

Mitteilungen aus dem botanischen Museum der Universität Zürich.
(XXII.)¹⁾

I.

Beiträge zur Kenntnis der afrikanischen Flora. (XVII.)¹⁾
(Neue Folge.)

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Mit Beiträgen von

Edm. Baker (London). E. Hackel (St. Pölten).

J. G. Baker (Kew). R. A. Rolfe (Kew).

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Gramina.

E. Hackel (St. Pölten).

Perotis, subgen. nov. Tropidachne Hack.

Spiculae subsessiles, a pedicellis minutis pulviniformibus demum solatae, basi in callum ovoideum obtusum pilosulum epinasticum constrictae. Glumae steriles muticae, chartaceae, carinatae, carina incrassatae.

P. phleoides Hack. n. sp.

Rhizoma crassum, horizontale vaginis foliorum vetustorum distichis dense obsitum. Innovationes extravaginales, breves, basi tumidae, folia crebra (ad 10^{na}) dense aggregata ferentes. Culmi erecti, circ. 50 cm alti, teretes, glaberrimi, nodis circ. 5 exsertis, summo supra medium culmum sito, basi dense foliati. Folia glabra: Vaginae teretes, arctae, internodiis breviores, laeves; ligula brevissima, marginiformis, tenuiter membranacea; laminae e basi aequilata lineares, longe acuminatae, planae, inferiores 5—8 cm lg., ad 4 mm lt., summa vix 1 cm lg.; 1 mm lt., erecto-patulæ, rigidae, virides, praeter margines scabriusclos glaberrimæ, tenuinerves. Spica erecta, stricta, densissima, ad 10 cm lg., 7 mm lt., rhachi subgracili, tenace, multangula, glaberrima, post delapsas

¹⁾ Vergl. Bull. Herb. Boiss. 1904.

spiculas pulvinos minutos excavatos exhibente. Spiculae in singulis pedicellis irregulariter ab omnibus rhacheos partibus enascentibus singulae, raro in basi spicae binae ad quaternae in pedicello communi, anthesi patulae, post anthesin ope pedicelluli calliformis epinastici puberuli circ. 0,4 mm longi deflexae, linearis-oblongae, 3,5 mm lg., a latere compressae, curvulae, pallide virides, glabrae. Gluma I. linearis-oblonga, obtusa, secus carinam superne subcompliata, carina crassa, viridi, aculeolato-scabra, ceterum flavo-viridula, laevis, praeter carinam enervis, II^{am} basi late amplectens; gluma II. I^{ao} simillima, ea parum brevior, obtusiuscula, carina scabra; III. quam I. paullo brevior, elliptica vel ovata, acuta, glaberrima, uninervis. Palea glumam aequans, glaberrima. Antherae 1,7 mm lg. aureo-flavae. Stigmata purpurascens.

Südafrika: Transvaal, in fruticetis prope Hammanskraal, 1400 m, leg. Schlechter 4200 bl. 16 I. 1894. Eine sehr eigen-tümliche, in der Tracht an *Phleum Boehmeri* Wib. erinnernde Art, deren Unterschiede von *P. latifolia* Ait. so bedeutend sind, dass die Aufstellung eines besondern Subgenus gerechtfertigt erschien. Technisch ist dieses schon durch den Mangel der Grannen der Hüll-spelzen von *Euperotis* verschieden.

Agrostis eriantha Hack. n. sp.

Perennis. Culmi erecti, subrobusti, ad 5 dm alti, teretes, glaberrimi, 4—5-nodes, nodo summo circ. in medio culmo sito, simplices, ad apicem usque foliati, foliis subaequaliter dispositis. Folia glabra; vaginae internodiis plerumque longiores, teretes, laxiusculae, glaberrimae; ligulae oblongae, obtusae, 4—5 mm lg.; laminae e basi aequilata anguste lineares, acutae, plerumque complicatae, ad 18 cm lg., explicatae 2 mm lt., suberectae, rigidulae, glaberrimae, virides, nervis crassiusculis supra prominulis percursae. Panicula obovata v. obovato-oblonga circ. 30 cm. lg., basi vagina summa inclusa, inferne contracta, superne patula, apice subnutans, rhachi inferne laevi superne scabra, ramis binis elongatis (inferioribus ad 20 cm longis) a 1/4 v. 1/3 inferiore trichotomo-ramulosis, ramulis secundariis solitariis saepe tertianos 1—5-spiculatos gignentibus, omnibus subcapillaribus aculeolato-scaberrimis, spiculis in apice ramorum aggregatis subcontiguis longe pedicellatis, pedicellis leviter clavatis, subterminalibus spiculam aequantibus. Spiculae

lineari-lanceolatae, 5 mm lg., viridi et purpureo variegatae, rachilla non producta. Glumae steriles aequales, lineares, (explicatae 1 mm) latae, acutae, 1-nerves, carina aculeolato-scabrae; gluma fertilis 3—3,5 mm lg., lanceolata, acuta, bidentata, dentibus (0,6 mm longis) minute bimucronulatis, toto dorso calloque pilis albis appressis circ. 1 mm longis haud densis villosula, in medio dorso v. infra medium aristam exserens gracilem 4 mm longam in medio leviter flexam nec tortam, scabram. Palea glumam subaequans, oblonga, obtusa, minute bidentula, binervis, glaberrima. Stamina 3, antheris 2 mm longis.

Südafrika: Transvaal, in humidis prope Pretoria, 1400 m, Schlechter 4144, Jan. 1894; in collibus prope Middelburg, 1600 m, Schlechter 4052, Dec. 1893. Aus der Gruppe der *Agrostis*-Arten mit auf dem Rücken behaarter Deckspelze ist aus Südafrika bisher nur *A. lachnantha* Nees bekannt, die aber mit unserer Art weder habituell noch in den Merkmalen der Spelzen irgend eine Verwandtschaft zeigt. Näher steht ihr schon die abessynische *A. vestita* Hochst., deren Rispenäste jedoch zu 4—7 in Halbquirlen stehen und erst von der Mitte an Ährchen tragen; diese sind unbegrannt, wenig über 2 mm lang. Noch näher steht die australische *A. retrofracta* Willd., (*A. aemula* R. Br., *Deycuxia Forsteri* Kunth), die sich aber durch die relativ kürzere, gestutzte, nicht zweizähnige Deckspelze unterscheidet. Auch die indische *A. Royleana* Trin. ist mit unserer verwandt, hat aber eine kurze Vorspelze, eine andere Gestalt der Rispe u. s. w., steht überhaupt schon ferner.

***Pogonarthria falcata* Rendle var. *condensata* Hackel
nov. var.**

Differt a typo (*Leptochloa falcata* Hackel) panicula condensata, breviore, racemis brevibus rectis suberectis ubi magis approximatis, spiculis arcte imbricatis.

Südafrika: Transvaalkolonie, in graminos. pr. Hammanskraal, 1160 m, Schlechter 4195.

Liliaceae.

J. G. Baker (Kew).

***Bulbine transvaalensis* Baker nov. spec.**

Fibrae radicales densae graciles Folia 7—8 sessilia ascendentia lanceolata semipedalia acuminata densa 6—7 lin. lata membranacea

glabra. Pedunculi ad rosulam 2 semipedales. Racemi 3—5 poll. longi deorsum laxi, pedicellis ascendentibus apice articulatis 3 lin. longis, bracteis membranaceis lanceolatis acuminatis 3 lin. longis. Perianthium aurantiacum $2\frac{1}{2}$ longum, segmentis linearibus brunneo vittatis. Stamina perianthio 2—3-plo breviora, antheris parvis oblongis, filamentis infra apicem stupposis. Stylus elongatus. Capsula globosa 1 lin. diam.

