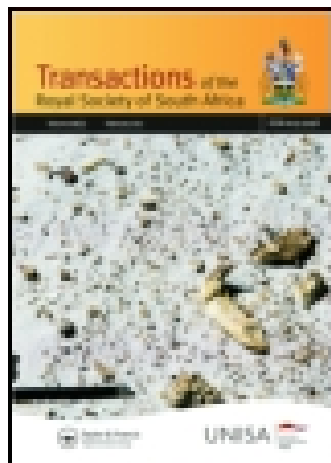


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CONTRIBUTIONS TO THE AFRICAN FLORA

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^a Harpagophytum Peyleræ

^b Selago swaziensis

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CONTRIBUTIONS TO THE AFRICAN FLORA.

By HARRY BOLUS, D.Sc., F.L.S.,

INCLUDING

Harpagophytum Pegleræ, by Dr. O. STAPF.

Selago swaziensis, by Mr. R. A. ROLFE.

(Plate XI.)

LOTONONIS SWAZIENSIS, *Bolus*, n. sp. (Leguminosæ-Genisteæ-Crotalariae).

L. multifloræ proxima sed foliolis majoribus, bracteolis orbicularibus, floribus majoribus et in racemis paucioribus, facile distinguitur.

Fruticulus 30–60 cm. altus, undique, petalis flavis exemptis, argenteo-nitens; rami ramulique graciles, erecto-patentes, internodiis 0·5–1·5 cm. longis; folia alterna, exstipulata, petiolata, petiolis 0·2 cm. longis, 3-foliolata, foliolis obovato-cuneatis, emarginatis, apiculatis, 0·7–1·3 cm. longis, 0·4–0·6 cm. latis; racemi terminales, sæpissime 3-, rarius 1–2-fl., bracteis caducis; pedicelli 0·2 cm. longi, bracteolis 2, orbicularibus, valde concavis, apiculatis, 0·5 cm. longis et latis; calyx inflatus 0·8 cm. longus, labio superiore perbrevissime 4-dentato, segmento inferiore deltoideo, acuminato, 0·2 cm. longo; vexillum reflexum, subrotundum, breviter unguiculatum, externe pilosum, 1·2 cm. longum 1 cm. latum; alæ obovatæ, apice rotundatæ, lamina 0·6 cm. longa et lata, ungue 0·6 cm. longo; carina acuta, lamina 0·5 cm., ungue 0·6 cm. longo; legumen sessile, oblique oblongum, subturgidum, 1·5 cm. longum, 0·4 cm. latum, seminibus 5–6.

HAB.: Swazieland; grassy hills and valleys, Dalriach, near 'Mbabane, Jan., approx. alt. 1,350–1,450 meters, *H. Bolus*, 11766.

INDIGOFERA SWAZIENSIS, *Bolus*, n. sp. (Leguminosæ-Galegeæ-Indigoferæ. § Productæ).

Ad I. cylindricam accedit sed indumento, pedicellis brevioribus, bracteis longioribus, differt.

Suffrutex ramis adscendentibus, striatis, cum petiolis, stipulis,

nerviis primariis, pedunculis, calyce et vexillo brunneo-pubescentibus, internodiis 2-2.5 cm. longis; folia petiolata, petiolo 1 cm. longo, imparipinnata, foliolis sæpissime 7-8, rarius 4-6-juga, petiolulatis, minute stipellatis, ovalibus, apiculatis, strigillosis, 1-2 cm. longis, 0.7-1.2 cm. latis, rhachi 6.5-7.5 cm. longa; stipulæ setaceæ, 1 cm. longæ; pedunculi 2-2.5 cm. longi, racemis densis, 4-6 cm. longis; flores pedicellati, pedicellis 0.2 cm. longis; calyx 0.3 cm. longus, subæqualiter 5-lobus, lobis deltoideis, acuminatis; vexillum late ovatum, apice rotundatum, sessile, intus glabrum, 0.9 cm. longum, 0.6 cm. latum; alæ oblongæ, obtusæ, brevissime unguiculatæ, 0.6 cm. longæ, 0.2 cm. latæ; carina obtusa, vexillum subæquans; stylus basi villosus; ovarium 7-8-ovulatum, glabrescens; legumen?

HAB.: Transvaal; Schlechter 3908! near Lydenburg, Jan., Wilms 327 (in herb. Kew & Brit. Mus.), 315 (in herb. Brit. Mus.); *Swaziland*; grassy places, Dalriach, near 'Mbabane, Dec., approx. alt., 1,450 meters, *H. Bolus*, 11804.

VIGNA DAVYI, Bolus, n. sp. (Leguminosæ-Phaseoleæ-Euphaseoleæ).

V. omnibus partibus (petalis exemptis) hirtis; foliis simplicibus.

Ad quasdam formas V. vexillatæ accedit.

Tota planta nisi petala plus minusve aspera villis brunneis; rami procumbentes, patentes; folia simplicia, ovata vel late lanceolata, acuta, basi rotundata, petiolata, petiolis 1-1.5 cm. longis, multi-reticulata, nerviis primariis 3, adscendentibus, inferne prominentibus, 10-12 cm. longa, 4-8 cm. lata; stipulæ oblique ovato-lanceolatæ, longe acuminatæ basi cordatæ, multi-nervatæ, 1 cm. longæ; stipellæ lanceolatæ, acuminatæ, 0.6-0.7 cm. longæ; pedunculi axillares, robusti, arcuato-erecti, 10-21 cm. longi, biflori, floribus subsessilibus; bracteæ lanceolatæ, cum bracteolis linearibus acuminatis, 0.8 cm. longæ; calyx campanulatus, subæqualiter 5-fidus, tubo 0.8 cm. longo, segmentis lanceolatis, setaceo-acuminatis ca. 1 cm. longis; vexillum late reniforme, emarginatum, 2.1 cm. longum, 3.4 cm. latum; carina valde incurva, rostrata, 2.1 cm. longa; stigma laterale, bilabiatum, labio superiore cucullato, inferiore bilobo, patentes, margine dense piloso; ovarium dense fusco-villosum.

HAB.: *Swaziland*; near Mbabane, *J. Burt-Davy*, 2827 (in Herb. Brit. Mus.); "High Veld" between Carolina and Dalriach, approx. alt., 1,700 meters, Dec., *H. Bolus*, 11836.

Uganda; mouth of the Kagera River, *Bagshawe* (in Herb. Brit. Mus.).

DOLICHOS ROBUSTUS, Bolus, n. sp. (Leguminosæ-Phaseoleæ-Eu-phaseoleæ).

D. foliis majoribus, labio inferiore calycis profunde 3-fido, segmentis elongatis.

Robusta, tota, petalis exceptis \pm pubescens; rami procumbentes quadrangulares, striati, foliosi, internodiis 3.5–5.5 cm. longis; folia tactu asperula, petiolata, petiolo communi, 3–4 cm. longo, internodio 1.5–2 cm. longo, foliolis lateralibus a ramo 2–2.5 cm. distantibus, circumscriptione obovatis, basi subcuneatis, impariter bilobis, lobis subacutis mucronulatis, nervis prominulis, 4–5.5 cm. longis, 2.5–4 cm. latis, foliolum terminale obovatum æqualiter 3-lobum, 6–7.5 cm. longum, 6–7 cm. latum, ceteroquin lateralibus conformibus; stipulæ obliquæ lanceolato-ovatæ, acutæ, nervatæ ad 1 cm. longæ; stipellæ lineares setaceo-acuminatæ, 0.6 cm. longæ; pedunculi axillares ad 1.5 cm. longi, bracteis lanceolatis, acutis 0.2–0.4 cm. longis, 2–4-fl., pedicellis 0.4 cm. longis; calycis labio superiore bidentato, inferiore subæqualiter profunde 3-fido, segmentis lanceolatis acuminatis 0.5 cm. longis, tubo subinflato 0.5 cm. longo, 0.4–0.5 cm. lato; vexillum suborbiculare, basi auriculatum, 1.2 cm. long et lat.; alæ oblique oblongæ obtusæ, basi calcare 0.3 cm. longo, instructæ; carina oblonga obtusa leviter incurva, alas vexillumque subæquans; ovarium sericeo-villosum; legumen deest.

