Type material of names based on plants from Namibia collected by F. Schäfer and kept at the Senckenberg Museum of Natural History, Görlitz (GLM)

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Abstract

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The GLM herbarium collection houses vascular plant specimens from Namibia collected between 1909 and 1913 by Fritz Schäfer. Duplicates at Berlin-Dahlem (B) were partly destroyed during World War II, and further duplicates are known only in few cases at Zurich (Z) and Cape Town (NBG). At GLM we traced 27 type specimens of 20 validly published names, for eight of these names no further type material is known to have been preserved elsewhere. We typify the names involved and designate Schäfer specimens preserved at the herbaria GLM or B, respectively, as lectotypes for *Abutilon schaeferi*, *Anthericum apicicolum*, *A. diphyllum*, *A. glutinosum*, *Aster schaeferi*, *Gnidia suavissima*, *Hermannia seitziana*, *Lachenalia klinghardtiana*, *Lebeckia cinera var. schaeferi*, *Oldenlandia schaeferi*, *Pelargonium grandicalcaratum*, *P. squarrosum*, *Solanum schaeferi* and *Viscum schaeferi*, and a Dinter specimen preserved at NBG for *Pelargonium mirabile*.

Additional key words: Moritz Kurt Dinter, southern Africa, flowering plants, herbarium, typification

Introduction
Fritz Schäfer (b. 21.2.1881 in Görlitz, d. 1931 in Görlitz) was a physician and amateur botanist. According to a dossier in the herbarium of the Senckenberg Museum of Natural History at Görlitz (GLM), he moved to former German Southwest Africa (today Namibia) in 1907 and worked there first at a railway construction enterprise and since 1911 at the Deutsche Diamantgesellschaft, which exploited the diamond deposits around Lüderitzbucht (Fig. 1). Between 1909 and 1913 he collected plants and also vertebrate animals in Southwest Africa (Dinter 1918; Dunger 1986; Frahm & Eggers 2001; Hardtke & al. 2004; GLM dossier). In 1910 Schäfer met Moritz Kurt Dinter, the leading botanist at that time in Southwest Africa, who later described Schäfer as a good observer of the flora and who pointed out the “excursion” into Schäfer’s herbarium as the most notable event at his stay at Seeheim (Dinter 1918). In 1914 Schäfer came back to Germany and served in WW I in Europe (GLM herbarium dossier). After the war, Schäfer was first in Küstrin (Dinter 1920) and from 1920 in Spitzbergen (GLM herbarium dossier). In 1927 he returned to Görlitz.

Already from an early stage Schäfer was in close contact with the GLM herbarium. In a letter to the GLM curator Hugo von Rabenau he names him his teacher and fatherly friend and remembers his own preparatory work in the herbarium under Rabenau’s supervision. In 1910/11 Schäfer donated 750 Southwest African plant specimens

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to the GLM collection and in 1915/16 another 100 specimens. In 1927 he donated his whole herbarium to the GLM (GLM herbarium dossier).

Original descriptions of taxa based on Schäfer’s collections were published by the Berlin botanists Harms (1912), Pilger (1913), Krause (1913, 1921), Ulbrich (1913), Engler & Krause (1914), Dammer (1915), Knuth (1918) and Engler (1919). They partly refer simultaneously to Schäfer and to Dinter gatherings as syntypes, or to material that simultaneously bears a Schäfer and a Dinter number. The latter fact (see under *Manulea schaeferi* Pilger, below) shows that both had exchanged material at that time already (see also under *Hermannia seitziana* Engl., below).

It is not known to what degree Schäfer material was included by Dinter in his “specimens for literature” swap agreement with the Botanical Museum in Berlin (Dinter 1918). At any rate, the fact that in some cases (see below) specimens with the same number from Schäfer’s collection were the bases of independent descriptions of taxa by Dinter and by Berlin botanists shows that Schäfer material had also come to B independent of Dinter.

Dinter (1914) also mentions Schäfer as a collector of succulent plants that had been sent via Berlin to the Giardini Botanici Hanbury in La Mortola, Italy.

