

CONTRIBUTIONS TO THE AFRICAN FLORA.

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

(Read May 31, 1905.)

MURALTIA SPICATA, Bolus, n. sp. (Polygalaceæ-Polygaleæ).

M. (§ *Eumuraltia*-*Gymnocarpæ* Chodat) *petalis ligulatis obtusis* ; *carina basi unguiculata*, *lobis expansis subreniformibus*, *petala excedens* ; *capsula obovata*, *apice pilosa ciliataque*, *cornubus capsula æquilongis* ; *seminibus glabris vel parcissime pubescentibus*.

Fruticulus erectus virgatus, 1-1½-pedalis ; rami pauci sæpius simplices, erecti, teretes, foliosi, cum foliis molliter albo-pilosi ; folia sessilia, erectiuscula, pleraque imbricantia, anguste oblonga, rarius oblanceolata, subobtusa, supra canaliculata, dorso carinata, crassa, minute tuberculato-rugosa, 0·7-1·2 cm. longa, 0·1-0·18 lata ; flores spicati, inter majores ; spica interrupta, 3·5-10 cm. longa, 1-1·4 cm. lata ; sepala oblonga, lanceolatave, acuta, concava, glabra, subcarinata, leviter nervosa, 0·4-0·5 cm. longa ; petala lateralia erecta, unguiculata, usque ad medium coalita, sursum libera ligulata obtusa, intus medio pilosa, 0·65 cm. longa ; carina 0·8 cm. longa, e basi unguiculata sursum in lobos subreniformes 0·5 cm. longos, 0·3 cm. latos expansa, petala paullo excedens ; capsula obovata, ciliata, apice pilosa, cornubus capsula subæquilongis, tota 0·5 cm. longa ; semina glabra vel parcissime pubescentia cum pilis paucis sparsa.

HAB.: Cape Colony, South-western Region, district Bredasdorp, on hills near the mission station of Elim, alt. 300 ft., July, *Bolus* 8468 ; mountains towards Napier, 800 ft., *Guthrie*, 3767 ! hills near Koude River, 400 ft., April, *Schlechter*, 10468 !

Distinct by its slender virgate habit, and rather large flowers. It seems to be nearest to *M. thymifolia*, Thunb.

PSORALEA BIOVULATA, Bolus, n. sp. (Leguminosæ-Galegeæ).*Ps. ovario biovulato distincta, etiamque exstipulata.*

Fruticulus gracilis, decumbens, ramosus ; rami ramulique patentes, gracillimi, angulati, paucifoliati, 30-50 cm. longi, juniores albo-

sericei demum glabrescentes; folia exstipulata, remota, rigida, appressa vel erecto-patentia, linearis-subulata, acuminata, 0·2-0·3 cm. longa, marginibus incurvis, superne albo-sericea, subtus glabra; flores 1-3, in ramulis divaricatis brevibus, saepius terminales, geminataque, rarius subracemosi; pedicelli 0·1-0·2 cm. longi; bractea subulata, colorata, æquilonga; calyx turbinatus, externe albo-sericeus, minutissime glanduloso-vittatus, 0·4 cm. longus, segmentis binis posterioribus alte connatis, ceteris alte fissis lanceolatis acuminatis, tubo 2-3-plo longioribus; vexillum reniforme, emarginatum, unguiculo brevi, 0·6 cm. longum; alæ obovatæ, auriculatæ, vexillum paullo superantes; carina obtusa, basi auriculata, calcarata, vexillo paullo brevior; ovarium lanceolatum albo-sericeum, 2-ovulatum.

HAB.: Cape Colony; South-western Region, Bredasdorp district, between Elim and Napier, amongst shrubs, flowering in October, *Bolus*, 6902.

An interesting species differing from the usual generic characters by its 2-ovuled ovary, and the absence of stipules. The translucent glandular dots are very minute, but may be detected on the calyx. It may be placed next to *E. tenuissima*, E. Mey., from which it is at once distinguishable (besides the characters given above) by its very short pedicels.

LICHTENSTEINIA KOLBEANA, Bolus, n. sp. (Umbelliferæ-Apioideæ-Ammineæ).

L. foliis circumscriptione oblongis ovato-lanceolatisve bipinnatipartitis, pinnulis iterum incisis grosse dentatisve; fructibus compresso-globosis.

Herba perennis, glabra $1\frac{1}{4}$ - $3\frac{1}{4}$ -pedalis; radices primariæ 3-4, parte indivisa ad 22 decim. longa vel ultra, 0·8 cm. crassa; caulis erectus validus sulcato-striatus, infra medium ramosus, subnudus, bracteis 2-3, parvis, membranaceis, sursum foliaceis, pinnatipartitis, donatus; rami 3-4, subfastigato-corymbosi, apice umbelliferi; folia radicalia 4-6, procumbentia vel laxe adscendentia, 7-27 cm. longa, 4-12 cm. lata, petiolis dilatatis striatis subamplexicaulibus, 2-6·4 cm. longis, ad 1 cm. latis, lamina circumscriptione oblonga ovato-lanceolatave, bipinnatipartita, pinnis 4-6-jugis, pinnatifidis, secundum rhachin longe alato-decurrentibus incisisque, pinnulis oblongis acutis 1·5-3 cm. longis, incisis grosse dentatisve basi late decurrentibus; umbellæ 9-13-radiatæ, pedunculis fructiferis ad 6·5 cm. longis, bracteis 5-6, linearibus acuminatis 1-1·5 cm. longis; umbellulæ 8-15-radiatæ, pedicellis fructiferis 0·8-1 cm. longis, bracteis 5-6; petala basi unguiculata, lamina elliptica, apice arcte deflexa longe

acuminata, basin fere attingentia; fructus matus subcompressoglobosus, (siccitate?) rugulosus, atro-brunneus, 0·4 cm. longus et latus; carpophora bipartita pallida (ceteris generis).

HAB.: Cape Colony (South-eastern Region), district Kentani, amongst grass (*Erianthus capensis*, Nees), alt. about 1,000 ft., fl. Dec., Miss A. Pegler, No. 891! (in herbb. Kew, Berlin and my own).

Distinct by its much divided leaves and large spreading inflorescence. The species is dedicated to the Rev. F. C. Kolbe, D.D., of Cape Town, who has distinguished himself by his love of Cape botany, and his enthusiastic efforts in teaching and spreading a love for it amongst others.

FELICIA MARITIMA, Bolus, n. sp. (Compositæ-Asteroideæ).

F. foliis alternis, semiteretibus, carnosis; capitulis terminalibus, solitariis, 40-floris; involucro 3-seriato; achæniis hispidulis.