HAB.: Transvaal Colony; on the "High Veld" between Carolina and Swazieland, in grassy places, approx. alt., 1,550 meters, Dec., Bolus, 11837.

Rather remarkable in the genus by its robustness and large leaves, and by the deeply cleft lower lip of the calyx.

DOLICHOS FALCATUS, Klein.

This plant, a native of India, does not yet appear to have been recorded from South Africa, nor is it mentioned by Oliver and Hiern in the Flora of Tropical Africa. The following collections may be cited: Cape Colony: Komgha, *Flanagan*, 1141! Transvaal: Barberton, *Galpin*, 753! Lydenburg, *Wilms*, 412! Pretoria, Bolus, 11840! Warm Bath, *id.*, 11839!

RHYNCHOSIA PAUCIFLORA, Bolus, n. sp.

R. foliolis longis angustisque; floribus solitariis, axillaribus, pedunculatis; calyce corollam æquante vel excedente, segmentis prominenter 1-nervis.

Fruticulus erectus, undique plus minusve sparse pilosus, ca. 30 cm. altus; rami adscendentes, graciles, internodiis 2.5–3 cm.

longis; folia alterna erecta petiolata, petiolo 0·7–0·8 cm. longo, foliolis linearibus, apice basique angustatis, mucronulatis, marginibus reflexis, superne delicate reti-venosis, pallidioribus, inferne nervo medio valde prominente, 6–7 cm. longis, 0·4–0·5 cm. latis; stipulac subulatæ, longe acuminatæ, 0·8–0·9 cm. longæ; pedunculi axillares, patentes, graciles, 5–6 cm. longi, apicem versus articulati, ad articulum bracteola setacea 0·4 cm. longa ornati; calyx campanulatus, persistens, segmentis lanceolatis, acuminatis, subæqualibus, nervo medio perspicuo, superioribus usque ad medium connatis, inferioribus fere ad basin liberis, corollam æquantibus vel sæpius excedentibus; vexillum glabrum, carina æquilongum, 1·3 cm. longum; legumen oblique ovatum pilosum 2-spermum, stylo persistente desinens, 3 cm. longum, 0·8–1 cm. latum.

HAB.: Transvaal Colony, in grassy places, "High Veld," near Carolina, approx. alt. 1,790 meters, Jan., *Bolus*, 11842 (in herb. Kew, my own, &c.).

METALASIA PALLIDA, Bolus, n. sp. (Compositæ-Inuloideæ)

M. aduncæ affinis, sed foliis nec uncinatis, capitulis 10-fl., involucri squamis petaloideis 2–3-seriatis.

Suffrutex erectus, totus pallidus, 25–30 cm. altus; rami adscendentes, cano-tomentosi, vel vetustiores glabrescentes, internodiis 0·2–0·3 cm. longis; folia sparsa, erecta, lineari-lanceolata, mucronata, stricta nec torta, involuta, inferne glaberrima, nitentia, obscure 1-nervia, axillis nudis, 0·7–1 cm. longa, 0·2–0·3 cm. lata; corymbus confertus, pedunculis 0·2–0·3 cm. longis, capitulis discretis 12–20, cylindricis, 0·8–1 cm. longis 0·3–0·4 cm. latis; involucri squamæ exteriories 3–4-seriatæ, appressæ, lineares, acuminatæ, sphacelato-mucronulatæ, araneosæ, 0·2–0·5 cm. longæ, interiores petaloideæ, 2–3-seriatæ, erectæ, obtusæ, apice concavæ, albæ, 0·6–0·7 cm. longæ, 0·1–0·2 cm. latæ; achænia tereti-subtriangularia, glabra, punctulata, 0·2 cm. longa; pappi setæ capillaceæ, barbellatæ, albæ.

HAB.: Cape Colony; Prince Albert Division; on the Zwartebergen, near Zwartberg Pass, in rocky places, approx. alt. 1,080 meters, Dec., *H Bolus*, 11542 (in herb. Kew, my own, &c.).

METALASIA STRICTIFOLIA, Bolus, n. sp. (Compositæ-Inuloideæ).

M. aduncæ proxima, sed foliis erectis, strictis nec uncinatis, axillis gemmiferis, distinguitur.

Fruticulus ramosissimus, fere undique araneoso-tomentosus, 15–20 cm. altus; rami adscendentes, conferti, 4–7 cm. longi; folia sparsa, erecta, lineari-lanceolata, pungenti-mucronata, araneosa,

deinde vel pilosa, vel rarius glabrescentia, sæpissime axillis gemmiferis, 0·5–0·9 cm. longa; capitula 5–10-glomerata, glomerulis 1–1·5 cm. latis, discreta nec indumento intertexta, cylindrico-campulata, 5-fl., 0·9 cm. longa, apice 0·2–0·4 cm. lata; involucri squamæ exteriores 3-seriatæ, appressæ, lanceolatæ, acuminatæ, mucronulatæ, 0·3–0·6 cm. longæ, petaloideæ 1-seriatæ, patentes, lineares, obtusæ, albæ, flores excedentes, 0·8 cm. longæ, 0·2 cm. latæ; pappi setæ copiosæ, filiformes, serrulatæ, albæ, longitudine inter flores et squamas petaloideas intermediae.

HAB.: Cape Colony; Prince Albert Division, on the summit of the Zwartebergen, near Zwartberg Pass, in rocky places, approx. alt. 1,850 meters, Dec., *H. Bolus*, 11990 (in herb. Kew, my own, &c.).

BOJERIA NUTANS, Bolus, n. sp. (Compositæ-Inuloideæ).

B. foliis basi auriculatis; capitulis axillaribus solitariis, nutantibus.

Frutex erectus, 5-pedalis, undique scaberulus; rami virgati, striati, internodiis 2–2·5 cm. longis; folia adscendentia, ovato-lanceolata vel lanceolata, acuta, basin versus angustata, semi-amplexicaulia, late auriculata, serrata, nerviis primariis subtus prominentibus, adscendentibus, utrinque 7–8, subtus pallidiora, 5–13 cm. longa, 2–4 cm. lata; pedunculi solitarii in axillis foliorum superiorum, nutantes, graciles, 4–6·5 cm. longi, bracteolis foliaceis, 3–4, lanceolatis, sub capitulo approximatis, circa 1·5 cm. longis; capitula cyathiformia, 2 cm. longa, 2·5 cm. lata; involucri squamæ 4-seriatæ, lanceolatæ, intimis linearibus, acuminatissimis, flores acquantibus, herbaceæ, virides, marginibus submembranaceis, sericeo-ciliatis, apicibus barbatis, discoloribus, 0·5–1·5 cm. longæ; corollæ cylindricæ, 1·1 cm. longæ, limbo 0·15 cm. longo; styli rami insigniter atro-brunnei; achænia glanduloso-pubescentia, 0·3 cm. longa, setis pappi barbellatis, persistentibus, extimis brevissimis, intimis corollam æquantibus.