In 1920 Dinter dealt with material from Southwest Africa that was sent to him by Schäfer (Dinter 1920). Additionally, Dinter revised the Schäfer material that was at GLM at that time already. The result was his publication “Plantae novae Schäferianae” (Dinter 1920) with descriptions of several new taxa.

The aim of the present publication is to identify type material among Schäfer’s specimens at GLM, duplicates at B and elsewhere, to typify the corresponding names and so to clarify the status of the material.

**Material and methods**

Potential type material from Schäfer’s collection at GLM was identified on the basis of the labels of the specimens compared with the protologues (original descriptions) of the respective taxa as well as with the information given by Merxmüller (1966–72). Related material at Berlin-Dahlem (B) was searched for, using also the online database (Röpert 2000+) as well as the unpublished catalogue of Dinter, which is preserved at B (Unpublished Sources no. 3). Furthermore, the correspondence between Dinter and Rabenau (Director of the GLM herbarium in 1920), which is preserved in the autograph collection of the Senckenberg Museum of Natural History in Görlitz, was studied. In addition, other herbaria that are known to hold Dinter specimens were consulted and the online database of Zurich (Z) (Anonymus 2010) and the Aluka database (Aluka 2010) were consulted for possible type material of the taxa considered here. Herbarium abbreviations follow Thiers (2008+).

**Results**

We traced at GLM altogether 357 Schäfer specimens collected in Southwest Africa between 1909 and 1913. They often bear annotations by Dinter. Among them are 27 type specimens of different status related to 20 taxon names; one former GLM specimen was later accessed at B. Two specimens are the basis of invalid or unpublished names, which are listed in a separate section, below, two were cited in a nomenclaturally superfluous publication (see under *Pelargonium mirabile*).

Description of new taxa by Berlin authors and independently by Dinter concerns material collected in 1913 in the Klinghardt Mts. Particularly in the case of *Pelargonium grandicalcaratum* Knuth it is obvious that duplicates came to B independently of Dinter, since this taxon was described before Dinter got access to Schäfer’s collections from this area (see below). An index of 84 numbers of plant specimens collected by Schäfer mostly in the Klinghardt Mts, which is available in the herbarium dossier of GLM, bears the date 28.1.1916. It refers
probably to the accession of 100 specimens in 1915–16. It is nearly identical with the species list given by Dinter (1920) who refers to specimens collected by Schäfer that had “mostly been determined in Berlin”. A note by Rabenau from January 1920 in the GLM herbarium dossier mentions an “index of Mr Volkens, Dahlem” comprising Schäfer specimens at GLM, which was loaned to Dinter (Dahlem stands for the herbarium of B).

Of the 11 “Plantae novae Schäferianae” that were first described by Dinter (1920), 8 taxa are represented with type material at GLM. The wording of Dinter evokes the impression that he had received all of the underlying material from Schäfer himself, but Dinter’s letters to Rabenau show that he received only a single packet directly from Schäfer, containing specimens from the Klinghardt Mts collected in 1913. Further material he borrowed from GLM. It is not known how many material Dinter took out from Schäfer’s packet. Of the taxa described by Dinter (1920), *Ferraria schaeferi* and *Pharnaceum longearistatum* were not found at GLM now. From the material borrowed from GLM, Dinter mentions in his letters the number of 9 “half sheets”, i.e. duplicates that he wished to get for his own collection as well as for Schinz. Furthermore, he kept the specimen of *Lotononis rabenavianna* (Schäfer 101, see below) and that of an unknown *Scrophulariaceae* (*Schäfer 413*); the latter in order to be sent to Schinz for determination, with the proposed genus name “*Schaeferothamnus*”.