Südafrika: nördl. Transvaalkolonie, am Marovongue-Fluss, 1200—1600 m, Junod 998.

Ad B. natalensem Baker accedit.

Anthericum (Dilanthes) vestitum Baker nov. spec.

Radix fibris dense vestita. Folia radicalia plura erecta linearia complicata pedalia 2—3 lin. lata crassa rigidula ubique pilosa crebre distincte nervata. Pedunculus simplex pubescens teres foliis aequilongus. Racemus simplex infra apicem laxus 6—9 poll. longus, rhachi dense pubescente, bracteis ovato-lanceolatis acuminatis infernis 3—4 lin. longis, floribus saepe binis, pedicellis brevissimis. Perianthium oblongum 6 lin. longum, segmentis oblongo-lanceolatis albis dorso venis tribus brunneis carinatis. Antherae 2 lin. longae, filamentis longiores. Stylus elongatus.

Südafrika: nördl. Transvaalkolonie (Spelonken), Shiluvane, beim Sanatorium, Junod 862, 1441.

Ad A. triflorum Ait. accedit.

A. (Dilanthes) divaricatum Baker nov. spec.

Radix setis copiosis productis coronata. Folia 6—8 linearia patula glabra 2—3 poll. longa 1 lin. lata. Pedunculi gracillimi nudi compressi 2—8 poll. longi. Panicula laxissima deltoidea vel rhomboidea, ramis patulis vel erecto-patentibus: racemi laxissimi pauciflori 1—2 poll. longi: pedicelli brevissimi, prope basin articulate, saepe gemini: braeteae parvae ovatae acuminatae. Perianthium oblongum $2\frac{1}{2}$ —3 lin. longum, segmentis oblongis obtusis dorso brunneis carinatis trinervatis. Antherae magnae, filamentis brevissimis. Stylus elongatus.

Südafrika: nördl. Transvaalkolonie (Spelonken), Shiluvane, Junod 665.

Ad A. patulum Baker accedit.

A. (*Trachyandra*) *macranthum* Baker nov. spec.

Radix haud visa. Folia pauca basin pedunculi vaginantia erecta ensiformia acuminata sesquipedalia et ultra deorsum 7—8 lin. lata membranacea glabra. Pedunculus simplex nudus subteres sesquipedalis. Racemus simplex laxus 3—4 poll. longus, braeteis ovatis longe acuminatis 6—12 lin. longis, pedicellis ascendentibus 6—9 lin. longis apice articulatis. Perianthium 7—8 lin. longum, segmentis oblanceolatis obtusis albis dorso brunneo carinatis 3-nervatis. Stamina perianthio paulo breviora, antheris oblongis parvis, filamentis elongatis. Stylus elongatus.

Südafrika: nördl. Transvaalkolonie (Spelonken), am Motsuiri, 1400 m, Junod 1448.

A. (*Dilanthes*) *Junodi* Baker nov. spec.

Fibrae radicales densae graciles. Radix apice fibris gracilibus coronata. Folia radicalia plura erecta linearia sesquipedalia et ultra 4 lin. lata membranacea glabra. Pedunculus bipedalis sursum acute angulatus. Panicula laxa deltoidea 4—5 poll. longa; racemi 3—4, laterales patuli: bracteae ovatae acuminatae minutae: pedicelli interdum gemini 2—3 lin. longi medio articulati. Perianthium campanulatum 2 lin. longum, segmentis oblongis obtusis albis dorso viridi carinatis trinervatis. Antherae lineares 1 lin. longae. Capsula globosa magnitudine pisi, valvis transversaliter lineatis.

Südafrika: nördl. Transvaalkolonie (Spelonken), Shiluvane, Junod 1735.

***Eriospermum brevipes* Baker nov. spec.**

Tuber ovoideum 9—12 lin. diam. haud fibrosum. Pedunculus infra folium 2—3 poll. longus. Folium unicum synathium basi caulem vaginantium ovatum acutum glabrum 9—12 lin. longum. Pedunculus supra folium subnillus. Racemus densus multiflorus corymbosus, pedicellis infimis 9—12 lin. longis. Perianthium oblongum 2 lin. longum, segmentis lineari-oblongis obtusis albidis viridi-brunneo carinatis. Stamina perianthio duplo breviora.

Deutsch-Südwest-Afrika: Hereroland, Etiro, Rautanen 445.

Ad *E. sphaerophyllum* Baker accedit.

***Eriospermum Junodi* Baker nov. spec.**

Tuber ovoideum 9—12 lin. diam., tunicis crassis fibrosis. Folia 3 synanthia erecta glabra basalia lanceolata 3—4 poll. longa,

media 3—6 lin. lata, ad petiolum 1—2 poll. longum sensim attenuata. Pedunculus gracilis 8—10 poll. longus. Racemus multiflorus angustus 2—3 poll. longus, pedicellis infimis erecto-patentibus 3—6 lin. longis, bracteis minutis saccatis. Perianthium 2 lin. longum, segmentis linearis-oblongis albidis breviores carinatis. Stamina perianthio paulo breviora.

Südafrika: nördl. Transvaalkolonie (Spelonken), Managila, in Wiesen, Junod 1482.

Ad *E. triphyllum* Baker accedit.

***Asparagus conglomeratus* Baker nov. spec.**

Caulis sarmentosus gracilis glaber 4-pedalis et ultra, internodis ultimis brevissimis. Folia indurata haud spinosa. Cladodia 6—12-na subulata rigida 1½—2 lin. longa. Flores 1—2-ni, pedicellis brevissimis. Perianthium 1½ lin. longum, segmentis angustis obtusis albidis viridi carinatis. Stamina perianthio vix breviora, antheris oblongis parvis, filamentis antherio longioribus. Stylus productus.

Südostafrika: Natal, Durban, Conrath 911.

Ad *A. asiaticum* accedit.

***Hypoxis longipes* Baker nov. spec.**

Cormus parvus globosus, tunicis castaneis parce fibrosis. Folia pauca erecta linearia 6—12 poll. longa, 1½—2 lin. lata haud rigidula parce pilosa. Pedunculi ad cormum 3 gracillimi flexuosi 2—4 poll. longi parce pilosi. Corymbus 1—3 florifer, pedicellis ascenditibus 15—18 lin. longis, bracteis subulatis pilosis. Ovarium obonicum parvum sericeum. Perianthii segmenta 4 lin. longa, exteriore dorsa sericea interiora oblonga lutea. Stamina perianthio duplo breviora.

Südafrika: nördl. Transvaalkolonie (Spelonken), Shiluvane, Junod 1446.

Ad *N. angustifoliam* Lam. accedit.

***H. longifolia* Baker nov. spec.**

Cormus globosus 2 poll. diam., apice fibris copiosis brevibus coronatus. Folia plura erecta ensiformia bipedalia deorsum 9—12 lin. lata cuminata rigidula parcipilosa. Pedunculi ad cormum 4 foliis multo breviores graciles adpresse pilosi. Racemus laxus multiflorus demum 3—4 poll. longus, pedicellis brevissimis, bracteis linearibus, rhachi dense pilosa. Ovarium parvum obonicum dense pilo-

sum. Perianthii segmenta 6 lin. longa, exteriora lanceolata dorso dense pilosa, interiora oblonga lutea. Stamina perianthio 1—3-plo breviora, filamentis brevissimis.

