STERCULIACEAE

A New Species of Hermannia

Hermannia umbratica *Verdoorn*, sp. nov., *H. malvaefoliae* praecipue foliis cordatis accedens sed inter alia floribus minoribus geminatis, petalis glabratis differt.

Planta procumbens; rami tenues, rami, petioli, pedunculi et pedicelli stellato-pubescentes saepe pilis brevibus vel longis pluri-cellularis apice glanddulosis immixtis. *Stipula* oblonga, oblongo-lanceolata vel deltoideo-oblonga, nonnunquam lobata, 2–6 mm longa, stellato-pubescens pilis brevibus apice glandulosis immixtis. *Folia* ovato-oblonga vel suborbiculata, basi cordata, margine crenata, supra sparse stellato-pubescentia, infra grosse stellato-pubescentia et minute papillosa; petiolus 4–16 mm longus. *Inflorescentia* 2-flora, folia opposita; pedunculi 10–20 mm longi; pedicelli 2–12 mm longi, ad apicem cernui; bracti plerumque 3, 1–2·5 mm longi. *Calyx* circa 3·5 mm longa, quasi medium quinquefidus sparse stellato-pubescens pilis brevibus apice glandulosis immixtis. *Petala* lutea, anguste obovata, 5–6 mm longa, leviter ad medium angustata, ultra medium margine inflexa glabra. *Stamina* filamentis cruciatis, 1·5 mm longis, lobis lateralibus apice setosis; antheris 2 mm longis, acutis sparse ciliatis. *Ovarium* stellato-tomentosum. *Capsula* tenuiter stellato-tomentosa circiter 3·5 mm longa, lobis obtusis. *Semina* reniformia, laevigata, nigra hilo albido.

Type: Transvaal, Potigetersrus, Pyramid Estate, *Galpin* 8924 (PRE, holo.).

Procumbent plant with slender branches, the branches, petioles, peduncles and pedicels stellate-pubescent with long, many-celled, gland-tipped hairs intermixed, often one or other of these types of hairs predominant. *Stipules* oblong, oblong-lanceolate or deltoid oblong, sometimes oblique and rarely 2–3-lobed, 2–6 mm long, stellate-pubescent with short gland-tipped hairs intermixed. *Leaves* ovate-oblong to suborbicular, cordate, margins irregularly crenate, upper surface sparsely pubescent with 1–3-rayed stellate hairs, under surface coarsely pubescent with several-rayed stellate hairs; petiole 4–16 mm long. *Inflorescence* leaf-opposed, geminate; peduncle 16–20 mm long; pedicel 2–12 mm, cernuous near the apex; bracts usually 3, 1–2·5 mm long. *Calyx* about 3·5 mm long, lobed to just beyond the middle, sparsely pubescent with stellate and short gland-tipped hairs; tube widely campanulate; lobes about 1·5 mm long, more or less deltoid. *Petals* yellow, rather narrowly obovate, 5–6 mm long, lower half with narrowly inrolled margins, glabrous. *Stamens* with cruciform filaments, about 1·5 mm long, lateral arms with apical setae; anthers about 2 mm long, acute, sparsely ciliate. *Ovary* stellate-tomentose; styles slender, erect. *Capsule* thinly stellate-tomentose, about 3·5 mm long, enclosed in the faded calyx and corolla, carpels rounded at the apex. *Seeds* reniform, smooth, black with a conspicuous whitish hilum.

Found in shade on rocky slopes in the dry wooded country of the central Transvaal. Recorded from the Pretoria, Potgietersrus and Lydenburg districts.

Transvaal.—Pretoria: Wonderboom Poort, *C. A. Smith* 6153. Potgietersrus: Pyramid Estate, *Galpin* 8924 (type). Lydenburg: near Steelpoort, *Codd & Dyer* 7725.

This species resembles *H. malvaefolia* in the trailing habit, slender stems and cordate leaves. It differs in several respects which are not readily detected, such as the leaves in *H. malvaefolia* being more orbicular, mostly broader than long and more regularly crenate; the flowers usually solitary and slightly larger, 8–10 mm long, and the petals distinctly pubescent dorsally. *H. malvaefolia* is found on the high mountains in the eastern escarpment at altitudes above 5500 ft in contrast with the dry wooded country of the central Transvaal from which our species comes.

The late Mr. N. Pillans recognized this as an undescribed species and it would have been a pleasure to name it in his honour but the epithet " pillansii " has already been used in *Hermannia*. Collectors' notes on all the specimens seen mentioned that the plants grew in the shade and this suggested the name *H. umbratica*.

I. C. VERDOORN

NEW NAMES IN HERMANNIA

Hermannia antonii *Verdoorn*, nom. nov.