HAB.: Orange River Colony; Witzie's Hoek, grassy slopes near the summit of Mapedi's Peak, approx. alt. 2,650 meters, Feb., *Justus Thode* 21!; Basutoland, river banks above Buffalo River Waterfall; approx. alt. 2,500 meters, March, *E. E. Galpin*, 6659!

PEGOLETTIA DENTATA, Bolus, n. sp. (Compositæ-Asteroideæ).

P. foliis oblongis, grosse dentatis, pappo biseriato exteriori e setis pluribus brevissimis, interiore e setis 5–7 multo longioribus barbellatis.

Fruticulus humilis erectus ramosus, parce brevissimeque glanduloso-puberula; rami pauci divaricati, rigidi inferne nudi, sursum nunc paucè nunc dense foliati, vetustiores cicatricibus

foliorum delapsorum notati, 10–15 cm. longi, inferiores 0·2 cm. crassi; folia oblonga acuta, basi valde attenuata, utraque dentibus grossis 2–3 acutis aucta, minute glanduloso-puberula, viridia, 1–2 cm. longa, 0·15–0·2 cm. lata; capitula terminalia solitaria campanulata, 1·5 cm. longa, 2 cm. lata, 100-fl. vel ultra, in pedunculis bracteatis 0·75–1·25 cm. longis, bracteis paucis parvis subulatis subscariosis; receptaculum foveolatum; involucri squamæ 4–5-seriatæ numerosissimæ recurvo-patentes subulatæ, longe setoso-acuminatæ, integræ nudæ 1-nervæ, scariosæ pallidæ, omnibus inter sese subæqualibus ± 1 cm. longis; corollæ tubulosæ, regulariter 5-fidæ tenuissimæ, 0·8–0·9 cm. longæ; pappus biseriatus e setis exterioribus brevioribus pluribus, 0·1 cm. longis, cum setis 5–7 interioribus barbellatis longioribus, 0·8–1 cm. longis; ovaria dense albo-sericea 0·15 cm. longa.

HAB.: Cape Colony; district Montagu, near the warm baths, on dry rocky hills, alt. 300 meters, Dec. (1892), *Bolus*, 7882 (in herb. Kew and my own).

In floral structure nearest to *P. oxydonta* DC., but differing in pappus and very much in habit and general appearance, being smaller in all parts, greener, and nearly glabrous. It appears to be rare.

CHRYSANTHELLUM PROCUMBENS, *Pers.* (Helianthoideæ-Coreopsidæ).

This widely-spread tropical species, probably a native of the East Indies, has long since been found in various parts of Tropical Africa, from Abyssinia southward. It occurs near Bulawayo, specimens having been sent by Rev. A. Barthelemy from that town. Finally, it was collected by me at Warm Bath in the Transvaal Colony in January last (*Bolus*, 12090), and this seems to be the only extra-tropical station yet recorded for it.

PHÆOCEPHALUS GNIDIODES, *S. Moore in Journ. Bot.* (1900), p. 158, t. 409 (Compositæ-Anthemidæ).

This species was first found by F. Masson, who travelled in the Cape Colony in 1775, and the single specimen he sent to England lay *perdu* in the herbarium of the British Museum until it was examined, and the genus established, by Mr. Moore as above. This gentleman was good enough to draw my attention to it when in England two years ago, in the hope that I might be able to find it again, no other specimen being known. As no station had been recorded by Masson, it was therefore a singular coincidence that a few months after my return to the Colony I found the plant when

crossing the Zwartberg Pass from Prince Albert. It grows in some abundance on the left side of the road about 2 or 2½ miles from the summit of the Pass, on the Prince Albert side of the mountain. The bush is of straggling habit, 2–3 ft. high, with its branches nude below, flowers yellow, with the aspect of an *Athanasia*. The rediscovery of the species after a lapse of 130 years appears sufficiently interesting to be worthy of record.

ATHANASIA THODEI, Bolus, n. sp. (Compositæ-Anthemideæ).

A. foliis linearibus sæpius indivisis rarius 2-3-fidis intermixtis, corymbis polycephalis dense confertis, capitulis hemisphericis, 35-40-floris; involucri squamis subbiseriatis, achæniis pappo minuto denticuliformi coronatis.

Suffrutex 4–5-pedalis, subviscidus, odore aromatico. Rami erecti vel patentes, ad 20 cm. longi, 0·5 cm. crassi, nudi, asperi, cinerei; ramuli 8–10 cm. longi, albo-tomentosi, usque ad apicem foliosi, inferne nudi; folia juniora erecta, demum recurvo-potentia linearia indivisa vel interdum supra medium 2–3-fida, obtusa, superne glabra, aspera, subtus tomentosa prominenter 1-nerva, 2–3 cm. longa 0·1–0·15 cm. lata; capitula hemispherica, 0·3–0·4 cm. longa, 35–50-flora, in corymbo dense polycephalo, 2–3 cm. lato, conferta, pedicellis bracteatis; involucri squamæ subbiseriatæ appressæ lanceolatæ, acuminatæ, scariosæ, sæpe laceratæ, extus tomentosæ exterioribus longioribus flores æquantibus; receptaculi paleæ lanceolatæ acuminatæ apicem versus serrulatæ, floribus paullo brevioribus; corolla 0·25 cm. longa; achænia tenuia striata glabra, pappo e squamis 5 denticuliformibus acutis minutissimis coronata.

HAB.: Natal; stony places near the summit of the Mont-aux-Sources, alt. 2,800 meters, Jan! (1896), *Justus Thode*, 23! Cape Colony; district Barkly East, Doodman's-Krantz-Mt., 2,800 meters, March, *Galpin*, 6707! (in herb. Kew, my own, &c.).

Thode's plant has longer undivided leaves, larger corymbs and smaller heads; those of Galpin show several bifid and trifid leaves, intermixed with undivided and mostly shorter leaves, smaller corymbs with fewer and larger heads; the measurements given above represent the extremes of size. The species does not greatly resemble any other known to me.

EUMORPHIA DAVYI, Bolus, n. sp. (Compositæ-Anthemideæ).

E. foliis linearibus integris glabris, viridibus; involucri squamis intimis apice ovatis membranaceo-dilatatis.

Tota glabra; rami lignosi adscendentes dense foliosi, 18 cm. longi;

folia sparsa conferta imbricata, adscendentia vel patentia, linearia acuta mucronulata, pleraque curva, viridia, 1-1.2 cm. longa, 0.06-0.07 cm. lata; capitula terminalia solitaria subsessilia, obconica vel transverse semi-ovata, basi angustata, radiis exemptis 0.5-0.6 cm. longa, apice 0.6 cm. lata; involucri squamæ multiseriatæ, appressæ, imbricatæ, exterioribus brevissimis, intermediis, lanceolatis acuminatis laceratis, apicem versus membranaceis, 0.6 cm. longis, intimis apice in laminam ovatam membranaceam discolorem dilatatis, 0.7 cm. longis; flores radii 12-14, patentes, ligulis oblongis 3-dentatis, 0.7 cm. longis, disci numerosi.