Südafrika: nördl. Transvaalkolonie (Spelonken), Berglehnen um Shiluvane, Junod 1445.

Ad H. obtusam Burck. accedit.

***H. mollis* Baker nov. spec.**

Cormus magnus, tunicis brunneis apice haud fibrosis. Folia plura lanceolata 8—10 poll. longa deorsum 5—6 lin. lata erecta vel falcata subcoriacea utrinque molliter breviter pilosa. Pedunculi ad cormum 4 erecti 4—6 poll. longi dense breviter pilosi. Racemus laxus pauciflorus, pedicellis brevibus erecto-patentibus, bracteis linearibus. Ovarium obconicum dense breviter pilosum. Perianthium 6 lin. longum, segmentis exterioribus lanceolatis breviter pilosis, interioribus oblongis luteis. Stamina perianthio 2—3-plo breviora, filamentis brevissimis.

Südafrika: Transvaalkolonie, Modderfontein, Conrath.

Ad H. obtusam Burck. accedit.

***H. nigricans* Conrath in Herb. Univ. Turic. nov. spec.**

Cormus magnitudine mediocris, apice longe et copiose fibrosus. Folia plura erecta linearia rigidula 9—10 poll. longa 2—3 lin. lata sordide brunnea ad apicem sensim attenuata, utrinque pilis elongatis patulis vestita. Pedunculus gracilis foliis brevior dense pilosus. Racemus densus pauciflorus, bracteis linearibus pilosis, pedicellis brevibus erecto-patentibus. Ovarium obconicum dense longe pilosum. Perianthium 6 lin. longum, segmentis exterioribus lanceolatis dorso dense pilosis, interioribus oblongis obtusis. Stamina perianthio triplo breviora, filamentis brevissimis.

Südafrika: Transvaalkolonie, Modderfontein, Conrath.

Ad H. obtusam Burck. magis accedit.

Velloziaceae.

J. G. Baker (Kew).

***Vellozia (Xerophyta) rosea* Baker nov. spec.**

Acaulis. Folia plura linearia 2—5 poll. longa $1\frac{1}{2}$ lin. lata ascendentia vel patula coriacea glabra crebre lineata margine brevia. Pedunculus gracilis 2—4 poll. longus superne viscosus. Ovarium oblongum dense viscosum. Perianthii segmenta lanceolata rosea

9—12 lin. longa dorso deorsum leviter viscosa. Stamina 6, limbo valde breviora, antheris linearibus, filamentis brevissimis.

Südafrika: nördl. Transvaalkolonie (Spelonken), Felsen um Shiluvane, 1100—1400 m, Junod 969.

Iridaceae.

J. G. Baker (Kew).

Moraea (Vieusseuxia) stricta Baker nov. spec.

Cormus globosus 6 lin. diam., tunicis fibrosis complicatis. Folia 2 vaginantia superposita apice libero parvo lineari. Pedunculus gracillimus strictus 6—8 poll. longus. Spathae 1—3, laterales sessiles, 8—12 lin. longae, valvis lanceolatis complicatis. Ovarium parvum oblongum glabrum. Perianthii limbus 6 lin. longus violaceus deorsum luteus, segmentis exterioribus obovatis unguiculatis, interioribus linearibus apice dilatatis integris, styli limbo 2—3 plo breviores, appendibus patulis.

Südafrika: nördl. Transvaalkolonie (Spelonken), Shiluvane, Junod 563.

Ad M. tenuem Ker accedit.

Gladiolus (Eugladiolus) densiflorus Baker nov. spec.

Cormus magnitudine mediocris, tunicis brunneis fibrosis. Folia producta 6 ensiformia erecta rigidula glabra pedalia vel sesquipedalia 6—9 lin. lata, venis gracilibus. Pedunculus validus sesquipedalia et ultra. Spica densissima multiflora secunda 6—9 poll. longa, spatha viridis 5—6 lin. longa, valva exteriori ovato lanceolata mucronata. Perianthium coccineum 9—10 lin. longum, segmentis obovatis obtusis tubo curvato infundibulari aequilongis. Stamina limbo vix breviora.

Südafrika: nördl. Transvaalkolonie (Spelonken), Shiluvane, Junod 1204.

Ad G. crassifolium Baker accedit.

G. brachylinbus Baker nov. spec.

Cormus depresso-globosus magnitudine mediocris, tunicis fibrosis. Folia producta 4 erecta linearia glabra subcartilaginea, majora 6—8 poll. longa, 5—6 lin. lata, venis marginibusque in-crassatis stramineis. Pedunculus pedalis vel sesquipedalis. Spica multiflora laxa subsecunda semipedalis, spathis complicatis acutis

12—18 lin. longis. Perianthium coccineum, tubo curvato 15 lin. longo sursum subcylindrico, limbo tubo duplo breviori, segmentis superioribus obovatis inferioribus oblongis. Stamina limbo distinete breviora. Styli rami simplices 2 lin. longi sursum applanati.

Südafrika: Transvaalkolonie, Magaliesberge, 1650 m, Schlechter 3629.

Loranthaceæ.

Hans Schinz (Zürich).

Viscum Galpinianum Schinz nov. spec.

Unterscheidet sich von dem ihm offenbar ähnlichen *Viscum tuberculatum* Rich. aus Nordostafrika wesentlich durch die Laubblätter, die bei der Transvaalpflanze breitverkehrteiformig bei keilförmigem Grunde sind; die ungestielte, aber zusammengezogene Spreite ist dick lederig und besitzt — im getrockneten Zustande — hervortretende Nerven. Die Länge beträgt $\pm 3 \frac{1}{2}$ cm bei einer Breite von ± 2 cm. Die zu zwei oder drei in den Blattachsen befindlichen Früchte sind länglich eiförmig bis länglich verkehrt-eiförmig, oben abgestutzt und kraterartig vertieft, stark warzig.

Ich habe die Pflanze mit den in Kew befindlichen afrikanischen *Viscum*-Arten wie mit denen unserer hiesigen Herbarien verglichen, kann aber keine sich mit ihr deckende, bereits beschriebene Art finden.

Südafrika: Transvaal, parasitic upon *Cussoniae* growing amongst rocks on mountain sides Barberton, 1330 m, E. Galpin 452, fr. X.

Indigoferæ.

Edmund Baker fil. (London).

Indigofera acutisepala Conrath in Herb. Schinz nov. spec.

Species I. *Zeyheri* Spr. affinis.

Suffruticosa. Caules erecti tenuiter cano-strigillosi superne plus minus angulati ex speciminibus mihi obviis 40—60 cm alti. Folia imparipinnata saepissime 3—4 jugata cum impari breviterpetiolato vel subsessili. Foliola tenuiter cano-strigosa cuneata-ob lanceolata vel linearis-cuneata vel anguste oblonga 7—12 mm longa. "Flores albi" Pedunculi graciles multiflori tenues quam folia longiores. Pedicelli quam ei *I. Zeyheri* Spr. breviores. Bracteae minutae

subpersistentes. Calycis tubus brevis lobi quam ei *I. Zeyheri* Spr. distincte longiores sublineares. Vexillum extus fulvo-sericeum. Carina vexillo subaequilonga. Legumen rectum subcylindricum plurispernum apice mucronatum subcoriaceum tenuiter strigilosum 2—2,7 cm longum.

Südafrika: Transvaalkolonie, Modderfontein, Paul Conrath 215; Pinaars Rivier, 1560 m, in collibus pr. R. Schlechter 4141; Makapansberge, Streydpoort, A. Rehmann 5570.