H. rehmannii (Szyszyl.) K. Schum. in Engl. Mon. Afr. Pflanz. 5: 76 (1900), nom. illeg., non Szyszyl. (1887).

Mahernia rehmannii Szyszyl. Polypet. Thalam. Rehm. 147 (1887). Type: Transvaal, *Rehmann* 6648 (K, Z).

Szyszylowicz described both *Hermannia rehmannii* and *Mahernia rehamnnii* in 1887 when working on the plants collected by Anton Rehmann in South Africa. The syntypes of the *Hermannia* were collected in the Cape and the Orange Free State, while the *Mahernia* came from the Transvaal highveld. *Hermannia rehmannii*, the Cape species, has been found to be conspecific with *H. bryoniifolia* Burch. (1824). Schumann in Engler's Mon. Afr. Pflanz. 5: 56 recognized this and placed it in synonymy under *H. bryoniifolia*. In the same publication, Schumann transferred *Mahernia rehmannii* to the genus *Hermannia*, making the combination *H. rehmannii* (Szyszyl.) K. Schum. According to present day rules of nomenclature, this is not permissible and the species is therefore now given a new name using, for historical purposes, Rehmann's Christian name.

Incidentally, it may be helpful to mention, firstly, that Schumann, when making the combination *H. rehmannii*, placed *H. brachymalla* in synonymy, but today these are recognized as distinct species; and, secondly, under *H. bryoniifolia* he cites *Rehmann* 3249 as coming from the Transvaal which is incorrect. The Rietpoort given as the locality could not be in the Transvaal, not only because the species does not occur there, but because of the low collector's number, 3249. By the time Rehmann reached the Transvaal his numbers were all in the six thousands.

Hermannia repetenda *Verdoorn*, nom. nov. *H. hirsuta* Schrad. et Wendl., Sert. Hannov. 10, t. 4 (1795–1798), nom. illeg., non Mill. (1768).

Miller's *Hermannia hirsuta* obviously describes *Hermannia althaeifolia* L. and has been placed in synonymy under that species.

The later homonym, *H. hirsuta* Schrad. & Wendl., here given the new name *H. repetenda* (meaning regained or come upon again), was described from plants flowering in the " Herrenhäuser Gärten ", Hannover, the seed having come from the Cape of Good Hope. A figure accompanies the description and from this, together with type material preserved in the Stockholm, Leningrad and Göttingen herbaria, the species is readily identified. It is, however very rarely found represented in herbaria today but a recent search for the species in the wild by the author has revealed that it occurs in the Van Rhyns Pass, the Pakhuis Pass and on the Piketberg in the western Cape Province. Its scarcity in herbaria may be attributed to its being palatable to stock and thus seldom found by collectors.

FIG. 7.—**Hermannia cuneifolia** var. **glabrescens.** 1, upper portion of a branch, × 1; 2, leaf, × 7; 3, flower, × 7; 4, petal, × 7; 5, stamens surrounding the ovary, × 7; 6, stamens, × 7; 7, ovary and styles, × 7 (*Smith* 4407).

A wrong application of the name was commended by Harvey who in the Flora Capensis (1860) mistakenly cited a figure, Jacquin, Schoenbr t. 127, as a synonym of *H. hirsuta* Schrad. & Wendl. This figure represents a closely related but specifically distinct species which is found abundantly in herbaria (not palatable?) and which is, today, recognized as *H. aspera* Wendl. Jacquin had mistakenly called it *H. scabra* Cav.

I. C. VERDOORN

NEW COMBINATIONS IN THE GENUS HERMANNIA

Hermannia burchellii (*Sweet*) *Verdoorn*, comb. nov.

Mahernia burchellii Sweet, Hort. Brit. ed. 1: 57 (1827). Type: Plate 224, Bot. Reg. 3 (1817). *M. grandiflora* sensu Ker Gawl. in Bot. Reg. 3: t.244 (1817), partly, as to description, plate and *Burchell* 2333; Harv. in Fl. Cap. 1: 217 (1860), partly, as to *Burchell* 2333. ——var. *burchellii* Harv., l.c. (1860). Type: Plate 224, Bot. Reg. 3 (1817).

