

nosis (disco adhærente?) notatum, uniloculare. *Ovulum* unicum, ex apice loculi pendulum. *Stylus* brevis, crassus, superne in ramos duos longos exsertos intus villosos, stigmatosos divisus, basi in stylopodio rotundato crasso lobato expansus. *Fructus* oblongus, durus, indehiscens, superne tuberculatus, styli vestigiis notatus, basi perianthio persistente cinctus. *Semen*

5. *H. ALBO-ARISTATUS*. Culmis teretibus, vel subcompressis; vaginis culmeis remotis, interdum nullis, arcte convolutis, sub apice flavido mucronatis; spiculis masculis 2-3, approximatis, oblongis vel subglobosis; bracteis oblongis, acuminatis, acuminibus albidis vel flavis; glumis lanceolatis; antheris apiculatis: spiculis femineis 2-3, approximatis, oblongis, 1-floris, spathis bracteisque ut in mare; glumis parvis, ovatis, acutis, hyalinis; ovario oblongo, breviter stipitato, superne ad discum crenulatum annulare adhærente; stylo brevi, stigmatibus 2, longiusculis, exsertis; fructu oblongo, basi perianthio parvo cincto.—*Restio albo-aristatus*, *N. ab E. Linnæa*, v. 635; *Kunth, Enum.* iii. p. 407; *Steud. Syn.* ii. p. 249, *quoad pl. masc.*—*Hypodiscus duplicatus?*, *Hochst. Flora*, 1845, p. 338.—*Boeckhia lævigata*, *Kunth, Enum.* iii. p. 450, *quoad femineam*.

Hab. Pr. B. Sp. Ex. sp. s. ♂, *Masson!*; *Drège*, 16!, 199 a!; *Eckl.* 91!, 874!; *Zeyher*, 816!; *Dr. Thom*, 1060!

♀, *Eckl.* 818!; *Zeyher*, 972!; *Burchell*, 7655!; *False Bay*, *Robertson!*; *Uitenhage*, *Niven!*, *Drège*, 2478!

♂ et ♀, *Hottentotshollandberg*, *Zeyher*, 4333!

Culmi cæspitiosi, erecti, simplices, teretes vel compressiusculi, 18-24-pollicares, crassitie pennæ corvinæ, olivacei, purpureo maculati, basi vaginis dense imbricatis, obtusiusculis, castaneis, nitidis vestiti. *Vaginæ culmæ* 1 vel 2, interdum nullæ, sesquipollicares, tubulosæ, basi arcte convolutæ, versus apicem subpatentes, coriaceæ, fuscæ, flavido maculatæ, ad margines apicemque obtusiusculum flavidæ, mucronato-aristatæ, arista erecta, nonnunquam torta. *Spiculæ masculæ* 2-3, in apice culmi approximatae, sessiles, *rachi* flexuosæ compressæ impositæ, singulæ plurifloræ, oblongæ vel subglobosæ, 3-4 lin. longæ, 2-3 lin. latæ. *Spathæ* apertæ, vaginiformes, inferior spicula sua longior, reliquæ spiculis paulo longiores seu easdem æquantes. *Bractææ* arcte imbricatæ, cartilagineæ, oblongo-ovatae, fuscæ, longiuscule cuspidato-aristatæ, ad margines aristasque flavidæ vel albidæ. *Perianthium* compressum, arcuatum, rigidiusculum, inæqualiter biseriale, 6-glume, *glumis* oblongo-lanceolatis, *lateralibus externis*, conduplicatis, glabris, *intermedia antica* glabra, *internis* conformibus, paullo minoribus, tenuioribus. *Antheræ* lineari-oblongæ, apiculatæ.—*Plantæ* femineæ *culmi*, *vaginæ*, *inflorescentia* plerumque ut in mare. *Spiculæ* unifloræ, cylindraceo-lanceolatae, 3-4 lin. longæ, 1-1½ lin. latæ. *Bractææ* oblongo-lanceolatae, cuspidatæ, castaneæ, marginibus cuspidibusque albidis. *Perianthium* stipitatum (stipite brevi, crasso), minutum, hyalinum, biseriale, 6-glume, *glumis* æqualibus ovatis. *Ovarium* oblongum,

stipiti cylindraceo impositum, *disco* epigyno annulari crenulato superatum, uniloculare. *Stylus* brevis. *Stigmata* 2, longa, exserta, intus villosa. *Ovulum* unicum, ex apice loculi pendulum. *Fructus*

6. *H. STRIATUS*. *Boeckhia striata*, *Kunth*, *Enum.* iii. p. 449; *Steud. Synops.* ii. p. 263.

Hab. Pr. B. Sp. Ex. sp. s. ♂, *Drège*, 2484 c!, 2022!, 2479!; *Eckl.*!

♀, *Drège*, 2480!, 2484!, 9452!; *Eckl. et Zeyh.* 105. 3!

♂ et ♀, *Drège*, 2488 b b!, 2484!; Ylandsrivier (*Martio*), *Zeyher*!

In some of Ecklon's specimens the male plants have branched or compounded inflorescences, and the flowers themselves are altered by the production of an increased number of glumes, some of which show transitional forms between ordinary glumes and stamens.

7. *H. BINATUS*. *Culmis* erectis, fistulosis, simplicibus; *vaginis* culmeis arcte convolutis, coriaceis, striatis, sub apice pallidior subulato-mucronatis; *spiculis* masculis subglobosis, in paniculam erectam linearem laxiusculam geminatim ternatimve dispositis; *bracteis* late ovatis, acutis, dorso sub apice vix carinatis: *spiculis* femineis cylindraceo-lanceolatis; *perianthio* minuto, hyalino; *ovario* disco epigyno carunculato flavido notato; *stylo* unico, crasso.—*Dovea binata*, *Steud. Syn.* ii. p. 248, *femina tantum*.

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, *Burchell*, n. 7958!; ♀, *Drège*, n. 2477!

Culmi bipedales et ultra, ad basim cæspitosi, *squamis* ovatis vel oblongis coriaceis castaneis nitidis mucronatis dense approximatis vestiti, superne erecti, teretes vel compressiusculi, fistulosi, simplices, crassitie pennæ corvinæ, olivacei, purpureo maculati, remote vaginati; *vagina culmæ* 1–2-pollicares, arcte convolutæ, fuscæ vel cinnamomeæ, coriaceæ, purpureo maculatæ, sub apice tenuiore flavido subulato-mucronatæ. *Cymulæ* 4–6, remotiusculæ, in paniculam erectam terminalem distiche dispositæ, singulæ *spatha* oblonga aperta sulcato-striata vaginiformi, cymula brevior, suffultæ. *Spiculæ* masculæ in singulis cymulis geminatim vel ternatim dispositæ, altera sessilis, altera pedicellata, pedicello complanato, sursum dilatato, spiculum æquante, singulæ subglobosæ, 3–4 lin. longæ, 3–3½ lin. latæ. *Bracteæ* arcte imbricatæ, late ovatæ, acutæ, castaneæ, coriaceæ, impresso-punctulatæ, dorso sub apice tenuiore submembranaceo subcarinatæ, *flores* arcuatos oblongos compressos duplo superantes. *Perianthium* rigidum, ferrugineum, biseriale, sexglume, *glumis* oblongo-lanceolatis, inæqualibus, *externis lateralibus* conduplicatis, carinatis, carinis glabris, *intermedia* planiuscula, *internæ* tenuiores, breviores. *Filamenta* complanata. *Antheræ* exsertæ, lineari-oblongæ, apiculatæ, dorso ferrugineæ.—*Plantæ* femineæ *culmus*, *vagina*, *inflorescentiaque*

prorsus ut in mare; *spiculæ femineæ* autem cylindraceo-lanceolatæ, 1-floræ, 3-4 lin. longæ 1 lin. latæ. *Bracteæ* infimæ ut in mare, superiores 2-3 oblongo-lanceolatæ, mucronatæ. *Perianthium* minutum, hyalinum, biseriale, sexglume, *glumis* subæqualibus, ovatis, obtusiusculis. *Ovarium* oblongum, stipitulum, 1-loculare, superne disco curunculato flavido donatum. *Stylus* brevis, crassus, castaneus. *Stigmata* 2, longiuscula, subulato-lanceolata, intus villosa. *Fructus* . . .

8. *H. NITIDUS*, sp. n. Culmis pedilibus, simplicibus, compressiusculis; vaginis culmeis 1-1½-pollicaribus, arctis, coriaceis, nitidis, sub apice setaceo-mucronatis; spiculis masculis 5-7, subclavatis, parvis, in cymam terminalem paniculiformem approximatis; bracteis laxiuscule imbricatis, longe aristatis; glumis externis rigidiusculis, acutatis; glumis internis oblongis, obtusis, apiculatis. Femina ignota.—*Hypodiscus nitidus*, *Nees ab E. MS. in herb. Sonder. sine descript.*

Hab. Pr. B. Sp. Ex. sp. s. ♂, in summa Winterhocksberg (Nov.), *Ecklon!*

Culmi erecti, pedales (et ultra?), simplices, compressiusculi, olivacei, impresso-punctulati, basi *squamis* ovatis spadiceis dense approximatis vestiti, superne remote vaginati, *vaginis* arcte convolutis, 1-2-pollicaribus, coriaceis, nitidis, castaneis, obsolete nervoso-striatis, sub apice obtusiusculo subulato-mucronatis. *Spiculæ* masculæ 5-7, in cymam terminalem paniculiformem aggregatæ, sessiles vel breviter pedicellatæ, pedicellis arcuatis, singulæ 3-4 lin. longæ, 3 lin. latæ, ovato-oblongæ vel subclavatæ. *Spathæ* 2-3, vaginiformes, spiculas imprimis omnino velantes, postea apertæ, demum deciduæ. *Bracteæ* arcte imbricatæ, oblongæ, longe acuminato-aristatæ, coriaceæ, fusæ, ad margines pallidiores, *flores* ovatos v. subcompressos duplo triplove superantes. *Glumæ externæ* 3, æquales, ovatæ, acutatæ, rigidæ, ferrugineæ, *laterales* naviculari-conduplicatæ, carinatæ, carina lævi, *intermedia* nervo medio prominente notata. *Glumæ internæ* 3, externis vix breviores, hyalinæ, planiusculæ, oblongæ, obtusæ. *Antheræ* oblongæ, apiculatæ, dorso ferrugineæ, demum exsertæ.