HAB.: Transvaal Colony; district Lydenburg, Graskop near Pilgrim's Rest, on the edge of the Drakensbergen, Jan., *J. Burt-Davy*, 1474! (in herb. Kew, my own, &c.).

This species is very distinct and unlike any other in its foliage. The membranous dilatation of the tips of the inner involucreal scales is also larger than in any other.

EUMORPHIA PROSTRATA, Bolus, n. sp. (Compositæ-Anthemideæ).

E. prostrata, ramis radicanibus, foliis plerisque indivisis, hinc inde bifidis albo-sericeis, receptaculum paleis paucis tantum sub floribus exterioribus auctum.

Fruticulus prostratus, ramis radicanibus nudis, glabris, ad 25 cm. longis, ramulis foliosis patentibus, 2-6 cm. longis; folia subdensa, juniora fasciculata, incurva vel recurva, sessilia, linearia vel spathulato-linearia acuta; pleraque indivisa hinc inde bifida, basi connata, pubescentia albo-sericea arcte appressa nitente vestita, 0.6-1 cm. longa, 0.1-0.15 cm. lata, suprema abbreviata in bracteas foliaceas usque ad basin capitulorum abeuntia; capitula terminalia, solitaria, hemisphærica, brevissime pedunculata vel subsessilia, 0.65-0.8 cm. longa, 0.6-0.7 cm. lata; involucri squamæ 3-4-seriatæ, erectæ, exterioribus brevioribus deltoideis interioribus lanceolatis oblongisque omnibus acutis albo-sericeis; receptaculum paleis paucis præcipue sub floribus exterioribus auctum; flores radii 10-14, ligulis patentibus reflexisve, oblongis albis, 0.6-0.7 cm. longis, flores disci numerosi flavi; ovaria immatura glabra.

HAB.: Cape Colony; district Barkly East, summit of Doodman's-Krantz-Mt., approx. alt. 2,800-2,970 meters, March 8, 1904, *E. E. Galpin*, 6700! (in herb. Kew, my own, &c.).

This comes near to *E. sericea* Wood & Evans, but is distinguished by its prostrate habit, shorter, more appressed and shiny indument, and its smaller heads with shorter rays. The paleæ on the receptacle in the head examined are very few.

SENECIO THERMARUM, Bolus, n. sp. (Compositæ-Senecionideæ).

S. ambifario Sp. Moore, proximus, sed pedunculis solitariis, floribus numerosioribus, foliis brevioribus differt.

Herba annua, erecta, tota pallida, cum pedunculis ca. 25 cm. alta; rami adscendentes, foliosi, ad 9 cm. longi, internodiis 0·3–0·4 cm. longis; folia sessilia, erecto-patentia, oblanceolata, acuta, obscure nervata, membranacea, juniora araneosa, demum glaberrima, 3–4 cm. longa, 0·8–1 cm. lata; pedunculi terminales, solitarii, graciles, nudi, leves, apice paullo dilatati, 20 cm. longi; capitula campanulata, homogama, discoidea, 1 cm. longa; 0·8 cm. lata; involucri squamæ 8, oblongæ, deltoideo-acutæ, marginatæ glaberrimæ, 0·6 cm. longæ, 0·15–0·2 cm. latæ; flores ca. 23 albi, corollis medio abrupte dilatatis, 0·6 cm. longis, segmentis acutis, papillosis; ovaria teretia, apice truncata, 4 striata, striis scabris.

HAB.: Transvaal; Waterberg District; among shrubs near Warm Bath, approx. alt. 1,150 meters, Jan., *H. Bolus*, 12034; Boschveld, Klippan, *Rehmann* 5241! Delagoa Bay Collection, *Schlechter*, 11727 (precise station not available).

EURYOPS GILFILLANII, Bolus, n. sp. (Compositæ-Senecionideæ).

E. acaule, foliis radicalibus gramineis, scapo monocephalo.

Rhizoma breve sublignosum, lana sordida cum reliquiis foliorum delapsorum coronatum; folia omnia radicalia erecta linearia vel marginibus involutis sæpe filiformia, plerisque indivisis hinc inde paucis bifidis trifidisque, obtusa, rigida, glabra, apice sphacelata, basi dilatata, scariosa, multinervia, pallida, 6–12 cm. longa, 0·1 cm. lata; scapus solitarius gracilis, monocephalus, nudus, glaber, 18–30 cm. longus; capitulum hemisphericum, 0·4–0·5 cm. diametro. Involucri squamæ 9–11, ovato-lanceolatæ acutæ vel acuminatæ, infra medium connatæ, glabræ; flores radii 9–10, ligulis patentibus 0·4 cm. longis, disci numerosissimi; ovaria ovoidea, puberula.

HAB.: Transvaal Colony; district Middelburg, near Witbank Railway Station, Dec., *D. F. Gilfillan* (No. 7201 of Mr. Galpin's distribution! in herb. Kew, my own, &c.).

In habit this is very different from any of the genus known to me, more resembling that of some of the stemless *Othonnæ*. The approximate altitude of the station is not given by the collector, and I have no data at hand to refer to. It is in what is so well known as the "High Veld" of the Transvaal, and probably between 5,000 and 6,000 ft. above the sea. There are numerous coal-mines in the vicinity.

EURYOPS GALPINII, Bolus, n. sp. (Compositæ-Senecionideæ).

E. foliis lanceolatis integris; capitulis terminalibus solitariis vel binis, sessilibus; involucri squamis circa 12, ultra medium connatis; radii flosculis 12-15, disci 50; achæniis clavatis, glabris.

Suffrutex glaber, 2-3-pedalis; rami adscendentes, superiores foliosi, inferiores nudi cicatricibus foliorum delapsorum notati; folia dense conferta usque ad basin capitulorum, imbricata, sessilia, recurvopotentia, oblongo-lanceolata subacuta cartilagineo-ciliolata, subtus nervo valido percursa, 0.7-0.9 cm. longa, 0.2-0.28 cm. lata; capitula terminalia, in pulvillo tomentoso sessilia, foliis floralibus parum dilatatis arcte cincta, turbinata 1-1.1 cm. longa; involucri squamæ circa 12, ultra medium connatæ, cartilagineæ, leves, pallide flavæ, segmentis late lanceolatis minute ciliolatis; receptaculum foveolatum; radii flosculi 12-15, ligulis 1.4 cm. longis, disci circa 50, 0.45 cm. longi, concolores, lineis 5 purpureis notati, segmentis lineari-lanceolatis acutis; achænia clavata, glabra, polita, 0.24 cm. longa; pappi setæ breves, barbellatæ.

HAB.: Cape Colony; district Queenstown, on Hanglip Mt., alt. about 1,850 meters, Nov., *E. E. Galpin*, 1620! on the Windvogelberg, 1,400 meters, June, *Rev. Baur*, 1117! (both in herb. Kew).

This has the habit and general appearance of *Gamolepis brachypoda* DC., with similarly closely imbricated leaves; but their shape is quite different, and the heads in this are sessile, or nearly so.

LASIOCOMA, Bolus, gen. nov. (Compositarum e tribu Senecionidearum).

Ex affinitate Euryopsis a quo differt achæniis fl. ♀ sterilibus pappique in fl. ♀ defectu.