The specimen figured in the Botanical Register, plate 224 (1817), was taken from a plant introduced by William Burchell from South Africa and raised in a London nursery. Burchell is quoted as writing that it came originally from the " vast sandy plains northwards of the town of Litakuun ", that is north-east of the present-day Kuruman. In that publication the specimen is wrongly identified as being conspecific with *Hermannia grandiflora* Ait., which was introduced by Masson some years earlier and differs, among other things, in having the leaves glabrous or fairly sparsely glandular pubescent and rather deeply lobed on the margins, instead of densely setellate-pubescent to tomentose at least on the lower surface and shallowly crenate on the margins. The flowers of the two species are very similar and if the genus *Mahernia* were maintained they would, on account of the filaments, be placed in that genus. This accounts for the combination *Mahernia grandiflora* (Ait.) Burch. ex Ker Gawl. in the Botanical Register. Masson's species, *H. grandiflora*, is restricted to the Karoo between the Laingsburg and Carnarvon districts whereas Burchell's species is found only in the Kalahari north of the Orange River which Masson did not reach. The painting in Paterson's " Travels " facing page 60, which is also cited in the Botanical Register as being the same species as Burchell's plant, is *Hermannia stricta* (E. Mey. ex Turcz.) Harv., found only along the lower reaches of the Orange River. It has flowers resembling *H. grandiflora* and *H. burchellii*, but is not closely related, differing in the type of inflorescence and the long-horned capsules.

Hermannia cuneifolia *Jacq.* var. **glabrescens** (*Harv.*) *Verdoorn*, comb. nov. Lectotype: *Drege* s.n. (K!).

H. pallens Eckl. & Zeyh. var. *glabrescens* Harv. in Fl. Cap. 1: 190 (1860), partly, as to *Drege* specimen labelled *H. multiflora* and annotated by Harvey as a variety of *H. pallens*, excl. *Barber* s.n. in Herb. Hook. (K).

When reviewing the genus *Hermannia* for the Flora of Southern Africa it was found that *H. pallens* Eckl. & Zeyh. (1835) is synonymous with the earlier species *H. cuneifolia* Jacq. (1797). It was also found that the species may be separated into two groups of varietal rank with more or less distinct areas of distribution, overlapping only on the borders. This necessitated a clear definition of the variety *H. pallens* var. *glabrescens* Harv.

When describing this variety Harvey cited two specimens, one collected by Drege and the other by Mrs. Barber. On inspecting these sheets, sent on loan from Kew, it was found that the Drege specimen, which happens to be mentioned first under the variety, best matched the diagnosis which reads " leaves glabrescent, very sparingly