9. *H. WILDENOVIA*. Culmis simplicibus, erectis v. arcuatis, complanatis, sulcatis; vaginis compressis, arcte tubulosis, subulato-mucronatis; spiculis masculis solitariis, oblongis, compressis; bracteis ovato-oblongis, obtusis, subulato-mucronatis; glumis inæqualibus, externis membranaceis, liberis, internis hyalinis, duplo longioribus, plus minus connatis; antheris apiculatis: spiculis femineis solitariis, 1-floris; perianthio minuto, hyalino, 4-6-glumi; glumis distinctis, subæqualibus; ovario oblongo, stipitato, disco epigyno (stylopodio?) notato; stylis 2, linearibus, exsertis, intus villosis-stigmatosis.—*Willdenovia striata*, *Spreng. Syst. Veg.* i. p. 188, *fide N. ab E.*—*Lepidanthus Willdenovia*, *N. ab E. Linnæa*, v. p. 665, *quoad stirpem masculam*.—*Restio sulcatus*, *Kunth, Enum.* iii. p. 404; *Steud. Synop.* ii. p. 253.

Variat culmo breviori, latiori, vaginis mucronibusque vegetioribus.

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, Cape Flats, *Eckl.* 85!; Hottentotshollandsberg (Sept. Oct.), *Eckl. et Zeyh.* 78. 8!; *Burchell* 5646!

♂. Pampoes Kraal, *Eckl. et Zeyh.* 77. 9!; Caledon, *Zeyher*! n. 4352!; *Burchell*, 6662!, 8545!

Culmi cæspitosi, ad basim *squamis* coriaceis, ovato-oblongis, laceris, dense approximatis vestiti. *Culmi steriles* 6–8-pollic., simplices, stricti vel arcuati, compressi, sulcato-striati, purpureo maculati; *vaginæ* oblongæ, compressæ, arctæ, coriaceæ, sub apice tenuiore concolori valide subulato-mucronatæ. *Culmi fertiles* tenuiores, longiores, plerumque stricti, præ ceteris sterilibus conformes; *vaginæ* eis culmorum sterilium conformes, nisi magnitudine minore mucroneque multo breviora tenuioraque. *Spiculæ* masculæ oblongæ, erectæ, compressæ, 6–8 lin. longæ, 2 lin. latæ, singulæ *spatha* aperta aristata spiculam æquante suffultæ. *Bracteæ* arcte imbricatæ, ellipticæ, coriaceæ, ferrugineo maculatæ, sub apice obtusiusculo mucronato-aristatæ, *flores* oblongo-lanceolatos arcuatos paulo superantes. *Perianthium* inæqualiter biseriale, sexglume. *Glumæ externæ* membranaceæ, ferrugineæ, mucronatæ, *laterales* oblongæ, conduplicatæ, carinatæ, carina glabra; *glumæ intermedia antica*, conformis, planiuscula, nervo medio prominente donata. *Glumæ internæ* 3, hyalinæ, externis dimidio longiores, subspatulatæ, lanceolatæ, basi in tubum connatæ, tubo brevi superne inæqualiter diviso, lacinia altera plana omnino libera, duabus nonnisi ad apices connatis, et ad margines externos involutis. *Filamenta* liguliformia, albida, longitudine glumarum internarum. *Antheræ* lineari-oblongæ, apiculatæ, dorso ferrugineæ, demum exsertæ.—Planta feminea masculinæ conformis. *Spiculæ* minores, tenuiores, 1-floræ. *Perianthium* minutum, ut videtur, biseriale, 6-glume, *glumis* hyalinis oblongis, externis majoribus, mucronatis, omnibus liberis. *Ovarium* oblongum, obtusum, 1-loculare, brevissime stipitatum, superne disco crasso epigyno donatum. *Styli* duo, decidui, intus stigmatoso-villosi. *Fructus*

Nees established his genus *Lepidanthus* on the male flowers only, the female plant being at the time unknown to him, and was probably led to do so from the smaller size of the outer glumes of the perianth, as contrasted with the inner ones; Nees also describes the inner glumes as “brevi spatio connatæ.” Kunth, under the head of *Restio sulcatus*, describes the glumes nearly in the same terms as above given, and which apply, so far I have seen, in the majority of cases; but the degree of union seems to vary; so also in the case of the female flower the number, size, and form of the glumes differ in different specimens.

10. H. NEESII, sp. n. Culmis simplicibus, strictissimis, 18-pollic., teretibus, fistulosis, profunde longitudinaliter sulcatis; vaginis arcte convolutis, bipollicaribus, coriaceis, superne membranaceis, laceris, lon-

giusculæ setaceo-aristatis; spiculis masculis 5-8, in cymam simplicem linearem disticham dispositis, singulis oblongis, ob spathas deciduas denudatis; bracteis arcte imbricatis, chartaceis, ferrugineis, oblongis, longe acuminatis; glumis omnibus conformibus, oblongis, aristatis; antheris apiculatis: spiculis femineis 2-3, in apice culmi distiche dispositis, singulis 1-floris, oblongis, erectis, 4-6 lin. longis, spatha vaginiformi duplo longiore suffultis; bracteis acuminato-aristatis, ferrugineis; glumis parvis oblongis, apiculatis; ovario oblongo, 1-loculari, superne lobis clavatis notato; stylo unico, in stigmata 2 linearia elongata diviso.—*Leucoplocus striatus*, Nees, MS. in *herb. Sond.*, *absque descript.*

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, Steenbokriet, *Eckl.*!, sine numero.

Culmi ad basin cæspitiosi, *squamis* ovatis oblongis coriaceis ferrugineis, sursum increscentibus dense vestiti, superne teretes, simplices, fistulosi, 18-pollicares, crassitie pennæ corvinæ, cinnamomei v. olivacei, profunde sulcati. *Vaginæ culmæ* remotiusculæ, arcte convolutæ, 1-2-pollicares, coriaceæ, fusæ, ad margines subhyalinae, laceræ, sub apice obtusiusculo membranaceo setaceo-aristatæ. *Spiculæ* masculæ 5-8, in cymam simplicem linearem 2-pollicarem, *spathis* deciduis denudatam dispositæ, singulæ oblongæ, 4-6 lin. longæ, erectæ, plurifloræ, rachi complanatæ impositæ. *Flores* stipitulati, oblongi v. cuneati, remotiusculi, singuli *bracteis* singulis lanceolatis acuminatis chartaceis albidis, quam ipsi vix longioribus, suffulti. *Perianthium* biseriale, 6-glumæ; *glumæ externæ* 3, oblongæ, longe acuminato-aristatæ, cymbiformes, ferrugineæ, carinatæ; *glumæ internæ* conformes, magnitudine $\frac{1}{3}$ majores. *Antheræ* lineari-oblongæ, dorso ferrugineæ, apiculatæ.—*Spiculæ femineæ* 2-3, in apice culmi, in spicam simplicem linearem disticham dispositæ, singulæ lineari-oblongæ, erectæ, 3-5 lin. longæ, *spatha* aperta vaginiformi spiculam duplo superante suffultæ. *Bracteæ* arcte imbricatæ, ovato-oblongæ, longiusculæ acuminato-aristatæ, rigidæ, ferrugineæ. *Flos* unicus, terminalis. *Perianthium* parvum, biseriale, sexglumæ, *glumis* oblongis, acuminatis, membranaceis. *Ovarium* oblongum, glumas duplo triplove superans, superne lobis clavatis carnosus notatum, 1-loculare. *Stylus* unicus, infra medium in *stigmata* 2 longissima papilloso-villosa divisus.

11. H. ARGENTEUS. Culmis simplicibus, teretibus, obscure striatis; vaginis arctis, oblongis, longe acuminatis, coriaceis, ad margines membranaceis, laceratis; spiculis masculis 00, in cymas paniculiformes densas terminales aggregatis, singulis ovatis v. subrotundis; bracteis arcte imbricatis, oblongo-lanceolatis, aristatis, chartaceis, albidis; floribus compressis, arcuatis; glumis oblongis, acuminato-mucronatis, externis lateralibus carinatis, internis vix brevioribus vel etiam longioribus: spiculis femineis solitariis vel geminis, oblongis, $\frac{1}{2}$ -pollicaribus et ultra, 1-floris; perigynio nullo(?); fructu stipitato, stipite crasso,

irregulariter lobato.—*Leucoploceus argenteus*, *N. ab E. in Lindl. Nat. Syst.* ed. 2. p. 450, *et in herb. Sond. (nomen tantum)*.—*Restio argenteus*, *Thunb. fide N. ab E. l. c., sed vix*.

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, *Eckl. et Zeyh.* 52. 8! et 75. 5!; *Caledon, Zeyher*, 4338!

♂, *Drège*, 1642!, pro parte; *Burchell*, 7901!, 8117!; *Palmitrivier, Eckl.* 972!

♀, *Burchell*, 7058!, 8129!; *Zeyher*, 4337!

Culmi cæspitiosi, erecti, teretes, simplices, 2–3-pedales, crassitie pennæ gallinaceæ, olivacei, leviter longitudinaliter striati, albido-lepidoti, basi *squamis* ovatis v. oblongis coriaceis ferrugineis nitidis dense approximatis vestiti, superne remote vaginati. *Vaginæ culmæ* pollicares et ultra, arcuæ, longiuscule acuminatæ, fuscæ, coriaceæ, ad margines apicemque tenuiores, laceræ. *Panicula* mascula terminalis, pluriramosa, ramulis filiformibus, *spathis* 3–4 magnis apertis nitidis vaginiformibus, demum deciduis, munita. *Spiculæ* masculæ oblongo-ovata v. subrotundæ. *Bracteæ* arcte imbricatæ, oblongæ, longe acuminatæ, membranaceæ, albidæ, *flores* ovatos compressos arcuatos stipulatos 2–3-plo superantes. *Perianthium* sexglume. *Glumæ* rigidiusculæ, ferrugineæ, oblongo-lanceolatæ, acuminato-mucronatæ; *externæ laterales* naviculari-conduplicatæ, carinatæ, carinis glabris, *intermedia* planiuscula; *internæ* 3, externas æquantes vel superantes, *laterales* ad margines superne parum involutæ, *intermedia* planiuscula. *Antheræ* lineares, ferrugineæ, mucronulo albido terminatæ.—*Spiculæ* femineæ in apice culmi, solitariae, nunc 1–3, oblongæ, erectæ, pollicares, *spathis* vaginiformibus magnis coriaceis nitidis striatis margine laceris suffultæ. *Bracteæ* rigidæ, oblongo-lanceolatæ, acuminatæ, pallidæ, versus apices purpurascens, nervoso-striatæ. *Flos unicus* terminalis, bractea stipante brevior. *Perianthium* nullum (an semper?). *Fructus* oblongus, obtusus, osseus, lævis, nigrescens, 1-locularis, 1-spermus, stipiti brevi crasso irregulariter lobato impositus. *Semen* ex apice fructus pendulum.

