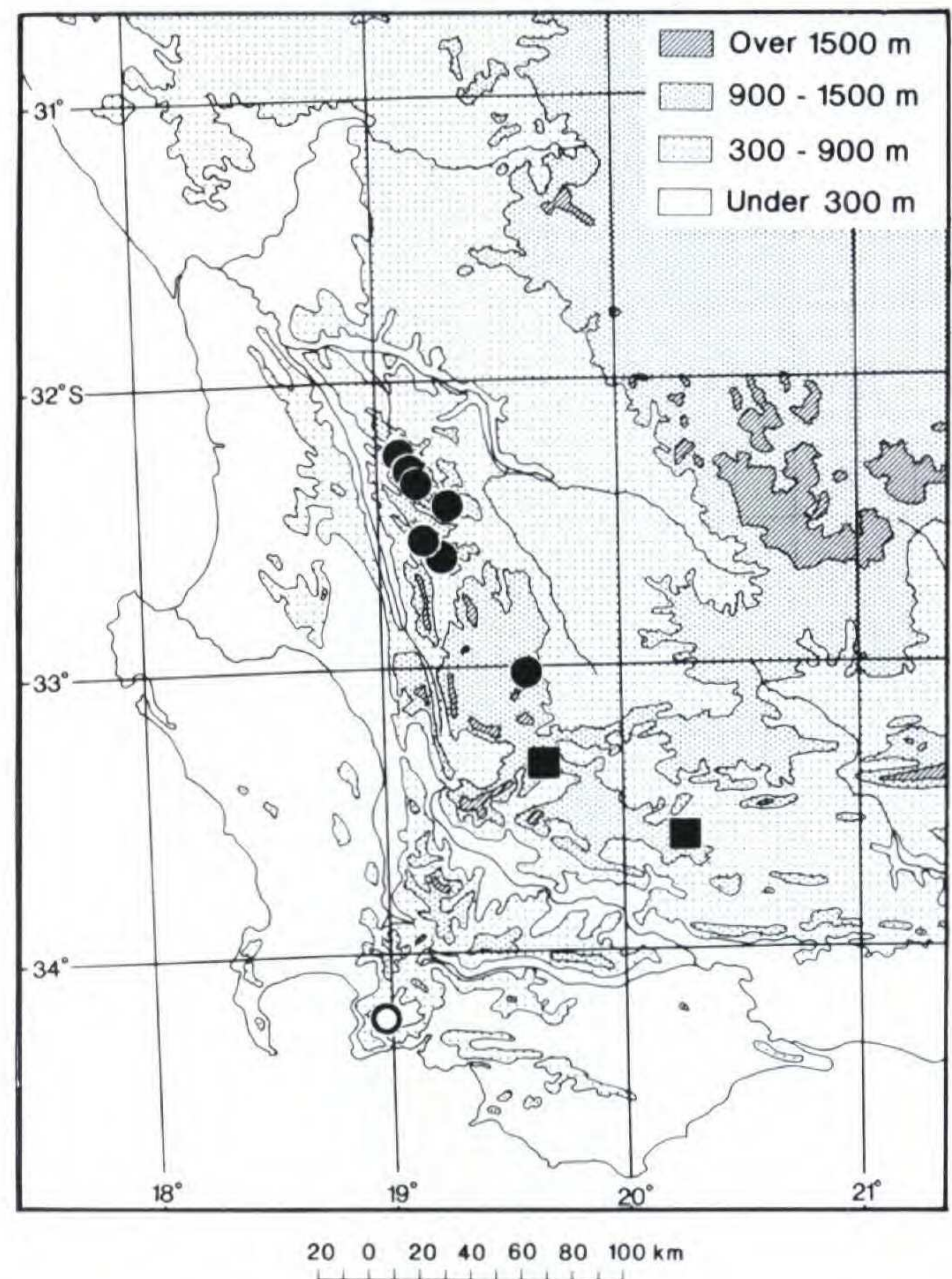


Figure 2. Known distribution of *Erica cabernetea* (open circle), *Erica cedromontana* (solid circles), and *Erica navigatoris* (squares).

Cape. Both form low compact, sometimes almost cushion-like, plants in open places between tussocks of Restionaceae and low sclerophyll shrublets.