Material from Dinter’s collection has come into possession of several herbaria besides GLM and B. However, Schäfer specimens seem to have been amongst it only in few cases (see below). Dinter’s collecting activities for Z had ended in 1905 already, before he got into contact with Schäfer (Dinter 1918). At STU, no material of the considered taxa could be traced. Dinter types that are housed there originate from Schlenker’s herbarium (Joßberger in litt.; Peines & Engelhardt 2006). At M, Dinter material is dated from the 1930s or later, which means that there is probably no material related to that at GLM (Schuhwerk in litt.). Information regarding Schäfer material of *Aster schaeferi* at K and at BM (Grau 1973) is erroneous (see below).

The title of Dinter’s unpublished catalogue (see Unpublished Sources no. 3) suggests that Dinter collected material for a “Landesherbarium”, probably referring to the collections of the former Landesmuseum in Windhoek, and it might be possible that Schäfer material incorporated in Dinter’s collection was among this material. It is, however, not clear whether any of these specimens has ever reached this museum. Dinter (1923) mentions that after
WW I he found his herbarium, which he left in Southwest Africa in 1914, to be in good condition at its place in his home. This herbarium he later sold to South Africa (Schade 1955), what is most probably the way the Manuela schaeferi duplicate came to Cape Town (NBG). It is therefore not very likely though possible that further duplicates of Schäfer’s early collections incorporated into Dinter’s herbarium remained in Namibia. An overview on related specimens at WIND and other Namibian institutions is not possible, yet (Hillebrecht in litt.).

Below we list the names that are represented at GLM with type material collected by Fritz Schäfer. Most of the collection sites are shown in Fig. 2.

The names are arranged by families in alphabetical order with the monocotyledons following the dicotyledons. The structure of the entries is as follows: (1) The name based on material by Schäfer with bibliographic reference. (2) If different, the correct name of the taxon, unless stated otherwise, according to Germishuizen & Meyer (2003). The taxonomically correct name is always given in bold face. (3) Type citation in the protologue. (4) Status of the type(s) and citation of the label text of the type material, including isotypes and syntypes/paratypes known to exist. (5) Notes on the typification or the collections.

Scans of the specimens will be made available via internet at the SeSam database of the Senckenberg Gesellschaft für Naturforschung.

List of names

Dicotyledoneae

Amaranthaceae

Hermbstädtia schaeferi (Schinz) Schinz & Dinter

Type citation: “Gross-Namaland: leg. Dr Schaefer, commun. Kurt Dinter, bei der Station Gawachab”.

Holotype: [Namibia], Gross Namaland, Gawachab, 1918, Schäfer s.n. (Z 000000267); putative isotypes: “Celosia schäferi Schinz sp. nov., Gawachab, 2.1910, Schäfer 390” (GLM 160382); “Hermbstädtia spec. nov. (wird von Schinz veröffentlicht [see Schinz 1921]), det: Schinz, Gawachab, Bez. Keetmanshoop, 2.1910, leg. Dr F. Schäfer No 390” (GLM 102620); “Celosia schäferi Schinz sp. nov., Gawachab, 2.1910, Schäfer 390” (GLM 145550). The GLM material most probably represents isotypes. B 100154175 and B 100154176 are duplicates of the GLM material and thus probable isotypes as well.

According to annotations of Dinter on the specimens at B, the collection site Gawachab is situated near Seeheim.

Asteraceae

Felicia filifolia subsp. schaeferi (Dinter) Grau

Type citation: “Namaland: Tafelberge bei Buntfeldschuh, Dr Schäfer 507”.

Lectotypus (hic designatus): [Namibia], “Aster schaeferi Dtr. sp. nov., Buntfeldschuh, 7.1913, Dr F. Schäfer 507” (GLM 145550).

No duplicate could be traced at B or elsewhere. In the case that no duplicates ever existed, this would be the holotype. This is, however, not sure; we therefore choose GLM 145550 as the lectotype of Aster schaeferi.

Grau (1973) mentions the holotype as being housed at K and a duplicate at BM. At K there is, indeed, a folder of Felicia filifolia subsp. schaeferi marked as “type”. It, however, contains a specimen collected by Dinter (Hind in litt.). Also at BM, F. filifolia is represented only by Dinter specimens from the 1920s and no Schäfer gatherings of any taxon are in the BM type specimen database (Hunnex in litt.).