The distinguishing characteristics of this species are

a) The virgate canescent-strigillose stems.

b) The long slender peduncles more copiously flowered than in *I. Zeyheri* Spr. — the pedicels being shorter than in *I. Zeyheri* Spr.

c) The sublinear calyx lobes longer than in the type of *I. Zeyheri* Spr.

d) The straight mucronate legume 2—2,7 cm long.

The following may be also referable to this species:

Südafrika: Transvaalkolonie, Johannesburg, Bezuidenhout's valley, 1902, Dr. R. J. Rand 839; Pretoria, Kuduspoort, A. Rehmann 4656; Kapkolonie, in lapidosis Mts. Boschberg, 1000—1300 m, Mac Owan 365.

The following is very closely allied to

Indigofera longipes N. E. Brown. in Herb. Kew.

Suffruticosa. Caules erecti virgati ramosi tenuiter cano-strigosi. Folia imparipinnata saepissime 1 jugata interdum 2 jugata impari petiolato. Foliola angusta apice mucronata 15—30 mm longa convoluta multoties longiora quam lata, nervo medio superne impresso, petiolo communi 5—15 mm longo cano-strigoso, jugis inferioribus 5—10 mm supra basin proditis. Pedunculi axillares tenues laxiuscule floriferi quam folia multoties longiores. Pedicelli graciles saepissime quam calyx longiores. Calyx ± 1,5 mm longus. Calycis tubus brevis lobi breves lanceolati quam ei *I. concavae* Harvey valde diversi. Vexillum extus fulvo-pubescent 6 mm longum ± 4,5 mm latum. Carina vexillo paululo longior naviculariformis apicem versus praecipue distincte fulvo-hirta. Alae quam carina distincte breviores. Legumen juvenile cano-strigosum

Note on some of the species allied to *I. Zeyheri* Sp.

<i>I. Zeyheri</i> Sp.	<i>I. leptophylla</i> E. Mey.	<i>I. acutisepala</i> Conrath.	<i>R. Schlechter</i> No. 6856.
Suffruticosa erecta tenuiter canescens.	Suffruticosa.	Suffruticosa.	Suffruticosa tenuiter cano-strigosa.
Folia 3—5 jugata cum impari.	Folia saepe trijugata cum impari.	Folia 3—4 jugata cum impari.	Folia 1—2 jugata vel in var saepissime 3-jugata cum impari.
Foliola cuneato-oblonga.	Foliola sublinearia.	Foliola linearis-cuneata vel cuneata-oblonga.	Foliola sublinearia.
Racemi axillares pendunculati, laxiusculi pauciflori.	Racemi axillares pendunculati pauciflori (in typo 4—6 flori).	Racemimultiflori quam ei <i>I. Zeyheri</i> longiores.	Racemi multiflori eo <i>I. acutisepala</i> subsimiles.
Pedicelli calyce longiores.		Pedicelli quam ei <i>I. Zeyheri</i> breviores.	Pedicelli quam ei <i>I. Zeyheri</i> breviores.
Calyx brevis.	Calyx brevis, ± 2 mm	Calyx longior, lobi sublineares.	Calyx brevis, ± 1,5 mm longus.
Calycis lobi breviter subulati.	longus.		
Legumen rectum 6—9 spermum, tenuiter canescens.	Legumen glabrescens.	Legumen rectum subcylindricum, 2—2,7 cm longum.	Legumen juvenile cano-strigosum, ± 2,5 mm longum.

apice mucronatum rectum ad suturas incrassatum plurispernum \pm 2,5 mm longum.

Südafrika: Transvaalkolonie, in saxosis pr. Bluekranz River, 1200 m, R. Schlechter 6856; near Acton Homes, J. M. Wood 3525.

This is a difficult plant to classify as the leaves are generally uni-jugate and the terminal petiolate but occasionally they are 2-jugate, but as it is certainly allied to *I. acutisepala* Conrath I have placed it here. The distinguishing features of the type of this plant are:

- a) The branched virgate habit.
- b) The generally 1-jugate leaves, the leaflets being very narrow and 15—30 mm long.
- c) The long racemes rather laxly flowered.
- d) The short calyx \pm 1,5 mm long.

It differs from *I. acutisepala* Conrath more particularly:

- a) By its narrower leaflets and fewer pairs of leaflets.
- b) By the shorter calyx with shorter lobes.

I. adenoides Bak. fil. nov. spec.

Suffrutex caulis diffusis pilis brevibus glandulosis tectis. Folia imparipinnata 4—5 juga impari petiolato. Foliola elliptica vel ovata vel obovata, nervo medio superne impresso, apice mucronata saepe \pm 4 mm longa \pm 2,5 mm lata, spatia interjugalia 2—2,5 mm, longa, subtus pallidiora, petiolo communi glanduloso. Racemorum axes glandulosi. Racemi pauciflori folio nunc breviores nunc longiores, pedicellis brevibus. Calycis tubus brevissimus lobi breves acuti. Petala haud visa. Legumen rectum saepe 8—9 mm. longum ad suturas incrassatum paucispernum glandulosum.

Südafrika: Transvaalkolonie, Houtbosh, A. Rehmann 6217.

The distinguishing features of this plant which must be placed among the Productae are:

- a) The diffuse habit. The stems peduncles petioles densely covered with shortly stalked glands.
- b) The peduncles of 12—17 mm long with comparative few flowers.
- c) The imparipinnate leaves with generally 4—5 pairs of rather small leaflets.

- d) The short linear stipules.
- e) The straight subcylindrical pods about 8—9 mm long — glandular externally.

I. angustiloba Bak. fil. nov. spec.

Species habitu *J. Phillipsiae* Bak. fil.

Caules ex speciminibus mihi obviis 6—12—15—25 cm longi superne angulati herbacei cano-strigosi. Folia lignosa imparipinnata 1—2—3 juga cum impari breviter petiolato. Foliola oblonga vel linearis-oblonga vel oblanceolata vel ovata utrinque cano-strigosa, saepe 10—13 mm longa, 3—4 mm lata, superne nervo medio impresso, apice mucronata, petiolo communi 10—18 mm longo, lateralibus oppositis. Stipulae lineares cano-strigosae. Racemi axillares quam folia longiores. Calyx \pm 2 mm longus extus cano-strigosus calycis tubus brevissimus lobi angusti. Vexillum \pm 3,5 mm longum extus cano-puberulum obovatum suborbiculare. Carina nivaliformis apice obtusa utrinque in calcar breve producta quam alae conspicue longior. Legumen juvenile cano-sericeum lateralibus compressum saepe 2 seeded.

Südafrika: Transvaalkolonie, Distrikt Lydenburg, bei der Stadt Lydenburg, Wilms 321, 32a, fl. et fr. Nov. 1889.

The distinguishing features of this plant are:

- a) The herbaceous canescent angular stems 6—12—15—25 cm long, slightly woody at the base.
- b) The imparipinnate leaves with 1—2—3 pairs of oblanceolate narrow oblong, or oblong, or ovate leaflets — terminal leaflet shortly petioled.
- c) The racemes 3,5—4,0—6,0 cm long.
- d) The calyx 2—4 mm long of which the narrow linear lanceolate or subulate teeth are much longer than the tube.
- e) Only young legumes have been seen. These are compressed laterally canescent often 2 seeded.

Until further specimens with fully ripe legumes have been examined the exact position of this plant in Harvey's series must remain in abeyance.