Paratypes. SOUTH AFRICA. **Western Cape:** 3418: (-BB), Arieskraal Farm, underneath powerlines entering from Somersfontein after crossing the Klein Palmiet River, 140 m, 21 Oct. 1995, *Rode 519* (NBG); (-BB/BD), Palmiet River, Elgin, Dec. 1941, *Stokoe 7956* (BOL), *Stokoe sub SAM 55108* (SAM); Caledon Div., Palmiet River valley, Jan. 1943, *Stokoe 8559* (BOL); Elgin, between Grabouw & the Paardeberg, Dec. 1947, *Stokoe in SAM 62478* (SAM); (-BD), Elgin area, NE corner of 3418BD near Somersfontein, 800 ft. (244 m), 19 Sep. 1969, *Boucher 714* (NBG, PRE).

Erica cedromontana E. G. H. Oliver, sp. nov.
TYPE: South Africa. Western Cape: 3219AC, Central Cedarberg, Langberg, SW-slopes, cracks under small overhangs on rock faces below summit, 1820 m, 7 Dec. 1995, *Oliver 10683* (holotype, NBG; isotype, PRE). Figure 3.

Fruticulus minimus multiramulosus incanus. Rami brevissimi fragilissimi puberuli pilis reflexis et pilis paucis longissimis simplicibus. Folia ternata ovata ad elliptica late sulcata puberula incana et pilis paucis longissimis simplicibus. Flores ternati in fasciculo unico in ramulis terminales; pedicellus 1.0–1.3 mm longus, puberulus; bractea partim recaulescens parva in medio pedicello;