Herba salsuginosa, humilis, decumbens; rami graciles e caudice, nunc adscendentes, nunc patentes, nodiis radicantes, glabri vel hispiduli; folia alterna subpauca, adscendentia, e basi dilatata semiamplexicaulique scariosa, linearis-semiteretia vel filiformia, obtusa, carnosa, 0·15–0·35 cm. longa, 0·07–0·12 cm. crassa; capitula terminalia, solitaria, turbinata, 0·5 cm. longa, 0·4 cm. diam.; involucrum 3-seriatum, squamis oblongis vel oblongo-lanceolatis, acutis, intimis longioribus, floribus paullo brevioribus; flores radii circ. 14, ligulis albis; flores disci circ. 25, flavi; achænia hispidula, pappi setis subpaucis, barbellatis.

HAB.: Cape Colony, in sandy ground near the sea-shore, inundated in winter, Maitland, near Cape Town, fl. June, coll. A. Bolus (Herb. Norm. Austr.-Afr., 1170; herb. Bolus, 6265!).

Allied to *F. ficoidea*, DC. (also a halophilous plant), but quite distinct by its slender habit, alternate, obtuse, narrower leaves, and acute involucral bracts.

FELICIA FLANAGANII, Bolus, n. sp. (Compositæ-Asteroideæ).

F. foliis oppositis, petiolatis, ellipticis, ovatisve, integris; pedunculis monocephalis; involucro 1-seriato, squamis pilosis; floribus radii 12, ligulis albis, disci ad 33, flavis; achæniis hispidulis; pappo 1-seriato.

Fruticulus procumbens, vel dependens, ramosus, ad 25 cm. longus; rami oppositi, graciles, pubescentes, pallidi, in pedunculo monocephalo, nudo, pubescente, pallido, pleroque 8–12 cm. longo, desinentes; folia patentia, opposita, petiolata, petiolo 0·3–0·5 cm. longo, lamina elliptica, ovatave, obtusa, obscure apiculata, submembranacea,

pilosa, supra viridia, subtus pallidiora, 0·8–1·2 cm. longa; capitula turbinata, 0·8–0·9 cm. longa, 0·9–1·1 cm. lata, receptaculo alveolato; involucrum 1-seriatum, squamis circ. 12–13, oblongis, linearibusve, acutis, nervatis, pilosis, pallescentibus, floribus paullo brevioribus; flores radii circ. 12, ligulis albis apice 3-dentatis, flores disci circ. 33, flavi; achænia hispidula, pappo 1-seriato, subcopioso, setis barbellatis.

HAB.: Cape Colony, South-eastern Region, district Komgha Mooi Plaats, overhanging precipitous rocks, alt. 1,000 ft., June, "not common," *Flanagan*, 1799!

Allied to and with the habit of *F. (Aster) petiolatus*, Harv. Thes. Cap. t. 154), but distinct by its opposite, entire leaves; also near to the south-western *F. brachyglossa*, Cass. (*Aster Cymbalariae*, Thunb.), but the habit differs, as well as the leaves, and the longer peduncles.

GYMNOSTEPIUM LEVE, Bolus, n. sp. (Compositæ-Asteroideæ).

G. foliis alternis, linearibus; involucris 4-serialibus, serie interiori e squamis 13 condita; floribus radii circ. 14 lilacinis, pappo pleroque carentibus; floribus disci flavis, plerisque sterilibus; pappo e setis paucis barbellatis.

Fruticulus gracillimus, erectus, fere totus glaber, 1–1½-pedalis; caules plerique simplices rarius basi semel ramosi, leves, pallidi; folia alterna, sparsa, linearia, subacuta, subtus 1-nervia, parte inferiori ciliata dilatata semi-amplexicaulia, 2–3·5 cm. longa, vix 0·1 cm. lata; pedunculi subnudi 10–12 cm. longi; bracteis 2–3, remotis, foliaceis, minimis, prædicti; capitula turbinata vel cyathiformia, 0·85 cm. longa, apice 0·95 cm. lata; involucrum 4-seriale, serie interiori e squamis 13, cuneato-oblongis, obtusis, levibus, flavescentibus, obscure nervatis, parce ciliatis, condita, ceteris paucioribus sub-similibus, brevioribus; receptaculum alveolatum; flores radii circ. 14, ligulis oblongis, tridentatis, lilacinis, circ. 0·7 cm. longis, achæniis levibus, glabris, pallidis, pappo pleroque carentibus, vel rarius setis 2–3 coronatis; flores disci circ. 50, flavi, plerique steriles, casu tamen rarissime unus alterusve fertiles, pappo e setis paucis barbellatis.

HAB.: Cape Colony, district Ceres, in moist grassy or marshy places at the Gydouw, alt. 3,100 ft., Dec.–Jan., *Bolus*, 8625! Herb. Norm. Austr. Afr. 1169! Koude Bokkeveld Mountains near Tandfontein, 4,500 ft., Jan., *Schlechter*, 10141!

LEYSSERA MONTANA, Bolus, n. sp. (Compositæ-Inuloideæ).

L. acaulescente; pedunculis monocephalis; capitulis campanulatis; involucri bracteis 5–6-seriatis; receptaculis epaleaceis foveo-

latis ; radii floribus 20–24, disci ♂ ; pappo e setis barbellatis 11–15, corollæ tubum æquantibus, paleis brevibus intermixtis.

Fruticulus humillimus, acaulescens ? (specimen unicum caudice carpum ut videtur nec radices ostendit), totus cum pedunculo 9 cm. altus ; rami (duo, in exempl. nostr.) lignosi, dense foliosi, circ. 2 cm. longi ; folia numerosissima, dense conferta, totum caulem obtegentia, patentia, oblongo-spathulata, obtusa, basin versus angustata, subsessilia, 1·3–1·8 cm. longa, sub apice 0·2 cm. lata, subtus obscure nervata, lana densa alba, intertexta, omnino vestita ; pedunculi graciles, monocephali, pilis floccosis, minimis, paucis, 6 cm. longi ; capitula campanulata, 1·3 cm. longa, 1·6 cm. diam., involucrum 5–6-seriatum, bracteis numerosis, erectis, appressis, planis, oblongis, anguste ellipticisve apice angustatis obtusiusculis, scariosis, exteroribus sensim brevioribus ; receptaculum epaleaceum, foveolatum ; flores radii 20–24, flavi, ligulis oblongis, obtuse 3-dentatis, pappo 2-seriato e setis 11–15, longis, barbellatis, corollæ tubum æquantibus cum paleis brevibus intermixtis, achæniis dense pilosis ; flores disci flavi, ♂, pappo achæniisque, ut in ♀.

HAB. : Cape Colony, South-western region, district Worcester, on the Matroosberg, alt. circ. 6,500 ft., fl. Jan., A. Bolus (6367 ! in my herb.).

