VII.—TYPES AND TYPE COLLECTIONS.

It has been indicated elsewhere that the first fungi found in South Africa were taken to Europe as part of the spoils of the earlier botanical collectors, or, later, were sent to European mycologists for identification. As a result of this practice, few of the earlier type specimens are to be found in South Africa, and when Dr. Pole Evans began his study of South African fungi, the lack of types and of authentically named specimens was a serious handicap. It was found necessary, therefore, to send further collections away for study

retaining duplicates in the country, until sufficient named material had accumulated to form a basis for future work.

Type specimens of fungi collected in the 18th and 19th centuries are scattered in many herbaria, and are not always easy to trace. Dr. Wiltshire (1944 : 5) states that " since the last International Botanical Congress, the Committee on Nomenclature of the Botanical Society of America undertook to gather data on the location of type specimens. A preliminary list in mimeographed form of the herbaria of notable mycologists and the places where they are preserved, was circulated some years ago, but is far from complete." This list is not available in South Africa, and information about the location of type specimens of South African fungi and lichens is meagre and very far from complete. In the succeeding pages an effort has been made to indicate where at least the more important of these collections are to be found. It is hoped that at some future date a South African mycologist will find it possible to catalogue South African types in European and American herbaria ; such a compilation would be of great service.

Most of Thunberg's specimens are in the Thunberg Herbarium in the botanical museum, Uppsala ; there are also a number in other herbaria from sendings to his friends while on his travels. Two of his collections, *Lycoperdon carcinomatis* [=*Podaxis pistillaris* (Linn. ex Pers.) Fr.] and *Lichen verrucosus* [=*Siphula tabularis* (Thumb.) Nyl.] are in the Linnean Herbarium, London (Jackson 1912 : 97, 99).

Collections made by Eaton, Harvey and Zeyher were sent to Berkeley for examination and are in the Berkeley Herbarium at Kew. In 1847, Taylor published descriptions of a number of lichens collected by Zeyher, which he found in the Hooker Herbarium. Part of Zeyher's collection of fungi was sent by G. Kunze to Elias Fries ; a few of these had not been studied by Berkeley, others were common to both collections. These fungi, and also those described by Fries from collections made by J. A. Wahlberg in Natal and parts of the Cape, are in the Museum of the Acad. Sc., Stockholm. Most of Drège's specimens are preserved in the Herb. Delessert at Geneva (Pole Evans 1917 : 101).

MacOwan's early collections were sent to von Thuemen, who distributed many numbers in his Mycotheca universalis. A number were identified by Winter and were distributed with the Rabenhorst-Winter Fungi Europaei et Extra-europaei. MacOwan prepared several sets of his Fungi austro-africani, of which one was sent to Cooke at Kew, where it was filed in the herbarium, and a second went to Kalchbrenner. A third set of MacOwan's plants, apparently including fungi, was sent to Theodor M. Fries, for in a letter dated 25th October, 1887, Fries writes from Uppsala : " The fine specimens of *Hydnora* and *Broomeia* are now true ornaments to our museum and the centuries that we have last received of your splendid *Herbarium austro-africanum* must, as well as those we have received before, be considered as the most precious additions that our herbarium have received of late. " A third set was left in Somerset East, when MacOwan went to Cape Town, and was later transferred to Grahamstown ; this set was acquired by purchase for the Pretoria Herbarium from Dr. S. Schonland when he retired from the curatorship of the Albany Museum. It is unfortunately not complete, nor is the set in the herbarium of the South African Museum, Cape Town.