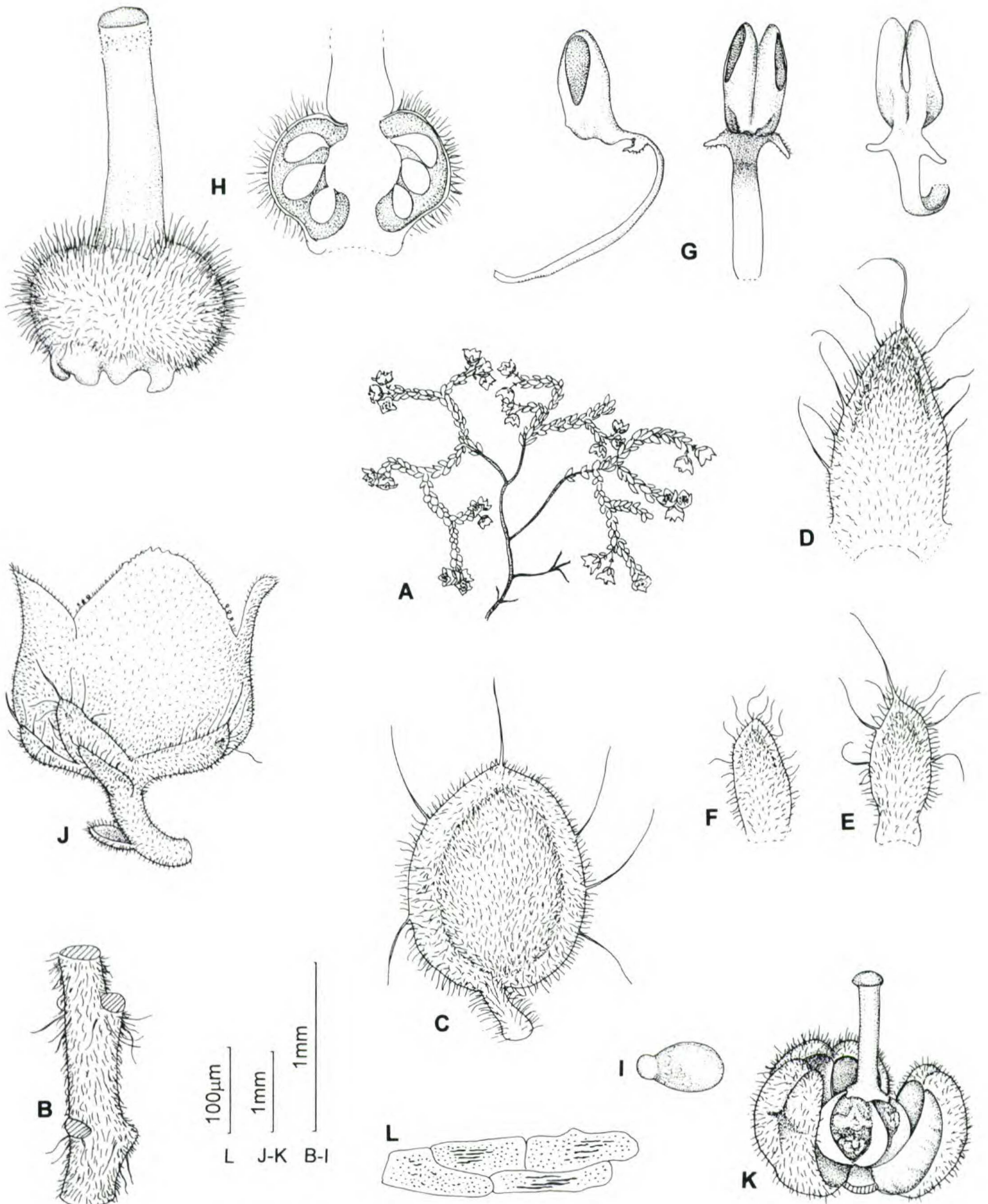


Figure 3. *Erica cedromontana* E. G. H. Oliver. —A. Flowering branch, natural size. —B. Stem. —C. Leaf. —D. Sepal. —E. Bract. —F. Bracteole. —G. Stamen, side, front, and back views. —I. Seed. —J. Flower. —K. Capsule, with one valve removed. —L. Testa cells. All drawn from the type collection, *Oliver 10683* (del. Inge Oliver).

bracteolae 2, in medio pedicello ad approximatae. Calyx quadrilobatus, puberulus et pilis paucis longissimis simplicibus. Corolla quadrilobata cyathiformis puberula alba ad roseorubra. Stamina 8 libera inclusa; filamenta curvata; antherae appendiculatae, calcaribus parvis in filamentis decurrentibus; pollen in tetradis. Ovarium quadriloculare, puberulum, emarginatum, ovulis 4–6 in quoque loculo;

stylum inclusum; stigma truncata. Fructus capsularis seminibus glabris nitidis croceis, elaiosoma alba.

Small, much-branched, matted gray shrublet to 50 × 80 mm, rarely larger, single-stemmed. *Branches* numerous, very short, brittle, terminating

in florescences, puberulous with reflexed hairs and a few much longer, slender, simple (rarely gland-tipped) hairs mostly at nodes. *Leaves* ternate, sub-erect to spreading, longer than internodes, 1.5×0.8 – 1.0 mm, broadly ovate to broadly elliptic, semi-openbacked with revolute margins, sulcus very wide, puberulous all over and with a few very long straight to straggly hairs toward the margins, rarely gland-tipped, apex subacute; petiole appressed, 0.3 mm long, puberulous. *Inflorescence*: flowers 3-nate in 1 whorl at ends of branchlets ca. 10 mm long; *pedicel* 1.0 – 1.3 mm long, puberulous, dull red; bract partially recaulescent in about the middle position, 0.8 mm long, elliptic, broadly sulcate for $\frac{1}{2}$ its length or nonsulcate, puberulous abaxially with a few long simple or gland-tipped hairs on margins, dull red; *bracteoles* 2, from middle position to approximate to calyx, 0.7 mm long, otherwise like bract. *Calyx* 4-lobed, 1.3×0.7 mm, only slightly fused at base, adpressed to corolla, lobes ovate with subacute apex, broadly sulcate for $\frac{1}{2}$ – $\frac{3}{4}$ their length, not imbricate, entire, puberulous abaxially and with long thin straggly simple or gland-tipped hairs on margins, greenish to dull red. *Corolla* 4-lobed, 2.5×2.7 mm, cyathiform, the mouth not contracted, puberulous outside, when fresh white tinged pinkish red mainly on upper side and toward the lobes becoming pinkish red all over, turning yellow to orange-red when dry; lobes erect, about twice the length of tube, subacute, margin erose and fringed with short hairs and toward the base a few short-stalked glands. *Stamens* 8, free, included; filaments oblong, broad, 1.3 mm long, markedly curved, glabrous; *anthers* dorsifixed near base, bilobed, 0.7×0.3 mm, oblong, appendiculate; thecae erect and adpressed, laterally narrowly oblong-elliptic, yellowish brown, spurs attached on filament below thecae, 0.15 mm long, semispreading, narrow, ciliolate, pore half the length of theca; *pollen* shed as tetrads. *Ovary* 4-locular, 0.8×1.1 mm, oblate, emarginate, puberulous, green, with nectaries around the base; ovules 4–6 per locule, pendulous to spreading from a central placenta; *style* included, 1.3 mm long, terete, slightly papillate below apex, otherwise glabrous, *stigma* simple, truncate. *Fruit* a dehiscent capsule with woody valves and the septa 50% on valve and 50% on columella; *seeds* 0.5×0.25 mm, ellipsoid, slightly flattened, smooth, shiny, orange, with a small white elaiosome, testa cells elongate, anticlinal walls slightly undulate, inner periclinal walls with numerous small pits. Figure 3.