Wilms 32a has longer stems and narrower longer calyx teeth and differs in certain other respects from Wilms 321. in Herb. Zurich, but they are evidently forms of the same species and the above description has been drawn up to include both.

I. auricoma E. Meyer var. cuneata Bak. fil. nov. var.

Caulis striatus 25—38 cm longus. Foliola 7—8 anguste cuneato-ovata saepe 1—1,3 cm longa superne flavo-viridia. Racemi longi inferne laxiuscule floriferi. Calycis tubus brevis lobi setacei.

Deutsch-Südwest-Afrika: Hereroland, Nels 263. I have compared this plant with the type collected by Drège in Herb. Harvey and the leaflets have a markedly more cuneate base. The common petiole is 2—3,5 cm long.

I. cryptantha Bentham var. occidentalis Bak. fil. nov. var.

Suffruticosa. Caules erecti virgati ex speciminibus mihi obviis 25—35 cm alti plus minusve angulati albo-pubescentes. Folia imparipinnata saepissime 3—5 jugata, impari petiolato. Foliola pluries longiora quam lata in sicco nigrescentia lineari-oblonga 10—20 mm longa, 2,5—3,5 mm lata, utrinque strigosa, petiolo communi 3—4 cm longo, jugis inferioribus 9—11 mm supra basin proditis. Foliolis lateralibus oppositis, spatia interjugalia 5—6 mm longa. Racemi pauciflori axillares quam folia pluries breviores. Pedicelli calyce breviores. Calyx brevis 1,5 mm longus calycis tubus campanulatus lobi breves triangulares subacuti. Vexillum ± 5 mm longum. Carina vexillo subaequilonga naviculariformis. Legumen juvenile torulosum adultum glabriusculum 3—4 spermum.

Deutsch-Südwest-Afrika: Gross Namaland, im Sande des Oanob bei Rehoboth, Fleck 449, 610; Hereroland, Kuisib, Fleck 827a, Spitzkoppjes, Dinter 40.

Differs from type, more particularly, in the longer leaflets which tend to be in fewer pairs, and the pairs of leaflets are more remote 5—6 mm from each other.

The following is a short description of a plant allied to *J. eriocarpa* Herb. Harv.

Indigofera (Productae) spec.

Suffrutex *J. eriocarpa* Herb. Harv. affinis. Caulis superne angulatus ferrugineo-pubescentes. Folia imparipinnata 4—5 juga, impari petiolato. Foliola elliptica vel oblonga vel oblongo-ovata utrinque strigosa apice mucronata, spatia interjugalia saepe 8—9 mm longa, lamina saepissime 10—11 mm longa ± 5 mm lata, glan-

duloso-stipellatis. Stipulae angustae pilosae \pm 6—7 mm longae. Racemi densiflori. Bracteae lanceolatae acuminatae. Flores rosei. Calyx extus cano-strigosus calycis lobi anguste-lanceolati. Vexillum apice apiculatum breviter unguiculatum \pm 6,5 mm longum. Alae carinae subaequilongae tenuiter pubescentes. Carina naviculariformis utrinque in calcar breve producta apice obtusa. Legumen haud visum.

Südost-Afrika: Natal, Pinetown, 1000 m, H. Junod 135.

I. Fleckii Bak. fil. nov. spec.

Species *I. heterotrichae* D. C. et *I. adenocarpae* E. Meyer affinis. Frutex. Caulis erectus ramosus. Rami novelli plus minus strigoso-canescentes. Folia imparipinnata 3—5—6 juga cum impari sessili vel subsessili. Petiolus communis saepe 1,5—2 cm longus. Foliola parva ovata vel obovata vel oblonga 2,5—5 mm longa cinereo-viridia utrinque strigosa, lateralibus oppositis. Pedunculi arcuato-adscedentes quam folia 2—3 plo longiores extremitates versus floriferi. Calyx \pm 2,5 mm longus extus glandulosis calycis lobi lanceolati acuti. Vexillum \pm 7 mm longum \pm 7 mm latum haud unguiculatum. Alae \pm 6 mm longae. Carina naviculariformis \pm 6,5 mm longa utrinque in calcar breve producta. Legumen 1—2,5 cm longum rectum ad suturas subinerassatum apice mucronatum plurispernum glandulosum.

Deutsch-Südwest-Afrika: Gross Namaland, Oranjefluss, Fleck 611, 612. A member of the Pinnatae.

The distinguishing characteristics of this copiously branching shrub are:

- a) The imparipinnate leaves with 3—6 pairs of small, ovate oblong, or obovate, leaflets — the terminal sessile or subsessile.
- b) The arcuate ascending peduncles, 2—3 times longer than the leaves, bearing flowers towards the extremities.
- c) The rather short calyx (2,5 mm long), glandular externally, with lanceolate acute lobes.
- d) The broad vexillum not unguiculate, slightly hairy externally.
- e) The straight legumes glandular externally.

Differs from *I. heterotricha* D. C. of which I have seen authentic material in Herb. Kew, in the absence of the spreading setae.

The leaves are not albo-canescens as in *I. adenocarpa* E. Meyer and they are of a different shape to those of *I. Pechuelii* Kuntze. Fenchel 191 from Keetmanshoop is an allied plant — the leaflets are longer and more canescent.

***I. hilaris* Ecklon & Zeyher var. *drakensbergensis* Bak.
fil. nov. var.**

Caules angulati cano-strigosi. Folia saepissime 4 juga cum impari sessili. Foliola utrinque cano-strigosa erecta vel suberecta oblonga vel oblanceolata apice mucronata, petiolo communi erecto-patenti 7—10 mm longo, lamina saepissime 6—7 mm longa, petiolulis brevissimis. Stipulae lineares. Racemi breves pauciflori folio subaequilongi vel quam folia breviores. Pedicelli sicut calyx extus cano-strigosi. Calyx \pm 4,5 mm longus. Calycis tubus brevissimus lobi \pm 3 mm angusti lanceolati acuminati quam tubus duplo longiores. Vexillum carinae subaequilongum quam alae paulo longior suborbicularare 6—6,5 mm longum extus puberulum. Alae \pm 5,5 mm longae brevissime unguiculatae. Carina naviculariformis utrinque in calcar \pm 2 mm longum et acutum producta. Ovarium lineare pluriovulatum. Legumen haud visum.

Südafrika: Oranjeflusskolonie, Hochebene westl. von Van Reenen's Pass, A. Schenck 725.

The distinguishing characteristics of this plant are:

- a) The suffruticose habit with several subsimple, suberect, compressed and angular stems, coming from a common rootstock, as in the type of *I. hilaris* E. Z.
- b) The narrow linear strigose stipules.
- c) The erecto-patent common petioles with generally 4 pairs of leaflets — the leaflets generally involute, erect and mucronate.
- d) The few flowered rather short racemes.
- e) The calyx with narrow, lanceolate, acuminate lobes \pm 3 mm long.
- f) The suborbicular standard 6—6,5 mm long about the same length as the keel.

I have compared this plant with Ecklon & Zeyher 1605 in Herb. Harvey — the type of *I. hilaris* E. Z.

- a) The common petioles in *I. hilaris* are not so distinctly erecto-patent.

- b) The leaves are not so constantly 4-jugate, and the leaflets not so markedly erect.
- c) The calyx in *I. hilaris* E. Z. is setaceo-subulate.