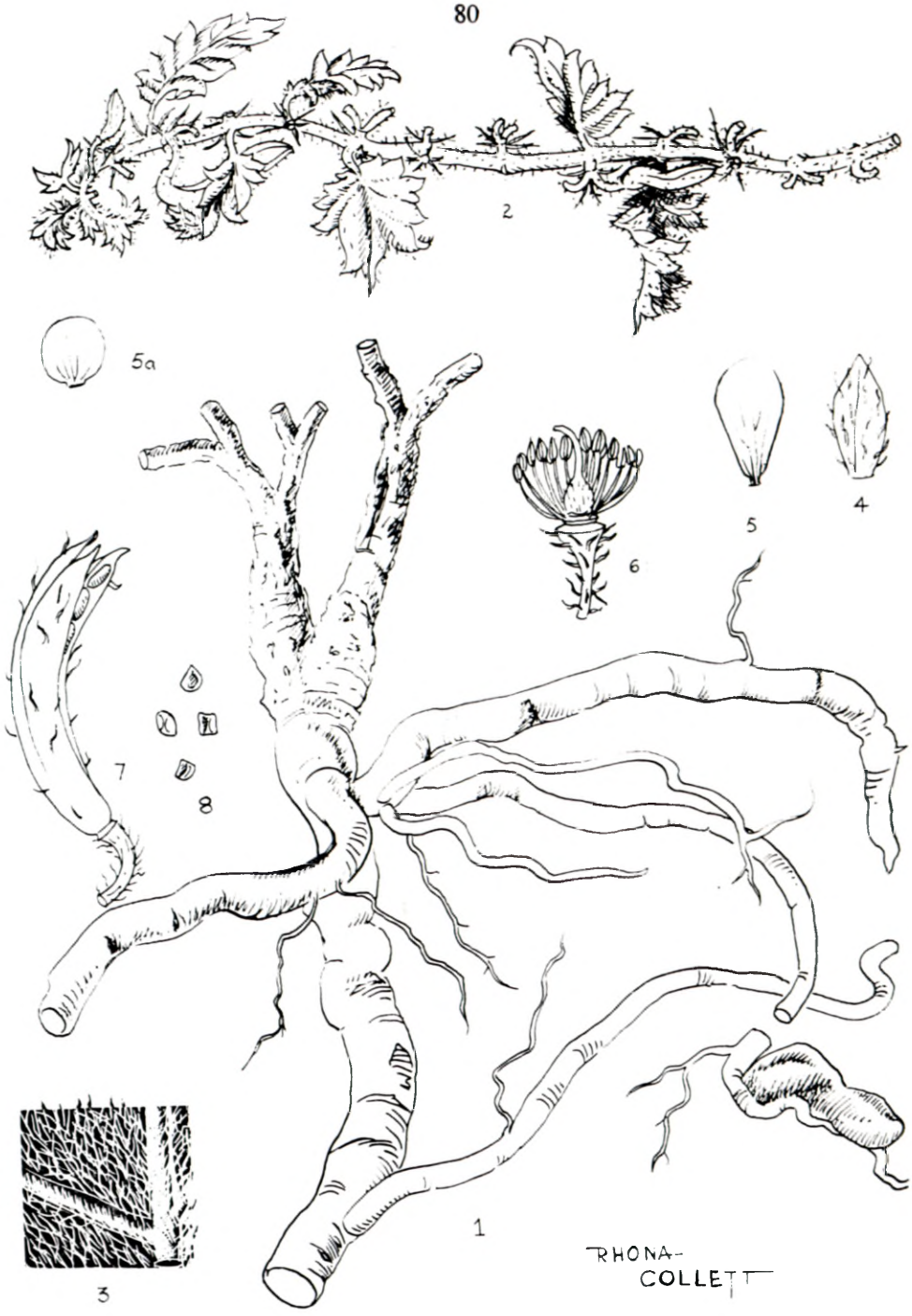

FIG. 8.—**Corchorus sulcatus.** 1, rootstock and in bottom right-hand corner a small stone to illustrate how the roots curved around and under the loose stones; 2, upper portion of a prostrate branch, showing the persistent peduncles and pedicels from which the fruits have fallen; 3, section of the under surface of leaf, × 7; 4, sepal × 3; 5, obovate petal, × 3; 5a, suborbicular petal from neighbouring flower × 3; 6, androgynophore bearing stamens and ovary × 3; 7, capsule × 2; 8, seed × 2.

scaly ". The specimen collected by Mrs. Barber in the type locality of *H. pallens* is obviously merely an odd specimen of the typical variety, differing in that it has a few leaves which are glabrescent on the upper surface, but they are densely " scaly " (lepidote stellate) below. The Drege specimen on which the leaves are " sparingly scaly " and the label bears the words " *H. pallens* var. *subglabra* " in Harvey's handwriting is therefore here selected as the type of Harvey's variety. It happens to match the group presently segregated as a variety and found mainly in the transitional zone between Karoo and grassland, which stretches roughly from the vicinity of Beaufort West north-eastwards in a widening band through Middelburg to Aliwal North and through Herbert district into the Orange Free State, reaching Lesotho in the east. The locality where Drege collected the type specimen is by implication the " Hexrivierbergen " for in Zwei Documenta that is given as the only locality for Drege's concept of *H. multiflora*. This is to the south-west of the area of distribution of the variety as indicated by the presently available material. There may be some uncertainty about the exact locality of the Drege specimen, but there is no doubt about its identification. It is conceivable that further specimens may be found outside the main distribution area.

H. cuneifolia var. *glabrescens* differs from the typical variety in the shrublets being generally 30–40 cm tall, more repeatedly branched, the branchlets shorter, rigid and early glabrescent; the leaves more sparsely lepidote-stellate; the inflorescence congested at the apices of numerous, short, lateral twigs, usually with only 3 to 5 flowers in each; flowers smaller, just over 5 mm long (instead of 8–10 mm long); the calyx more narrowly campanulate and slightly narrowed at the throat; and the petals glabrous or nearly so and cuneate into the claw instead of being distinctly ciliate to densely pubescent along the margins and abruptly narrowed into the claw.

CAPE.—Ceres: Bokkeveld, Hexrivier Mts.?, *Drege* s.n. (K, lecto., W); Beaufort West: Nieuwveld Mts., *Esterhuysen* 2748; Sunnyside, *Esterhuysen* 5056. Murraysburg: *Van Heerden* 1. Cradock: *Brynard* 43; *Long* 770; 772; Modderfontein, *Acocks* 12811. Middelburg: *Horn* s.n.; Conway Farm, *Gilfillan* in herb. Galpin 2955; 5507. Richmond: Leopards' Vlei, *Bolus* 15341. Colesberg: *Botha* in Bloemfontein Univ. Herb. 7547. Aliwal North: *Thode* A1840. Herbert: Thornhill, *Leistner* 1422.

O.F.S.—Philippolis: *Smith* 4485; 4497. Rouxville: *Ecklon & Zeyher* loc. 114 in Linnaea 19. Zastron: *Maree* 1. Fauresmith: *Smith* 413; 429a; 4344; 4373; 4407; 4430; 4541; *Henrici* 1815; 1864; *Verdoorn* 1140. Thaba Nchu: *Roberts* 2666. Bloemfontein: *Gemmell* in Bloemfontein Univ. 6440; *Thode* A521.

LESOTHO.—Leribe: *Dieterlen* 755.