This species is interesting as an example of a mountain form, or of what is often called an "Alpine" form (an objectionable term, as I venture to think, because of its ambiguity as leading to a possible conception of the Alps of Europe). While very near its congeners in general structure, it is completely different in habit from them all. On the same mountain (the loftiest in the South-western region of South Africa, and attaining a height of 7,400 ft.), several other plants of a similar habit have recently been found by Dr. R. Marloth, who has published an interesting paper on them in the *Transactions* of this Society, vol. xi., part 3, pp. 161–168, with several illustrations. One of the species figured (*Felicia bellidoides*, Schltr.), though a herb, very much resembles the present species in habit. I have but one specimen of the latter, which seems to have been broken off just above the collar.

PHYMASPERMUM APPRESSUM, Bolus, n. sp. (Compositæ-Anthemideæ).

Ph. foliis arcte appressis, ovatis, cuspidatis, minimis ; capitulis terminalibus, hemisphæricis ; involucri squamis 4-serialibus, glabris ; receptaculo convexo ; floribus radii 10–14, disci 40–50.

Suffrutex erectus, ramosus, 2–4-pedalis ; rami adscendentes, tenues, foliosi, nervis foliorum decurrentibus striati, tomentosi,

inferioribus sterilibus, abbreviatis, 0·7–1·5 cm. longis, foliis imbricatis dense vestitis, superioribus florigeris elongatis, 5–10 cm. longis, foliis remotioribus usque ad basin capitulorum; folia sparsa saepe gemmifera, sessilia, appressa, ovata, crassa, glabra, nitida, juniora acuta, vetustiora demum longe cuspidato-acuminata, 0·2–0·4 cm. longa, cuspidibus membranaceis, setiformibus, brunneis, laminam aequantibus vel excedentibus, subtus 3-nervia, nervo medio prominente, incrassato, longe decurrente, nervis lateralibus nunc obscuris nunc etiam incrassatis decurrentibusque; capitula in ramulis superioribus nunc brevibus nunc elongatis, terminalia, solitaria, corymbos irregulares laxos mentientia; involucrum hemisphaericum, squamis erectis, imbricatis, 4-serialibus, glabris, siccis, rigide papyraceis, pallidis, exterioribus brevioribus, ovatis, subobtusis, carinatis, interioribus oblongis, basi calyculatum, 0·7–0·8 cm. longum et latum; receptaculum convexum, pilis brevissimis articulatis parce sparsum; flores radii 1-serialis, circa 10–14, ligulis oblongis albis, 0·7 cm. longis; fl. disci ♀, ca. 45–50, 5-lobi, tubo glanduligero, flavi, 0·3 cm. longi, styli truncati, breviter ciliolati fimbriative; achænia cylindrica, 10-costulata, glandulosa, pallida, 0·2 cm. longa; pappus subnnullus vel costulis in denticulos brevissimos productis.

HAB.: Cape Colony: South-western Region; rocky mountain-side on the Zwartberg Pass, distr. Prince Albert, alt. about 4,700 ft., Dec. (1904) *H. Bolus*, 11551.

Distinct by its peculiar, very small, appressed, ovate, thick leaves. In other respects it may be near the little-known *Ph. junceum* Less. (*Osteospermum junceum* Thunb.), which does not seem to have been collected since Thunberg's time, and (according to Harvey) is now only represented in his herbarium by a very poor deflorate specimen. In habit it bears some resemblance to *Ph. aciculare* (*Iocaste acicularis* E. Mey.). The plant was somewhat abundant where found.

OSTEOSPERMUM TRIPINNATUM, Bolus, n. sp. (Compositæ-Calenduleæ).

O. foliis 3-pinnatipartitis; capitulis paucis, fastigiato-corymbosis in pedunculis sublongis paucifoliatis vel subnudis; involuci squamis 2-3-serialibus, lanceolatis; floribus radii 15-20, disci ∞; achæniis tereti-clavatis, verrucosulis.

Herba lignosa vel fruticulus erectus ramosus, verisimiliter $2\frac{1}{2}$ -pedalis vel ultra; caulis validus, striatus, rugosus, pallidus, 0·5 cm. crassus, cum ramis ramulisque pilis rigidis patentibus hirsutus; rami pauci adscendentes foliosi, superiores in corymbis pauci-ramosis, subfastigiatis, 2-3-pedunculatis, desinentes; folia alterna

patentia, sessilia, semiamplexicaulia, circumscriptione lanceolata, 2–3-pinnati-partita, 3–5, usque ad 7·5 cm. longa, ad 3 cm. lata, rhachi hirsuta, segmentis parce pubescentibus forte viscidulisque, pinnis irregulariter dispositis, ima basi simplicibus brevissimis, superioribus pinnulatis, ad 1·5 cm. longis, pinnulis nunc linearibus simplicibus, nunc, in foliis majoribus, incisis, lobulis ultimis semper linearibus acutis; pedunculi monocephali, 5–9 cm. longi, bracteis 1–2, minimis, foliiformibus; capitula subhemisphærica 0·8 cm. longa, 1 cm. diam., involucri squamæ 25–30, erectæ pleræque 2–, rarius sub 3-serialis, lanceolatæ, acutæ, rigidæ, externe scabrido-puberulæ, pallidæ, 0·5–0·6 cm. longæ; flores radii circa 18, ligulis angustis, 0·8–0·9 cm. longis; flores disci ∞; achænia clavata obsolete triquetra, transverse verrucosulo-rugosa, brunnea, 0·4–0·43 cm. longa.

HAB.: Griqualand West, Kalahari Region, "near the Kloof Village in the Asbestos Mountains, September 25, 1811," Burchell, 1670 (according to N. E. Brown, Kew); near Griquatown (within forty miles of the first-named station), sent by Mrs. Orpen in 1873, No. 8303 in my herb.

This is very distinct from any species known to me. In its much cut leaves it approaches to *O. tanacetifolium* MacOwan, but in other respects not only the leaves but the habit and inflorescence are very different.

ERICA MILANJIANA, Bolus, n. sp. (§ Ceramia).

E. foliis 4-nis; floribus terminalibus, 4-nis; corolla cyathiformi, segmentis erectis; filamentis linearibus latitudine æqualibus; antheris exsertis, muticis; ovariis sericeo-lanatis.