***I. gonioides* Hochst. var. *mossambicensis* Bak. fil. nov. var.**

Caules ramosi. Folia imparipinnata. Foliola quam ea typi breviora, latiora et pauciora, elliptica vel ovata, viridia 2—1 juga cum impari petiolato, lamina 10—14 mm longa. Calyx brevis. Vexillum glabrum. Legumen 25—33 mm longum lateralibus compressum ad suturas incrassatum tenuiter strigosum.

Südost-Afrika: Delagoa-Bay: H. Junod 27.

***I. Kelleri* Bak. fil. sp. nov.**

Species adspectu *I. pseudosubulatae* Bak. fil. Frutex cortice nigrescente ramulis novellis strigosis angulatis. Folia saepissime pinnatim trifoliolata. Foliola elliptica vel oblonga vel ovata utrinque strigosa saepissime 1—5—2,5 cm longa, 6—11 mm lata, nervo medio superne impresso, foliolis lateralibus oppositis brevissime petiolulatis. Pedunculi tenues laxiuscule multiflori. Racemorum axes strigosi. Flores ± 5 mm longi angustissimi. Calyx ± 1,5 mm longus calycis lobi anguste lanceolati quam vexillum breviores. Vexillum angustum apice mucronatum 4,5—5 mm longum. Carina ± 3,5 mm longa mox decidua naviculariformis apice acuta utrinque in calcar breve producta. Stylus incurvus stigmate capitellatus. Ovarium glabrum. Legumen haud visum.

Ostafrika: Somalland, Abdallah, C. Keller, 1891.

The distinguishing features of this distinctly woody shrub are:

- a) The leaves are usually pinnately trifoliate, the lateral leaflets being opposite, the terminal leaflets being 3—8 mm from the point of insertion of the lateral.
- b) Racemes slender rather laxly many flowered, the flowers small and singularly narrow.
- c) The standard is narrow 4,5—5 mm long, hairy on the outside with a hooked mucro at the apex. The keel seems to be at an early period deciduous.

The general aspect is somewhat similar to that of *I. pseudosubulata* Baker fil. from Niam-Niam land, but the flowers on dissection differ in many points. The flowers of *I. pseudosubulata* are ± 4 mm

long with calyx \pm 2,5 mm long. The standard is \pm 3,5 mm long slightly hairy externally but shorter and broader than in I. Kellери.

I. malacostachys *Bentham* var. *macrura* *Conrath* mss.
nov. var.

Suffruticosa. Caules erecta ex speciminibus mihi obviis \pm 40 cm alti praecipue superne albido-subtomentosi. Folia imparipinnata 3—5 jugata, impari petiolato. Foliola glauco-viridia elliptica vel ovata utrinque cano-strigosa 11—14 mm longa, 4—5 mm lata, nervo medio superne impresso subtus conspicuo, spacia interjugalia saepe \pm 6 mm longa, foliolis lateralibus oppositis jugis inferioribus 2—3 mm supra basin proditis. Stipulae lineares. Racemi axillares praecipue apices versus confertiflori quam folia longiores. Calyx hirtus \pm 6 mm longus calycis tubus brevis lobi angusti. Vexillum ovatum sparse pilosum. Carina sparse pilosa. Legumen extus dense hirsutum 5—6 mm longum saepe 2-spermum.

Südafrika: Transvaalkolonie, Pretoria bei Irene, Paul Conrath 223.

The distinguishing features of this plant are:

- The imparipinnate 3—5 jugate leaves with glaucous green leaflets.
- The densely flowered rather long racemes.
- The densely hirsute calyx with long narrow hirsute lobes.
- The short turgid pods often 2-seeded.

The following plant collected by R. Schlechter is allied but differs in having fewer and also narrower leaflets. In saxosis pr. Olifants Rivier, alt. 1670 m, No. 3764.

I append a description of a plant collected by R. Böhm at Gondo a close ally of *I. Phillipsiae Bak. fil.* and *I. Volken-sii Taubert.*

Suffrutex. Caules virgati angulati strigosi. Folia imparipinnata. Foliola 5—10, lateralibus alternatis, linearis-oblonga apice acuta multoties longiora quam lata, petiolo communi 2—3,5 cm longo strigoso, lamina utrimque strigosa 1—2,6 cm longa, 3,5—5,5 cm lata, petiolulis brevissimis. Stipulae lineares acuminatae. Pedunculi quam folia longiores copiose floriferi ad 14 cm longi. Bracteae angustae. Flores parviusculi. Calyx extus strigosus calycis tubus brevissimus lobi setacei quam tubus multoties longiores.

Vexillum extus pubescens. Carina naviculariformis apice obtusa utrinque in calcar breve conicum acutum producta. Ovarium strigosum. Legumen leviter falcatum lateraliter subcompressum strigosum ad suturas parce incrassatum \pm 15—17 mm longum deflexum plurispermum.

Ostafrika: Gondo, sandiger Wald, Blüten rosen-karminrot. R. Böhm. No. 39.

The distinguishing features of this virgate suffrutex related to the two species already mentioned and in some of its characters is related to *I. stenophylla* Guill. et Perr. are:

- a) The virgate stems and cinereous nature of the foliage when dried.
- b) The imparipinnate leaves with generally from 5—10 linear oblong, or sometimes linear acute leaflets — the lateral markedly alternate.
- c) The long copiously flowered racemes of comparatively small flowers.
- d) The short calyx tube and long setaceous calyx lobes.
- e) The narrow rather slender somewhat falcate legumes, generally 15—17 mm long, strigose.

If this were a South african species it would be placed in Harveys group *Alternifoliae*.

***I. porrecta* E. & Z. var. *tulbaghensis* Bak. fl. nov. var.**

Caulis striatus angulatis. Folia subdigitatim trifoliolata. Foliola cuneato-oblonga vel cuneato-oblanceolata quam ea typi angustiora apice mucronata saepe 12—15 mm longa 1,5—5 mm lata. Racemi pedunculati quam folia pluries longiores. Calycis tubus brevis lobi angusti. Carina ad apicem attenuata \pm 7 mm longa.

Südafrika: Kapkolonie, Tulbagh, Drakenstein, A. Rehmann 2228.

***I. (Amecarpus) Rautaneni* Bak. fil. nov. spec.**

Frutex espinescens *I. circinnatae* Bentham arcte affinis.

Cortex pallidus ramulis novellis cano-strigosis. Folia saepissime pinnatim 1-juga interdum 2-juga, impari petiolato. Foliola oblanceolata basi cuneata apice mucronata nervo medio impresso utrinque strigosa, foliolis lateralibus oppositis, 5—10 mm longa. Stipulae lineares. Pedunculi graciles laxiuscule floriferi. Bracteae angustae

persistentes. Calyx \pm 1,5 mm longus. Calycis tubus brevis extus strigosus lobi breves acuti quam vexillum plures breviores. Vexillum extus puberulum carinae subaequilongum. Alae quam carina breviores. Carina naviculariformis \pm 4 mm longa. Legumen circinnatum oculo nudo glabriuscum sub lente tenuiter strigosum lateraliter compressum ad suturas subincrassatum.

Deutsch-Südwest-Afrika: Hereroland, Ojikango, Rautanen 464, fl. 30. I. 03; Quaipüts, Dinter 187.

This shrub belongs to the section Amecarpus and is an ally of *I. circinnata* Bentham but differs by being not spiny. The distinguishing features are:

- The distinctly woody stem and pale cortex.
- The generally pinnately trifoliolate leaves more rarely 2 jugate — distinctly stalked.
- The slender raceme generally 5—15 mm long — the narrow persistent bracts and comparatively few flowers.
- The compressed legumes, circularly inflexed, thinly strigose.