MacOwan's lichens are more difficult to trace, and unfortunately very few numbers are to be found in South African herbaria. Some earlier collections, mostly from the Boschberg, were sent to Glasgow, where they were studied by Stirton and described in a paper which also dealt with lichens sent by Shaw and McLea. Some lichen numbers were included with the specimens sent to Kalchbrenner, who forwarded them to Lojka at Buda-Pesth ; Lojka was interested in the South African material and asked MacOwan to send specimens for the ' Lichenotheca universalis ' which he was preparing for distribution ; he also asked to see the specimens sent to Stirton as he considered that some of Stirton's species were ' ambiguous '. After Lojka's death, MacOwan's lichens were sent to Stizenberger at Constanz in Germany ; Stirton's types, which had been mislaid after Lojka's death, were found amongst his effects and also submitted to Stizenberger. The latter eventually returned them to MacOwan ; a few specimens at Pretoria have Stirton's original determination and comments in a different

hand, apparently that of Stizenberger ; unfortunately these specimens have no distinguishing numbers. In the report of the Government Botanist, 1897, MacOwan writes : " From the roll of correspondents with this herbarium, there has been recently removed by death, the eminent lichenologist Dr. Ernest Stizenberger of Konstanz. After the death of Dr. Hugo Lojka of Buda-Pesth, who had interested himself in Cape lichens, Dr. Stizenberger took up the broken thread of investigation, and at his suggestion, special attention was given to the collection of the saxicole forms, which previously had been greatly neglected. *Considerable numbers of each species were placed at his disposal, and after the publication of his Lichenaea Africana, the surplus was distributed among lichenologists.*" Mr. S. Garside has ascertained that most of MacOwan's lichen types are to be found in the Herbarium der Botanische Museum der Universität, Zurich. It would appear that all, or most of Stizenberger's lichen collections went to Zurich, as there are numerous references to collections made by Wilms, Rehmann and Breutel in Zurich, as well as those of MacOwan.

Medley Wood's fungi also went to Cooke and Kalchbrenner and there is a set of his specimens at Kew. The lichens which he collected were probably sent to Lojka, as in a letter dated 8.3.87, the latter states that he has written to Medley Wood, asking him to collect corticolous and foliicolous lichens. A set of Medley Wood's fungi was kept in the Natal Herbarium, and was presented to the Government in 1913 ; this set is now in the Cryptogamic Herbarium, Pretoria, but unfortunately, during the years it was kept in Durban, insects wrought considerable havoc, especially in the larger specimens.

A large number of South African and many tropical African type collections, which are of almost equal importance in the study of South African species, were filed in the herbarium of the Botanisches Museum, Berlin-Dahlem, where it is hoped they may have survived the ordeal by fire in 1944. These include fungi described by P. Hennings, some of Schlechter's specimens, parts of lichen collections of Wilms, Breutel, Bachmann and many more, as well as Baum's fungus collections, made when he accompanied the Kunene-Sambesi Expedition.

Welwitsch's Angola collections were divided between Lisbon and the British Museum, and when there was only a single specimen, an illustration was filed in the British Museum. Also in the latter institution are collections of lichens contributed by MacLea, Breutel and others, some, at least, of which are parts of type collections.

Besides Thunberg's specimens, a more recent collection of South African lichens is to be found at Uppsala. I. Ortendahl of the Botanical Gardens there, made a collection in Namaqualand, which was sent to Magnusson for examination. This collection, in which yellow species of Acarospora predominate, is preserved in the Plant Biological Institution at Uppsala. The extensive collections of lichens and fungi taken back to Norway by O. A. H*ø*eg as a result of his journey through Africa, are in the Museum of the Royal Norwegian Society of Science, Trondheim.

From 1905 onwards, Dr. Pole Evans sent numerous specimens to Europe for identification, some to P. Hennings and P. Magnus, but the majority to H. and P. Sydow, in whose herbarium many types were assembled. After the first world war, H. Sydow disposed of his herbarium, and it is now in the Nat. Hist. Museum, Stockholm. Later Sydow started a new Herbarium and types of species described more recently were kept in Berlin ; this second collection was unfortunately destroyed during the second world war. Portions of all collections sent away were retained in Pretoria, where are also to be found types of species described in ' Bothalia ' from 1921 onward. Many of the larger fungi were sent to C. G. Lloyd in America, and after P. A. van der Byl became Professor of Plant Pathology in the Stellenbosch-Elsenburg College of Agriculture, he continued this practice. A number of types are therefore in the Lloyd Mycological Collections and parts of the type collections either in the Pretoria Herbarium or in the van der Byl Herbarium at Stellenbosch. There are also a few types in the herbarium of the Stellenbosch-Elsenburg College of Agriculture.