Capitula heterogama radiata, floribus radii ♀, 1-seriatis fertilibus, disci ♂ sterilibus. Involucrum campanulatum, bracteis 1-seriatis, subæqualibus, usque ad medium fere in cyathum connatis demum subsolutis liberisve patentibus. Receptaculum planum, alveolatum, septis elevatis dentibus paleæformibus acuminatis auctis. Fl. ♀: corollæ ligulatæ, lamina patente, parva, 3-dentata; achænia clavata, a dorso compressa, lana densa alba accrescente demum longissima vestita, calva. Fl. ♂: Corollæ regulares, tubulosæ, limbo subinfundibuliformi apice 5-fido; antheræ basi integræ obtusæ; styli rami appianati, subtruncati, penicillati; achænia tenuia, vacua, breviter pubescentia pappo e satis barbellatis 1-seriatis numerosis coronata. —Fruticulus erectus ramosus, glaber, 2-3-pedalis. Folia alterna patentia, e basi semiamplexicauli linearia, ultra medium 3-fida, lobo intermedio integro, lateralibus linearibus 2-fidis, 2-lobisve, omnibus

apice calloso-mucronulatis. Pedunculi axillares, solitarii, graciles, foliis sæpius longiores. Involucri squamæ 6-7, subæquales, oblongæ subacutæ. Flores radii 6-7, disci 9-12 (ut videtur ex siccis, flavi).

LASIOCOMA PETROPHILOIDES (DC.), Bolus; sp. unica. *Erioccephalus ? petrophiloides* DC., *Prodr.* vi. 146; *Harv. & Sond., Flora Capensis*, iii., 201.

Folia 1·5-2·5 cm. longa, segmentis 0·07-0·1 cm. latis; pedunculi 1·5-2·5 cm. longi; capitulo cum lana achæniorum, 0·8-1·1 cm. longa; involucrum 0·45-0·7 cm. longum; radii ligulæ 0·35 cm. longæ; pappi setæ fl. ♂ 0·2 cm. longæ; achænia fl. ♀ 0·5 cm. longa.

HAB.: South Africa, without station, *Drège*; *Ecklon*, 446 (in herb. Sonder). Cape Colony: Nama'land Minor, near Klipfontein, in open places, alt. 950 meters, Sept. (1883), *Bolus*, in MacOwan & Bolus, herb. Norm. Aust.-Afr., 426 (in herbb. Kew, Brit. Mus., Paris, Berlin, &c.); Calvinia Division, near Nieuwoudtville, *C. L. Leipoldt*, 760! "Very common, growing in sandy soil in big patches, fl. May to Oct., and said to be a very fine 'sheep-bush'" (Collector's note).

The affinity of the genus is clearly with *Euryops*, from which it is separated by the sterile achenes of the disk and by the absence of pappus on the ♀ flowers. The remarkably long accrescent hairs on the achenes of the ♀ flowers are a further peculiar character; for while the achenes of *Euryops* are commonly villous, there is nothing in that genus, so far as known to me, approaching those of this plant, which led De Candolle and Harvey to suppose that it might be an *Erioccephalus*.

The present plant has a rather singular history. First found by *Drège* and by *Ecklon*, it was described by De Candolle in 1837 (*loc. cit.*); but so imperfect were the specimens that he expressed much doubt as to the genus. Harvey, in 1864, had both *Drège's* and *Ecklon's* specimens before him, yet fared no better. He followed De Candolle in placing them, with doubt, in *Erioccephalus*, but says: "A most remarkable species, unlike any other, and possibly not of this genus; but the fl.-heads, in the only specimens I have seen, have had their contents eaten by insects, leaving merely the outer invol. and a dense tuft of discoloured wool. What may be the origin of this wool, whether from an inner invol. or from the achenes, remains undetermined." In 1883 the plant numbered 426 in the Herb. Norm. Austro-Africanum was found by me, and being deceived by the similarity of the involucre was distributed by me, without having dissected it, as a *Euryops*. A more recent examination appeared to show its distinctness from that genus, and a reference to the description of *Erioccephalus petrophiloides* DC. seemed to leave little doubt

as to its identity with that species. By the kindness of M. Casimir de Candolle, of Geneva, who has compared my plant with the type in the "Prodromus herbarium," this probability has been rendered a certainty. The plant has since been collected by Mr. C. L. Leipoldt, whose notes on his ticket are interesting; a bush which seems to be as attractive to sheep as it certainly is to insects (for a large proportion of all the flower-heads seen have been attacked) must have a hard struggle for existence.

Plate XI., fig. 1, Involucre; 2, ♀ flower, the ovary deprived of its wool; 3, ♂ flower; 4, stamens; 5, a hair of the pappus from the ♂ flower, $\times 30$; 6, mature achene of the ♀ fl., with wool and half-concealed corolla, $\times 2$; 7, mature achene of ♀ fl., deprived of its wool, $\times 4$; 8, section of ditto; 9, style branches of the ♂; 10, ditto of the ♀ fl.; 11, receptacle.

GAMOLEPIS INTERMEDIA, Bolus, n. sp. (Compositæ-Senecionideæ).

G. foliis, inermibus, erecto-patentibus, pinnatisectis, subcarnosis.

Herba perennis, diffusa, undique glabra 30 cm. alta; rami late patentes incurvique, foliosi, sæpius 5–7 cm. longi; folia subopposita, erecto-patentia, dense imbricata, linearia, integra vel sæpissime sursum pinnatifida, lobis utrinque 3–4, linearibus, acutis, subcarnosa, semi-amplexicaulia, 1–1.5 cm. longa, 0.2–0.3 cm. lata, lobis 0.15 cm. longis; pedunculi axillares late patentes, incurvi, filiformes, levissimi, purpurei, 8–10 cm. longi; capitula crateriformia, 0.6 cm. longa, 1 cm. lata; involucri squamæ 13–14, acuminatæ, purpureæ, tubum æquantes; flores radii circa 13, ligulis 0.5 cm. longis; achænia clavata, 10 costata, rugulosa.

HAB.: Cape Colony; Prince Albert Division; in stony places, on the summit of the Zwartebergen, near Zwartberg Pass, approx. alt. 1,725 meters, Dec., *H. Bolus*, 11561.

Intermediate between *G. trifurcata* and *G. munita*, differing from the former by its pinnatisect leaves, and the short ligules of its ray flowers; and from the latter by its erect-spreading, unarmed, fleshy, and nerveless leaves.

OSTEOSPERMUM ELEGANS, Bolus, n. sp. (Compositæ-Calendulaceæ).

O. ilicifolio affine, sed foliis irregulariter pinnatifidis, marginibus planis; achæniis ellipticis, acute triangularibus, distinctum.

Fruticulus undique plus minusve viscoso-puberulus; rami ascendentes, foliosi, internodiis 0.5–1 cm. longis; folia alterna, sessilia, patentia reflexave, circumscriptione oblonga vel lanceolata, acuminata, irregulariter pinnatifida, semi-amplexicaulia, nervo medio utrinque

prominente, 3–8 cm. longa, 1–3 cm. lata, segmentis lanceolatis, acutis mucronulatis 0·4–1·4 cm. longis, interdum dentibus 1–2 instructis; capitula solitaria, vel rarius in corymbo laxo, foliato terminali, 2–5 capitato disposita, campanulata, 0·8 cm. longa et lata; involucri squamæ sub 2-seriatæ, oblongæ, acuminatæ cuspidatæ, margine membranaceæ ciliolatæ, intimis flores disci excedentibus; flores radii circa 10, ligulis 1·2 cm. longis, 0·4 cm. latis; achænia elliptica, acute 3-angulata, longitudinaliter 1-nervia, levia.