Fabaceae


Type citation: “Schäfer no. 101, Sandboden bei Klein Karas, 1300 m, 1909”.

Holotype: [Namibia], “Kl. Karras. 4.1901” [year “9” by the same hand altered to “I”], Schäfer 101 (B 100349155).

According to Dinter (Unpublished Sources no. 1), he had borrowed the specimen Schäfer 101 from GLM and wished to keep it for a longer time for the diagnosis.
Dinter (Unpublished Sources no. 2) mentioned that the sheet was in B with Harms at that moment. While the specimen originally came to Berlin as a loan, it was later accessioned there and incorporated. No document about the circumstances is extant, perhaps there is a connection with the fact that after the death of Rabenau in 1921 the GLM herbarium was without curation for a longer time.


= *Lebeckia cinerea* E. Mey.

Type citation: “Granitberg zwischen Bogenfels und Prinzenbucht, Dr Schäfer 598”.


The specimen here chosen as lectotype of *Lebeckia cinerea* var. *schaeferi* is the best developed and the only one annotated with this name; the duplicate at B, with the label in Dinter’s hand, is rather sparse, consisting of one shoot only. The varietal name “*schaeferiana*” as given on the isolecotype sheets was published by Dinter (1922: 437) as a nomen nudum.


= *Melolobium macrocalyx* var. *longifolium* Dümmér

Type citation: “Sandverhaar, tiefer Dünensand, 800 m über dem Meeresspiegel, Dr F. Schäfer 278” [Glanz-Kalkföhn, auf überschwemmten Boden” and “Dtr. 2040, Seskamelbaum, Satansplatz”.

Lectotype of *Melolobium stenophyllum* (designated by Moteetee & Wyk 2006): [Namibia], “*Witvley-Marienthal*, grosse rote Dünen (Dinter no. 1976, 3.1911)”.

Lectotypy of *Monsonia namaensis* (designated by Ven- ter 1979: 77); [Namibia], “Satansplatz 25.3.1911, Dinter 2040” (SAM 72744 at NBG); paralectotype: “*Monsonia* spec., Seeheim Kalkfontein km 16, an überschwemmt gewesenen Stellen, häufig, nach Mentha piperita riechend, 2.[19]09, Schäfer 55” [by Schäfer]; “*Monsonia namaensis* Dtr. sp. nov. / Seit vielen Jahren von mir für *M. umbellata* gehalten von der sie sich aber durch größere Blüten, deren Petalen viel länger als der Kelch ist, größere Blütenzahl der Dolden und breitdreieckige Nebenblätter unterscheidet” [by Dinter] (GLM 104540).

The specimen SAM 72744 was annotated as lectotype by Venter in 1978. The GLM specimen is a syntype or paralecotype, respectively. No material could be traced at B and no duplicates are known to exist somewhere else.

The collecting site of the lectotype, given with “Seskamelbaum, Satansplatz” in the protologue and with “Satansplatz” on the label, is a not precisely determinable location between the farms Seskamelboom and Satansplatz (Dinter 1918: 49–50).


= *Pelargonium crassicaule* L’Hér.

Type citation: “Rote Kuppe (Wüste östlich Lüderitzbucht) Dtr.Nr. 2600”

Lectotypus (hic designatus): [Namibia], “Rote Kuppe (Wüste östlich Lüderitzbucht) Dtr. NR. 2600”

Type citation: “Rote Kuppe (Wüste östlich Lüderitzbucht) Dtr. Nr. 2600”

*Lecotype (hic designatus):* [Namibia], “Rote Kuppe, cult. Okahandja Febr. 1913, Dinter 2600” (SAM 72776 at NBG; isolecotype: SAM 72805 at NBG).