HYPOLÆNA, *Brown, Prod.* 251; *Kunth. En.* iii. p. 451.

Inflorescentia mascula pluristachya, amentacea, spiculis uni- vel plurifloris; inflorescentia feminea solitaria, spicata, spicis 1-floris. Flores dioici. Perianthium biseriale, sexglume, glumis æqualibus vel inæqualibus. Stamina 3. Antheræ peltatim affixæ, 1-loculares, longitudinaliter dehiscentes. Ovarium sessile, uniloculare, stylo 2–3-partito deciduo coronatum. Ovulum unicum, ex apice loculi pendulum. Fructus ovatus vel subglobosus, osseus, lævis, indehiscens, vertice plerumque disco epigyno crasso flavido (stylopodio?) superatus, basi perianthio persistente interdum minuto cinctus.—*Herbæ Restionis* habitu. Culmi ramosi, vaginati, vaginis persistentibus.

* *Spiculæ masculæ axem per marginem respicientes (ut in Lolio).*

1. H. LAXIFLORA, *Nees ab Esenb. in Linnæa*, v. p. 663; *Kunth, Enum.* iii. p. 451; *Steud. Synops.* ii. p. 264.

Hab. Pr. B. Sp. Ex. sp. s. ♂, Table Mount (Oct.), *Eckl.* n. 843!; *Eckl. et Zeyh.* 56. 6!, 70. 10!

♂ et ♀, *Drège*, 10, *pro parte*.

This species, like its congeners, varies in the size of its parts. Eckloun and Zeyher's n. 70.10 is a very slender form of this species.

2. H. ECKLONIANA, sp. n. Culmis cæspitosis, teretibus v. subcompressis, infra medium dichotome ramosissimis, ramis virgatis, erectis, compressis; vaginis arctis, compressis, coriaceis, subulato-mucronatis; spiculis masculis 3-5, erecto-patentibus, in cymam simplicem terminalem approximatis, singulis cylindraceo-oblongis, multifloris; bracteis undique imbricatis, oblongis, obtusis, apice laxiusculis; floribus subtrigonis; glumis externis lineari-oblongis, glumis internis latioribus; antheris apiculatis: spiculis femineis in apice ramulorum, plerumque solitariis, nunc 2-3 approximatis, oblongis, demum obcuneatis, 1-floris; bracteis subulato-mucronatis; glumis oblongis, obtusis, subæqualibus, fructum æquantibus; ovario oblongo, uniloculari, stylo brevissimo superato; stigmatibus 2, linearibus, revolutis, exsertis; fructu duro, indehiscente.—*Hypolæna Eckloniana*, *Nees, MS. in herb. Sonder., sine descript.*

Hab. Pr. B. Sp. Ex. sp. s. ♂, *Masson!*, *Burchell*, 7844!, 7897!, 8267!; *Sieber, Fl. Cap.* 228!

♀, Hottentotsholland Kloof, *Eckl.* 950!; *Dr. Thom*, 1031, *pro parte*; *Admiral Grey!*

♂ et ♀, Gr. Houhoek (July), *Zeyher*, 4348!; *Muysenberg, Zeyher*, 4348 b!; *Simonstadt, Eckl.* 997!; *Dr. Thom*, 632!, *pro parte*.

Culmi 1-3-pedales, crassitie pennæ gallinacæ, ad basim cæspitosi, vaginis coriaceis laceris dense vestiti, teretes, striolati, purpureo maculati, infra medium dichotome ramosi, ramique compressi, virgati, elongati, impresso-punctulati, vix striolati, iterum ramulosi. *Vagina culmæ* remotiusculæ, 6-8 lin. longæ, arcte convolutæ, oblongæ, ellipticæ, coriacæ, fuscæ, striolatæ, ad margines concolores, tenuiores, sub apice acutiusculo subulato-mucronatæ. *Spiculæ masculæ* 3-5, in cymam simplicem terminalem disticham 1-1½-pollicarem dispositæ, singulæ erectæ vel horizontaliter patentēs, cylindraceo-oblongæ, 5-6 lin. longæ, 1-1½ lin. latæ, basi *spatha* aperta vaginiformi ipsa dimidio breviorē, demum decidua, suffultæ, rachin flexuosam, complanatam per margines respicientes. *Bractæ* 6-fariam imbricatæ, apice subpatentes, oblongæ, cymbiformes, obtusiusculæ, submuticæ, coriacæ, ferrugineæ, nitidæ, flores stipitulos paulo superantes. *Perianthium* subtrigonum nec compressum, bi-

seriale, sexglume; *glumæ externæ* 3, ima basi connatæ, æquales, lineari-oblongæ, ferruginæ, rigidæ; *glumæ internæ* externas longitudine æquant, iisque latiores, oblongæ, obtusæ, hyalinæ; *filamenta* complanata; *antheræ* lineari-oblongæ, apiculatæ, dorso ferruginæ.—*Spiculæ femineæ* in apice ramorum solitariae vel 3-5 distiche spicatimque dispositæ, singulæ 1-floræ, cylindræco-oblongæ, demum obpyramidales, 4-6 lin. longæ, 1-1½ lin. latæ, *spatha* aperta vaginiformi suffultæ. *Bracteæ* steriles 2-3, vaginiformes, subulato-mucronatæ, apice demum patentes; *bractea* axi contigua oblonga, obtusa, mutica, dorso bicarinata, carinis calvis; *bractea fertilis* conformis, florem terminalem involvens, eoque vix longior. *Perianthium* biseriale, 6-glume, *glumis* omnibus subæqualibus, oblongis, obtusis, nervoso-striolatis, externis ferrugineis, internis subhyalinis, ovarium æquantibus, eique appressis. *Fructus* cylindræco-oblongus, coriaceus, nitidus, lævis, inferne flavescens, superne castaneus, 1-locularis, 1-spermus, *stylo* brevi terminali persistente superatus. *Stigmata* 2, linearia, revoluta, intus villosa.

This appears to be a common species, and varies in stature, number of spikelets, &c. The male plant is in the Linnean herbarium with this label attached, "*12 Restio paniculatus*." It differs, however, considerably from the *R. paniculatus* of Rottbüll.

3. H.? IMPOLITA.—*Restio impolitus*, Kunth, Enum. iii. p. 404; Mast. Journ. Linn. Soc. viii. p. 249.

Hab. Pr. B. Sp. Ex. sp. s. ♂, Zeyher, 4349, *pro parte*!; Palmitrivier, Eckl. 951!; Talfelberg, Eckl. et Zeyh. 56. 6!; Burchell!, Drège, 67!

This plant is so like the other species of this genus that I have little hesitation in referring it here, though the female plant is as yet unknown.

4. H.? ASPERA, sp. n. Culmis cæspitosis, erectis, filiformibus, striatis, versus medium dichotome ramosis, ramisque erecto-patentibus, albidotuberculatis; vaginis arctis, ellipticis, acuminato-aristatis, coriaceis, superne profunde hyalino-membranaceis; cymis masculis terminalibus, pluristachyis, erectis, dichotome vel simpliciter ramosis, ramis linearibus, erectis; spiculis oblongis, compressis, 3-floris, axem per margines respicientibus; spathis bracteisque oblongo-lanceolatis, acuminato-aristatis, superne hyalinis; floribus subtrigonis; glumis externis lateralibus, majoribus, postice versis.

Hab. Pr. B. Sp. Ex. sp. s. ♂, Burchell, 8065!, 8069!; Ecklon et Zeyh. 56. 6!; Hottentotshollandberg. Eckl. et Zeyh. 59. 5!; Palmitrivier, Eckl. 951!; Dr. Thom, 632, *pro parte*.

Radices fibrosæ, fibris simplicibus, duris, griseis, flexuosis. Culmi cæspitosi, ad basim vaginis approximatis, coriaceis, striatis, laceris,

sursum increescentibus vestiti, superne remote vaginati, teretes, filiformes, stricti, rigidi, versus medium dichotome ramosi, *ramique* erecto-patentes vel curvati, tuberculis majusculis albidis asperati. *Vaginæ culmæ* arcte tubulosæ, 4-5 lin. longæ, coriaceæ, striatæ, fuscæ, sub apice hyalino obtuse bilobato, tandem deciduo, acuminato-aristatæ. *Spiculæ* masculæ 00, in cymas erectas, lineares, pauciramosas, ad apices ramulorum desinentes, distiche remotiusculeque dispositæ, singulæ 3-floræ, lineari-oblongæ, compressæ, 3-4 lin. longæ, *spatha* oblonga acuminata coriacea ferruginea superne hyalina spiculamque æquante suffultæ, *rachin* flexuosam complanatam per margines respicientes. *Bracteæ* laxiuscule imbricatæ, *spathæ* omnino conformes, nisi magnitudine minore. *Perianthium* biseriale, sexglume. *Glumæ externæ* oblongæ, obtusiusculæ, *laterales* duæ naviculari-conduplicatæ, carinatæ (carinis villosulis), rigidiusculæ, ita postice positæ ut axin spiculæ (rachillam) spectent; *glumæ* aliæ breviores, tenuiores, planiusculæ, oblongæ, inter se æquales. *Filamenta* brevissima, albida. *Antheræ* lineari-oblongæ, apiculatæ, flavidæ, dorso ferrugineæ.

Some of Burchell's specimens are of more slender habit than the above, and have the spikelets smaller and less crowded.