About 1930, van der Byl became interested in lichens and made considerable collections which he sent abroad for identification. New species were described by Vainio, of which the types were deposited in the Herbarium of the Mus. Bot. Univ. Fennicae in Abo (Turku) Finland. Zahlbruckner was responsible for a larger number of descriptions and the types

filed in the botanical section of the Naturhist. Museum in Vienna, of which he was the Director. Other types in this herbarium are those of species described by Zahlbruckner from material collected in Africa by Brunnthaler and in South West Africa by ' Apotheker Fincke ' of Luderitzbucht. Parts of all van der Byl's lichen collections were retained in his herbarium now housed in the botanical department of the University of Stellenbosch.

According to Schinz (1905 : 2) Menyharth's collections of plants from the Zambesi region are partly in the botanical museum of the University of Vienna and partly in the Haynald-Observatorium in Kalocza, Hungary ; duplicates of most of the numbers were to be found in Vienna.

As Dr. Wiltshire has pointed out, the practice in general botany of taking the actual specimen studied as the type does not hold in mycology, where the author of a new species bases his description usually on a number of specimens or a collection. After elaborating this point, he continues (1944 : 5) : " I suggest therefore, that Article 18 of the International Rules, which states that ' The type of the name of a species or group of lower rank is usually a specimen or preparation ', should be extended to read ' except that the type of an epithet among micro-fungi is almost universally a collection '. It follows that all the material of a type collection has equal value wherever it may be deposited. . . . In South Africa it is taken for granted that the part of a MacOwan or Medley Wood collection retained in that country is as much type material as that sent to Kew and used by Cooke as the basis for a new species, and I really do not see how anyone can object to this. The parts of the fungus used by Cooke for his examination were not preserved. For purposes of comparison the right species has to be taken from the original material and identified whether that material be preserved at Pretoria or Kew."

In the lists of species in succeeding pages, the word ' type ' is used in the sense suggested by Dr. Wiltshire, i.e. as indicating the type collection or a part thereof.

VIII.—LIST OF SPECIES.

In the following list abbreviations are used for author's names and publications, and place names are indicated as briefly as possible. A note of interrogation before a record indicates that there is some doubt about the identification, but that the fungus is probably the species named.

South African Collections listed and Abbreviations used.

The largest collection of fungi of southern Africa is to be found in the Cryptogamic section of the National Herbarium, Pretoria. The numbers in this collections are quoted without any qualifying letters.

Other South African collections listed are the following, the abbreviations used in quoting their numbers being shown in brackets :—

(Duthie) Dr. A. V. Duthie's collections, mostly from Knysna and Stellenbosch. The Fungi are scattered in several herbaria ; Mr. S. Garside kindly permitted the author to list the Myxomycetes, which are under his care in the Bolus Herbarium, Cape Town.

(MacOwan) Fungi MacOwaniana, of which the majority were collected by Dr. Peter MacOwan in the neighbourhood of Somerset East, the Boschberg and Cape Town. Sets of specimens in the National Herbarium, Pretoria and the South African Museum, Cape Town are incomplete. There is also a set in the Kew Herbarium.

(Medley Wood) Dr. J. Medley Wood's Natal fungi, originally housed in the Natal Herbarium, Durban were later transferred to the National Herbarium, Pretoria.

(Pegler) Miss A. Pegler's fungi of Kentani. There is an almost complete set in the National Herbarium, Pretoria ; a set was also sent to Kew Herbarium.

(Rh) Mycological Herbarium of the Department of Agriculture, Southern Rhodesia. Thanks are due to Dr. J. C. F. Hopkins for lists of unpublished records from this herbarium.