Dinter (1914) gives a short but formally sufficient description and also provides an instructive photograph of the plants. The name can thus safely be regarded as validly published, but is illegitimate as a later homonym of *Pelargonium xmirabile* Sweet. Dinter (1920), how-
ever, considered his publication of the name in 1914 as insufficient, provided a more detailed description and cites two synotypes: “Dtr. no. 2600, Namaland: Auf den Gneißbergen der Roten Kuppe, 2 km nördlich der Station in Hunderten von Exemplaren, Jan. 1910” and “Dr Schäfer 577, Geröll des Dreikugelbergs im Klinghardtgebirge”.

Following Dinter (1920), other authors, e.g. Walt & Vorster (1981), considered the name of 1914 to be a “nom. subnd.”, which is, however, no category of the Code (McNeill & al. 2006), and cite the name from the 1920 publication. Consequently, the two collections cited in the latter work were considered as syntypes. Taking the name as validly published in the 1914 publication, the Schäfer 577 gathering cited by Dinter (1920) has no type status and a lectotype can thus be chosen only from Dinter 2600, of which material is known only to be extant in SAM at NBG.

Both SAM specimens were annotated by Vorster in 1979 as “syntype of Pelargonium mirabile Dinter”. The identification of this material as types is surely correct, although the collecting dates differ between the description and the labels. The note “cult. Okahandja” shows that Dinter cultivated these plants (or this single plant, later divided) that were originally collected by him at the Rote Kuppe in 1910 in his garden in Okahandja until they flourished in 1913. There is no evidence against the assumption that the trunk was taken from the garden together with the flowering shoots. Our impression from the scans of the Dinter 2600 specimens sent to us from NBG is that the elements originate from a single plant that was divided into a couple of parts and thus preserved at one time (McNeill & al. 2006: Art. 8.2); the two specimens at SAM may therefore be regarded as duplicates. The collecting date is February 1913.

Two specimens of the collection Schäfer 577 are preserved at GLM: “Pelargonium mirabile Dtr. sp.n., det: Dinter, Klinghardtgebirge, Geröll des Dreikugelberges, 14.8.1913, leg. Dr F. Schäfer 577” (GLM 112797, 132652).

Walt & Vorster (1981) point out some morphological differences between typical Pelargonium crassicaule and P. mirabile and synonymised them only with reservations. Thus, although both were synonymised also by Germishuizen & Meyer (2003), further taxonomic studies are desirable.


Type citation: “Geröll am Abhang des Dreikugel-Berges im Klinghardtgebirge (Schäfer a. 1913 no. 579, Typus in herb. Berol.!)”.


Type citation: “Schäfer 579, Namaland: Geröll am Abhang des Dreikugelbergs im Klinghardtgebirge, bisher nur einmal gefunden.”


The holotype of Pelargonium grandicalcaratum was apparently lost when the Berlin herbarium was destroyed by the air raid in 1943. Walt & Vorster (1988) assumed that also “the type specimen” of P. squarrosum “was destroyed during the Second World War”. However, Dinter (1920) did not designate a certain specimen of the collection Schäfer 579 as type and actually two duplicates of Schäfer 579 are extant at GLM. The neotypification of P. grandicalcaratum by Walt & Vorster (1988: 61) is superseded by the above lectotypification, which is done simultaneously with the same sheet also for P. squarrosum to assure their homotypy.

Malvaceae


Type citation: “Groß-Namaland: an Wegen und Revieren bei Aus (Dr Schaefer, Südwest n. 361!, vereinzelt blühend und fruchtend, ohne Datum 1910)”.

Lectotypus of Abutilon schaeferi (hic designatus): [Namibia], “Abutilon Schaeferi Ulbrich, an Wegen und Revieren bei Aus, 1910, Schäfer 361” (GLM 104697).

No duplicate was traced at B or elsewhere. The material at B was apparently destroyed in 1943.

Rubiacae


Type citation: “Schäfer n. 335, Bezirk des Namaqualandes: auf den Bergen hinter Klein-Karas. – Mit Blüten und Früchten gesammelt im Februar 1911”.

Lectotypus of Oldenlandia schaeferi (hic designatus): [Namibia], “Oldenlandia Schaeferi Krause sp. nov., Berge hinter Klein Karas bei km 112, 2.1910, Schäfer 335” (GLM 139520).