HAB.: Cape Colony; hills near Clanwilliam, approx. alt. 150 meters, Oct., *H. Bolus* 9043 (in herb. Kew and my own).

A pretty shrub characterised by its pinnatifid elegantly recurved leaves with rather distant lobes, and its broad and pale involucreal scales.

URSINIA SUBINTEGRIFOLIA, Bolus, n. sp. (Compositæ-Aretotideæ.
§ Eu-Ursinia).

U. foliis sæpius integris, subtus squamellis minutis appressis indutis; radii ligulis discoloribus; achæniis glabris pappo sæpe deficiente.

Fruticulus humilis, 12–22 cm. altus; rami decumbentes vel adscendentes, foliosi, 4–7 cm. longi; folia linearia vel oblanceolata e basi angusta sursum ampliata, acuta, sæpius integra, rarius apicem versus pinnatifida vel irregulariter 2–3-fida, coriacea, rigida, interdum involuta, superne glabra, inferne squamellis minutis, appressis, sparsis, induta, 3–6 cm. longa, lobis exemptis, 0·2–0·3 cm. lata, lobis linearibus, acutis, 0·3–0·4 cm. longis; pedunculi solitarii, terminales, parce squamellati, 9–17 cm. longi; capitula crateriformia, 1 cm. longa, 1–1·2 cm. lata; involucri squamæ 4-seriatæ, lanceolatæ, acutæ, exterioribus omnino herbaceis, interioribus apicibus amplis, membranaceis, 0·2–0·8 cm. longæ; receptaculi paleæ oblongæ, apice dilatatæ, laceratæ; flores radii 10–14, ligulis discoloribus, 0·7 cm. longis; ovaria omnino glabra pappo sæpe deficiente, dum adsit, extimo e squamis suborbicularibus, erosulatis, aliis subopacis, aliis subhyalinis, intimo e setis capillaceis.

HAB.: Orange River Colony; mountains, Bester's Vallei, near Witzies Hoek, approx. alt. 1,650–2,000 meters, Dec., *H. Bolus*, 8206 (in herb. Kew).

URSINIA ERECTIFOLIA, Bolus, n. sp. (§ Sphenogyne).

U. foliis 2–3-furcatis, pinnatisectisve, squamis involucri omnibus apice membranaceis, ligulis florum radii discoloribus.

Lignosus, erectus, foliosus, parce minuteque albo-tomentulosus,

7–12 cm. longus; folia imbricata erecta, rarius linearia indivisa, vel sæpius supra medium bi-trifurcata, vel pinnatisecta, marginibus inflexis, segmentis utrinque 1–2, linearibus acutis 0·5–1 cm. longis, 1-nervia, tomento deciduo puberula, minute impresso-punctulata, 3–3·5 cm. longa, 0·2 cm. lata; pedunculi terminales, tomentulosi, 2–3 cm. longi; capitula crateriformia, 1 cm. longa, 1·5 cm. lata; involucri squamæ 4-seriatæ, lanceolatæ, omnibus apice membranaceis pubescentibus, 0·2–0·7 longis; receptaculi paleæ cuneatæ vel flabelliformes, hyalinæ, laceratæ; flores radii ad 17, ligulis 0·8 cm. longis, subtus discoloribus; ovaria glabra; pappus 1-seriatus, squamis sub-orbicularibus; achænia haud suppetunt.

HAB.: Transvaal Colony, on the "High Veld," in grassy places near Belfast, approx. alt. 2,000 meters, Dec., *Bolus*, 12056.

In general appearance resembling *U. annua*, *Less.*, but the leaves are less divided, the involucrial scales all membrane-tipped, the rays discoloured beneath, and the scales of the pappus in a single series.

TRIPTERIS KARROOICA, *Bolus*, n. sp. (Compositæ-Calendulaceæ,
§ Fruticosa).

Ad T. spinescens accedit, sed ramulis inermibus, foliis linearibus differt.

Fruticulus undique plus minusve visciduloso-scaberulus, 15–20 cm. altus; rami adscendentes, rigidi, striati, pallidi, in pedunculos moncephalos, bracteatos, 3–8 cm. longos abeuntes, internodiis 0·5–1·5 cm. longis; folia alterna, sæpius erecta, sessilia, linearia, acuta, mucronata, ciliolata, basi angustata, sæpe complicata, inflexave, lana alba in axillis vestita, nervo medio inferne prominente, 1·5–2·5 cm. longa, 0·2 cm. lata; capitula campanulata, 0·8 cm. longa, 1 cm. lata; involucri squamæ 2-seriatæ, lanceolatæ, acuminatæ, marginibus anguste membranaceis, intimis quam flores disci brevioribus; flores radii circa 12, aurantiaci, ligulis 0·9 cm. longis, 0·3 cm. latis; achænia 0·6–0·7 cm. longa, alis membranaceis 0·2 cm. latis ornata, inter alas transverse rugosa.

HAB.: Cape Colony; on stony hills near Prince Albert, approx. alt. 700 meters, Dec., *H. Bolus*, 11528 (in herb. Kew, my own, &c.).

TRIPTERIS CONFUSA, *Bolus*, n. sp. (§ Paniculatæ).

Ad T. arborescentem accedit, sed foliis majoribus inferioribus petiolatis, achæniis minoribus, alis multo angustioribus, differt.

Herba annua, undique plus minusve glanduloso-pubescent, 30–50 cm. alta; caulis erectus, striatus, internodiis 1–2 cm. longis; folia

alterna, erecto-patentia, inferiora petiolata, petiolo semi-amplexicaule, 1·5–2 cm. longo, lanceolato-ovata, acuta, serrato-dentata, puberula, nervis primariis tribus, adscendentibus, 5–6·5 cm. longa, 2·5–3 cm. lata, folia superiora amplexicaulia, sæpe basi auriculata, acuminata, integra, 1–3 cm. longa; capitula crateriformia, 0·8 cm. longa, 1 cm. lata, in corymbo laxo, 6–9 cephalo, bracteolato, disposita; involucri squamæ 1-seriatæ, lanceolatæ, cuspidatæ, marginibus membranaceis 0·6–0·8 cm. longæ; flores radii 15–17, ligulis 2 cm. longis; achænia florum radii dorso rugosa, 0·4 cm. longa, alis 0·1–0·15 cm. latis, disci? (monstrosa?) teretia, exalata, 0·8 cm. longa.

HAB.: Little Nama'land; between Port Nolloth and Oograbies, approx. alt. 90 meters, Aug., *Bolus*, 9607; near Spektakel, approx. alt. 460 meters, Sept., *Bolus*, 9608.

The achenes in our specimens have fallen from the heads, and we are unable to determine whether the terete exalate form belongs to the disk or the ray flowers, although most probably to the former. In either case they might be a monstrous form.

GAZANIA LINEARIFOLIA, *Bolus*, n. sp. (Compositæ-Arctotideæ).

G. foliis caulinis, radicalibusque linearibus, setuloso-ciliatis; involucri squamæ quam tubus duplo longioribus.

Ad G. armerioidem accedit.

