THE GENERIC NAMES PUBLISHED BY N. M. VON WOLF

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O. SCHWARZ (in Repert. Spec. Nov. Regn. Veg. 47: 288. 1939) was the first in recent years to draw attention to the *Genera Plantarum Vocabulis Characteristicis Definita* of N. M. von Wolf and to the fact that certain generic names were validly published in it for the first time. MANSFELD (in Repert. Spec. Nov. Regn. Veg. 48: 267. 1940; op. cit. 49: 42. 1940) and H. P. FUCHS (in Verh. Naturf. Ges. Basel 72: 344–345. 1961), however, argue that none of the names in Wolf's work can be regarded as validly published. A study of the work and the others associated with it (Wolf, Concordantia Botanica, 1780; Genera et Species Plantarum Vocabulis Characteristicis Definita, 1781) has led me to the opposite conclusion, and in my view some twenty generic names are in fact validly published in Wolf's *Genera*.

Bibliographic details of the works in question are:

Genera Plantarum / Vocabulis Characteristicis / Definita / 1776. [1]–8, table (bound in), [1]–[178]. 8°. There is no indication of author. Pp. 3–177 of the main text are numbered, and on the un-numbered verso of p. 177 there is a list of "Errata".

Concordantia / Botanica. "Nota" on verso of title. 147 pp. innum., sign. A-S 4°, sign. T folio with blank verso to second leaf. Footnote at end of text ([T2] recto) "*Dantisci.* Typo Mülleri & cura N. M. de Wolf. 1780."

Genera et Species / Plantarum / Vocabulis Characteristicis / Definita. / In Marienwerder, / Typis Joan. Jac. Kanteri Typogr. Aulici / 1781. [1]–454 (table pasted in after p. 10) [this is the same table as is bound in after page 8 in the *Genera*], 8 pp. innum. (sign.* "Additamentum Alterum / Sibiricae Cel. Dni. Pallas. / et Aliae Quaedam."), table.

The one copy of the *Genera* that I have seen has the *Concordantia Botanica* bound in behind it, and so had the copies seen by Lampe (Gedachtnissrede auf den Herrn D. Nathanael Mattheus von Wolf in der ausserordentlichen öffentlichen Versammlung der Naturforschenden Gesellschaft zu Danzig am 10. Mai 1785: 29, footnote. 1785) and H. P. Fuchs (in Verhandl. Naturf. Ges. Basel 72: 344. 1961). Because of this Fuchs considers that the *Genera* was not published until 1780, but this does not seem to me to be necessarily so. All copies of the *Genera et Species* with the original title page that I have

seen, and all those for which I have seen an entry in a library catalogue or bibliographic work, have the *Genera* and the *Concordantia* bound in behind them in that order. In those I have seen the preface to the *Genera* is omitted, the first part of the preface to the *Genera et Species* being identical, although partly reset. Lampe (op. cit.: 30, footnote. 1785) says: "Zur Vollständigkeit des ganzen Buches gehören beide Werke, die der Herr *v. Wolf* auch immer, nach gänzlicher Voliendung [sic] beider, zusammen verband; nur ist alsdenn die Einleitung und Tabelle bei den *Gener.* überflussig, weil beides bei den *Gener. & spec.* schon enthalten ist." There is, however, at the British Museum a copy of the *Genera et Species* whose text is printed from the same type as the others but which has a title page reading: *Genera et Species / Plantarum / Vocabulis Characteristicis / Definita.* / Regiomonti / apud Wagner et Dengel / 1782.
and this has neither the *Genera* nor the *Concordantia* bound in, and is also without the "Additamentum Alterum".

It is not possible to elucidate fully the history of the publication of this work on the basis of present evidence, but there is no reason to suppose that, whilst the surviving copies of the *Genera* so far investigated were not issued until 1780 and had the *Concordantia* included, others were not issued earlier. Certainly the *Genera* had been printed before the *Concordantia* was prepared; there are slight differences in the classification adopted in the *Genera* and the *Genera et Species*, and the entries in the *Concordantia* for *Carandas* and *Jasminonerium* correspond to the classification adopted in the *Genera et Species*. There is thus no firm evidence that the *Genera* was not published in the year that appears on its title page, and this should therefore be accepted for the present. It appears that whether the work was published in 1776 or 1780 has no effect on the status of any name as far as priority considerations are concerned, but if the *Concordantia* is treated as part of the *Genera* as originally published *Jasminonerium* is illegitimate (see p. 158 below).