Whereas the collecting date reads “2.1910” on the sheet, Krause cited “2.1911” in the protologue. However, the collection number leaves no doubt regarding the identity. No specimen could be traced at B or elsewhere. In the case that no duplicates ever existed, the GLM specimen would be the holotype but it is more likely that a specimen was preserved at B that was destroyed in 1943. We therefore choose GLM 139520 as lectotype of Oldenlandia schaeferi.
Scrophulariaceae

**Manulea schaeferi** Pilger in Bot. Jahrb. Syst. 48: 436. 1913

Type citation: “Dr Schäfer 41 (Koll. Dinter n. 1327), Groß-Namaqualand: Klein-Karas, bei 1300 m auf Sandboden, blühend und fruchtend im Juni 1909”.


The above cited SAM specimen at NGB is annotated with “lectotype of current name” proving its identity with Hilliard’s lectotypification.


Type citation: “Dinter n. 1069a!, Groß-Namaqualand: Aus, felsige Rinnsale bei 1400 m – Blühend und fruchtend im Januar 1910” and “Dr Schäfer 252 – Berge bei Aus – 1909”.

Lectotype (designated by Hilliard 1994: 385): [Namibia], Aus, 10.1. 1910, Dinter M. K. 1069A (SAM 74427 at NGB); isolectotype: [Namibia, Aus], 10.1. 1910, Dinter 1069 (SAM 67661 at NGB); paralecotype: “Manulea robusta Pilger sp. nov., Aus, sine anno, leg. F. Schäfer 252” (GLM 138086).

The SAM specimen at NGB cited as lectotype is annotated with “lectotype of current name” proving its identity with Hilliard’s lectotypification.

Solanaceae

**Solanum schaeferi** Dammer in Bot. Jahrb. Syst. 53: 343–344. 1915

= *Solanum burchellii* Dunal

Type citation: “Dr Schäfer 323, Deutsch-Südwest-Afrika: Kanus, 2.1910”.


Whereas the collecting date reads “1.1910” on the sheet, Dammer wrote “2.1910”. However the collection number leaves no doubt regarding the identity. No duplicates could be traced at B or elsewhere. In the case that no duplicates ever existed, the GLM specimen would be the holotype but it is more likely that a specimen was preserved at B, where Dammer was curator (Wagenitz 2009), and was destroyed in WWII. We therefore choose GLM 137593 as lectotype of *Solanum schaeferi*.

Sterculiaceae


Type citation: “Dr Schäfer 501, Groß-Namaland: am Tafelberg bei Buntfelschuh”.

Holotype: [Namibia, Namaland], “Tafelberg bei Buntfelschuh, 7.1913, Dr Schäfer 501” (B 100349156); isotypes: “Hermannia patellicalyx Engl. (1919), det: Dinter, Tafelberge bei Buntfelschuh, Bez. Lüderitzbucht, 7.1913, leg. Dr F. Schäfer 501” (GLM 133620); “Hermannia Schaeferiana Dtr. sp. nov., Tafelberg bei Buntfelschuh, 7.13, leg. Dr F. Schäfer 501” (GLM 132621).

The Berlin specimen can be considered as the holotype, since Engler worked at B and there is no evidence that he had seen any of the other duplicates (McNeill & al. 2006: Rec. 9A.4). The GLM specimens are thus isotypes.

The name *Hermannia schaeferiana* Dinter mentioned on the labels has not been published.


≡ *Hermannia dinteri* Engl. 1907, non Schinz 1898 = *Hermannia engleri* Schinz 1910 (Verdoorn 1980)

Type citation: “Dinter n. 1178 – Blühend im Januar 1910, Sandverhaar, um 800 m” and “Schäfer n. 285, blühend im Januar 1910”.