Rami diffusi, gracillimi, glanduloso-hirti, cum pedicellis ferruginei, 20–25 cm. longi; folia subdensa, patentia, 4-na, elliptico-oblonga, utrinque angustata, acuta, plana, marginibus reflexis, minute hispidula, distanter glanduloso-ciliolata, subtus pallidiora, 0·4 cm. longa; flores terminales, 4-ni; pedicelli gracillimi, patentes, flexuosi, glanduloso-hirti, 0·6–0·7 cm. longi; bracteolæ subapproximatæ, lineares, minutæ; sepala subulata, acuta vel acuminata, ciliolata, colorata, 0·1 cm. longa; corolla cyathiformis, vix vel non apice contracta, glabra, rosea, 0·25 cm. longa, limbi segmentis erectis, late rotundatis longitudine tertiam partem tubi æquantibus; filaments linearia, e basi sursum æqualia; antheræ exsertæ, laterales, oblongæ, obtusæ, muticæ, 0·09 cm. longæ, poro duplo longiores; stylus longe exsertus, validus, sursum gradatim angustatus; stigma capitellatum; ovarium sericeo-lanatum.

HAB.: British Central Africa, Milanji Plateau, coll. T. McClounie (in herb Kew).

Most nearly allied to *E. tenuipes*, *Guth.* and *Bol.*, of the South-Western Cape Flora, differing by its 4-nate leaves, more strictly cyathiform corolla (*i.e.*, its erect, not subrecurved, segments), broader filaments, more exserted anthers. It is also near to *E. planifolia*, *Linn.*, and to *E. thymifolia*, *Wendl.*, differing from the former by its exserted anthers, from the latter by the shape of its corolla, its filaments of equal width, muticous anthers, and from both by its 4-nate leaves.

GNIDIA PULVINATA, Bolus, n. sp. (Thymelæaceæ).

G. floribus terminalibus, subglomeratis, exinvolutatis; calycis segmentis reflexis, ovatis lanceolatisve, acutis; petalis e pulvinulis 4, processibus erectis filiformibus cum pilis intermixtis praeditis, pulvillum annularem ostium tubi fere claudentem efformantibus; antheris superioribus cassis minimis, inferioribus perfectis multo majoribus.

Fruticulus 3–4-pedalis; rami diffusi, rigidi; pubescentes, cito glabrescentes, cinerei, cicatricoso-tuberculati; folia conferta, opposita vel subsparsa, juniora suberecta imbricata, vetustiora incurvo-patentia, anguste lanceolata, longe attenuata, obtuse acuta, coriacea, haud pungentia, transverse rugulosa, minute tuberculosa, juniora dense pilosa, demum glabrescentia, 1–1·4 cm. longa, 0·2 cm. lata; flores terminales, in glomerulis 3–5-floris, exinvolutati, sessiles; calycis tubus subgracilis fauce ampliatus, tomento denso subintertexto vestitus, 1–1·2 cm. longus, 0·1–0·12 cm. diametro, segmentis reflexis, e basi lata ovatis lanceolatisve, acutis, utrinque tomentosis supra demum glabrescentibus, sordide purpureis, 0·6 cm. longis, 0·25 cm. latis; petala e pulvinulis 4-prominulis, crassis, carnosis, glabris, nitidis, in fauce tubi sitis orta, multipartita, segmentis erectis filiformibus brevibus, numerosissimis exterioribus gradatim minoribus, pilis albis sericeis longioribus intermixtis, totus pulvillum annularem densum efformans; antheræ inferiores perfectæ multo majores, superioribus cassis.

HAB.: Cape Colony; Bredasdorp Division, on the mountains between Caledon and Elim, alt. about 600 ft., Oct., *Bolus*, 9238! near Koude River, 1,000 ft., Dec., *Schlechter*, 9619!

In habit and general appearance near to *G. scabrida*, *Meisn.*, and *G. pubescens*, *Berg.*, but differing from both in floral characters.

STRUTHIOLA LEPTANTHA, Bolus, n. sp. (Thymelæaceæ).

S. foliis oppositis; floribus axillaribus; calycis segmentis oblongis acutis; petalis bipartitis segmentis erectis subulatis subobtusis

carnosis, pilis copiosis æquilongis circumdatis; antheris in summa fuce tubi sitis inclusis acutis.

Fruticulus erectus ramosus, 2-3-pedalis; rami erecti patentesve, rigidi, puberuli, glabrescentes, cinerei, interdum cicatricibus foliorum delapsorum prominulis notati; folia opposita, patentia, vel erecta imbricataque, linearia vel anguste oblanceolata, subacuta, coriacea, rigida, glabra, ciliata vel rarius subnuda, supra concava, subtus trinervia, 0·7-1 cm. longa; flores axillares, erecto-patentes, in ramulis superioribus laxe dispositi; calycis tubus gracilis, rectus vel decurvus, ampliatus, pilis albis sericeis appressis pubescens, saepius 1·5-2·1 cm. longus, vel rarius in exemplaribus nonnullis, depauperatus, 0·5-1 cm. longus, 0·04-0·05 cm. diametro, segmentis patentibus, demum saepius reflexis, oblongis acutis vel subulatis acuminatis, saepe subinæqualibus, 0·25-0·35 cm. longis; petala bipartita, segmentis erectis, subulatis, subobtusis, carnosus, circa 0·15 cm. longis, pilis basalibus copiosis sericeis albis æquilongis circumdatis; antheræ in fauce summa tubi sitæ, inclusæ, subulatæ, acutæ; stylus tubo calycis dimidio brevior.

HAB.: Cape Colony; Namaqualand Minor, near Ookiep, 3,200 ft., Sept., *Bolus* (No. 688 of Herb. Norm. Aust.-Afr.); Clanwilliam, Blaauwberg, Aug., *Schlechter*, 8488! Pikenier's Kloof, 850 ft., *id.*, 4938! Calvinia Division, near Nieuwoudtville, *C. L. Leipoldt*! Malmesbury Division; Groene Kloof, 300 ft., Oct., *Bolus*, 4322!

EULOPHIA FLANAGANII, Bolus, n. sp. (Orchidaceæ-Vandeæ).

E. foliis syanthiis angustis, petalis super labellum deflexis, labelli lobo intermedio truncato retusove, calcare ovato brevi, pollinium stipitibus glandulisque (an semper?) discretis, ovario apodo.

Herba gracilis erecta, glabra, $1\frac{1}{4}$ - $1\frac{1}{2}$ -pedalis; folia circa 4, synanthia, rigida, lineariformia, acuminata, multinervia, 25-35 cm. longa, 0·3-0·7 cm. (saepius 0·3-0·4 cm.) lata; scapus rectus subflexuosusve, striatus, 0·2-0·25 cm. diametro, foliis longior, vaginis 4 appressis acutis vel acuminatis multinervis, stramineis vestitus, inferioribus 5 cm. longis, superioribus sensim brevioribus; racemus sublaxus, subsecundus, 12-20-fl., bracteis ovatis acuminatis, inferioribus 1 cm. longis, superioribus sensim brevioribus; sepala patentia æqualia, oblonga breviter acuta, glauco-virescentia, 0·9 cm. longa, 0·25 cm. lata; petala super labellum deflexa, oblonga, apiculata, lilacina, sepalis æquilonga, 0·4 cm. lata; labellum porrectum, cuneatum, 3-lobum, lilacinum, sepalis æquilongum, lobis lateralibus abbreviatis intermedio multo majore quadrato subtruncato vel leviter retuso, apice 0·5 cm. lato, infra apicem papillis setiformibus, acumi-

natis, hyalinis, in fasciculo quadrato confertis, basin versus papillis brevioribus in seriebus tribus dispositis, ornatum; calcare ovato, 0·2 cm. longo; columna sessilis, oblonga, subtetragona, nec in pedem basi producta; pollinia in stipitibus oblongis discretis inter se paullo distantibus per filum extensivum affixa, glandulis ovatis (an semper?) discretis.