5. *H. TENUIS*, sp. n. Culmis filiformibus, striatis, tetragonis; vaginis arctis, setaceo-aristatis; spiculis masculis 3-4, singulis 1-floris, in spicam terminalem dispositis; floribus compressis, axem per dorsum respicientibus; glumis subinæqualibus: spiculis femineis solitariis, 1-floris; glumis obovatis, spongiosis, fructu oblongo carneo paulo brevioribus.—*Restio tenuis*, Burchell MS. in herb. Hook.!

Hab. Pr. B. Sp. Ex. sp. s. ♂, Burchell, 7028!

♀, Burchell, 7360!

Rhizoma (ut videtur) subterraneum, simplex, erectum, spongiosum, spithamæum, crassitie pennæ anserinæ, *vaginis* magnis ellipticis coriaceis ferrugineis nitidis, superne sensim minoribus munitum. *Culmi* cæspitiosi, erecti, filiformes, rigidi, nodosi, tetragoni, 12-18 poll. longi, simplices vel parum dichotome ramosi, *ramique* conformes, flavidi, impresso-punctulati, ad angulos lineis purpureis notati. *Vaginæ culmæ* subpollicares, arcte convolutæ, ellipticæ, coriaceæ, striatæ, ferrugineæ, sub apice acutissimo hyalino membranaceo longiuscule setaceo-aristatæ. *Spiculæ* masculæ 3-4, remotiusculæ, in spicam linearem terminalem dispositæ, singulæ 1-floræ, oblongæ, *spatha* oblongo-lanceolata coriacea pallide ferruginea apice longissime setaceo-aristata, demum decidua suffultæ. *Flores* 1-2 lin. longæ, *spatha* v. *bractea* 3-4-plo breviores, erecti, brevissime pedicellati, oblongi, axem complanatam flexuosam per dorsum respicientes, omnes, nisi forte terminalis, fertiles. *Perianthium* biseriale, sexglume, *glumis* oblongis, papyraceis, pallide ferrugineis, nervo medio notatis, *externis lateralibus* conduplicatis, carinatis (carina glabra), postice versus axem refractis, *glumis internis* tenuioribus, pallidioribus. *Filamenta*

albida, tenuissima. *Antheræ* lineares, apiculatæ, flavidæ, filamenta æquantes, inclusæ.—*Plantæ* femineæ *culmi vaginæque* ut in mare. *Spiculæ femineæ* in apicibus ramorum solitariae, 1-2-floræ, 5-6 lin. longæ, sing. *spatha* coriacea, fusca, oblongo-lanceolata, setaceo-aristata munitæ. *Flos* fertilis unicus, sessilis, spatha v. bractea 3-4-plo brevior; *flos sterilis* (si adest) pedicellatus, rudimentarius. *Perianthium* biseriale, sexglume; *glumis* subæqualibus, oblongo-ovatis vel spatulatis, subspongiosis, fuscis, nervo medio notatis, *externis lateralibus*, naviculari-conduplicatis. *Ovarium* subtrigonum. *Styli* 2, superne plumoso-stigmatosi, demum decidui. *Fractus* obovatus v. subglobosus, indehiscens, osseus, ferrugineus, levis, unilocularis, glumis persistentibus paulo longior. *Semen* unicum, ex apice loculi pendulum. *Albumen* corneum.

Practically it makes little difference whether the male inflorescence be considered to consist of a single spikelet with three or four flowers, each provided with its sheathing bract, or whether it be described as consisting of three or four distinct 1-flowered spikelets. From the size and ultimate fall of the bracts (spathes), as well as from the distance between the flowers, and the length of the axis between them, I have in the foregoing description adopted the latter view.

The florets are placed with their backs against the axis, the outer lateral glumes being a little twisted to allow of the axis fitting in between them.

6. H. ? *GRACILIS*, sp. n. Culmis cæspitosis, 1-2-pedibus, teretibus, versus medium dichotome ramosissimis; ramulis filiformibus, subfasciculatis, compressiusculis; vaginis arctis, ellipticis, coriaceis, striatis, filiceo-aristatis; spiculis masculis in apicibus ramulorum solitariis, erectis v. patentibus, oblongis, spatha vaginiformi filiceo-aristata suffultis; bracteis oblongis, mucronatis; floribus vix compressis; feminea adhuc ignota.—*Hypolæna gracilis*, Nees MS. in herb. Sonder., absque descript.

Hab. Pr. B. Sp. Ex. sp. s. ♂, Muisenberg, n. 4347, Zeyher!; Simonstadt, Zeyher, 1006!, et C. Wright, 500!

Radices filiformes, flexuosi. *Culmi* cæspitosi, decumbentes, 1-2-pedales, crassitie pennæ corvinæ, basi spatio 2-3-pollicari, *vaginis* arctis, coriaceis, striatis, fuscis, laceris, approximatis muniti, ad nodos incrassati, superne remote vaginati, teretes, olivacei, purpureo maculati, obsolete tuberculati, striolati, infra medium dichotome ramosi; *ramis* erectis, iterum iterumque ramulosis; *ramulis* subfastigiatis, compressis, filiformibus, elongatis. *Vaginæ culmæ* pollicares, arcte ellipticæ, acutatae, coriaceæ, fuscae, striatæ, purpureo maculatæ, filiceo-aristatæ; *vaginæ ramulorum* conformes nisi magnitudine minore. *Spiculæ masculæ* in apicibus ramulorum solitariae.

plurifloræ, ovato-oblongæ, demum cylindraceæ, *spatha* aperta vaginiformi brevi suffultæ. *Bracteæ* laxiuscule imbricatæ, ovato-oblongæ, cymbiformes, coriaceæ, ferrugineæ, nitidæ, apice filiceo-aristulatæ, *flores* subtrigonos stipulatos duplo superantes. *Glumæ externæ* 3, oblongæ, ferrugineæ, rigidiusculæ, carinatæ, *lateralium* carinis villosulis, *intermediæ* carina glabra; *glumæ internæ* oblongæ, obtusæ, hyalinæ, externas longitudine æquantes, iisque latiores. *Filamenta* tenuia; *antheræ* oblongæ, apiculatæ, flavidæ, dorso ferrugineæ.

7. H. FILIFORMIS, sp. n. Culmis cæspitosis, bipedalibus, strictissimis, infra medium dichotome ramosis, ramis ramulisque elongatis, filiformibus; vaginis arcte convolutis, ellipticis, coriaceis, striatis, mucronatis; spiculis masculis 00, erectis, in paniculas terminales elongatas parce ramosas aggregatis, singulis late oblongis, *spatha* aristulata suffultis; bracteis arcte imbricatis, oblongis, mucronatis; floribus compressis; glumis externis villosa-carinatis. Femina latet.

Hab. Pr. B. Sp. Ex. sp. s. ♂, Gr. Houhoeck (July), Zeyher, 4349, *pro parte*!; Dr. Thom, 1031, *pro parte*!

Radicis fibrillæ subligneæ, graciles, flexuosæ. *Culmi* dense cæspitosi, erecti, bipedales, crassitie pennæ passerinæ, teretes, infra medium dichotome ramosi, *ramique* stricti, elongati, cinnamomeo-fusci, impresso-punctulati. *Vaginæ culmæ* 6–10 lin. longæ, nisi ad ramificationes arctæ, ellipticæ, coriaceæ, striatæ, fusæ, ad margines concolores, tenuiores, apice filiceo-aristatæ. *Panicula mascula* terminalis, linearis, 2–3 poll. longa, parce ramosa, pluristachya. *Spiculæ* oblongæ, erectæ, 3–4 lin. longæ, 1½ lin. latæ, *spathis* vaginiformibus, longe aristatis, ipsis brevioribus suffultæ, rachin flexuosam complanatam per dorsum respicientes. *Bracteæ* apice laxiusculæ, oblongæ, cymbiformes, aristulatæ, coriaceæ, nitidæ, *flores* oblongos compressos parum superantes. *Glumæ externæ* oblongæ, ferrugineæ, rigidiusculæ, *laterales* conduplicatæ, villosa-carinatæ, *intermedia* planiuscula. *Glumæ internæ* 3, oblongæ, subhyalinæ, externis paulo breviores. *Filamenta* linearia. *Antheræ* oblongæ, apiculatæ, flavidæ, dorso ferrugineæ.

8. H.? ANCEPS, sp. n. Culmis filiformibus, complanatis; vaginis arctis, valide subfoliaceo-mucronatis; spiculis masculis compressis, 1–2-floris, spicatum dispositis; floribus axem per dorsum respicientibus; glumis subæqualibus, oblongo-lanceolatis.—Restio anceps, Burchell, MS. in herb. Hook.!

Hab. Pr. B. Sp. Ex. sp. s. ♂, Burchell, nn. 5896!, 7080!

Culmi cæspitosi, erecti, 12–18-poll., crassitie pennæ corvinæ, simplices, vel parum dichotome ramosi, *ramique* erecti, flexuosi vel patentes, complanati, purpurascens, albo maculati, ad margines tuberculis parvis exasperati. *Vaginæ culmæ* 8–10 lin. longæ, arctæ, coriaceæ, oblongæ, fusæ, albo maculatæ, superne membranacæ, sub apice acutiusculo valide mucronatæ, mucrone erecto. *Spiculæ masculæ* 3–4, in spicam terminalem linearem disticham approximatae, sing.

2-3 lin. longæ, 1-2-floræ, obcuneatæ, compressæ, bractea vel spatha vaginiformi suffultæ, rachillam flexuosam complanatam superne (bractea decurrente) alatham margine uno respicientes. *Flores* bracteis paulo breviores, stipitulati, oblongi. *Glumæ* oblongo-lanceolatæ, cartilagineæ, nervo medio notatæ; *externæ* pallide ferrugineæ, *laterales* duæ naviculari-conduplicatæ, carinatæ, carina glabra; *glumæ internæ* 3, inter se æquales, externis breviores pallidioresque, superne ad margines nonnunquam involutæ. *Antheræ* lineari-oblongæ, apiculatæ, flavidæ, filamentis gracilibus paulo breviores.