Dinter (1918: 32–33) describes his visit in the Sandverhaar between Kuibis and Seeheim on 15.1.1910 where he collected “the new *Hermannia Feddeana*” and his meeting with F. Schäfer in Seeheim later on the same day. So it is most likely that in this case the material in Schäfer’s herbarium originates from Dinter’s gathering and the syntypes cited in the protologue in fact represent duplicates (the notice “leg. Dr F. Schäfer” on GLM 133619 originates from a series of printed labels that were attached to sheets of the Schäfer herbarium, certainly without having proven the collector in each case). At any rate, the specimen at B is the only preserved type material of this species at the institution where the author worked. Therefore we choose this as lectotype of *Hermannia seitziana*. The name *Hermannia feddeana* Dinter (1918: 32) should best be regarded as invalid, the descriptive statement given in passing not satisfying the requirements of Art. 32.1(d) (McNeill & al. 2006), otherwise it would be another synonym of *H. engleri*.

Thymelaeaceae

Type citation: “Dr Schäfer 504, Namaland: zwischen An­
gras Juntas und Buntfeldschuh”.

Lectotypus (hic designatus): [Namibia, Namaland],
“Gnidia suavisissima, zwischen Angras-Juntas u.
Buntfeldschuh, niederliegender in der Windrichtung
gestreckter Zwergstrauch mit sehr wohlriechenden
Blüten, 7.1913, leg. Dr F. Schäfer 504” (GLM
101451); isolecotype: B 100349157.

Viscaceae

51: 470. 1914.

Type citation: “Namabezirk: Am Fischfluss bei Seeheim
(Schäfer n. 465. – Mit Blüten und jungen Früchten
gesammelt im März 1910)” and “bei Seeheim auf
Maerua Schinzii schmarotzend (A. Engler, Reise
daemisch-Sudwestafrika n. 6601. – Mit älteren
Früchten gesammelt Ende April 1913)”.

Lectotypus (hic designatus): [Namibia]. “Viscum Schae­
feri Engl. u. Krause, Am Fischfluss bei Seeheim
auf No. 466 (Maerua) schmarotzend, 3.1910,
Schäfer 465” (GLM 119349); isolecotype; “Viscum Schae­
feri Engl. u. Kraus., Bezirk Keetmannshoop,
Am Fischfluss bei Seeheim auf Maerua Schinzii
schmarotzend, 3.1910, det. Engl. u. Kraus., leg. Dr
F. Schäfer 465” (GLM 112799).

No further type specimen was traced at B or elsewhere;
also Balle (1968) did not mention any specimen of these
gatherings in the consulted herbaria. The specimen se­
lected as lectotype is in much better condition than the
other specimen.

Monocotyledoneae

Asphodelaceae

Regni Veg. 16: 338. 1920.

Type citation: “Dr Schäfer 553, Namaland: Klinghardt­
gebirge. Gipfel des Dreikugelberges zwischen Fels­
trümmern”.

52: 236. 1921, nom. illeg.

Type citation: “Groß-Namaqaland: Im Klinghardtge­
birge auf dem Gipfel des Dreikugelberges zwischen
Felstrümmern (Schäfer n. 553. – Blühend und fruch­
tend gesammelt im September 1913)”.

≡ Trachandra muricata (L. fil.) Kunth

Lectotypus of Anthericum diphyllum and A. apicicolum
(hic designatus): [Namibia], “Anthericum diphyllum
Dtr., Klinghardtgebirge, Gipfel des Dreikugelberges,
zwischen Felstrümmern, 14.8.1913, Dr Schäfer
553” (B 10 0165920); isolecotypes: “Anthericum
diphyllum Dtr. sp. nov., Klinghardtgebirge: zwischen
Felstrümmern des Dreikugelberges, 14.8.1913, leg.
Dr F. Schäfer 553” (GLM 122024); “Anthericum
diphyllum Dtr. sp. nov., det: Dinter, Klinghardtgeb.,
Gipfel des Dreikugelberges, Bez. Lüderitzbucht,
14.8.1913, leg. Dr F. Schäfer 553” (GLM 105511,
114978).