HAB.: Cape Colony, Komgha Division, on grassy slopes near the mouth of the Kei River, alt. 200 ft., fl. Jan., *Flanagan*, 1029 (in herb. Kew, Bolus, &c.); mountain slopes near Queenstown, alt. 4,000 ft., fl. Jan., *Galpin*, 1713! Eland's Hoek, near Aliwal North, alt. 4,500 ft., *F. Bolus* (No. 10544 in my herb.).

Described from living specimens of Flanagan's No. 1029. The colour of the sepals is cold pale green, somewhat livid, faintly mottled, the petals and lip pale lilac with purple edges near the apex. The separation of the stipites and glands of the pollinia may be a sport. I have not observed it before in any other species, but found it identical in two flowers of Flanagan's 1029, dissected. The species resembles *E. laxiflora*, Schltr., but is distinguishable by the absence of any chin or projecting foot at the base of the column, as well as by colour differences. In some of the *Eulophiæ* the colours of the flower vary considerably, especially in the lip, and too much reliance must not be placed upon them; in others, especially the unicoloured species, there seems to be little variation.

MYSTACIDIUM, Lindl.

(*Note on the S. African species of this genus.*)

In my *Icones Orchidearum Austro-Africanarum*, under t. 7 (*Angræcum Gerrardii mihi*), I endeavoured to show that the genus *Mystacidium* should be restricted to those plants having the peculiar bearded appendages to the rostellum, which were described by Lindley in establishing the genus (*Comp. to Bot. Mag.*, v. 2, 206). These appendages being often of small size, and attached to an organ which generally loses its shape in dried specimens, have possibly been overlooked by European botanists, or, if seen, have not been regarded as of generic importance. In respect to this genus and *Angræcum* (as well as to other allied genera), great differences of opinion have existed among orchidologists, and much inconvenience has resulted therefrom. In the desire to refrain as far as possible from adding to this, I have reconsidered the course adopted in the work first above cited, and have concluded that it would be better to change it. The chief characters adopted by Pfitzer (in *Natürliche Pflanzenfamilien*, II. 6. 214, 216), and by Rolfe (in the *Flora of*

Tropical Africa, vol. 7, 133, 169), as distinguishing *Mystacidium* from *Angræcum*, are, that the former has flowers with the two pollinia on two distinct stipes, each with a separate gland; while the latter has two pollinia on a single stipe and gland. These characters have the merit of clearness; and I have no sufficient reason to doubt their constancy, though I am under the impression that I have seen flowers of *M. filicornis* with a single, or two very closely approximate, glands. I propose now to follow these authorities, and the more willingly since this arrangement will probably be adopted in the continuation of the *Flora Capensis*. The result is simply to enlarge the limits of Lindley's *Mystacidium*; while the peculiar character which he had in view might with advantage be used as forming the section *Eumystacidium*. The South African species at present known would then be arranged thus:—

1. *Mystacidium filicornis*, Lindley, in Comp. to Bot. Mag., 2,206; Thesaur. Cap. 2, t. 175; Bolus, Icon. Orch. Aust.-Afr., t. 55. (*Epidendrum capense*, Berg, Deser. Pl. Cap. (1767), 347; Linn. f., Suppl. (1781), 407. *Limodorum longicorne*, Thunb., Prodr. (1794), 3; Swartz, in Schrader's Journ., Bot. (1799), 230. *Eulophia longicornis*, Spreng., Syst. Veg. (1826), 3,720. *Angræcum capense*, Lindl., Gen. Sp. Orch. (1833), 248. *Aeranthus filicornis*, Reichb. fil., in Walp. Ann. (1861), 6,900.)
2. *M. gracile*, Harvey, Thes. Cap. (1863), 2, t. 174; Bolus, Icon. Orch. Aust.-Afr., t. 56.
3. *M. pusillum*, Harvey, Thes. Cap. (1863), 2, t. 173; Bolus, l.c., t. 57.
4. *M. Gerrardii*, Bolus, in Journ. Linn. Soc., vol. 25 (1889), 187. *Aeranthus Gerrardii*, Reichb. f., in "Flora" (1867), p. 117. *Angræcum Gerrardii*, Bolus, Icon. Orch. Aust.-Afr., v. 1 (1893), t. 7.
5. *M. Pegleræ*, Bolus (see below).
6. *M. Caffrum*, Bolus (*Angræcum caffrum*, Bolus, Icon. Orch. Aust.-Afr., t. 8).
7. *M. Millari*, Bolus (see below).
8. *M. Flanaganii*, Bolus (*Angræcum Flanaganii*, Bolus, Icon. Orch. Aust.-Afr., t. 52).

Rostellum with two bearded appendages (§ *Eumystacidium* Pfitzer, amended)

Sepals and petals nearly equal and all acute or acuminate.

Spur of the lip 3·5-5·2 cm. long; leaves 3-9 cm. long .. *filicornis*, Lindl.

" " 3-3·5 cm. long; leaves 2-3·8 cm. long .. *gracile*, Harv.

Petals obtuse, shorter than the sepals *pusillum*, Harv.

Rostellum naked (§ *Gomphocentrum*, Pfitzer).

Lip about as broad near the apex as its length.

Lip trowel-shaped, spur falcately incurved *Gerrardii*, Bolus.

Lip fan-shaped, spur slightly incurved *Pegleræ*, Bolus.

- Lip ovate, obtuse, in length about $1\frac{1}{2}$ times its breadth.
 Spur about as long as the ovary *Caffrum*, Bolus.
 Spur about twice as long as the ovary *Millari*, Bolus.
 Lip ovate-lanceolate, acute, length about $2\frac{1}{2}$ times its breadth *Flanaganii*, Bolus.
-

MYSTACIDIUM PEGLERÆ, Bolus, n. sp. (Orchidaceæ-Vandeæ).