This new species is distinguished by the very small brittle habit, the broad, gray, finely puberu-

lous leaves with a few long simple hairs on the margins, the anthers with small spurs decurrent on the filament, and the small shiny orange seeds with a small white elaiosome.

Erica cedromontana is not closely related to any other species. In foliar and floral characters it has some similarities to a group of hairy-flowered species that occur in the region—*Erica cederbergensis* Compton, *E. setociliata* H. A. Baker, *E. eriocodon* H. Bolus, and *E. trichadenia* H. Bolus. These all, however, form much more robust and larger plants with sulcate leaves and do not grow in rock crevices. In *E. trichadenia* the spurs on the anthers are indeed decurrent, but the long, much stouter hairs on the leaves and floral parts are glandular, and the testa is alveolate with the anticlinal walls markedly undulate. *Erica eriocodon* is the closest in leaf type, which is more open-backed, but the anthers are a different shape and lack spurs, and the hairiness is more lanate; seeds are unknown. *Erica setociliata* is the furthest removed due to the development of the wind-pollination syndrome with accompanying modifications of the style/stigma complex and a loss of nectaries; it also has erect ovules. *Erica cederbergensis* occurs very close to the new species geographically, growing semi-erect to sprawling in the short vegetation on open slopes below the summit cliffs on Langberg. It has the same type of testa and testa cells, but lacks the elaiosome, and the anthers are not spurred.

The habit and habitat of *Erica cedromontana* are remarkable in the Cedarberg. We studied a small population of plants growing in rock crevices and on small ledges under overhangs on south-facing cliffs on Langberg. Here the plants were in deep shade, certainly for most of the day. In this shady situation, together with their hoary gray color, small size, and the grayish white lichen-covered rocks, the plants were very difficult to spot. This appears to be the case from all the other records except for that of *van Wyk 1501* (NBG, PRE), which was collected out in open ground between rocks and was therefore much larger and more erect.

This habitat and habit are similar to another species that has an outlying record in the southern Cedarberg, *E. marlothii* H. Bolus, recorded once from Gideonskop, otherwise known only from the high peaks in the Hex River mountains. It was recorded as growing in rock crevices on large boulders on the south slopes. It has open-backed leaves, but the corolla is depressed globose and glandular hairy, the sepals have sessile glands adaxially, the anthers are recurved and spurless, and the style is curved and puberulous.

Erica cedromontana is well distributed on the

highest peaks within the mountainous region of the Cedarberg from Krakadouw in the north to Gideon-skop in the south, with an extension into the eastern part of the central Cold Bokkeveld at Vleiberg (Fig. 2). In its very specific habitat the biology of *E. cedromontana* requires comment. The possession of what appears to be an elaiosome on the seed would indicate that the seeds are distributed by ants. This would explain how the species is able to distribute itself locally in inaccessible crevices under overhangs. However, this does not correlate with the long-distance dispersal required between the high peaks, which can only be explained by wind dispersal. One would also assume that the highly inconspicuous plants and flowers would be visited by the selfsame ants for the pollination process. We have noted the visitation of ants to the flowers of four species of *Erica* with very low or semiprostrate shrublets and white pendulous flowers growing and flowering together on a nearby peak.

The first collection was made as early as March 1843. The full sheet in TCD has the label written in handwriting that looks very similar to that of Wallich on other collections of South African Ericaceae in Kew. This is substantiated in the entry for Nathaniel Wallich in *Botanical Exploration of Southern Africa* (Gunn & Codd, 1981): "In the early part of 1843 he accompanied the astronomer Thomas Maclear into the mountains north-west of Cape Town and to the Cedarberg." Presumably this collection was acquired by Harvey who resided at the Cape and, the following year, moved to TCD. The fragment in K clearly comes from the TCD sheet as it is labeled "*E. microphylla*" by Sonder who had had the TCD material on loan for the revision of the Ericaceae for his *Flora Capensis*. This work was never completed by him, and the loan was returned to TCD via K, which must have kept a fragment. Bolus saw the fragment in K and kept a flower for BOL with the comment "*Eremia* sp."