** *Spiculæ masculæ axem per dorsum respicientes (ut in Tritico).*

9. II.? *VIRGATA*, sp. n. Culmis erectis, filiformibus, teretibus v. vix angulatis, dichotome ramosis, aphyllis; vaginis arctis, vix pollicaribus, sub apice obtuso longe mucronatis; spiculis masculis 8-10, in spicam disticham linearem dispositis, singulis ellipticis, erectis, spathis vaginiformibus æquilongis suffultis; bracteis arcte imbricatis, oblongo-obtusis, mucronatis, flores oblongos compressos superantibus; glumis externis oblongis, lateralium altera longiore, internis æqualibus, tenuioribus; antheris linearibus. Feminea adhuc ignota.

Hab. Pr. B. Sp. Ex. sp. s. ♂, *Burchell*, 7187!

Culmi 1-2-ped., cæspitosi, teretes vel subangulati, crassitie pennæ corvinæ, ad basin *vaginis* coriaceis fuscis dense approximatis obtecti, superne remote vaginati, versus medium dichotome ramosi, *ramique* erecti, olivacei, albo-lepidoti. *Vaginæ* arcte convolutæ, ellipticæ, coriaceæ, fusæ, sub apice obtuso tenuiore longe mucronatæ. *Spiculæ* masculæ 8-10, in spicam linearem, erectam, disticham remotiuscule dispositæ, singulæ plurifloræ, ellipticæ, erecto-patentes, 3-4 lin. longæ, 1-2 lin. latæ, *spatha* aperta vaginiformi, spiculam ipsam æquante, suffultæ. *Bracteæ* arcte imbricatæ, oblongæ, obtusæ, coriaceæ, sub apice mucronatæ, flores oblongos compressos stipulatos vix duplo superantes. *Glumæ externæ* oblongæ, rigidiusculæ, *laterales* inæquales, naviculari-conduplicatæ, carinatæ, carina ferrugineo-villosa, *intermedia* planiuscula. *Glumæ internæ* 3, conformes, hyalinæ, externis paulo breviores. *Filamenta* linearia, albida. *Antheræ* lineares, apiculatæ, flavidæ, dorso ferrugineæ. *Pistilli rudimentum* minutum vel nullum.

The irregularity of the outer lateral glumes, one of which overlaps the other at the summit, is a noteworthy character of this species.

10. H.? *BURCHELLII*, sp. n. Culmis cæspitosis, bipedalibus, teretibus, versus medium dichotome ramosis, ramis elongatis, virgatis, erecto-patentibus; vaginis arctis, brevibus, coriaceis, superne membranaceis, laceris; spiculis masculis pluribus, in cymas lineares distichas terminales dispositis, rachin per dorsum spectantibus; bracteis laxius-

cule imbricatis, lanceolatis, profunde hyalino-membranaceis, basi ad margines decurrentibus; glumis oblongis, acutis, externis cartilagineis, lateralibus inæqualibus, naviculari-conduplicatis, villosa-carinatis, internis membranaceis, brevioribus; antheris apiculatis.

Hab. Pr. B. Sp. Ex. sp. s. ♂, *Burchell*, 8116!, 7632!, 7894 a!

Culmi erecti, bi-tripedales, teretes, crassitie pennæ gallinacæ, basi spatii bi-tripollicari *vaginis* coriaceis, laceris, arcte approximatis vestiti, superne remote vaginati, infra medium dichotome ramosi, *ramique* erecto-patentes, iterum ramulosi, olivacei, albo-lepidoti, ramuli ultimi compressiusculi. *Vaginæ culmæ* arcte convolutæ, 5-8 lin. longæ, coriaceæ, striatæ, fuscæ, superne hyalino-membranacæ, ibique demum deciduæ. *Vaginæ ramulorum* conformes, nisi magnitudine minore, sub apice membranaceo acutiusculo, interdum bilobo, acuminato-aristatæ. *Spiculæ masculæ* 00, in cymam pluristachyam paniculiformem terminalem erectam dispositæ, singulæ plurifloræ, cylindraceæ, oblongæ, 1-2 lin. longæ, $\frac{3}{4}$ lin. latæ, *spatha* aperta vaginiformi ipsas æquante suffultæ, rachin flexuosam compressam per dorsum spectantes. *Bracteæ* laxiuscule imbricatæ, oblongo-lanceolatæ, filiceo-aristatæ, coriaceæ, superne profunde hyalino-membranacæ, *flores* stipitulos oblongos compressos duplo superantes. *Perianthium* biseriale, 6-glume; *glumis externis* inæqualibus, oblongo-lanceolatis, cartilagineis, *lateralibus* 2 naviculari-conduplicatis, villosa-carinatis, ex his altera longior, *intermedia* planiuscula; *glumæ internæ* 3, æquales, planiusculæ, membranacæ, externis parum breviores. *Filamenta* brevissima. *Antheræ* lineari-oblongæ, apiculatæ, flavidæ, dorso ferrugineæ.

WILDENOVIA, *Thunb. Act. Holm.* (1790); *Kunth, Enum.* iii. p. 452; *Steud. Syn.* ii. p. 262.

1. W. TERES, *Thunb. Act. Holm.* 1790, p. 27, t. 2. f. 2; *Kunth, Enum.* iii. p. 452; *Steud. Synops.* ii. p. 262.—Restio dichotomus, *Gaert. Fruct.* ii. 12. t. 82. f. 3, *excl. syn.*

Hab. Pr. B. Sp. Ex. sp. s. ♀, *Drège*, n. 2482!; Zeckoesvalley, *Ecklon*, n. 3!

? ♂, Mosselbank Rivier, *Ecklon*, n. 77!

To this species, not without hesitation, I refer a male specimen of *Ecklon's* (n. 77) in Dr. Sonder's herbarium, to which Nees gave the name *W. brevis*, and of which the following is a description:—

Culmi decumbentes, 1-1½-pedales, basi *squamis* approximatis coriaceis spadiceis, nitidis, oblongis, valide mucronatis dense obsiti, superne teretes, crassitie pennæ corvinæ, olivacei, albo-lepidoti, versus medium dichotome vel subfasciculatim ramosi, *rami* arcuati. *Vaginæ culmæ* vix pollicares, laxiuscule convolutæ, coriaceæ, flavidæ, demum fuscæ, puncticulatæ, mucronato-aristatæ, ad margines apicemque profunde

hyalino-membranaceæ, pars terminalis membranacea cum inferiore articulata et demum decidua. *Spiculæ mascule* in apicibus ramorum solitariæ (an semper?), erectæ, oblongæ, 6-8 lin. longæ, 2-3 lin. latæ, *spatha* coriacea aperta vaginiformi suffultæ. *Bracteæ* oblongo-lanceolatæ, acutatae, membranaceæ, superne pallide ferrugineæ, *flores* remotiusculos duplo superantes. *Perianthium* biseriale, 6-glume, *glumis* linearibus, hyalinis; *antheræ* lineares, apiculatæ, dorso ferrugineæ.

2. *W. STRIATA*, Thunb. *Act. Holm.* 1790, p. 27, t. 2. f. 1; Kunth, *Enum.* iii. p. 453; Steud. *Syn.* ii. p. 262.—*Nematanthus* Ecklonii, Nees ab Esenb. *Linnaea*, v. p. 662, teste Neesio ipso, in herb. Sonder., quoad pl. masc.—*Willdenovia neglecta*, Steud. *Synops.* ii. p. 263.

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, Zeyher, 1736!; Ecklon et Zeyher, *sine numero*!

♂, "ad pedem montis Tigridis et inter Weinberg et montem Stellenbosch (Maio, Junio, Julio)," et Olifants River, Ecklon!, Burchell, 787!, Drège, n. 2520!

♀, Drège, n. 2516!, n. 2515b!

I follow Kunth in referring Drège's specimens (with which the others above cited correspond in all essentials) to *W. striata*, Thunb., though the latter author represents the fruit as provided with "stipite cupulari 6-partito." In all the specimens that I have examined, the fruit has simply been raised on a very short, smooth, not lobed, stipes. Kunth, in describing Drège's specimens, seems to have overlooked the punctations on the fruit, which he describes as smooth, and hence probably led Steudel to form his *W. neglecta*, in which the fruit is rightly described as punctate. In point of fact, the markings on the fruit vary in different specimens, according to age &c. Drège's 2515b, on which Steudel founded his species, does not differ materially from the others.

3. *W. SULCATA*, sp. n. Culmo decumbente, infra medium dichotome ramoso, ramisque erectis, teretibus v. subcompressis, longiusculis, sulcato-striatis; vaginis culmeis subpollicaribus, nisi ad ramificationes arcte convolutis, superne membranaceis, mucronato-aristatis; paniculis masculis pauciramosis; spiculis femineis solitariis vel geminis, cylindraceo-oblongis, demum obcuneatis, $\frac{1}{2}$ -pollicaribus; bracteis oblongo-ovatis, mucronatis; flore unico, stipitato, stipite carnoso integro (nec lobato); glumis 6, oblongo-ovatis, ovarium læve æquantibus; stylis duobus, distinctis.

Hab. Pr. B. Sp. Ex. sp. s. ♂, Cape Flats (Martio), Ecklon, n. 930! ♀, Ecklon in herb. Sonder., *sine numero*!