M. (§ *Gomphocentrum*) *sepalis lateralibus lanceolatis, impari oblongo obtuso, inter se subæquilongis; petalis rhomboideis; labello arcuato-deplexo subflabelliformi, obscure trilobulato, sepalis dimidio longiore, calcare cylindrico quam lamina paullo longiore.*

Epiphyta glabra ; radices aerales filiformes, 0·15 cm. crassæ ; caulis validus foliatus, vaginis nervosis foliorum delapsorum vestitus, 5–6 cm. longus ; folia disticha, erecto-patentia, ligulata, inæqualiter biloba, lobulis obtusis, basi angustata, semiamplexicaulia, coriacea, 3–5 cm. longa, 0·7–1 cm. lata ; racemi squarroso-patentes ; rhachis fractiflexa, 5–6-flora, 4–5 cm. longa ; flores erecti, albi ; sepala lateralia, patentia, oblanceolata, acuta, 0·25 cm. longa ; sepulum impar erectum oblongum ovatumve, obtusum, quam lateralia paullo brevius ; petala erecto-patentia, rhomboidea, angulis rotundatis, 0·18 cm. longa, 0·17 cm. lata ; labellum arcuato-deflexum, subflabelliforme, angulis rotundatis, margine antico obscure 3-lobo, lateralibus subundulatis, tota lamina manu explanata 0·35–0·4 cm. longa, basi in calcar dependens subincurvum cylindricum, 0·5 cm. longum, 0·075 cm. crassum productum ; columna decurva, oblonga, emarginata ; rostellum deflexum, lanceolatum, acutum ; pollinia globosa in stipitibus capillaceis affixa, glandulis ovatis minimis.

HAB.: Cape Colony, South-eastern Region, district Kentani, in a forest near Kentani, on trees, alt. 1,000–1,200 ft., Feb., Miss A. Pegler, No. 993 !

Described from dried specimens and fresh flowers preserved in formalin. In general appearance this most nearly resembles *M. caffrum* mihi (see note above), but is well distinguished by its smaller flowers, different sepals and petals, and more especially the lip. I am indebted for this and many other good things to Miss Pegler, who has made excellent collections in the neighbourhood of Kentani, a district hitherto very little explored. To her we owe the detection of *Dermatobotrys Saundersii* mihi (hitherto only known from Natal) within this Colony, and the rediscovery of *Stangeria Katzeri*, Regel, the native station of which was previously unknown.

MYSTACIDIUM MILLARI, Bolus, n. sp. (Orchidaceæ-Vandeæ).

M. (§ Gomphocentrum) sepalo impari oblongo obtusissime rotundato, concavo, basi dente in utroque margine aucto; petalis ovatis; labelli lamina ovata, obtusa, calcare basi inflato deinde cylindrico, sensim attenuato, quam lamina 3½-plo longiore.

Epiphyta caulescens glabra; radices aerales 0·23 cm. crassæ; caulis validus, 0·4–0·5 cm. crassus, vaginis foliorum delapsorum vestitus; folia 2–3, pleraque apice caulis conferta, erecto-patentia, ligulata subundulata, inæqualiter biloba, lobis angustatis subobtusis, medio nervo depresso percursa, coriacea, 8·5 cm. longa, 1·4–1·6 cm. lata; racemi squarroso subrecti rigidi, 7–10-flori, 2–4 cm. longi; flores plerique erecti, albi; pedicelli cum ovario 0·8–0·9 cm. longi; sepala lateralia patentia, oblongo-oblanceolata, subacuta, 0·6 cm. longa, parte latiore 0·22 cm. lata; sepalum impar erectum, oblongum, obtusissimum, subconcavum, basi dente in utroque margine auctum, 0·6 cm. longum, 0·45 cm. latum; petala erecto-palentia, oblique ovata subacuta, sepalis paullo breviora, 0·32 cm. lata; labelli lamina ovata, obtusa, concava, apice decurva, petalis æquiloniga, calcare basi inflata, deinde cylindrico incurvo, 2 cm. longo; columna decurva, oblonga vel subrhomboidea, infra medium dilatata; pollinia lenticularia, in stipitibus filiformibus, glandulis ovatis; rostellum exappendiculatum.

HAB.: Natal, near Durban, on trees, alt. 500 ft., fl. Jan., Coll. A. D. Millar (Natal Gov. Herb., No. 8437).

Described from fresh specimens; flowers white. In the general appearance of the flowers this resembles *M. gracile* Harv.; but the shape of the perianth segments and the nude rostellum, show it to be quite distinct. I can find nothing like it amongst the tropical *Mystacidia* in the *Flora of Tropical Africa*.

HOLOTHRIX CULVERI, Bolus, n. sp. (Orchidaceæ-Ophrydeæ).

H. (§ Tryphia) spica dense multiflora; sepalis lanceolatis acutis, in var. β lateralibus basi calcaratis; petalis oblongis acutis, quam sepala dimidio longioribus, duplo latioribus; labello subquadrato, 3-lobulato, vel, in var. β, lobulis lateralibus carentibus.

Folia radicalia 2 (?), unicum tantum visum emarcidum ovatum; scapus erectus gracilis, vaginulis remotis erectis lanceolatis acuminatis aristulatis membranaceis vestitus, basin versus retrorse pilosus sursum glabrescens, ad 12 cm. altus; spica cylindrica, dense multiflora (30–60-fl.), 4–5 cm. longa, 0·8 cm. diam., floribus quaquaversis (vel interdum, ex collectore, secundis); bracteæ lanceolatæ acuminatæ, inferiores ovario paullo longiores, superiores breviores; sepala

lateralia oblanceolata, dorsale oblongum, 0·22 cm. longa; petala patenti-reflexa, oblonga, acuta, 0·31 cm. longa, quam sepala duplo latiora, cum labello minute papilloso-scabriuscula; labellum subquadratum, 3-lobum, lobulis lateralibus patentibus dentiformibus, vel in var. β omnino carentibus, lobo intermedio multo majore, subtrulliformi, breviter acuto, supra basin angustato, marginibus eleganter curvo-ampliatis, tota lamina 0·35 cm. longa et lata, basi in calcar subrectum acutum, 0·15–0·2 cm. longum, producta; columna ovalis; pollinium caudiculae brevissimæ, glandulis discretis vel (ex collectore), filo extensivo connexis.

VAR. β , *integra*; sepalis lateralibus calcaratis; labelli lobulis lateralibus carentibus; ceteris ut in typo.

HAB.: Transvaal Colony; Fig-tree Creek, near Barberton, on rocky slopes, alt. about 2,000 ft., Sept. (1890), W. Culver, 84! Var. β growing with and close to the typical form, Culver, 84a! (in herb. Schlechter; Bolus).

Petals and lip white. Most nearly allied, amongst the South African species known to me, to *H. Macowaniana*, Reichb. f.; but the aspect is different, the spike being much closer and more numerously flowered. I believe this is the only known instance of spurred sepals in the genus.