Paratypes. SOUTH AFRICA. **Western Cape:** 3219: (-AA), Krakadouw, crevices sheltered under overhanging rock, 5000 ft. [1525 m], 20 Oct. 1945, *Esterhuysen 12102* (BOL, NBG); (-AC), top of Sneeuwkop in rocks, 27 Mar. 1843, *Wallich s.n.* (TCD—BOL & K fragment); Langberg, rocky S slopes, shady rock crevices, 15 Dec. 1941, *Esterhuysen 7339* (BOL, NBG); rocky peak just N of Tafelberg, in sheltered rock crevices, 5500 ft. [1677 m], 29 Dec. 1947, *Esterhuysen 14341A* (BOL); Crystal Pool, crevices of rock face behind hut, Mar. 1933, *Stokoe 2605* (BOL), 5900 ft. [1800 m], Dec. 1941, *Stokoe SAM 55110* (SAM), *Stokoe SAM s.n.* (BOL); Sneeuwkop, Dec. 1941, *Stokoe SAM 55147* (SAM); Corridor Peak, S-facing cracks & overhangs in shade, 1800 m, 29 Nov. 1987, *Taylor 11924* (K, NBG); (-AD), Wolfberg Cracks, 3000–4000 ft. [915–1220 m], 26 Dec. 1953, *Esterhuysen 22446* (BOL), S aspect, crevices, 1220 m, 27 Dec. 1962, *Esterhuysen 29981*

(BOL); plateau on Wolfberg between cracks and arch, rock crevices, 1600 m, 26 Nov. 1983, *M. van Wyk 1501* (NBG, PRE); (-CA), Apollo Peak, S aspect, crevices in massive cliffs, 5200 ft. [1586 m], 13 Dec. 1950, *Esterhuysen 18068* (BOL); (-CD), Gun Peak, upper SW slopes, boulder scree, growing flat in crack in boulder overhang in deep shade, 1450 m, 27 Oct. 1986, *Taylor 11643* (NBG). Without precise locality: Cedarberg, Mar. 1932, *Stokoe SAM 50107* (SAM). 3319: (-BA), Vleiberg, S-facing, rock crevices in overhanging rock, 1650 m, Oct. 1994, *Hitchcock s.n.* (NBG).

Erica navigatoris E. G. H. Oliver, sp. nov. TYPE: South Africa. Western Cape: 3319BC, Worcester Div., Matroosberg, steep slopes above De Doorns, SE aspect, ca. 5000 ft. (1525 m), 18 Dec. 1962, *Esterhuysen 29875* (holotype, BOL; isotypes, BM, K, MO, NBG, P, PRE, S, W). Figure 4.

Fruticulus ad 400 mm altus, unicaulis. Rami pauci erecti innovantes, cristis infra foliis, glabri vel interdum pilis minutis paucis. Folia ternata imbricata erecta ad sub-patentia apice cuspidato ciliata minute sulcata glabra; petiolus glaber. Flores ternati unifasciculati terminales in ramulis lateralibus; pedicellus reflexus glaber; bractea basali petaloidea; bracteolae 2 medianae bractee similes. Calyx quadripartitus segmentis ovatis ad lanceolatis glabris. Corolla quadrilobata urceolata glabra alba, lobis sub-patentibus colliculatis. Stamina 8, libera manifesta; filamenta ad basim parum lata recta glabra; antherae obcuneatae glabrae appendiculatae, calcaribus ad apice filamentum decurrentibus pendulis anguste ellipticis ad anguste ovatis fimbriolato-ciliatis; pollen in tetradis. Ovarium quadriloculare late elliptico-turbinatum 4-lobatum vel parum 8-lobatum emarginatum glabrum nectariis basalibus; ovuli ca. 10 in quoque loculo; placenta in dimidio superiore; stylum exsertum glabrum; stigma capitellatum. Fructus non visus.