(Rump) Mr. W. G. Rump's collections of the larger fungi of Natal, mostly from the country around Pietermaritzburg. These are housed in the Natal Museum, Pietermaritzburg and there is a fairly complete set in the National Herbarium, Pretoria.

(S.A.M.) Fungi and lichens in the herbarium of the South African Museum, Cape Town, were listed through the courtesy of the Director of the Museum.

(Stell.) The Mycological Herbarium of the Stellenbosch-Elsenburg College of Agriculture, originally Dr. L. Verwoerd's collections. I am greatly indebted to Dr. B. J. Dippenaar for a list of the fungi in this herbarium.

(E. L. Stephens) Collections, mostly of the larger fungi of the south-eastern Cape, assembled by Miss E. L. Stephens in the museum of the University of Cape Town. Miss Stephens very kindly assisted in listing these collections.

(T.R.L.) The Mycological Herbarium of the Timber Research Laboratory, Johannesburg. Thanks are due to Miss D. Weintroub of that institution for a list of the named fungi in the herbarium.

(v.d. Byl) The herbarium of Dr. P. A. van der Byl in the botanical department of the University of Stellenbosch. A record of the fungi in this collection has been published by Dr. G. C. Nel (1942) and the trustees of the van der Byl herbarium granted access to his collections so that the lichens could be listed. In the van der Byl herbarium, as in the National Herbarium, Pretoria there are two series of numbers, one for fungi and the other for lichens.

It is not considered necessary to explain abbreviations used in referring to European herbaria and well-known exsiccata, which are readily recognisable.

Amongst the species listed there are a number which, in literature quoted, are recorded as occurring in South Africa, but which are not represented in any South African herbarium.

Place of Collection.

In order to avoid repetition of names of districts and provinces, the place of collection is indicated as briefly as possible. The district and province in which each place is located can be found by reference to the locality index (p. 00). In this index there are a few omissions —mainly places quoted by early collectors—which it has not been possible to locate. Maps of provinces are supplied showing division into districts, and by comparison with the vegetation map, a general idea can be gained of the type of country in which the fungus or lichen was found.

Literature.

Citations are made as follows : Author, year of publication (in parenthesis) and page The full citation may be found by reference to the bibliography, where titles are listed under the names of authors, arranged in alphabetical order, and date of publication. When more than one paper by the same author in any year is quoted, these are distinguished by letters added to the year of publication.

There are two exceptions to this method of citation. Saccardo's Sylloge Fungorum and Zahlbruckner's Catalogus Lichenum universalis are quoted respectively as ' Sacc. Syll. Fung.' and ' Zahlbruckner Cat. Lich.', followed by the number of the volume in Roman figures and the page.

References to original descriptions are not included unless the type specimen was collected in South Africa.

List of Author's Names and Abbreviations.