DISA MARLOTHII, Bolus, n. sp. (Orchidaceæ-Diseæ).

D. (§ Eu-*Disa*), *foliis synanthiis radicalibus expansis herbaceis; racemis paucifloris, laxis; floribus mediocribus; calcare sepali imparis patente subelongato; petalis obtusis; rostello apice integro.*

Herba erecta, glabra, 14–25 cm. alta; folia synanthia, radicalia, plura, oblanceolata, acuta, herbacea, basi longe membranaceo-vaginantia, 3–5 cm. longa, parte latiore 0·8–1·1 cm. lata; caulis gracilis, substrictus, vaginis 4–7, erectis, herbaceis, marginibus submembranaceis, arcte amplectentibus vestitus; racemus saepius laxissime 2–5-florus, vel in exemplaribus macilentis 1-florus, pedicellis gracilibus elongatis; bracteæ vaginis conformes sæpe marginibus coloratis, ovario multo breviores; flores patentes, in sectione medocres, saturate rosei, galea petalisque maculis purpureis notatis; sepala lateralia patentia late oblonga, obtusissima, sub apice mucronulata, 0·9–1 cm. longa; sepalam impar posticum, galeatum, oris ambitu obovato obtuse acutiusculo, sepalis lateralibus æquilonium dorso in calcar patens vel subadscendens nullo modo deflexum substrictum vel levitur recurvum, apice valde attenuatum, 1·4–1·9 cm. longum, productum; petala erecta sub galea semiabscondita, late oblonga, obtusissima, basi postice angulo recto abrupte geniculato-

inflexa, rostello subduplo longiora; labellum porrectum, spathulato-oblongum, subacutum, circa 0·9 cm. longum; anthera valde resupinata, subreflexave, ovario parallela; rostellum erectum, oblongum, apice inter glandulas angustatum; ovarium gracile, cylindricum, cum pedicello, ad 2 cm. longum.

HAB.: Cape Colony; district Worcester, in swamps, Sand-drifts Kloof, Hex River Mountains, altitude about 3,200 ft., Jan. 4, 1897, Dr. Marloth, 2378! Same place A. Bolus (No. 6371 of my herb.). District Ceres; on the Skurfdebergen, near Klein Vley, altitude about 6,000 ft., Jan., R. Schlechter, 10,204!

A very distinct species, in floral structure nearest to *D. pulchra*, Sond., of which, though dissimilar in appearance, it might be regarded as a miniature Western representative. The petals in this, however, are very different, and the rostellum is proportionately much higher. In its inflorescence and the general shape of the flowers it is strikingly like *D. gladioliflora*, Burch. (which Schlechter has placed in the § *Oregura*), but is at once distinguishable from that by its herbaceous expanded leaves and the high suberect rostellum. It has also some relation with the very different-looking *D. caffra*, mihi, and I should place it between that and *D. pulchra*.

DISA SCHLECHTERIANA, Bolus, n. sp. (Orchidaceæ-Diseæ).

D. (§ Microperistera, Bolus, nov. sect.) foliis rigidis, gramineis, hysteranthiis vel cum ortu scapi marcescentibus, floribus inter majores, sepalo impari subgaleato, longissime calcarato, petalis minimis, resupinatis uncinatis, labello oblongo-lanceolato.

Herba erecta, glaberrima, ad 5·5 decim. alta; folia radicalia, 7-11, erecta, linearia, acuminata, rigida, prominenter nervata, 30 cm. longa, 0·1-0·13 cm. lata; scapus substrictus, vaginis membranaceis acuminatis arcte amplectentibus, marginibus basi longe connatis, distanter vestitus; bracteæ patentes, membranaceæ, ovatæ, acuminatæ, venosæ, ovario breviores; racemus laxe 6-12-florus, 8-14 cm. longus, flores inter majores hujus sectionis, patentibus, cremeis, colore et indole eos *D. Draconis* Swtz. in mentem revocantibus; sepala lateralia patentia, oblonga, acuta, 2·3 cm. longa; sepalum impar erectum subgaleatum ovatum acuminatum, apice recurvatum, ore ovato acuto 2·3 cm. longo, 1·5 cm. lato, basi sensim in calcar filiforme eleganter decurvum, ad 4·8 cm. longum, ovarium excedens, productum; petala minima resupinata, e basi lata orbiculari deinde angustata, abrupte incurvo-uncinata, acuminata, altitudine rostellum vix superantia; labellum patulum oblongo-lanceolatum acutum integrum, supra basin leviter constrictum,

1·8-2 cm. longum; anthera resupinata; pollinium glandulæ discretæ; rostellum erectum, subelongatum, leviter incurvum, oblongum, apice tridentatum; stigma pulviniforme; capsula erecta, clavato-cylindrica, ad 3·8 cm. longa.

HAB.: Cape Colony, Riversdale Division, in Garcia's Pass (Langenbergen), on rocky mountain sides, alt. about 1,800 ft., fl. December (1904), collected and sent by Mrs. C. Luyt; No. 10571 in my herb. (also in herb. Kew, &c.).

This much resembles *D. Draconis*, Swtz., but cannot, in my opinion, be fitly placed in any existing section. From the § *Coryphæa* it differs by its rigid, wiry, grass-like leaves, the small, subresupinate, uncinate petals, and the rather high rostellum. In all these characters it approaches the § *Herschelia*. From the latter, however, it is separated by the structure of the flowers generally, by the very entire lip, by the two distinct glands of the pollinia and the corresponding modification of the rostellum. There is nothing in the structure of the flower to suggest hybridity.

PTERYGODIUM LEUCANTHUM, Bolus, n. sp. (*Orchidacæa-Disperideæ*).

Pt. (§ Eu-Pterygodium, Schltr.) sepalo impari oblongo obtusissimo, basi angustato; labello pendulo transverse oblongo abbreviato obtusissimo vix emarginato, appendice quam labellum multo longiore, erecta, oblonga, carnosa, sursum angustata, apice breviter bifida, lobis deflexis, uncinato-incurvis, incrassatis, carnosis, discoloribus.

Herba glabra, erecta, 15-35 cm. alta; caulis gracilis, subflexuosus, foliatus; folia 4-5, erecto-patentia, ovato-lanceolata, acuta, siccitate membranacea venosaque, ad 8 cm. longa; racemus laxe 7-10-fl., bracteis erectis lanceolatis acuminatis floribus subæquilongis; sepala lateralia patentia cymbiformia acuta, margine anteriori obscure unidentata, circa 0·8 cm. longa; sepalmum impar erectum oblongum obtusissimum, basi angustatum cum petalis adhærentibus concavis cuellum suborbicularē efformantibus, sepalis lateralibus æquilongum; petala semiorbicularia, basi modice gibbosa; labellum abbreviatum, oblongum, latius quam longum, bilobulatum emarginatumve, lobulis rotundatis, sursum in appendicem erectam, oblongam, carnosam, apicem versus sensim angustatam, bifidam, productum, lobulis deflexis, uncinato-incurvis, incrassatis, subdivaricatis, obtusis discoloribus. (Ex. exempl. plur viv.)