Culmi decumbentes, erecti, teretes, 2-3-pedales, crassitie pennæ gallinaceæ, infra medium dichotome ramosi, ramique elongati, compressiusculi, olivacei, longitudinaliter sulcato-striati, albo-lepidoti. *Vaginæ*

culmee pollicares, plerumque arcte convolutæ, ad ramificationes laxiusculæ, ellipticæ, coriaceæ, fuscæ, tenuiter sulcato-striatæ, acuminatæ vel mucronatæ, superne utrinque membranaceæ, parte terminali membranacea demum decidua. *Spiculæ masculæ* in cymam paniculatam, terminalem, 1-2-pollicarem dispositæ, *spathis* vaginiformibus subapertis intus nitidis demum deciduis suffultæ. *Flores* pedicellati, pedicello, ad basin, *bractea* lineari-lanceolata, ferruginea, membranacea, florem duplo triplove superante instructo. *Perianthium* æqualiter biseriale, 6-glume; *glumis* linearibus, ferrugineis, membranaceis. *Anthere* lineari-oblongæ, apiculatæ, dorso ferrugineæ.—Plantæ femineæ *culmus vaginae* ut in marc. *Spiculæ* 1-floræ, solitariæ vel geminæ, altera sessilis, altera pedicellata (pedicello complanato, spiculum æquante), singulæ cylindraceo-oblongæ, 4-5 lin. longæ, 1-1½ lin. latæ, demum obpyramidatae, *spatha* aperta, quam spicula ipsa longiore, tardius decidua suffultæ. *Bracteæ* plurimæ, oblongæ, obtusiusculæ, membranaceæ, ferrugineo maculatæ, mucrone terminali nigrescente munitæ. *Flos* unicus, stipiticy lindraceo, crasso, caroso, haud lobato, impositus. *Perianthium* biseriale et æqualiter 6-glume, *glumis* ovato-oblongis, obtusis, membranaceis, ferrugineo maculatis, *ovarium* oblongum, stipitulum, superne punctulatum, uniloculare, uniovulatum subæquantibus. *Styli* duo, distincti, intus villosi-stigmatosi, tardius decidui. *Fructus*

The male plant has much the aspect of *W. striata*; but in the present species the sheaths are more closely convolute, and the flowers are larger. The female spikelets are scarcely half the size of those of *W. striata*, and more closely resemble those of *W. teres*, with which also they correspond in the oblong obtuse bracts.

4. *W. LUCÆANA*, Kunth, *Enum.* iii. p. 455; *Steud. Synops.* ii. p. 262.—*Spirostylis Ecklonii*, Nees, *MS. in herb. Sond.*

Hab. Pr. B. Sp. Ex. sp. s. ♂, Brakfontein, *Ecklon*!

♀, *Drège*, n. 2515a!, *Ecklon*, 84!, Gr. Houhoek, *Zeyher*, n. 4351!, *Eck. et Zeyh.* 1. 11!

There is a male plant of this species in the Linnean herbarium, with the name "*Elegia*" on the label.

5. *W. ARESCENS*, Kunth, *Enum.* iii. p. 454, n. 3; *Steud. Synops.* ii. p. 262, n. 3.

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, *Drège*, n. 2522!

6. *W. FIMBRIATA*, Kunth, *Enum.* iii. p. 455; *Steud. Synops.* ii. p. 262, *Hab.* Pr. B. Sp. Ex. sp. s. ♀, *Drège*, n. 1635b!

7. *W. CUSPIDATA*, sp. n. Culmo gracili, tereti, dichotome ramoso, ramis patulis; vaginis arcte convolutis, longiuscule mucronato-aristatis, coriaceis, fuscis, ad margines præcipueque ad apicem hyalino-membranaceis; spiculis femineis solitariis vel geminis, obcuneatis; *spatha*

bracteisque longiuscule aristatis, aristis erectis; perianthio fructum impresso-punctatum subæquante, stylo unico; stigmatibus . . . Mas latet.

Hab. Pr. B. Sp. Ex. sp. s. ♀, *Drège*, n. 2516!

Culmi erecti, teretes, crassitie pennæ corvinæ (2-pedales?), dichotome ramosi, hique patuli, teretes, olivacei, albo-lepidoti, impresso-punctulati. *Vaginæ culmæ* arcte convolutæ, longiuscule acuminatæ, coriaceæ, nitidæ, superne profunde hyalino-membranaceæ, parte superiore membranacea tardius decidua. *Spiculæ* femineæ in apice ramorum solitariae vel geminae, altera sessilis, altera pedicellata, singulæ $\frac{1}{2}$ - $\frac{3}{4}$ -pollicares, obcuneatæ, *spatha* aperta, oblonga, acuminata, ipsas æquante munitæ. *Bracteæ* plurimæ, oblongæ, longiuscule acuminatæ, coriaceæ, ferrugineæ. *Flos* unicus, stipite crasso, olivaceo, leviter sexlobato munitus. *Perianthium* æqualiter biseriale, sexglume, *glumis* oblongo-lanceolatis, membranaceis, ferrugineis, fructum vix æquantibus. *Fructus* breviter stipitatus, 1-locularis, oblongus, obtusus, ossens, fuscus, rugosus, punctis depressis majusculis notatus, ad apicem macula orbiculari flavida stylique unici vestigiis instructus. *Semen* . . .

Readily distinguishable by its small stature, long pointed bracts, and the deep depressions on the fruit.

8. *W. HUMILIS*. Culmis decumbentibus, erectis, simplicibus, filiformibus, compressiusculis; vaginis culmeis arcte convolutis, superne profunde hyalino-membranaceis, longiuscule filiceo-aristatis, aristis tortis; spiculis masculis 5-6, laxis, oblongis, erectis, in cymam linearem spiciformem, spathis apertis vaginiformibus deciduis interstinctam, remote disticheque dispositis; floribus remotiusculis; glumis 6, ciliiformibus, æqualibus, tortis: spiculis femineis solitariis (2-3?), cylindraceis, erectis, spathis vaginiformibus arcte convolutis suffultis; bracteis oblongis, lanceolatis; floris unici glumis 4 (6?) late ovatis, hyalinis; ovario oblongo, disco epigyno 4-lobato superato; stylo brevissimo; stigmatibus 2, longiusculis, exsertis.

Willdenovia humilis, *N. ab E. MS. in herb. Sonder., absque descript.*

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, Cape Flats, *Ecklon*, 867!

Rhizoma repens, crassitie pennæ gallinæ, *vaginæ* approximatis, coriaceis, oblongis, obtusis, fuscis, sulcato-striatis (siccitate), mucronatis, ad margines membranaceis, dense obsitum. *Culmi* decumbentes, erecti, 1- $1\frac{1}{2}$ -pedales, crassitie pennæ corvinæ, simplices, teretes v. compressiusculi, cinnamomei vel olivacei, purpureo maculati, impresso-punctulati. *Vaginæ culmæ* 1- $1\frac{1}{2}$ -pollicares, arcte convolutæ, coriaceæ, fusæ, impresso-punctulatæ, ad margines præcipueque ad apices profunde hyalino-membranaceæ, aristatæ, aristis longiusculis, ciliiformibus, tortis. *Spiculæ mascule* 4-6, oblongæ, erectæ, remotiusculæ, plurifloræ, in cymam simplicem, linearem, erectam, 2-3-pollicarem distiche dispositæ. *Rachis* communis complanata, sursum dilatata, ad margines subalata. *Spathæ*, ut videtur, deciduæ. *Flores* laxius-

cule dispositi, singuli *bractea* membranacea oblongo-lanceolata ferruginea quam ipsi duplo triplove longiore suffulti. *Glumæ* 6, inter se æquales, ciliiformes, tortæ. *Stamina* 3; *filamenta* glumis vix angustiora; *antheræ* lineari-oblongæ, apiculatæ, dorso ferrugineæ.—Plantæ femineæ *culmi vaginæque* ut in mare. *Spiculæ* in apice culmi, solitariae, erectæ, nunc 2-3, in cymam linearem disticham remotiuscule dispositæ, singulæ cylindraceæ, pollicares, *spatha* vaginiformi arcte convoluta suffultæ. *Bracteæ* plurimæ, oblongo-lanceolatæ, mucronatæ, ferrugineæ, membranaceæ, omnes, unica excepta, steriles. *Flos* femineus unicis, sessilis, bractea stipante triplo brevior. *Perianthium* minutum, biseriale, 4-glume (an normaliter 6-glume?), *glumis* late ovatis, hyalinis. *Ovarium* stipiti crasso brevi impositum, oblongum, obtusum, superne disco epigyno, 4-lobato, lobis crassis ovatis crenulatis, munitum, 1-loculare, 1-ovulatum. *Ovulum* pendulum. *Stylus* brevissimus. *Stigmata* duo longiuscula, linearia, exserta, intus villosa. *Fructus* . . .

Apparently a distinct species, easily recognizable by its slender unbranched stems, its simple inflorescence, the peculiar epigynous disk, &c., but possibly a depauperated form of some other species. In one male flower that I examined, there were six stamens; and in another instance one of the filaments divided above the middle into two branches, one of which bore an anther. In the only female flower that I have been able to examine, there were but 4 glumes to the female perianth.

Species mihi ignota.

W. COMPRESSA, *Thunb. Act. Holm.* 1790, t. 2. f. 3. An vere hujus generis?

Species excludendæ.

W. NEGLECTA, *Steud. Synop.* ii. 263=W. striata, *Thunb.*

W. ?ECKLONII, *Kunth, Enum.* iii. 456=W. striata, *Thunb.*

CERATOCARYUM, *Nees ab Esenb. in Lindl. Nat. Syst.* ed. 2. p. 451; *Kunth, Enum.* iii. p. 482.

1. C. ARGENTEUM, *Kunth, Enum.* iii. p. 483; *Steud. Synops.* ii. p. 264. —Restio (Elegia) argenteus, *Herb. Willd., fide Nees ab Esenb. Linnæa*, v. p. 656, nec *Thunb.*—Ceratocaryum speciosum, *N. ab E. MSS. in herb. Sonder. et Coll. S. Trinit. Dubl.*

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, *Eckl. et Zeyh.* 56. 5!

♂, *Burchell*, 7656!, 7905!

Plantæ femineæ, hactenus indeductæ, *culmus vaginæque* ut in mare.

Panícula terminalis, cymosa, lineari-oblonga, erecta, 2-4 poll. longa, pluristachya, *spathis* 3-4, convolutis, coriaceis, striatis, purpurascens, nitidis, demum deciduis munita. *Spiculæ* 1-floræ, breviter pedicellatæ, oblongo-pyramidatæ, 8-10 lin. longæ. *Bracteæ* laxiuscule imbricatæ, lanceolatæ, acutæ, membranaceæ, flavescentes, nervo medio

prominente notatæ. *Flos* unicus, terminalis, bractea stipante multiplo brevior. *Perianthium* minutum, biseriale, 6-glume; *glumis* omnibus suborbiculatis, apice acutis, subcartilagineis, pallide ferrugineis, internis paulo minoribus. *Ovarium* *Fructus* osseus, subglobosus, apice truncatus, indehiscens, 1-locularis, 1-spermus, ferrugineus vel basi spadiceus, 5-6 lin. longus, *stylis* duobus, diu persistentibus, divergentibus, intus dense stigmatoso-villosis coronatus.