In the *Genera* and *Genera et Species* Wolf sets out a system similar to that in Bergeret's slightly later *Phytonomatotechnie Universelle* (1783–4) by which names for plants are derived from their characters. These names, which we will term formula names, are at three levels, family, genus, and species. The family formula names are of two syllables only and indicate the number of pistils and the number of stamens, whether the stamens are unequal and whether the plants have unisexual flowers, if so distinguishing those that are monoecious from those that are dioecious. The generic formula names indicate the nature and shape of the fruit, the number of seeds, and the shape and number of parts of the corolla, calyx and involucre. The specific formula names indicate whether the plant is woody or herbaceous, annual or perennial, its stature and branching, whether the stems are glabrous or hairy, the shape of the leaves, the type of inflorescence, the colour of the flowers, and the odour or taste of the plant.

The preface to the *Genera* explains this scheme in so far as it deals

with family and generic formula names. Wolf uses three letters additional to the normal roman alphabet, a gothic O, a reversed C, and N with an acute accent above. He also distinguishes long vowels from short ones by a circumflex accent over the former. Wolf clearly intended that his formula names should be used in speech as well as writing, for he gives instruction on the pronunciation of the letters. He then sets out how the family and generic formula names are to be formed from the characters of the plants and gives four examples showing how formula generic names are to be formed and how, having done this, one can look in the body of the book and "invenies nomen Scholae: Calligonum", "habebis *Asperula* pro nomine Scholae", "monstrabit Genus: *Solanum*", and "ducit ad *Circaeam*".

The main text of the work is set out in a manner reminiscent of volume 2 of Adanson's *Familles des Plantes*, in that the characters of the genera are given in tabular form. They are divided into un-named classes, sections, and groups of lesser undesignated rank by headings in the text giving their characters, the classes being designated by roman numerals, the sections by arabic numerals, and the lower groups by roman letters, greek letters, and, where further subdivision occurs, by one, two or more asterisks. In the left-hand column the family and generic formula names and the Latin generic names are set out. In the other columns the characteristics of the flower and fruit are given.

In even the lowest subdivisions more than one family formula name often occurs, e.g. on p. 27 under I, 6, a, α, *, there is:

Aî. Saprîri. *Lagoecia.*
Æî. Sæpvîvi. *Eryngium.*

There are even cases where two or more family formula names are associated with the same generic formula name and Latin generic name, e.g. on p. 11:

Æŷ.) Apvævæ.
Æzŷ.) *Andropogon.*

Conversely, the same family formula name can occur in different classes, e.g. on p. 3 under I, 1, b, α, there is:

Aê. Appe. *Parietaria.*

and on p. 57 under II, 3, f, β, there is:

Aê. Bâeve. *Callicarpa.*

There is not a one-for-one correspondence between the generic formula names and the Latin generic names. One Latin generic name can occur as equivalent to more than one generic formula name, e.g. on p. 21:

Azŷ. Apvŷvæ. *Apluda.*

and, in a different group of the lowest rank on the same page:

Azŷ. Apvŷsvæ. *Apluda.*

Often there is an indication of what part of a genus of earlier authors corresponds to a generic formula name, and occasionally which individual species, e.g.:

on p. 93 "Aâ. Wâpamhî. *Delphinium nectario uno.*"
on p. 98 "Yâ. Wŷpamhî. *Delphinium* 3. *Caps. Nect.* 1."
on p. 114 "Yâ. Wŷpæmhî. *Delphinium. Nectariis* 2."
and:
on p. 21 "Æzŷ. Appŷssô. *Hordeum murinum.*"
on p. 24 "Æŷ. Yppŷsnô. *Hordeum.*"

There are some cases where two or more generic formula names are bracketed together as equivalent to one Latin generic name and there is only one entry in the remaining columns against the bracketed formula names, e.g. on p. 6:

		Pist.	*Stam.*	*Semen.*	*Corolla.*
Icî. Apwî.) Apnæ.)	*Acnida*	5.	5.	ovatum.	semirot. 5. phyll. & lin. 2 phyll.

Not infrequently there are two Latin generic names cited in connexion with one generic formula name. In many such cases these are the names of a genus of restricted circumscription and that of the larger genus from which it is sometimes segregated, e.g. on p. 128:

Aæ. Fâdhemvæ. *Bicuculla. Fumaria.*
Aæ Fâphemvæ. *Cisticapnos. Fumaria.*
Aæ Fâfhemvæ. *Capnoides. Fum.*

In other cases the two names seem to be intended as synonyms, e.g. on p. 8:

Uzû. Upna. *Zostera. Alga.*

and in yet other cases the names seem to be intended as those of independent genera which do not differ in the characters that Wolf used in forming his formula generic names or in his tabulation, e.g. on p. 47:

Aco. Bravo. *Elate*
Cycas
Corypha

At times the same generic formula name, combined with different family formula names, appears in different entries and with different Latin generic names as equivalents, e.g. on p. 47 in addition to the entry cited immediately above there is:

Yco. Bravo. *Phœnix.*

According to the Code, names of genera "may even be composed in an absolutely arbitrary manner " (Art. 20). It follows that where Wolf uses a generic formula name only once and with as its equivalent a Latin generic name not previously validly published, one or other of these two is validly published as a legitimate generic name and the other is published as a synonym. His instructions about pro-

nunciation make it clear that if the generic formula names are regarded as validly published the gothic Ö should be transcribed as Öi, the reversed C as Sch, and Ń, said to be equivalent to the Spanish ñ, as N. Which of the two types of name is to be regarded as validly published must depend on a decision as to which of them, when there is not a one-for-one correspondence, denotes groups that Wolf regarded as taxa. In considering this point, Wolf's other botanical works need to be taken into account, and when doing so it will be necessary to remember that, in writings of that date, the word "genus" does not necessarily represent a taxon but can have the much wider meaning that it has in the terminology of the Aristotelian philosophy of classification.

The *Concordantia Botanica* is an alphabetical list of plant names, or perhaps it would be better described as two lists combined in one. There are entries in larger type, all of them Latin generic names, that are followed by an indication of the place in Wolf's classification in his *Genera* where the genus is to be found, e.g. "Acer. IV. 5. e. *β*." The entries in smaller type are followed by an indication of the genus, or in many cases the particular species, of which the name listed is a synonym, species being designated by their number in the third (Vienna, 1764) edition of Linnaeus's *Species Plantarum*. These entries consist not only of Latin generic names and names from classical literature but also vernacular names from German, French and English. There may be a number of entries under one name, e.g.:

Abutilon. Dill. v. *Sida* 12. 15–21. *Malva* 10. 22.
,, Ehr. v. *Napæa*. 2.
,, Plum. v. *Hibiscus*. 11.
,, Sloan. v. *Melochia*. 2. 3.

and in some cases there are both types of entry under one name, e.g.:

Acalypha. III. 1. c.
,, Lin. v. *Tragia* 2.
,, Diosc. v. *Urtica*.

None of Wolf's formula names appear in the *Concordantia*.

When we compare the *Concordantia* with the *Genera*, there are various discrepancies. Some genera that are treated as distinct in the *Genera* are treated as synonyms in the *Concordantia*, e.g. *Bulbine*, and others treated as distinct in the *Genera* are not listed in the *Concordantia*, e.g. *Botryoides*. There are also a number of genera not mentioned in the *Genera* that appear in the *Concordantia* as standing genera with their place in Wolf's classification indicated, e.g.:

Aciphylla. Forst. 1. 6.
Alina. Ad. III. 6. a. *α*.
Amerimnon. Br. IV. 5. c. *δ*.

The *Genera et Species Plantarum Vocabulis Characteristicis Definita* has a preface of which the first part is identical with that of the *Genera*,

although partly reset, and which continues with an account of the way in which specific formula names are to be formed. Its main text consists of entries in which the following are set out:

Family formula name,
Generic formula name,
Latin generic name or names,
Specific formula names preceded by a figure indicating the number of the species in the third (Vienna, 1764) edition of Linnaeus's *Species Plantarum*. Occasionally the Latin epithet of the species is added, especially when it is a generic name in apposition.

There are symbols indicating the continents from which plants come. These follow the Latin generic name when they apply to all species of the genus, otherwise they follow some or all of the specific formula names.

When two Latin generic names appear in an entry, one is a name not used by Linnaeus in the third edition of the *Species Plantarum* and the other is the generic name under which the species cited are placed by Linnaeus in that work. Occasionally there are three Latin generic names, two being synonyms for a genus not recognized by Linnaeus and the third that of the genus in which Linnaeus included it, e.g. on p. 101: "*Bustia. Asteroid. Buphthalmum.*"

The arrangement of the *Genera et Species* is the same as that of the *Genera* as far as the classes and sections of that work are concerned. The divisions immediately below the level of section are also, for the most part, the same in the two works, but below this level the classification is different, grouping being on habit in the *Genera et Species* and on floral characters in the *Genera*.

Although there are in the *Genera et Species* some specific formula names not preceded by the number of the species in the third edition of the Linnaeus's *Species Plantarum*, there is at least one species from that work cited in almost every generic entry, and genera not considered at all by Linnaeus are almost all omitted, even if they were included in the *Genera*. Thus in Classis I, the only genus in the *Genera et Species* under which no species from the *Species Plantarum* is cited is *Condea*. There are also a few cases where a species number has been omitted as a result of a manifest error, e.g. on p. 59:

Æŷ. Jcvîvæ. *Arundo. Bambos.* Ropavî.