Herba perennis, 20–25 cm. alta; rhizoma reliquiis fibrosis foliorum delapsorum interdum coronatum; folia pleraque radicalia, adscendentia, rigida, e basi dilatata linearia, acuta, setaceo-mucronata, marginibus revolutis, distanter setuloso-ciliatis, subtus nervis 3–5, prominentibus, 5–8 cm. longa, 0·1–0·2 cm. lata, caulina distantia sensim minora in calyculum abeuntia; caulis simplex, erectus, tomentosus; capitulum solitarium, cyathiforme, basi rotundatum, 2·5 cm. longum, 2 cm. latum; involucri squamæ 2–3-seriatæ, lineares, acuminatæ, intimis setaceis, corollæ ligulas æquantibus, exterioribus scabridis rigide ciliatis, duplo longiores quam tubus, bracteolis squamis conformibus vestitus; flores flavi, radii ligulæ ca. 17, subtus discolores; achænia dense sericeo-villosa, pappi squamis biseriatis, lanceolatis, setaceo-acuminatis.

HAB.: Transvaal; grassy places, near Belfast, approx. alt. 1,700–1,850 meters, Dec., *H. Bolus*, 12067.

This approaches to the genus *Berkheyopsis* O. Hoffmann, and perhaps would be regarded as such by some writers. But I have been unable to find any valid characters by which to separate it from *Gazania*.

BERKHEYA MILLERIANA, Bolus, n. sp. (Compositæ-Arctotideæ.
§ Stobæa).

Ad B. seminiveam Harv. et Sond. proxime accedit, sed foliis majoribus, nervis obscuris, capitulo subsessili, squamis involucri distanter ciliatis, subtus albo-tomentosis distinguitur.

Herba annua, erecta, 80 cm. alta; caulis simplex, tota longitudine foliatus, striatus, puberulus, brunneo-purpureus, internodiis 2·5–3·5 cm. longis; folia alterna, semi-amplexicaulia, inferiora lanceolato-ovata, basi angustata, acuta, intermedia lanceolata, superiora anguste lanceolata, crenulata, spinoso-ciliata, superne glabrescentia nisi spinis paucis hinc inde prope marginem armata, inferne albo-tomentosa, nervis obscuris, primariis utrinque 5–6, patentibus, 5–9 cm. longa, 1·5–4 cm. lata; capitulum solitarium, crateriforme, radiatum, 4 cm. longum, 7 cm. latum; involucri squamæ lineares, acuminatæ, rigide et distanter spinoso-ciliatæ, mucronatæ, superne puberulæ, inferne albo-tomentosæ, intimis ligulas æquantibus, quam tubus circa duplo longiores; achænia villosa, pappi squamis oblan- ceolatis, obtusis, 0·2 cm. longis.

HAB.: Swazieland; "High Veld," 'Mbabane, near Dalriach, in grassy places, approx. alt. 1,410 meters, Dec., *H. Bolus*, 12078.

Named in honour of Allister Miller, Esq., of Dalriach, who takes a keen interest in the Flora of Swazieland, and who afforded me the most generous assistance on my collecting tour.

BERKHEYA FRANCISCI, Bolus, n. sp. (Compositæ-Arctotideæ.
§ Euopsis).

B. caule albo-araneoso; foliis superne cinereo-araneosis, inferne dense albo-tomentosis. B. buphthalmoidei (DC.) Schltr. affinis.

Herba annua, valida, erecta, undique, floribus spinisque exceptis, plus minusve dense albo-tomentosa, 50–90 cm., alta; caulis simplex, basi dense foliosus, internodiis superioribus 4–6 cm. longis; folia inferiora oblonga, pinnatifida, acuta, lobis semiorbicularibus, sinuatis, 15–20 cm. longa, 4–7 cm. lata, superiora sensim minora paucioraque 3–8 cm. longa, 1–3 cm. lata, omnia rigide spinoso-ciliata; pedunculi ex axillis foliorum caulisorum erecto-patentes, apicem versus magis aggregati, 3–4 cm. longi; capitula crateriformia, 3 cm. longa, 3 cm. lata; involucri squamæ 4-seriatæ, lanceolatæ, acuminatissimæ, in spinas rigidas, pungentes desinentes, margine spinoso-ciliato, intimis flores radii excedentibus; radii flores 20–30, disci numerosi; achænia dense villosa, pappi squamis lanceolatis, laceratis.

HAB.: Cape Colony; district Oudtshoorn, in a rocky valley on the

summit of the Zwarteberg Pass, approx. alt., 1,480 meters, Dec., *Frank Bolus*. No. 12082 of my herb. (in herb. Kew, Berlin, &c.).

A fine species, sometimes reaching to a height of 3 or $3\frac{1}{2}$ ft. Most nearly allied to *B. buphthalmoides* (DC.), *Schltr.*, Journ. Bot., 1897, p. 343, differing by its more deeply cut leaves, which are covered with a closer white felted wool on the under surface, and by its narrower involucreal scales.

ERICA RECTA, Bolus, n. sp. (§Pyronium).

E. unilateralis Klotzsch affinis, floribus majoribus, aristis antherarum liberis, ovario glabro differt.

Rami erecti, stricti, approximati, pallide cinerei, fere glabri, 18–20 cm. longi vel ultra; ramuli semper terni, internodiis 0·6–3·3 cm. longis, primum breviter patentes deinde stricte adscendentes, simplices vel iterum et similariter ramosi, dense foliosi usque ad apicem, puberuli, 1·2–7·5 cm. longi; folia 3-na erecta dense imbricata, juniora duplo longiora, vetustiora $\frac{1}{4}$ vel $\frac{1}{3}$ longiora quam internodia, brevissime petiolata, oblonga vel late linearia, subobtusata glabra, subtus sulcata, marginibus nudis leviter inflexis, 0·2–0·35 cm. longa; flores terminales normale 3-na, interdum bini vel solitarii, patentes vel deflexi, rosei, corollæ limbo discolore; pedicelli albotomentosi rosei, 0·2–0·3 cm. longi; bracteæ omnes arcte approximatae, leviter patentes, lanceolatae, infra scariosæ, apice callo foliaceo coloratove desinentes \pm 0·2 cm. longæ; sepala bracteis conformia sed latiora et subinæqualia, lanceolata ovatave, apice calloso magis distincter canaliculato, sæpius rosea, 0·25 cm. longa; corolla ovato-urceolata, fauce leviter constricto, ore latiusculo, glabra, 0·5–0·55 cm. longa, limbi segmenta patentia, semi-orbicularia, minute ciliolata, \pm $\frac{1}{4}$ longitudinis tubæ; antheræ semi-exsertæ (demum fortasse exsertæ), laterales, a latere visæ longitudinaliter anguste semi-ovatae, leves, 0·15 cm. longæ, basi aristatae, aristis liberis stricte deflexis, longitudine dimidio antheræ; stylus exsertus; stigma capitatum; ovarium globosum, glabrum, ovulis numerosissimis minutis.

HAB.: Cape Colony; Coast Region; district Ladismith, on the Little Zwartberg range, near Vaartwel and the Gamka River, approx. alt. 900 meters, fl. June, *Dr. R. Marloth*, 3993! (in herb. Kew, my own, &c.).

Structurally near to *E. lateralis* Klotzsch, but with larger flowers, free anther-awns, and a glabrous ovary. The remarkably straight ternate branches and very regular erect leaves, would, if they should prove constant, distinctly characterise this species. But the material at our disposal is scanty.