2. *C. FISTULOSUM*, sp. n. Culmis fistulosis; spiculis masculis numerosissimis, plurifloris, in paniculam terminalem, cymosam, densam dispositis; bracteis glumisque lanceolatis acuminatis: spiculis femineis 4-6, in cymam linearem spiciformem dispositis, singulis pyramidalis, 1-floris; glumis minutis, oblongo-ovatis; fructu oblongo, tuberculato.

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, *Burchell*, 7095!

Culmi 4-5-pedales, simplices, erecti, teretes, fistulosi, straminei, minutissime impresso-punctulati, crassitie pennæ olorinæ. *Vaginæ culmæ* 1-2 poll. longæ, ellipticæ, acutæ, arcte convolutæ, coriacæ, flavidæ, superne profunde membranacæ, ad margines lacerae. *Panicula* mascula terminalis, laxiuscule cymosa, pluristachya, *spathis* vaginiformibus apertis, demum deciduis, munita. *Spiculæ* plurifloræ, oblongæ, erecto-patentes, 8-10 lin. longæ. *Bracteæ* oblongæ, angustatæ, longe acuminatæ, pallidæ, submembranacæ, flores stipulatos superantes. *Glumæ* 6, bracteis conformes, *internæ* 3 dimidio breviores. *Antheræ* inclusæ, lineari-oblongæ, apiculatæ, filamentis vix breviores. *Pistilli rudimentum* nullum.—*Spiculæ femineæ* 4-6, in cymam linearem spiciformem 2-3-pollicarem distiche dispositæ, singulæ pyramidalis, pluribracteata, 1-floræ. *Bracteæ* membranacæ, lanceolatæ, 1-nerviæ. *Perianthium* minutum, biseriale, sexglume; *glumis* subæqualibus, oblongo-ovatis, mucronatis, cartilagineis, ad margines superne membranaceis. *Ovarium* *Fructus* osseus, oblongus, tuberculatus, 1-locularis, 1-spermus, 4-5 lin. longus, basi perianthio persistente cinctus.

With almost the same habit and general appearance as the preceding species, *C. fistulosum* differs from it in its fistular stem, narrower bracts and glumes, and oblong tuberculated fruit. *Burchell* describes the spathes as "purpureis, marginibus membranaceis, ciliatis, dilute badiis."

ANTHOCHORTUS, *Nees*, *Lindl. Nat. Syst. Bot.* ed. 2. p. 451; *Kunth*, *Enum.* iii. p. 485; *Steud. Synops.* ii. p. 247.

Genus summopere dubium, plantis masculis lucusque tantum observatis. An vere *Hypolænæ* referendum?

1. *A. ECKLONII*, *Nees*, *Lindl. Nat. Syst.* ed. 2. p. 451; *Kunth*, *l. c.*; *Steudel*, *l. c.*, nomen tantum.

Hab. Pr. B. Sp. Ex. sp. s. ♂, *Eckl. et Zeyh.* 70. 10!

In the absence of female flowers it is impossible to judge

whether this be really separable from *Hypolœna*. The flowers are remote from each other along the side of the slender branches, somewhat in the same way as in the Australian genus *Calorophus*.

CRASPEDOLEPIS, *Steud. Synops. Glumac.* ii. p. 264.

1. C. FIMBRIATA, *Steud. l. c.*, ♀. Species mihi ignota.

RESTIO, vide *Journ. Linn. Soc.* viii. p. 224.

(Addenda et Corrigenda.)

R. RHODOCOMA. Culmis erectis (tripedalibus), teretibus, ad vaginas subverticillatim ramulosis, ramulis erectis, gracilibus; vaginis culmeis arcte convolutis, superne laceris; vaginis rameis arctis, sub apice profunde hyalino bilobato mucronato-aristulatis; spiculis masculis 00, in paniculam amplam terminalem pluriramosam dispositis, singulis ovato-oblongis, parvis; bracteis arcte imbricatis; floribus oblongis, subtrigonis; glumis rigidis: spiculis femineis conformibus, nunc in apicibus ramulorum solitariis vel geminis, sed plerumque in cymas lineares distichas pluristachyas dispositis, singulis 1-floris; perianthio trigono, 6-glumi; glumis obtusis, rigidis, internis paulo latioribus; staminodiis 3-linearibus; ovario 3-loculari; stigmatibus 3, ferrugineo-villosis; capsula rigida, 3-loculari, 3-angulari, angulis salientibus dehiscente.—*Rhodocoma Equisetum*, *Nees ab Esenb. in Lindl. Nat. Syst.* ed. 2. p. 450; *Kunth, Enum.* iii. p. 480; *Steud. Synops.* ii. p. 248.

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, *Burchell*, n. 3322!; *Drège*, 2016!; *Zwartkopsrivier*, distr. *Uitenhage*, *Eckl.* n. 788!

♂, *Stellenbosch*, *Mundt*!

Culmi erecti, tripedales et ultra, crassitie pennæ cygnæ, basi, spatio bi-, tripollicari, *vaginis* coriaceis, fuscis, lacerato-destructis, approximatis vestiti, superne remote vaginati, olivacei v. straminei, interdum nigro maculati, minutissime impresso-punctulati, supra medium ad vaginas subverticillatim ramulosi. *Ramuli* filiformes, compressiusculi, erecto-patentes, infimi steriles, supremi spiculigeri, sterilibus longiores. *Vaginæ culmæ* pollicares et ultra, arcte convolutæ, ellipticæ, acuminatæ, coriaceæ, purpurascentes, striolatæ, ad margines profunde hyalino-membranaceæ, apice in aristam longam, tardius deciduum desinentes. *Vaginæ rameales* 3-4 lin. longæ, arcte coriaceæ, sub apice profunde bilobato, lobis hyalinis, aristulatæ, vel in ramulis sterilibus plus minus foliaceo-mucronatis. *Spiculæ masculæ* 00, in apice ramulorum verticillatorum in cymas lineares, simplices, pluristachyas, distichas dispositæ, nunc solitariæ vel geminæ, plerumque inflorescentiam magnam, 6-8-poll., oblongam, erectam efformantes, singulæ ovato-oblongæ, vix 2 lin. longæ, $\frac{1}{2}$ lin. latæ, plurifloræ, axem flexuosam complanatam per margines respicientes, *spatha* oblonga, coriacea, superne profunde hyalina, longiuscule acuminato-aristata suffultæ.

Bracteæ arcte imbricatæ, oblongæ, coriaceæ, ferrugineæ, nitidæ, sub apice obtusato hyalino subulato-mucronatæ, flores oblongos subtrigonos vix superantes. *Glumæ externæ* oblongæ, obtusæ, rigidæ, fuscæ, *laterales* duæ naviculari-conduplicatæ, carinatae, carina glabra; *glumæ internæ* 3, paulo breviores, tenuiores, conformes, laterales superne ad margines parum involutæ. *Filamenta* brevissima. *Antheræ* lineari-oblongæ, apiculatæ, flavidæ, dorso ferrugineæ. *Pistilli* rudimentum nullum.—*Spiculæ bracteæque femineæ* masculinis conformes. *Flos unicus* terminalis, bracteam stipantem superans. *Perianthium* ut in mare, nisi glumis internis rigidioribus. *Staminodia* 3, liguliformia. *Ovarium* rotundatum, triloculare, *stylis* 3 incurvatis intus villosis-stigmatosis ferrugineis superatum. *Capsula* coriacea, triloba, 3-locularis, angulis salientibus longitudinaliter dehiscens. *Semina* magna, 3-gona.

In Dr. Sonder's herbarium are type specimens upon which Nees founded his genus *Rhodocoma*. A comparison of these specimens with other more perfect specimens leads to the conclusion that, as a genus, it is not distinct from *Restio*, to which, accordingly, I refer it. The species varies much in stature, and particularly in the number of spikelets on each branchlet: sometimes, as in the type specimens, there are but two, or even one only; but in most cases they are numerous, as above described.

R. HYSTRIX, sp. n. Culmis teretibus; vaginis arctis, longe aristatis; spiculis masculis cymoso-paniculatis, singulis cylindraceo-lanceolatis; bracteis arcte imbricatis, longe aristatis; glumis oblongo-lanceolatis; spiculis femineis cymoso-paniculatis, singulis plurifloris, oblongo-ovatis; capsula oblique ovata, compressa; stylo unico, brevi in stigmata duo ferrugineo-villosa diviso.

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, *Burchell, sine numero.*

Culmi 3-4-pedales et ultra, erecti, teretes, straminei, impresso-punctulati, medio dichotome ramosi, *ramis* compressiusculis ascendentibus. *Vaginæ culmæ* arcte convolutæ, 8-10 lin. longæ, coriaceæ, fuscæ, superne lacerato-membranaceæ, apice in aristam longam nigram desinentes. *Spiculæ masculæ* 00, in paniculam cymosam erectam dispositæ, singulæ plurifloræ, cylindraceo-lanceolatæ, 3-4 lin. longæ. *Bracteæ* arcte imbricatæ, oblongæ, coriaceæ, fuscæ, superne membranaceæ, sub apice longe aristatæ (aristis nigris, erectis), flores lanceolatos complanatos pedicellatos vix duplo superantes. *Glumæ* rigidiusculæ, oblongo-lanceolatæ; *externæ laterales* duæ naviculari-conduplicatæ, villosis-carinatae; *internæ* tenuiores, breviores, planiusculæ. *Antheræ* lineares, apiculatæ, flavidæ, dorso ferrugineæ, filamenta albida linearia vix superantes.—*Spiculæ femineæ* 00, in paniculam cymosam parce diffusam dispositæ, singulæ oblongo-ovatae, 8-10 lin. longæ, 4-5 lin. latæ, erectæ, plurifloræ, basi *spatha* vaginiformi suffultæ. *Bracteæ glumæque* ut in mare nisi magnitudine majores.

Ovarium *Capsula* oblique ovata, compressa, abortu 1-locularis, margine longitudinaliter dehiscens, perianthio persistente cincta. *Stylus* brevis, in *stigmata* duo ferrugineo-villosa, exserta divisus.

This apparently very distinct species does not seem to have been met with by any other traveller than Burchell; at any rate, I have met with no specimens other than those collected by him.