In the same class in the *Genera* there are, however, the following, none mentioned in the *Genera et Species*:

Ancistrum Forst.
Ascarina Forst.
Gahnia Forst.
Laxmannia Forst.
Pennantia Forst.
Schawia Forst.
Tardaval
Thryocephalum Forst.

The authorities above are as given by Wolf; *Tardaval* was published by Adanson.

Following the main body of the work there is an *Index Linnaei*, each entry of which consists of a Latin generic name, a generic formula name, and a list of species giving both their number in the third edition of the *Species Plantarum* and their Latin epithet, and the page where their specific formula name is given. There is only one generic formula name given for each genus, even where there are more both in the *Genera* and in the main body of the *Genera et Species*, e.g. on p. 18 of the *Genera* there is:

Aî. Epvivi.) *Echium.*
Ephivi.)

and on pp. 51–53 of the *Genera et Species*:

Aî. Ephivi. *Echium.* 1) ....
Aî. Epvivi. *Echium aequale.* 2) .... 3) ....
Aî. Ephivi. *Echium inaeq.* 4) .... 6) .... 7) ....
Aî. Ephivi. *Echium.* 5) ....

but in the *Index Linnaei*, p. 384:

Echium. Epvivi. 1) – 7) ....

with no mention of Ephivi.

Following the *Index Linnaei*, there is a page of errata, including the following two entries:

transfer. Tamarindus ad paginam 295. lin. 3.

dele *totum genus Balsamine, et transfer.* ad pag. 298. in lineam 15.

This is followed by four pages of addenda and six of examples of how specific formula names are formed, the left-hand column having entries of this type:

Rqbarbæd.
Fagus sylvestr.

Finally there is an *Additamentum Alterum Sibiricae Cel. Dni. Pallas, et aliae quaedam*, with entries in this form:

pag.	lin.				
14	16	Æzê.	Ynvy.	Ribarze.	*Betula fruticosa.*

The evidence in favour of the view that it is the Latin names and not the formula names that denote taxa seems to me to be overwhelming. The various points can be summarized thus:

Different family formula names occur in the same groups of the classification adopted, and are even bracketed together in connexion with the same generic formula name, and the same family formula name occurs in widely different parts of the classification. This shows that they do not denote taxa.

Generic formula names are bracketed together and associated with

a single Latin generic name and a single set of tabulated characters. Where more than one Latin generic name is associated with a single generic formula name, the Latin names are never bracketed together.

The equivalents in the *Concordantia* for names treated there as synonyms are Latin generic names, not generic formula names.

In the errata to the *Genera et Species* entries in the main text are referred to by their Latin generic names and not their generic formula names.

The formula names must therefore be regarded not as names of taxa but as mnemonics for artificial groups, those denoted by generic formula names being more or less equivalent to taxonomic genera.

In consequence, any Latin generic names in the *Genera* that were not previously validly published and that are the only ones in a particular entry must be regarded as validly published by Wolf, for he gives diagnostic details. Where there is more than one Latin generic name in an entry, none can be regarded as validly published, for even in the case where one is that of a segregate genus corresponding to the generic formula name and the other that of the wider genus in which it was included by, e.g., Linnaeus, the status of the smaller taxon is uncertain. Wolf may well have regarded it not as a genus but as a subdivision of one.

If this view is rejected, then all Wolf's generic formula names must be regarded as validly published generic names. They cannot be rejected on the basis argued by Mansfeld (in Repert. Spec. Nov. Regn. Veget. 49: 42. 1940) that they are two-word names, the family formula name being part of the generic name, even although the same generic formula name is used in connexion with different family formula names for different taxa. Wolf in his preface (p. 6) definitely states that the single-word generic formula name is "generis nom[en]", and such cases as *Bravo* (see p. 150 above) and *Wêêwe*, cited by Mansfeld, would have to be regarded as the simultaneous publication of homonyms.

Fuchs apparently had not seen the *Genera et Species* when he wrote: "N. M. von Wolf beabsichtigte, wie aus dem ganzen Werk hervorgeht, eine monominale Nomenklatur technische Art einzufuhren", nor had he adequately studied Wolf's preface when he termed the generic formula name *Fâepcvira*, which he misspells "Fâepcvirs", "unaussprechbar" (in Verhandl. Naturf. Ges. Basel 72: 345. 1961). The generic formula names cannot be rejected on these grounds, but only for the reason that it is the Latin generic names and not the formula names that represent taxa.