PHYLLOPODIUM LINEARIFOLIUM, Bolus, n. sp. (Scrophulariaceæ).*P. habitu fruticuloso, foliis linearibus.*

Suffrutex exsiccatione haud nigricans, 20 cm. altus; rami fastigiati, pubescentia in lineis longitudinaliter disposita vestiti; folia sessilia axillis sæpe gemmiferis, linearia, acuta, subcarnosa, glabra, sensim in bracteas abeuntia, 1-2.5 cm. longa, 0.1-0.15 cm. lata; spicæ nunc sphericæ nunc ovatæ, 1-1.5 cm. longæ, 1.4-1.5 cm. latæ; bracteæ lanceolatae, acuminatæ, longe ciliatæ 0.5 cm. longæ; calyx subæqualiter 5-fidus, tubo 0.1 cm. longo, segmentis lanceolatis, acuminatis longe ciliatis, 0.3 cm. longis; corolla 0.6 cm. longa, ore parce barbata, flava, lobis oblongis, obtusis, 0.1-0.2 cm. longis; antheræ manifestæ; stylus puberulus corollam æquans; ovarium glabrum.

HAB.: Cape Colony; at the foot of the northern slopes of the Zwartebergen, near Prince Albert, approx. alt. 850 meters, Dec., *H. Bolus*, 12189 (in herb. Kew, Brit. Mus., Berlin, &c.).

HARPAGOPHYTUM PEGLERÆ, Stapf. (Pedaliaceæ).

H. procumbenti DC. affinis sed fructu ad margines cresta duplica spinoso-lobata instructo differt.

Herba procumbens aspera vel novellis exceptis subglabra, undique glandulis mucilagiferis aspersa; folia elliptica repanda vel pinnati-lobata, lobis grosse repando-dentatis, obtusa basi breviter subcuneata, 4-7 cm. longa, 3-4.5 cm. lata; petiolus 1-2 cm. longus; flores solitarii vel in cymis axillaribus sessilibus 2- raro 3-floris; pedicelli sub anthesi 0.5-0.8 cm. longi; calyx ad 0.9 cm. longus, asperulus, segmentis e basi lanceolata subulatis; corolla 4-6 cm. longa, tubus inferne ad 1 cm. anguste cylindricus, abhinc dilatatus, ore 1 cm. diametro, pallidus vel purpureo suffusus; limbus 3 cm. diam., purpureus vel albidus, lobis suborbicularibus; capsula ambitu elliptica, 4.5 cm. longa, 3 cm. lata; prominenter nervosa, cresta duplica indurata lobata, lobis spinoso-dentatis circumdata, dorso et facie spinis binis brevibus conicis validis rigidissimis instructis.

HAB.: Transvaal Colony; in sandy loam near Rustenburg, *Miss Alice Pegler*, 1027! Waterberg district, near Warm Bath, in the "Bosch Veld," approx. alt. 1,100 meters, Jan., *Bolus*, 12199! (in herb. Kew, Bolus, &c.).

SELAGO SWAZIENSIS, Rolfe, n. sp. (Selaginaceæ).

Fruticulus nanus, diffusus; caules teretes, pubescentes, ramosi; folia brevissime petiolata, late elliptica, subobtusa, sæpissime plus minusve crenata, pubescentia, 0.5-1.5 cm. longa, 0.2-0.8 cm. lata; flores subsessilès, capitulata, capitulis numerosis in paniculas laxas

subcorymbosas dispositis; bracteæ lineari-oblongæ, obtusæ, subincurvæ, ciliatæ, 0·3–0·4 cm. longæ; calyx campanulatus, 0·4 cm. longus, puberulus, breviter quinquelobus, lobis deltoideo-oblongis, obtusis, 0·2 cm. longis; corollæ tubus oblongus, 0·8 cm. longus, lobis oblongis, subæqualibus, 0·15–0·2 cm. longis.

HAB.: Swazieland; grassy hills near Dalriach, 'Mbabane, approx. alt. 1,450 meters, Dec., *H. Bolus*, 12226! "Flores albi." (In herb. Kew, Brit. Mus., Berlin, &c.).

Allied to *S. Muddii* Rolfe, but having rather larger, less numerous leaves, heads more disposed in lax panicles, and in the details of the flowers. The plant shows a tendency to turn black in drying, in this respect resembling *S. monticola* Wood & Evans, which is a much taller, less decumbent plant.

PROTEA CHIONANTHA, *Bolus*, n. sp. (Proteaceæ-Proteeæ). § I. Acrocephalæ. 2. Subacaules.

P. Scolopendrium valde affinis sed omnibus partibus multo majoribus et squamis involucri undique dense griseo-tomentosis differt.

Caulis abbreviatus; folia sparsa, erecta, oblanceolata, acutiuscula, longe petiolata, marginibus involutis, rigidissima, coriacea, prominenter venosa, glaberrima, 34 cm. longa, 4–5 cm. lata, petiolis 13 cm. longis; capitulum sessile, erectum, circa 15 cm. longum, 14 cm. latum; involucri squamæ pluri-seriatæ, imbricatæ, lanceolatæ, longe acuminatæ, denso tomento griseo undique tectæ, 5–10 cm. longæ; calyx 8 cm. longus, tubo extus glabro, intus marginibus tantum linea albo-tomentosa bene definita ornato, segmentis dense barbatis; ovarium dense albo-pilosum, 1·2 cm. longum; stylus basi lateraliter compressus, 6·7 cm. longus; stigma filiforme, sulcatum, glabrum, 0·7 cm. longum.

HAB.: Cape Colony; Clanwilliam Div., summit of Sneeuwkop, in rocky places, approx. alt. 1,940 meters, *A. A. Bodkin*, No. 8673 of herb. *Bolus* (in herb. Kew).

I am informed by Mr. C. L. Leipoldt, who knows the locality well, that this species occurs not infrequently on the Sneeuwkop, where it is called the "Sneeuw-bloem," either from its general white appearance or from the fact of the snow often lying for some time on the broad-topped heads.

GNIDIA FRANCISCI, *Bolus*, n. sp. (Thymelæaceæ-Eugnidia. § Involucratæ (Gilg).

G. floribus 4-meris, capitulis involucri 5-floris, petalis bipartitis majusculis.

Fruticulus humilis a basi parce ramosus, ad 20 cm. alt.; rami vel

simplices vel semel terve divisi, subtetragoni, graciles, glabri vel apices versus pilosi; folia opposita erecta imbricata subulata acuminatissima gracilia, marginibus incurvis, dorso rotundata, junioribus pilosis apice barbatis demum glabrescentibus, 0·9–1·3 cm. longa, 0·06–0·1 cm. lata; flores 4-meri sæpius (an semper?) in capitulis 5-fl., solitariis, vel capitulis in glomerulis 2–3 aggregatis; bracteæ involucrantæ 5, e basi lata lanceolata acuminatissimæ parce pilosæ substriatæ, pallidæ, 0·35–0·4 cm. longæ; receptaculum tubulosum apice parum ampliatus, 1–1·3, vel, post anthesin, usque ad 1·7 cm. longum; sepala ovata vel oblonga 0·4 cm. longa, extus sericeo-villosa, intus subglabra; petala bipartita, segmentis oblongis circ. 0·15 cm. longis; fructus ovatus sericeo-villosus subsessilis, 0·4 cm. longus.

HAB.: Cape Colony, Oudtshoorn district, on the summit of the Zwartbergen, near the Pass, approx. alt. 1,725 meters, in rocky places, Dec., *Frank Bolus* (No. 11631 of herb. Bolus) (in herb. Kew, &c.).

The habit resembles that of *G. linoides*, Wikstr., but is otherwise very different; the flowers are cream-coloured.