Abbott	E. V. Abbott	—
Ach	Erik Acharius	1757–1819
Aderh	Rudolph Aderhold	1865–1907
Afzel	Adam Afzelius	1750–1837
Ains	G. C. Ainsworth	—
Alb	J. B. Albertini	1769–1831
Allesch	A. Allescher	1828–1903
Alm	J. V. d'Almeida	1855–1915
Anzi	M. Anzi	—
Appel	Otto Appel	—
Arn	F. Arnold	—
Arnaud	G. Arnaud	—
Arth	J. C. Arthur	1850–1942
Ashby	S. F. Ashby	—
Atk	G. F. Atkinson	1854–1918
Auersw	B. Auerswald	1818–1870
Bagl	F. Baglietto	1826–1916
Bailey	A. A. Bailey	—
Baillon	H. Baillon	—
Bailly	Amour Bailly	—
Bain	S. M. Bain	1869–1919
Bainier	G. Bainier	–1920
Bakke	A. L. Bakke	—
Bals	G. Balsamo-Crivelli	—
Bancroft	K. Bancroft	—
Bang	Henrik Bang	—
Barcl	A. Barclay	1852–1891
Basgal	Waldemar Basgal	—
Batsch	A. J. G. Batsch	1761–1802
Batt	A. Batarra	1714–1789
Bausch	Wilhelm Bausch	—
Beach	W. S. Beach	—
G. Beck	G. Beck von Mannagetta	1856–1931
Beckm	Johann Beckmann	1739–1811
Beeli	M. Beeli	—
Bél	Ch. Bélanger	—
Bell	A. Bellynck	1814–1877
Beltr	F. Beltramini de Casati	—
Béreng	G. A. de Bérenger	1815–1895
Berk	M. J. Berkeley	1803–1889
Berkhout	C. M. Berkhout	—
Berl	A. N. Berlese	1864–1903
Berthet	J. A. Berthet	—
Biourge	Ph. Biourge	—
Biroli	Giovanni Biroli	—
Bisby	G. R. Bisby	—
Bitanc	A. A. Bitancourt	—
Biv.-Bern	A. de Bivona-Bernardi	1774–1837
Bjerk	C. Bjerkander	1735–1795
Blume	C. L. Blume	1796–1862
Bodin	Eugéne and J. Almy Bodin	—
Boedijn	K. B. Boedijn	—
Boist	A. Boistel	—
Bolle	Pierrette C. Bolle	—
Bolley	H. L. Bolley	—
Bolt	James Bolton	–1799
Bomm	Elisa E. Bommer	1832–1910
Bon	H. F. Bonorden	1901–1884
Borr	W. J. Borrer	—
Bory	Jean Bory de St. Vincent	—
Bosc	Louis A. G. Bose	1759–1828
Bottomley	Averil M. Bottomley	—
Boud	Emile Boudier	1828–1920
B. de Lesd	M. Bouly de Lesdain	—
Bourd	H. Bourdot	1861–1937
Br	C. E. Broome	1812–1886
Branth	J. S. Branth	—
Braun	A. Braun	1805–1877
Breda de Haan	Jacob van Breda de Haan	–1917
Bref	Oscar Brefeld	1839–1925
Bres	G. Bresadola	1847–1829
Bri	G. Briosi	1846–1920
Brick	Carl Brick	1863–1924
Brizi	Ugo Brizi	—
Brumpt	Emile Brumpt	—
Brun	Paul Brunaud	—
Brushi	? Brushi	—
Bubák	Franz Bubák	1865–1925
Buchanan	R. E. Buchanan	—
Buchenau	F. Buchenau	—
Buism	Christine J. Buisman	1900–1936
Bull	P. Bulliard	1752–1793
Burkh	W. H. Burkholder	—
Burr	J. J. Burrill	1839–1916
Burt	Edward A. Burt	1859–1939
W. Busse	Walter Busse	1865–1933
Butler	Edwin J. Butler	1874–1943
Calm	L. C. A. Calmette	1863–1933
Cam	M. de Souza da Camara	—
Carne	W. M. Carne	—
Carpenter	C. W. Carpenter	—
Casp	J. X. R. Caspary	1818–1887
Cast	L. Castagne	1785–1858
Castellani	Aldo Castellani	—
Catt	A. Cattaneo	—
Cav	F. Cavara	1857–1929
Ces	V. de Cesati	1806–1883
Chalmers	Albert J. Chalmers	—
Chat	G. Adolphe Chatin	1813–1901
Chaub	L. A. Chaubard	—
Cheney	L. S. Cheney	1858–1938
Chester	F. D. Chester	1861–1943
Chev	F. F. Chevallier	1796–1840
Christopherson	J. B. Christopherson	—
Chupp	Charles David Chupp	—
Church	M. B. Church	—
Ciferri	Rafaele Ciferri	—
Claus	R. E. Clausen	—
Clem	F. E. Clements	—
Clint	G. P. Clinton	1867–1937
Clus	C. Clusius	—
Coem	E. Coemans	—
Coker	W. C. Coker	—
Cohn	F. J. Cohn	1828–1898
Colby	A. S. Colby	—
Cooke	M. C. Cooke	1825–1914
Corda	A. C. J. Corda	1809.1849
Cornu	M. M. Cornu	1843–1901
Cost	J. Costantin	1857–1936
Cotton	A. D. Cotton	—
Couch	J. N. Couch	—
Cromb	James M. Crombie	—
Crouan	P. L. and H. Crouan	—
	P. L. Crouan	1798–1871
	H. M. Crouan	1802–1871
Cub	G. Cuboni	1852–1920
Cunn	G. H. Cunningham	—