The following is an annotated list of the generic names first published in Wolf's *Genera*:

Archangelica Wolf, Gen. Pl. Vocab Char. Def.: 32 (1776).
Type: *Angelica atropurpurea* L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 75 (1781).

Wolf in his *Genera* uses this name for a genus with "umbella rubra", but does not maintain it in his *Genera et Species*; against the same generic formula name under the heading "umbella rubra" in that work he has the entry:

Angelica. 3) Wypîrdfû.
This is *Angelica atropurpurea* L.

Wolf's use of this name antedates that by Hoffmann (Gen. Pl. Umbell. 1: 161. 1814), for a genus consisting of *Archangelica officinalis* Hoffm. (= *Angelica archangelica* L.) and *A. atropurpurea* (L.) Hoffm. These species are nowadays normally retained in *Angelica.*

Botryoides Wolf, Gen. Pl. Vocab. Char. Def.: 83 (1776).
includes: *Hyacinthus comosus* L.
H. botryoides L.
H. racemosus L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 173 (1781).

H. botryoides L. should presumably be taken as the type of this genus. It is a taxonomic synonym of *Muscari* Mill., which Wolf treats as a separate genus including *Hyacinthus muscari* L. and *H. monstrosus* L. (cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 173. 1781).

Bulbine Wolf, Gen. Pl. Vocab. Char. Def.: 84 (1776).
includes: *Anthericum aloöides* L.
A. annuum L.
A. asphodeloides L.
A. frutescens L.
A. hispidum L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 171, 175 (1781).

In the present list of conserved names, *Bulbine* Willd. (Enum. Pl. Hort. Berol.: 372. 1809. type: *B. frutescens* (L.) Willd.) is conserved against *Bulbine* J. Gaertn. (Fruct. 1: 41. 1788). This conservation is unnecessary, but because of it *Anthericum frutescens* must be taken as the type of *Bulbine* Wolf. The list of conserved names needs to be suitably amended.

Carthamoides Wolf, Gen. Pl. Vocab. Char. Def.: 39 (1776).
includes: *Carduus acanthoides* L.
Carduus altissimus L.
Carthamus carduncellus L.
Carthamus coeruleus L.
Carthamus creticus L.
Centaurea alpina L.
Centaurea centaurium L.
Cnicus acarna L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char Def.: 95, 97, 98 (1781).

It is somewhat difficult to be sure that Wolf intended to indicate the species of *Carduus* and *Centaurea* listed above as belonging to this genus, but this seems to be so. The species listed are currently referred

to the following genera, all published before 1776: *Carduus* L., *Carduncellus* Adans., *Carthamus* L., *Centaurea* L., and *Cnicus* L.

Catunaregam Wolf, Gen. Pl. Vocab. Char. Def.: 75 (1776).

This generic name was used by Adanson (Fam. Pl. 2: 85, 534. 1763) but was not validly published by him as he spelled it as two words "Catu Naregam". It is based on the "Katou-Naregam" of Rheede (Hort. Malab. 4: 29, t. 13. 1683), whose identity is uncertain but which is probably either *Randia uliginosa* (Retz.) Poir. or *R. brandisii* Gamble.

G. Taylor (in Exell. Cat. Vasc. Pl. S. Tomé: 197. 1944) drew attention to the fact that *Randia* L. *sensu lat.* was highly heterogeneous and Keay (in Bull. Jard. Bot. Brux. 28: 15 et seq. 1958), in a revision of the West African species previously referred to *Randia* and *Gardenia* Ellis, came to the conclusion that *Randia*, the type of which is an American species, was not represented in Africa. In a revision of the Asiatic members of this alliance, *Catunaregam* Wolf will require to be taken into consideration and may prove to be the correct name for one of the segregate genera, possibly that now known as *Xeromphis* Raf.

Cervaria Wolf, Gen. Pl. Vocab. Char. Def.: 28 (1776).
includes: *Anthamanta cervaria* L., which clearly should be taken as type, and one other species.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 74 (1781).

This is a taxonomic synonym of *Peucedanum* L. This publication antedates that of Gaertner (Fruct. 1: 90. 1788), hitherto regarded as the first publication of this name. It is an earlier homonym of *Cervaria* L. (Amoen. Acad., ed. 3, 1: 415. 1787, *nom. superfl.*), a name which Linnaeus never intended to publish as a substitute for *Ortegia* Loefl. ex L.; he had used it in an early dissertation reprinted in 1787, but had dropped it before 1753.

Coralloides Wolf, Gen. Pl. Vocab. Char. Def.: 174 (1776).
includes: *Lichen fragilis* L.
L. paschalis L.
L. rangiferinus L.
L. rocella L.
L. subulatus L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 345 (1781).