The specimen at B was interpreted as “holotype” of An­
thericum diphyllum by Obermeyer (1962). However, the­
re is neither an accordant notice of Dinter on that sheet,
nor did Dinter (1920) refer to a certain specimen as the
type. It is also not possible to interpret the specimen at
B as the holotype on the basis of Rec. 9A.4 of the Code
(McNeill & al. 2006), since Dinter did not work at B and
there is evidence that he had seen the duplicates that are
now at GLM. The existing specimens therefore have to
be treated as syntypes among them a lectotype has to be
chosen.

Although Anthericum apicicolum is based on Schäfer
553 as well, Obermeyer (1962) cites the holotype at B as
“probably destroyed”. That would mean that A. diphyl­
um and A. apicicolum were based on different specimens
of Schäfer 553. Krause’s citation of the collecting time
with “September” is surely an error.

It seems reasonable to select one specimen as lecto­
type for both names to assure their homoty.

Regni Veg. 16: 338. 1920

≡ Trachandra laxa (N. E. Br.) Oberm.

Type citation: “Dr Schäfer 559, Namaland: Sandfelder
zwischen Pietab und Sargdeckel im Klinghardtge­
birge”.

Lectotypus of Anthericum glutinosum (hic designatus):
“Anthericum glutinosum Dtr. sp. nov., det: Dinter,
Klinghardtgebirge, Sandfelder zwischen Pietab und
Sargdeckel, Bez. Lüderitzbucht, 14.8.1913, leg. Dr F.
Schäfer 559” (GLM 112793).

No duplicates could be traced at B or elsewhere. Ober­
meyer (1962) cites a “holotype” at B as “probably de­
stroyed”. Independent of the question, whether the spe­
cimen at B was the holotype, the existence of a further
duplicate beside that at GLM in the past and its destruc­
tion require a lectotypification with the remaining ma­
terial. The specimen designated as lectotype is the only
known extant material of the collection Schäfer 559.

Hyacinthaceae


Type citation: “Dr Schäfer 554, Namaland: Zwischen
Felsgeröll des Dreikugelberges im Klinghardtge­
birge”.

Lectotypus (hic designatus): [Namibia], “Lachen­
alia klinghardtiana Dtr. sp. nov., Klinghardtgebirge:
Dreikugelberg zw. Felsgeröll, Bl. braun gefleckt,
14.8.1913, Dr Schäfer 554” (B 100167127); isolec­
totypes: “Lachenalia klinghardtiana Dtr. sp. nov.,
Klinghardtgebirge: Felsgeröll auf dem Dreikugel­
bruge, 14.8.1913 (Blätter braun gefleckt wie bei Or-
The specimen at B was annotated as “holotype” by A. Sölch in 1959. However, there is neither an accordant notice of Dinter on that sheet, nor did Dinter (1920) refer to a certain duplicate as the type. It is also not possible to interpret the specimen at B as the holotype on the basis of Rec. 9A.4 of the Code (McNeill & al. 2006), since Dinter did not work at B and there is evidence that he had seen the duplicates that are now at GLM. A holotype does therefore not exist and a lectotype has to be chosen from among all duplicates.

Material related to invalid names

**Othonna lasiocarpa** (DC.) Sch. Bip. (Asteraceae)
Cited material: “Dr Schäfer 1276, N.: Klein Karas.”

The collection number cited in Dinter (1924: 316) does not seem to be Schäfer’s one but Dinter’s number, as is proven by a corresponding entry in Dinter’s catalogue: “1276/ Othonna 11 Schäferi Muschler / Kl. Karas / Schäfer” (Unpublished Sources no. 3). This may have been among the losses at B.

**Microdon bosciaefolius** Dinter in Repert. Spec. Nov. Regni Veg. 19: 236. 1923/24, nom. nud. (Sclerophyllaceae)
Cited material: “Dr Schäfer 590, N.: Granitberg zw. Prinzenbucht und Bogenfels”.
Based on: “Microdon bosciaefolius Dr. sp. nov., det: Dinter, Granitberg zw. Prinzenbucht u. Bogenfels, 9.1912, leg. Dr F. Schäfer No. 590” (GLM 139386)
No duplicate is known elsewhere.

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