I. Rehmanni Bak. fl. nov. spec.

I. hirsutae Linn. affinis.

Suffruticosa erecta. Caulis praecipue superne patentim fulvo-hirsutus ex speciminibus mihi obviis 40—50 cm altus. Folia imparipinnata in sicco cinereo-viridia saepe 6-jugata cum impari petiolato. Foliola ovata vel oblongo-ovata vel oblonga apice obtusa mucronata brevissime petiolulata, spatia interjugalia saepe 5—7 mm longa, superne strigosa subtus cano-hirsuta 10—14 mm longa, 4—7 mm lata, foliolis lateralibus oppositis. Stipulae lineares. Racemi apices versus densiflori. Pedunculi stricti fulvo-hirsuti. Flores mediocres. Bracteae caducae lanceolatae in acumen productae 6—7 mm longae. Calyx fulvo-hirsutus calycis lobi angusti. Vexillum \pm 8 mm longum apice mucronatum. Carina naviculariformis. Legumen haud visum.

Südafrika: Transvaalkolonie, Houtbosh, A. Rehmann 6224. A member of the Productae.

The distinguishing features of this plant are:

- The erect stems covered with tawny hirsute pubescence.
- The imparipinnate leaves with often about 6 pairs of ovate, or somewhat obovate leaflets.

- c) The dense racemes of flowers produced towards the apex of the stem, the flowers subtended by long acuminate deciduous bracts.
- d) The calyx externally covered with dark brown hairs and with narrow calyx lobes.
- e) The standard is about 6 mm long, and distinctly longer than the keel.

Differs from Herb Austro Africanum no. 1273 with which it is evidently allied:

- a) In larger leaflets with rather shorter petiolules.
- b) Larger flowers and much stouter racemes.
- c) Longer bracts.

I have drawn up a description of a plant gathered by R. Schlechter at Ichopopo which may be *I. rufescens* E. Meyer but I have been unable to see the type of this species.

Suffruticosa. Caulis erectus ramosus ex speciminibus obviis ± 40 cm altus obsolete angulatus cortice nigro-rubescente, oculo nudo glabriusculus, sub lente sparse strigosus. Rami virgati suberecti angulati. Folia imparipinnata 6—8 jugata cum impari petiolulato. Foliola elliptica vel ovata superne glabra subtus stri-gosa, nervo medio superne impresso, subtus conspicuo, apice mucronata 6—10 mm longa 4—5 mm lata, foliolis lateralibus oppositis breviter petiolulatis. Stipulae minutae. Pedunculi tenues laxiuscule floriferi. Bracteae minutae persistentes linear-lanceolatae acuminatae. Pedicelli graciles calyce longiores. Flores parviusculi. Calycis tubus brevis lobi lanceolati acuminati quam tubus longiores. Vexillum extus petiolo-puberulum late obovato-orbiculare. Legumen juvenile rectum plurispernum mucronatum strigosum.

Südostafrika: Natal, Ichopopo, alt. 1300 m, R. Schlechter 6645.

The noticeable points of this species are:

- a) The dark cortex and virgate suberect branches.
- b) The peduncles, together with the laxly flowered racemes, longer than the leaves.
- c) The minute, persistent, linear lanceolate, acuminate bracts.
- d) The standard with dark brown hairs externally.

The terminal leaflet is distinctly stalked.

There is no type of *I. rufescens* E. Meyer in Herb Harvey. A specimen there doubtfully referred to this species was collected by Sanderson in Natal.

I. (*Trifoliolatae*) *Ruspoli* Bak. fil. nov. spec.

I. dealbatae Harvey affinis.

Fruticulus. Rami cortice nigrescente superne strigosi. Folia subdigitatim trifoliolata petiolata oblanceolata vel oblongo-oblanceolata vel anguste obovata, superne nervo medio impresso, saepissime 5—7 mm longa, utrinque strigosa. Stipulae angustae persistentes. Flores ± 4,5 mm longi parviusculi breviter pedicellati axillares. Calyx extus cano-strigosus. Calycis tubus brevissimus lobi angusti quam tubus longiores. Vexillum cano-strigosum carinae subaequilongum. Carina utrinque in calcar breve producta ± 3 mm longa. Ovarium pilis albidis vestitum, stylo glabro. Legumen juvenile strigosum rectum.

Ostafrika: Somalland, Warandab, C. Keller. Collected in 1891. Expedition Ruspoli-Keller.

This little shrub belongs to the *Trifoliolatae* and is allied to *I. dealbata* Harvey from the Cape. It is quite different from *I. tritoides* Baker.

I. *Schlechteri* Bak. fil. nov. spec.

Species *I. hirsutae*. var. *polystachyae* Welw. et *I. longebarbatae* Engler affinis. Radix lignosa. Caulis herbaceus + hirsutus angulatus ex speciminibus obviis 20—28 cm longus. Folia imparipinnata 6—8 jugata, impari petiolulato. Foliola utrinque cano-hirsuta elliptica vel ovata vel obovata 5—9 mm longa 3—4 mm lata lateralibus oppositis breviter petiolulatis. Stipulae lineares 5—6 mm longae. Pedunculi patentim hirti stricti erectopatentes quam folia 2—3 plo longiores. Bracteae angustae deciduae. Racemi multiflori apices versus densi. Flores parviusculi. Calyx tubus brevis lobi lanceolati acuminati hirsuti quam tubus longiores. Vexillum extus hirtum carinae subaequilongum. Carina naviculariformis ± 4 mm longa. Legumen juvenile 4 mm longum pendulum dense albo vel rufo-hirsutum.

Südostafrika: Natal, in graminosis Mont. Insiwa, 2200 m, R. Schlechter 6499; In convallis pone Matatule in Griqualand East, 1700 m; Tyson 1273. No. 1273 was issued as *I. velutina* E. Meyer.

I have seen a specimen of Drege and it is not at all his *I. velutina* or the plant of Herb. Harvey of which Krauss 373 is a good example. The chief points of *I. Schlechteri* are:

- a) The herbaceous stems and soft canous tomentum of the leaves.
- b) The dense axillary racemes on peduncles distinctly longer than the leaves.
- c) The imparipinnate 6—8 jugate leaves the terminal leaflet being petiolulate — the lateral opposite.
- d) The rather small flowers. The keel is about 4 mm long.

Very closely allied to *I. Rehmanni* Baker fil. It differs principally by:

- a) The stems being not so stout — the racemes not being so collected together near the apex.
- β) The leaflets being considerably smaller.
- λ) The stipules are shorter.
- δ) The bracts shorter and not so prominent.
- e) The flowers smaller — the keel measures about 4 mm whereas in *I. Rehmanni* it is \pm 8 mm long.

I. transvaalensis Bak. fil. nov. spec.

Caules diffusi prostrati tenues filiformes ex speciminibus mihi obviis 10—25 cm longi. Folia imparipinnata saepissime 2—3 jugata, impari petiolulato. Foliola viridia elliptica vel ovata superne glabra subtus strigosa 6—8 mm longa, 3—4 mm lata, nervo medio superne impresso, petiolo communi 10—16 mm longo, jugis inferioribus \pm 2 mm supra basin proditis, foliolis lateralibus oppositis glanduloso-stipellatis. Stipulae parvae vix oculo nudo conspicuae. Racemi 10—20 mm longi laxiuscule floriferi. Bracteae minutae subpersistentes. Calycis tubus campanulatus brevis lobi angusti quam tubus pluries longiores. Corolla ex speciminibus obviis desideratur. Ovarium albido-pubescentes stylo capitellatum. Legumen subcylindricum subrectum 2—3 spermum leviter strigosum 5—7 mm longum ad suturas subincrassatum.