In the *Concordantia* (E 2 verso), Wolf has the entry "Cladona Br. v. *Coralloides Lichen*". It is therefore clear, as his diagnostic matter in the *Genera* strongly suggests, that he was using this name in the sense of *Cladona* P. Browne ex Adans. One of the species that he includes in the genus in the *Genera et Species* is *Lichen subulatus* L., the type of *Cladonia* Wiggers, *nom. cons.* This species should clearly be taken as the lectotype of *Coralloides* and that name added as *nomen rejiciendum* versus *Cladonia* in the Code.

Publication of this generic name is normally attributed to Hoffmann (Descr. Adumbr. Pl. Lich. 2: 25, t. 31 fig. 2. 1791), but he gave no

generic description, only a description of a previously known species, *Lichen globiferus* L., which he refers to the genus.

Eragrostis Wolf, Gen. Pl. Vocab. Char. Def.: 23 (1776).
includes: *Briza eragrostis* L.
Poa eragrostis L.
cf. Wolf, Gen. & Sp Pl. Vocab. Char. Def.: 63, 65 (1781).

This publication antedates that of Palisot de Beauvois (Essai Nouv. Agrost.: 70. 1812), usually taken as the first publication of this name, although it has sometimes been attributed to Host (Ic. & Descr. Gram. Austr. 4: 14. 1809), who, however, provided no generic description. This publication by Wolf means that the names *Eragrostis major* Host (loc. cit) and *Eragrostis minor* Host (tom. cit.: 15) are validly published names, and the example in Art. 43 of the Code should be deleted. Since Palisot de Beauvois (op. cit.: 74. 1812) removed *Briza eragrostis* to his new genus *Megastachya*, *Poa eragrostis* (*Eragrostis minor*) must be taken as the type of *Eragrostis* Wolf.

Jasminonerium Wolf, Gen. Pl. Vocab. Char. Def.: 57 (1776).

The name "Jasmino-nerium" was first used by Linnaeus in his *Flora Zeylanica* (:191. 1747), where he included it in the "Obscurae Pentandria" and quoted one synonym from Plunkenet and another from Hermann and Burmann. He appears never to have cited "Jasmino-nerium" nor either of these synonyms in any subsequent work. Adanson (Fam. Pl. 2: 171, 532, 564. 1763) treats "Jasmino-nerium" of Linnaeus as a synonym of his genus *Carandas* (based on "Carandas Rumph., Herb. Amboin. Auct.: 57, t. 25. 1755), on which Linnaeus also based his genus *Carissa* (Mant. Pl. 1: 7. 1767), with originally the single species *C. carandas* L. (tom. cit.: 52. 1767). *Carissa* L. is conserved against *Carandas* Adans.

In his *Genera* Wolf does not mention *Carandas* or *Carissa*, but in the *Concordantia* he has the following entries:

"Carandas. Rump. II. 3. d." in large type indicating a standing name (D 1 verso).

"Jasminonerium. Lin. v. *Karandas*." (I 4 verso).

and in the *Genera et Species* (:132. 1781):

"*Jasminonerium. Carandas. Nerium.* 4) Reldavwa."

In both the *Genera* (p. 129) and the *Genera et Species* (p. 267) Wolf treats *Nerium* as a separate genus, placing it among the plants whose fruit is a siliqua, whilst *Jasminonerium* is placed among those whose fruit is a bacca. Under *Nerium* in the *Genera et Species* there is also a "4) Reldavwa" listed. *Nerium* no. 4 in the third edition of the *Species Plantarum* is *N. zeylonicum* L., now known as *Wrightia zeylonica* (L.) R. Br.

In this confusing situation it would seem correct to conclude that *Jasminonerium* Wolf in his *Genera* is based on the "Jasmino-nerium" of Linnaeus, which in its turn is based on a specimen in Hermann's herbarium (vol. 3, fol. 24, specimen numbered "405" by Linnaeus,

405 being the number of "Jasmino-nerium" in the *Flora Zeylanica*). This specimen has been identified by Trimen (Hand-b. Fl. Ceyl. 3: 125. 1895) as *Carissa spinarum* L., and there seems no reason to suppose that this identification is incorrect. Wolf then, between 1776 and 1780, came to agree with Adanson that his *Carandas* and Linnaeus's "Jasmino-nerium" were synonyms. At the generic level this is correct and *Jasminonerium* Wolf is a synonym of *Carissa* L., *nom. cons.*; if Wolf's *Genera* and *Concordantia* are regarded as a single work, *Jasminonerium* is illegitimate, being a superfluous substitute for *Carandas* Adans., *nom. rejic.*, and *Carissa* L., *nom. cons.*, but, as already pointed out (p. 148), I consider this view incorrect.