R. QUADRATUS, sp. n. Culmis elatis, tetragonis, fasciculatim ramosissimis; ramis dimorphis, his fertilibus, illis sterilibus; vaginis culmeis pollicaribus et ultra, arctis, acuminatis, laceris; vaginis rameis plus minus foliaceo-mucronatis; spiculis masculis parvis, ovato-oblongis, paniculatis; bracteis arcte imbricatis, oblongo-acutis, mucronatis; glumis oblongis: spiculis femineis cymoso-paniculatis, singulis ovato-oblongis, demum cuneatis, plurifloris; staminodiis liguliformibus; ovario triloculari; stigmatibus 3, capsula triloba.—*Restio tetragonus* β. exaltatus, N. ab E. in *Sonder, pro parte, quoad plantam masculam*.

Variat culmis, ramis vaginisque vegetioribus, necnon mucronibus foliaceo-subulatis.

Hab. Pr. B. Sp. Ex. sp. s. ♂, Burchell, 408!, 7778!; Uitenhage, Zeyher, 540!; Table Mount., Ecklon!, Drège, 167 a!

♀, ? Ecklon, 166, *pro parte*!, Dr. Pappe, 96, in *herb. Hook.*!; Niven, in *herb. Mus. Brit.*!

Culmus erectus, 4-5-pedalis, crassitie pennæ anserinæ et ultra, tetragonus, olivaceus, punctulatus, dichotome ramosus, *ramique* fasciculatim vel subverticillatim ramosissimi, spiculigeri, quam steriles longiores. *Vaginæ culmæ* arcte convolutæ, pollicares, ellipticæ, coriaceæ, fuscæ, nervoso-striatæ, superne ad margines laceratæ. *Vaginæ ramulorum* parvæ, coriaceæ, albo-lepidotæ, superne sub apice profunde hyalino bilobato foliaceo-mucronatæ, mucrone arcuato. *Spiculæ masculæ* in paniculas parce ramosas terminales remotiuscule dispositæ, singulæ plurifloræ, ovato-oblongæ v. demum cuneatæ, 2 lin. longæ, 1 lin. latæ, *spatha* vaginiformi, spiculam ipsam vix æquante, tectæ. *Bractææ* undique arcte imbricatæ, oblongo-acutæ, subcoriaceæ, ferruginæ, sub apice acutiusculo, membranaceo, brevissime mucronatæ, *flores* oblongos stipitulos compressiusculos superantes. *Glumæ* oblongæ, *externæ* coriaceæ, cymbiformes, *laterales* duæ naviculari-conduplicatæ, carinatæ, carina glabra; *glumæ internæ* conformes, breviores, planiusculæ, membranaceæ. *Antheræ* oblongæ, apiculatæ, flavidæ, dorso ferruginæ, *filamentis* albidis liguliformibus breviores. *Pistilli rudimentum* tristylum vel nullum.—*Spiculæ femineæ* cymoso-paniculatæ, singulæ erectæ, oblongo-ovatae, demum obcuneatæ, plurifloræ, 2 lin. longæ, 2 lin. latæ. *Bractææ*, quoad formam, ut in *mare floribusque* oblongis, subtrigonis, brevissime stipitulatis, brevioribus vel raro longioribus. *Glumæ* ut in planta mascula. *Staminodia* 3, liguliformia. *Ovarium* trilobatum,

triloculare, castaneum, *stigmatibus* 3 villosoplumosissuperatum. *Capsula* magis minusve triloba, abortu bi- vel unilocularis, stylo-
rum vestigiis coronatum, perianthio persistente vix brevior.

This species seems variable in the size of all its parts. Usually it has sterile much-branched foliaceous culms, separate from, and shorter than the fertile culms, which latter are destitute of leaves, and bear comparatively large spikelets in slightly branched paniced cymes; but not unfrequently spikelets are borne on the end of leafy much-branched culms, like those that are ordinarily sterile; and in this case the spikelets, though perfect, are smaller than those borne on the true fertile stems. This species is apt to be confounded, on a first glance, with *Leptocarpus paniculatus*, from which, however, it is very distinct.

R. BIFARIUS, sp. n. Culmis teretibus; paniculis masculis laxis pluristachyis; spiculis oblongis, obtusis, compressis; bracteis bifariam imbricatis; spiculis femineis majoribus, ovatis, plurifloris; bracteis quinquefariam imbricatis; stylis 3; capsula abortu biloculari.

Hab. Pr. B. Sp. Ex. sp. s. ♂ et ♀, *Burchell*, 8068!

Culmi 4-pedales, teretes, simplices, solidi, olivacei, albo-lepidoti, crassitie pennæ gallinacæ. *Vaginæ culmæ* $\frac{1}{2}$ -pollicares, arctæ, ellipticæ, coriaceæ, fuscæ, striatæ, superne ad margines tenuiores, sub apice obtusiusculo subulato-mucronatæ. *Panicula* mascula cymosa, effusa, pluriramosa, ramis complanatis, sursum dilatatis, erecto-patentibus. *Spiculæ* oblongo-obtusæ, vel cylindraceæ, subcompressæ, plurifloræ, 1 poll. longæ, 3-4 lin. latæ. *Spathæ* bracteiformes. *Bractææ* distiche dispositæ, basi arcte, superne laxè imbricatæ singulæ oblongæ, recurvatæ, coriaceæ, spadiceæ, impresso-punctulatæ, ad margines tenuiores, ad apicem breviter mucronatæ, flores 3-plo superantes. *Flores* stipitulati, oblongi, obtusi, arcuati. *Glumæ* oblongæ, acutæ, *laterales externæ* naviculari-conduplicatæ, villosocarinatæ, ferrugineæ, rigidæ; *intermedia antica*, æqualis, planiuscula; *internæ* 3, breviores, tenuiores, conformes. *Antheræ* inclusæ, lineari-oblongæ, dorso ferrugineæ, antice flavidæ. *Pistilli* rudimentum nullum.—*Spiculæ femineæ* 1-3, terminales, erectæ, oblongo-ovatae, 1-2-pollicares, eas *Thamnochorti imbricati* (*Staberohe imbricatæ*, Kunth) referentes. *Bractææ* oblongæ, mucronatæ, nervoso-striatæ, flores 3-4-plo superantes. *Glumæ* ut in mere. *Ovarium* 3-loculare, *stylis* 3 stigmatosis recurvis superatum. *Capsula* biloba, abortu bilocularis, dehiscens, glumis persistentibus vix brevior.

The female plant is so precisely like a *Thamnochortus* (§ *Staberoha*) in general appearance, that it would be passed as belonging to that genus by any one who did not examine the structure of the flower, which is that of a true *Restio*. It is one of the most distinct of that genus.

- R. LEPTOCLADOS, *Mast. Journ. Linn. Soc.* viii. p. 241, *ubi stirps feminea tantum descripta.*
- Plantæ masculæ a cl. Burchellio lectæ (herb. n. 5652!) *culmus vaginæque* ut in feminea. *Spicula* in apice culmi, solitaria, erecta, oblonga, compressa, pluriflora, $1\frac{1}{2}$ –2 lin. longa, basi *spatha* brevi vaginiformi suffulta. *Bracteæ* oblongo-acutæ, coriaceæ, ferrugineæ, sub apice tenuiore subulato-mucronatæ, *flores* oblongos duplo superantes. *Glumæ externæ* oblongæ, rigidiusculæ, ferrugineæ, naviculari-conduplicatæ; *internæ* 3, oblongæ, breviores, hyalinæ. *Antheræ* inclusæ, apiculatæ, flavidæ.
- R. FERRUGINOSUS, *Journ. Linn. Soc.* viii. p. 226, adde ♂, *Burchell*, 7632!
- R. SUBVERTICILLATUS, *l. c.* p. 227, adde ♂, *Burchell*, 8112!
- R. TRIFLORUS, *l. c.* p. 234, adde ♂, *Burchell*, 853!, 6800!, 7926!, 8017!
- R. SIEBERI, *l. c.* p. 235, adde ♀?, *Burchell*, 3499!
- R.? DIVARICATUS, *Mast. l. c.* p. 236, =R. macer; ♀, *Burchell*, 7520!
- R.? PUNCTULATUS, *Mast. l. c.* p. 242, =Thamnochortus distichus.
- R. DISTICHUS, *l. c.* p. 243, =Thamnochortus distichus.
- R. TRITICEUS, *l. c.* p. 243, adde ♂ et ♀, *Burchell*, 8005!
- R. IMPOLITUS, *l. c.* p. 249, =*Hypolæna impolita*.
- R. PERPLEXUS, *l. c.* p. 253, adde ♂, *Burchell*, forma gracilis, 7430!; ♀, *Burchell*, 641!
- R. BIFIDUS, *l. c.* p. 253, adde ♀, *Burchell*, 7647!
- R. ELONGATUS, *Thunb. l. c.* p. 254, =Thamnochortus elongatus.
- R. GLOMERATUS, *Thunb.* =forma monstrosa, bracteas steriles in spicas glomerulose aggregatas exhibens.

EXPLANATION OF PLATES VII. & VIII.

PLATE VII.

- A. *Hypolæna Eckloniana*. 1, portion of female plant; 2, ditto of male; 3, male flower; 4, one of the glumes of the same; 5, female flower; 6, ovary; 7, transverse section of ovary.
- B. *Dovea mucronata*. 1, inflorescence, &c. of female plant; 2, ditto of male plant; 3, male flower; 4, inner glume and stamen; 5, female flower; 6, ripe fruit; 7, vertical section of same; 8, seed.
- C. *Hypodiscus synchroolepis*. 1, inflorescence of female plant; 2, inflorescence of male plant; 3, male flower; 4, stamen; 5, female flower; 6, vertical section of ovary.

PLATE VIII.

- D. *Willdenovia Lucæana*. 1, inflorescence of male plant; 2, portion of sterile culm; 3, inflorescence of female plant; 4, male flower and bract; 5, fruit, showing the lobed fleshy stipes and a portion of the minute perianth.
- E. *Ceratocaryum fistulosum*, *Mast.* 1, inflorescence of male plant; 2, inflorescence of female plant; 3, the same with the bracts partially removed; 4, male flower of same; 5, stamen, from the front; 6, the same, from behind; 7, ovary with perianth; 8, transverse section of ovary.