Compact erect shrub to 400 mm tall, single-stemmed. *Branches:* few erect main branches mostly with continuous vegetative growth and few flowering lateral branches ca. 3–5 mm long, the lower occasionally up to 20 mm, internodes 1–2 mm long, with slight infrafoliar ridges, glabrous or occasionally with a few minute hairs in between the ridges. *Leaves* 3-nate, imbricate, 5–6 × 1 mm, erect to very slightly spreading, narrowly oblong, apex cuspidate, adaxially flattened, abaxially rounded, glabrous, edges minutely ciliate, sulcus narrow; petiole 1 mm long, glabrous, appressed. *Inflorescence:* flowers 3-nate in 1 whorl, terminal on side branches, occasionally on main branches; *pedicel* 6 mm long, reflexed, glabrous, reddish; *bract* partially recaulescent in basal position, 3.5 × 1.0 mm, lanceolate, sulcus 1/3 of its length, glabrous with a few small basal glands, petaloid white tinged pale green and pink toward apex; *bracteoles* 2, like bract but in middle position. *Calyx* 4-partite, ca. 2/3 as long as corolla, segments imbricate at base only, 3.6 ×

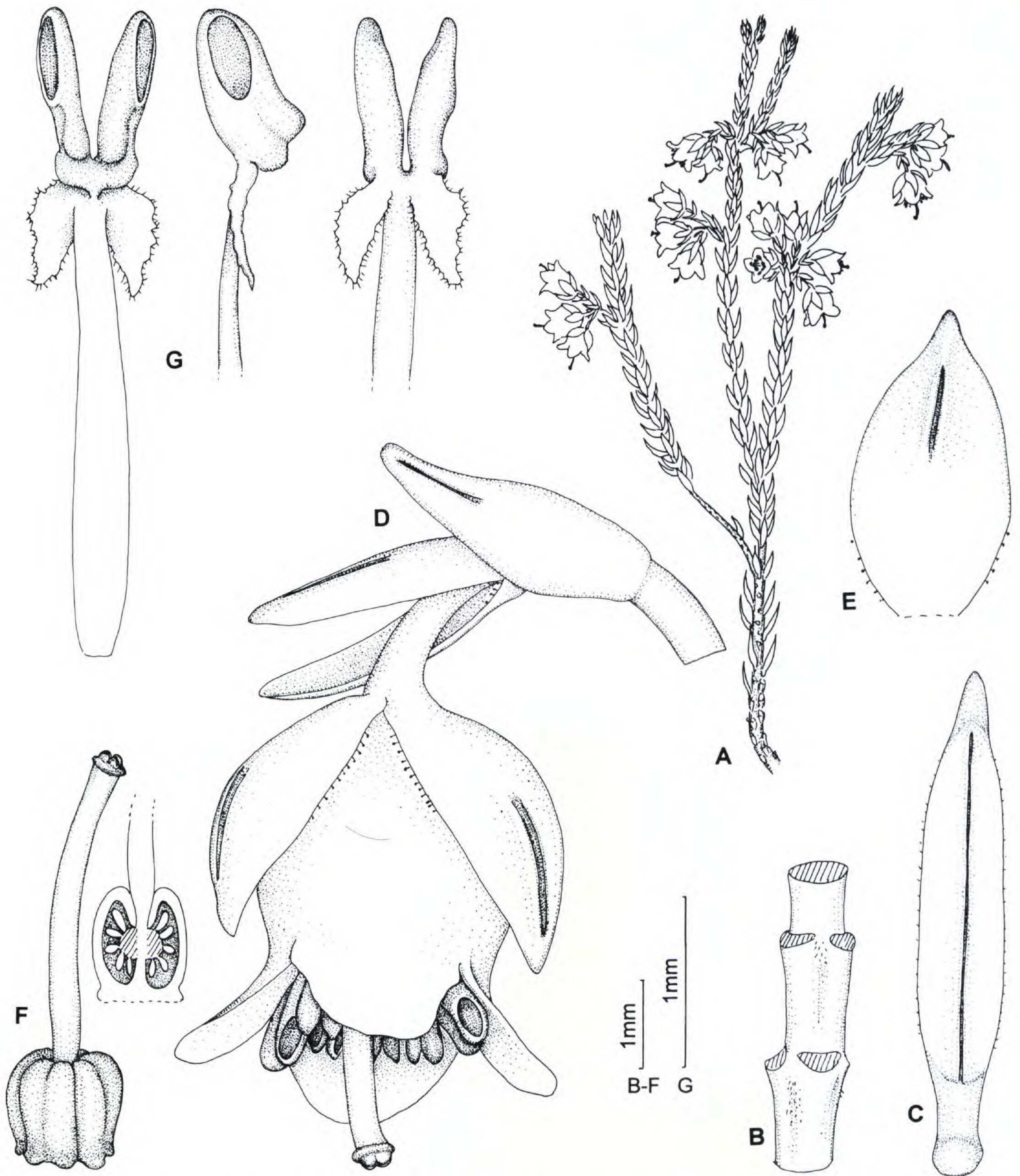


Figure 4. *Erica navigatoris* E. G. H. Oliver. —A. Flowering branch, natural size. —B. Stem. —C. Leaf. —D. Flower. —E. Sepal. —F. Gynoecium with, upper right, ovary cut in half longitudinally. —G. Stamen, front, side, and back views. All drawn from the type collection, *Esterhuysen 29875* (del. Inge Oliver).

1.8 mm, ovate to lanceolate, apex pointed, sulcus narrow, $\frac{1}{3}$ – $\frac{1}{2}$ the length of segment, petaloid white or pinkish, glabrous, margins entire with a few basal slightly stalked minute glands. *Corolla* 4-lobed, 5×4 mm, urceolate, glabrous, white and slightly translucent; lobes 1.8 mm long, subspreading, subacute to rounded, colliculate ad- and abaxially, edges very slightly and shortly aculeate. *Stamens*

8, free, manifest; filament 5.5×0.6 mm, oblong, slightly broadened toward the base, straight, glabrous; anthers 1 mm long, obcuneate, subbipartite, slightly recurved, glabrous, dark brown, appendiculate; thecae slightly spreading, 1.0×0.4 mm, oblong-elliptic, slightly falcate; spurs attached just below thecae on apex of filament, pendulous, ca. 0.7 mm long, narrowly elliptic to narrowly ovate,