Wolf's entries in his *Genera et Species* presumably indicate that he thought that two separate species were included under *Nerium zeylonicum* in the third edition of Linnaeus's *Species Plantarum* (:306. 1764), one that now known as *Wrightia zeylonica* (L.) R. Br. and the other that now known *Carissa carandas* L., in which species he included the "Jasmino-nerium" of Linnaeus.

In the *Genera et Species* Wolf uses a different basis of classification into third-order subdivisions within his section II. 3. from that adopted in the *Genera*. In this latter the entry for *Jasminonerium* is in under II. 3. f. β., whereas in the *Genera et Species* the entry for the genus is under II. 3. d.; the entry in the *Concordantia* for *Carandas* corresponds to that in the later work. This is one of the reasons for considering that the *Genera* was originally published separately from the *Concordantia*.

Karekandel Wolf, Gen. Pl. Vocab. Char Def.: 73 (1776).

This is based on the "Kare-Kandel" of Rheede (Hort. Malab. 5: 25, t. 13. 1685), which is a species of *Carallia* Roxb., *nom. cons.* It was formerly listed as a *nomen rejiciendum* versus *Carallia*, being attributed to Adanson (Fam. Pl. 2: 88, 532. 1763) but has been deleted from the most recent edition (1961) of the Code because, as correctly pointed out by Rickett and Stafleu (in Taxon 9: 69. 1960), Adanson spelled it as two separate words "Kare Kandel" and hence did not give it valid publication. It must now be reinstated in the list but attributed to Wolf.

Martagon Wolf, Gen. Pl. Vocab. Char. Def.: 84 (1776).
includes: *Lilium chalcedonicum* L.
L. martagon L.
L. pomponium L.
L. superbum L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 174, 175 (1781).

This is a taxonomic synonym of *Lilium* L. It is usually cited as having been published by Salisbury (Gen. Pl.: 57. 1866). *L. martagon* L. should obviously be regarded as the type species.

Mutellina Wolf, Gen. Pl. Vocab. Char. Def.: 31 (1776).
Type: *Phellandrium mutellina* L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 77 (1781).

This is a taxonomic synonym of *Ligusticum* L. No other post-Linnaean author seems to have used this generic name.

Myrthoides Wolf, Gen. Pl. Vocab. Char. Def.: 73 (1776).
Type: *Myrtus caryophyllata* L.

Wolf (Gen. & Sp. Pl. Vocab. Char. Def.: 156. 1781) has the entry "*Myrthoides. Myrthus.* 1) Ridapvan *", but in the same work (op. cit.: 158. 1781) he has "*Myrthus.* 1) Ripdapza. Ridabza. Ridavza. *vulg.* 3) . . . ." He distinguishes *Myrthoides* from *Myrtus* primarily of on the basis that the former has "Semina solitaria. Sem. 1" and the latter "Semina plura in locis aliquot. loca 3." From this it would appear that the "1)" in the *Myrthoides* entry is an error for "11)", designating *Myrtus caryophyllatus* L., and that that is the type of *Myrthoides*; this is accordingly a taxonomic synonym of *Syzygium* Gaertn. (Fruct. Sem. Pl. 1: 166. 1788), *nom. cons.*, and should be added to the list of names rejected against it.

Napellus Wolf, Gen. Pl. Vocab. Char. Def.: 114 (1776).
includes: *Aconitum lycoctonum* L.
A. napellus L.
A. pyrenaicum L.
A. uncinatum L.
A. variegatum L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 240 (1781).

Wolf separates *Napellus* from *Aconitum* L. in his *Genera*, restricting *Aconitum* to those species with a quinque-partite gynoecium, viz.: *A. anthora* L. and *A. cammarum* L. In the *Genera* & *Species*, however, he does not treat *Napellus* as a separate genus. As Linnaeus's original description of *Aconitum* (Gen. Pl., ed. 5: 236. 1754) includes "PIST. *Germina* tria (quinque) . . . . . OBS. Anthora *Pistillis quinque instruitur*", his name must be typified by a species with a tripartite gynoecium, and *A. lycoctonum* is usually recognized as the type of the genus. *A. napellus* should presumably be taken as the type of *Napellus*. All the species that Wolf included in *Napellus* are currently retained in *Aconitum*; even if that genus were to be divided along the lines suggested by Wolf, that name would have to be retained for the segregate he calls *Napellus*. However, as Wolf neither cites synonyms nor lists included species in his *Genera*, *Napellus* cannot be treated as a *nomen superfluum*.