HAB.: Cape Colony; South-eastern Region, district Engcobo, in steep rocky places on the Engcobo Mountain, alt. about 4,400 ft., fl. Jan., H. G. Flanagan! Bolus 8704! also in district Maclear, on the slopes of the Kwenkwe Mountain, near the Gatsberg,

alt. 5,500 ft., Jan., *Bolus!* Orange River Colony; on the Mapede's Peak, alt. 8,100–8,400 ft., Feb., *Thode*, 57b!

Colour of sepals pale green, petals white, lip white with faint green stripes, the incurved tips of the appendage very dark green. The specimens dry pale or yellowish, but these tips remain as two dark oval spots and serve at once to distinguish the species in the dried state. In habit and floral structure, especially by the form of the lip and appendage (which latter is about four times longer than the petaloid lip proper), it is allied to *Pt. catholicum*, Swartz, and to *Pt. acutifolium*, Lindl., but is very distinct from either. It appears to be rare, and only a few specimens were obtained by each of the collectors.

PTERYGODIUM DEFLEXUM, Bolus, n. sp. (Orchidaceæ-Disperideæ).

Pt. (§ Corycium, Schltr.) sepalo impari obtuseato-oblongo, obtusissimo; labello cuneato-unguiculato, subreniforme, bilobo, lobis divaricatis, appendice e basi linearis adscendente, apice biloba, lobis abrupte deflexis subulatis acuminatis curvis, floris basin fere attingentibus.

Herba erecta, glabra, 12–20 cm. alta; seapus validus, subflexuosus, foliatus; folia 4–6, erecto-patentia, e basi lata vaginante membranacea linearia, acuminata, multivenia, 6–10 cm. longa, superiora sensim minora; spica sublaxe 5–20-flora, 4–7 cm. longa, 2·3–2·7 cm. diam., floribus erecto-patentibus; bractæ ovatae, acutæ, membranaceæ, venosæ, medio plicato-constrictæ, floribus paulo breviores; sepala lateralia antica in laminam late ovatam deflexo-patentem, 0·75 cm. longam, coalita, lobis obtusis, marginibus leviter inflexis; sepalum impar obtuseato-oblongum, obtusissimum, 0·8 cm. longum, cum petalis adhaerentibus saccum efformantibus, ore suborbiculari 0·9 cm. lato, basi bene gibbosum ultra apicem ovarii productum; labellum e basi cuneata unguiculatum, subreniforme, bilobum, 0·5 cm. longum, apice 0·6 cm. latum, lobis divaricato-patentibus obtusis, appendice erecta, carnosa, linearis, apice biloba, lobis subulatis acuminatis, curvis, abrupte deflexis, floris basin fere attingentibus.

HAB.: Cape Colony (South-western Region), open hillsides, Koudeberg, near Wupperthal, district Clanwilliam, alt. about 2,500 ft., fl. Oct. (1897), coll. H. Bolus, No. 8660.

Very distinct by the lip-appendage, the dark green colour of which forms a sort of band inside and close to the yellow petals. The bracts and sepals are smoky-brown. The tubers and roots are hairy. Twenty or thirty specimens were found growing together; and the species was drawn and described from life.

The following rare and little known species having turned up again after a lapse of some seventy years, I have thought it desirable to describe it more fully :—

PTERYGODIUM BIFIDUM (Sond.), Schltr., in Bull. Herb. Boiss. v. 6 (1898), p. 856 (Orchidaceæ-Disperideæ).

(§ *Corycium*, Schltr.)

Erecta, glabra, semi-pedalis ; folia circa sex, erecta, lanceolata, acuminata, basi vaginantia, duo inferiora 4·2 cm. longa, superiora sensim minora ; spica cylindrica, dense multiflora, obtusa, 6·5 cm. longa, 1 cm. diam., floribus confertis, regulariter dispositis, subsessilibus ; bracteæ ovatæ vel lanceolatæ, acuminatæ, membranacæ, inferioribus flores excedentibus ; sepala lateralia antica, in laminam oblongam vel suborbicularē concavam, obtusissimam, retusam vel bifidam marginibus inflexis, coalita, 0·45 cm. longa ; sepalum impar lanceolatum acuminatum, 0·45 cm. longum ; petala semiorbicularia valde concava, marginibus exterioribus inflexis, cucullum suborbicularem, 0·4 cm. latum, efformantia ; labellum pendulum, ligulatum (lanceolatum, ex Sonder) acutum, integerimum, basi haud angustatum, trinervum, 0·35 cm. longum, 0·093 cm. latum, appendice æquilonga, erecta, unguiculata, ovata, obovata, carnosa, apicem versus angulo subrecto cucullato-inflexa, costa prominenti longitudinaliter percursa ; ovarium ovatum, apice in collum gracile angustatum. *Corycium bifidum*, Sond., in *Linnæa*, v. 19, p. 111. *C. ligulatum*, Reichb. f., *ibid.* p. 375 ; *Walp. Annales*, v. 1, p. 805 ; *Bolus, Orch. Cape Penins.*, p. 180.

HAB.: Mountains near Cape Town, Ecklon & Zeyher (ex Sond.) ; near Caledon, sent by Mr. A. W. Goatcher, Jan., 1904, No. 10568 in my herb.

This species has a somewhat similar floral structure to that of *Pt. microglossum*, Schltr., but is utterly different in general appearance and size and in the shape of the lip. In habit it resembles *Pt. bicolorum*, Schltr., and *Pt. excisum*, Schltr. ; but also differs in the lip and in the smaller size of its flowers, which are, indeed, the smallest in the genus, about 25–30 being contained in a length of an inch on the spike. The species is rare ; it has not been found since Ecklon and Zeyher's time until now, and was previously unseen both by Schlechter and myself. Of the identity with the type there is scarcely a doubt.



Bolus, Harry. 1905. "CONTRIBUTIONS TO THE AFRICAN FLORA." *Transactions of the South African Philosophical Society* 16, 135–152.

<https://doi.org/10.1080/21560382.1905.9526051>.

View This Item Online: <https://www.biodiversitylibrary.org/item/113609>

DOI: <https://doi.org/10.1080/21560382.1905.9526051>

Permalink: <https://www.biodiversitylibrary.org/partpdf/175326>

Holding Institution

Field Museum of Natural History Library

Sponsored by

The Field Museum's Africa Council

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.