white, fimbriolate-ciliolate; pollen in tetrads. *Ovary* 4-locular, 1.2×1.2 mm, broadly elliptic-turbinate, 4-lobed or slightly 8-lobed, emarginate, glabrous, shiny, red, somewhat darker at base with small nectaries around base; ovules ca. 10 per locule, erect to spreading to pendulous from a placenta in upper half; style exerted just longer than corolla, straight or slightly curved at apex, glabrous; stigma capitate. *Fruit* not seen.

This new species is allied to the *Erica brevicaulis* Guthrie & Bolus/*E. costatisepala* H. A. Baker complex in section *Eurystoma*, but can be distinguished by the broadened sclerified spine at the ends of the leaves and sepals (not just acute/pointed), plant glabrous except for a few nonsticky sessile glands on the margins of the sepals (not with hairy anthers, spurs, and ovary), and deeply emarginate ovary (not just slightly so). The flowers of the new species are much larger, about twice the size of the other two species. All have spurs half-decurrent along the apex of the filament, but in *E. navigatoris* and *E. costatisepala* these spurs are broad and flattened and in *E. brevicaulis* narrow.

Erica navigatoris is known from only two local-

ities some 60 km apart in the central inland mountains of the Western Cape (Fig. 2). Most of the collections were made on middle slopes of the Matroosberg, which is the highest mountain in the region at 2250 m (matroos = sailor, hence the specific epithet). *Erica brevicaulis* is also known only from the Hex River mountains, including Matroosberg, but from the summits and forming very small, compact, woody shrublets. *Erica costatisepala* occurs on the ranges to the east of the above localities, mainly on the Klein Swartberg, where it forms low, semispreading shrublets against rock faces at high altitudes.

Paratypes. SOUTH AFRICA. **Western Cape:** 3319: (-BC), Worcester District, Matroosberg, SE slopes, rocky, 5000 ft. (1525 m), 13 Nov. 1960, *Esterhuysen 28627* (BOL); Matroosberg, *Marloth s.n.* (NBG); De Doorns, mountains near Groot Kloof, Jan. 1948, *Stokoe sub SAM 62329* (BOL, SAM). 3320: (-CB), Montagu District, Wa-boomsberg, rock outcrops up to summit, 3950 ft. (1205 m), 12 Nov. 1989, *Bean, Viviers & Vlok 2091* (BOL, NBG).

Literature Cited

Gunn, M. & L. E. Codd. 1981. Botanical Exploration of Southern Africa. Balkema, Cape Town.