Napellus is usually attributed to Fourreau (in Ann. Soc. Linn. Lyon, nouv. ser., 16: 327. 1868), who raised to generic rank *Aconitum* sect. *Napellus* DC. (Regn. Veg. Syst. Nat. 1: 371. 1817). As this section includes the type species of *Aconitum*, *Napellus* has been considered a *nomen superfluum*. The entry for this name in the *Index Nominum Genericorum* requires correction.

Olusatrum Wolf, Gen. Pl. Vocab. Char. Def.: 30 (1776).
includes: *Smyrnium integerrimum* L.
S. olusatrum L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 74 (1781).

Smyrnium olusatrum should clearly be taken as the type of this genus. This species is normally regarded as the type of *Smyrnium* L., which Wolf treated as distinct, and hence *Olusatrum* cannot be regarded as a superfluous name. *Smyrnium integerrimum* is currently placed in *Taenidia* Drude. I cannot trace that any author since Linnaeus other than Wolf has used *Olusatrum* as a generic name.

Phalaroides Wolf, Gen. Pl. Vocab. Char. Def.: 11 (1776).
includes: *Phalaris aquatica* L.
P. arundinacea L.
P. phleoides L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 34, 36, 38 (1781).

Phalaris phleoides L. is currently placed in the genus *Phleum* L. and the other two species are normally retained in *Phalaris* L. I cannot trace that any other author than Wolf has used *Phalaroides* as a generic name.

Pinea Wolf, Gen. Pl. Vocab. Char. Def.: 156 (1776).
includes: *Pinus cembra* L.
P. pinea L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 316 (1781).

This is a taxonomic synonym of *Pinus* L., and *Pinus pinea* should clearly be regarded as its type. I cannot find that any other author has separated these two species from that genus.

Spelta Wolf, Gen. Pl. Vocab. Char. Def.: 22 (1776).
Type: *Triticum spelta* L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 61 (1781).

This is a taxonomic synonym of *Triticum* L. No other author that I can trace has used this generic name since 1753.

Vaccaria Wolf, Gen. Pl. Vocab. Char. Def.: 111 (1776).
includes: *Saponaria cretica* L.
S. vaccaria L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 234 (1781).

Saponaria vaccaria is clearly to be taken as the type of this name. The genus is currently recognized as distinct (cf. Dandy, List Brit. Vasc. Pl.: 26. 1958. – Chater in Tutin *et al.*, Fl. Europ. 1: 186. 1964) and valid publication of its name is usually attributed to Medikus (Phil. Bot. 1: 96. 1789), who did not, however, provide any validating matter. Recently it has been thought that its first publication was by Moench (Meth. Pl. Hort. Bot. Agri Marburg.: 63. 1794) and that the name of its type species was in consequence *Vaccaria parviflora* Moench (loc. cit.) (cf. Index Nom. Gen.: no. 10/14856). The fact that the generic name was validly published by Wolf means that *Vaccaria pyramidata* Med. is the correct name for the type species.

The entry for this genus in the *Index Nominum Genericorum* requires correction.

Vincetoxicum Wolf, Gen. Pl. Vocab. Char. Def.: 130 (1776).
Type: *Asclepias vincetoxicum* L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 269 (1781).

The question of the correct name for the genus typified by *Asclepias vincetoxicum* L. has recently been discussed by H. P. Fuchs (in Verh. Naturf. Ges. Basel 72: 343 *et seq.* 1961) and a full synonymy is given by him. His conclusions, however, are based on the view that the latin generic names published by Wolf are published in synonymy, but this, as is argued above, is erroneous. The correct name of the genus is therefore *Vincetoxicum* and of its type species *V. hirundinaria* Med. (in Hist. Comment. Acad. Elect. Theod. Palat. Mannheim, Phys. 6: 404. 1790). Walter (Fl. Caroliniana: 104. 1788) must be considered to have given a new description of an already published genus and to have referred two new species to it; Walter provides descriptions for all genera mentioned in his work, whether they had been published previously or not.

The entry for this genus in the *Index Nominum Genericorum* requires correction.

Zeocriton Wolf, Gen. Pl. Vocab. Char. Def.: 21 (1776).
includes: *Hordeum distichon* L.
H. zeocriton L.
cf. Wolf, Gen. & Sp. Pl. Vocab. Char. Def.: 59, 444 (1781).

This generic name is normally attributed to Palisot de Beauvois (Essai Nouv. Agrost.: 114. 1812). *Hordeum zeocriton* should clearly be regarded as its type. It is currently regarded as a taxonomic synonym of *Hordeum*.