Südafrika: Transvaalkolonie, in arenosis pr. Blackkopjes 1560 m, R. Schlechter 4176.

This plant belongs to the Diffusae series of the Productae.

The distinguishing features of this plant are:

- a) The diffuse, prostrate, multicaulescent habit.
- b) The 2—3 jugate leaves with elliptical or ovate leaflets — the terminal distinctly petiolated. On upper surface glabrous.

- c) The narrow calyx lobes several times longer in length than the calyx tube.
- d) The 2—3 seeded, subcylindrical, glabrescent or slightly strigose legumes.

Perhaps allied to *I. laxeracemosa* Baker fil. from Mozambique. It differs especially in having fewer leaflets and shorter pods.

I. Deflersii Bak. fil. nov. spec.

Species *I. Saltianae* Steudel affinis. Caules herbacei diffusi canescentes ex speciminiibus mihi obviis 4—10 cm longi. Folia pinnatim trifoliolata. Foliola obovata vel rotundato-obovata utrinque molliter cano-pubescentia saepissime 7—9 mm longa, 6—8 mm lata, foliolis terminalibus (3—4 mm) petiolulatis. Racemi quam folia longiores. Racemorum axes canescentes. Calyx ± 1,5 mm longus calycis lobi breves ± 1 mm longi acuti. Vexillum extus strigosum ± 5 mm longum, ± 2 mm latum oblongo-oblanceolatum. Carina naviculariformis secus apicem pubescens obtusa utrinque in calear breve producta. Stigma terminale capitellatum. Legumen haud visum.

Arabia felix australis: Bilad Fodhli. In planicie lapidosa circa Schughra, 22. Mart. 1890, *A. Deflers* 384.

The distinguishing features of this plant are:

- a) The diffuse, prostrate, herbaceous stems 4—10 cm long, canescent.
- b) The pinnately trifoliolate leaves with obovate, or broad obovate, softly canescent-tomentose leaflets.
- c) The racemes of subsessile flowers distinctly longer than the leaves.

M. Deflers does not describe this plant when describing the other novelties collected on his journeys in 1889—1890 in Bulletin Soc. Bot. France Tome XLII.

Geraniaceae.

Hans Schinz (Zürich).

Monsonia attenuata Harv. var. *lanceolata* Schinz nov. var.

Beim Typus sollen nach Harvey (Flora of South Afr., I, 255) die Laubblätter „not 2 lines wide“ sein, in unserem Falle aber messen sie 13 mm (= 4 lines).

Südostafrika: in saxos. pr. Mt. West, 1800 m, Schlechter 6827, fl. II.

Rhamnaceae.

Hans Schinz (Zürich).

Zizyphus mucronata Willd. var. *glauca* Schinz nov. var.

Ein Baum oder Strauch mit braunroter Rinde, deren Färbung indessen meist verdeckt ist durch ein sehr kurzes, grauweisses Indument. Die mehr oder weniger zickzackförmig hin- und hergebogenen Zweige sind stachelig bewehrt, von den paarweise stehenden Stacheln ist jeweilen der eine gebogen, der andere gerade, der erstere misst \pm 15 mm. Beide sind kahl. Die in Grösse und Gestalt ausserordentlich polymorphen Laubblätter sind bis 3 cm lang und durchschnittlich 2 cm breit. Die Blattstiele sind sehr kurz behaart. Die Spreite ist eiförmig, stumpf oder kurz bespitzt, gekerbt, gesägt, lederig, getrocknet graugrün, oberseits auf dem Mittelnerven und den zwei stärksten, bogig nach der Spitze zu verlaufenden Seitennerven kurz behaart, sonst aber kahl, unterseits, auf dem Hauptnerven, neben den kurzen Haaren noch vereinzelte längere Haare tragend. Am Grunde pflegt die Spreite schwach herzförmig ausgerandet zu sein. Die kahlen oder sehr kurzhaarigen Blütenstiele sind \pm $2\frac{1}{2}$ mm lang, die \pm $1\frac{1}{4}$ mm langen Kelchabschnitte sind dreieckig und spitz. Die Kronblätter sind verkehrt eiförmig. Die Drüsenscheibe ist fünflappig, zehngrubig und kahl. Unsere Pflanze unterscheidet sich vom Formenkreis der *Z. mucronata* Willd. ganz auffallend durch die dick lederigen, graugrünen Laubblätter, die absolute oder fast vollständige Kahlheit der Blütenstiele und der Kelche. Da aber gegen *Z. mucronata* zu verschiedentliche Anklänge konstatierbar sind, so wage ich es nicht, unsere Exemplare als besondere Art anzusprechen, sondern betrachte sie vorläufig als blosse, allerdings wohl charakterisierte Spielart von *Z. mucronata*.

Deutsch-Südwestafrika: Gross-Namaland, I Hei ! nabes am Chamobfluss, Fenchel 34, Aru genannt (einer der vielen „Wacht en bitje“); Keetmanshoop, Schinz 837, bl. 29. XII; II Arisdrift am Oranjefluss, Schenck 259 (vers. *mucronata* var. *glabra*), Pohle 48 (vers. var. *glabra*); Rehoboth, Fleck 621.

Hereroland: ! Kuisib, Fleck 624, fr. VI; Matchless mine, Fleck 625, 623, fr. VI; Nauas Schlucht, Fleck 620; Nels 18.

Kalachari: Chensis, Fleck 621 und 622, fr. Ende Mai.

Dieselbe Pflanze liegt mir aber auch vor von Hünerwestkloof in Griqualand West, von Rehmann gesammelt und von Szyszlowicz als *Zizyphus spina christi* Willd. bestimmt, welcher Bestimmung ich mich indessen nicht anschliessen kann; des Weiteren besitze ich Exemplare von Rehmann aus der Oranjefluss-Kolonie und zwar von der Mudriverdrift (Rehmann 3573 und 3595) und von Bloemfontein (Rehmann 3845) und endlich aus der Transvaalkolonie aus dem Boshveld, gesammelt zwischen Elandsriver und Klippan (Rehmann 5010).

Selaginaceae.

R. A. Rolfe (Kew).

Selago Junodii Rolfe n. sp.

Fruticulus, ramosus, circa $1\frac{1}{2}$ —2 ped. altus. Ramuli cinereo-puberuli. Folia fasciculata, linearia, subacuta, 2—5 lin. longa, asperula. Capitula densa, circa 4 lin. lata; flores subsessiles. Bracteae lineari-lanceolatae, subacutae, $1\frac{1}{2}$ — $1\frac{3}{4}$ lin. longae, asperulae. Calyx anguste campanulatus, $1\frac{1}{2}$ lin. longus, 5-fidus, lobis subacutis tubo subaequalibus. Corollae tubus angustus, $1\frac{1}{2}$ lin. longus, fauce paullo ampliato; lobi late oblongi, $\frac{1}{3}$ — $\frac{1}{2}$ lin. longi.

Südafrika: nördl. Transvaalkolonie, Shiluvane, Felsen um das Sanatorium, 1100 m, Junod 818. "Fleur blanche".

Allied to *S. Rehmanni* Rolfe, but much taller, with the leaves rather stouter and less crowded, and the flowers rather larger, and in denser capitula.