Curr.....	F. Currey.....	1819–1881
Currie.....	J. N. Currie.....	—
Curt.....	M. A. Curtis.....	1801–1872
Cutler.....	Elliott C. Cutler.....	—
Dade.....	H. A. Dade.....	—
Dalla Torre.	K. W. v. Dalla Torre...	—
Dan.....	E. Y. Daniels.....	—
Darling.....	S. T. Darling.....	—
Dast.....	Jehangir F. Dastur.....	—
Davis.....	J. J. Davis.....	1852–1937
Dearn.....	John Dearness.....	—
DC.....	Aug. Pyr. de Candolle..	1778–1841
de Bary....	Anton de Bary.....	1831–1888
Del.....	D. F. Delise.....	—
Delacr.....	E. G. Delacroix.....	1858–1907
de Not.....	G. de Notaris.....	1805–1877
des Abb.....	H. des Abbayes.....	—
de Seyn.....	J. de Seynes.....	1833–1912
Desm.....	J. B. H. J. Desmaziéres	1786–1862
Despr.....	? Despréaux.....	—
Desv.....	A. N. Desvoux.....	1784–1856
de Toni.....	G. B. de Toni.....	1864–1924
Dickson or Dicks	James Dickson.....	1738–1822
Died.....	H. Diedecke.....	—
Diehl.....	W. W. Diehl.....	—
Dierckx.....	Fr. Dierckx.....	—
Diet.....	Paul Dietel.....	—
Dipp.....	B. J. Dippenaar.....	—
Ditm.....	L. P. Fr. Ditmar.....	—
Dodge.....	Carroll William Dodge	—
Doidge.....	E. M. Doidge.....	—
Dorogin....	Georg. N. Dorogin.....	—
Dors.....	P. H. Dorsett.....	1862–1943
Drechsl.....	Charles Drechsler.....	—
Duby.....	J. E. Duby.....	1798–1885
Ducom.....	V. Ducomet.....	—
Duf.....	J. M. L. Dufour.....	—
Dug.....	B. M. Duggar.....	—
du Pless.....	S. J. du Plessis.....	—
Durr.....	M. Ch. Durieu de Maisonneuve	1796–1878
du Rietz....	G. Einar du Rietz.....	—
Earle.....	F. S. Earle.....	1856–1929
Eaton.....	Amos Eaton.....	—
Edgert.....	C. W. Edgerton.....	—
Eds.....	H. A. Edson.....	—
Edwards....	E. T. Edwards.....	—
Ehrlich.....	J. Ehrlich.....	—
Ehrenb.....	C. G. Ehrenberg.....	1795–1876
Ehrht.....	Friedr. Ehrhart.....	—
Ell.....	J. B. Ellis.....	1829–1905
Erikss.....	Jakob Eriksson.....	1848–1931
Eschw.....	F. G. Eschweiler.....	—
Essary.....	S. H. Essary.....	1870–1935
Evans.....	I. B. Pole Evans.....	—
Everh.....	B. M. Everhart.....	1818–1904
Fabr.....	J. H. Fabre.....	1823–1915
Farquh.....	C. O. Farquharson.....	1888–1918
Fautr.....	F. Fautrey.....	—
Fawc.....	H. S. Fawcett.....	—
Fayod.....	V. Fayod.....	1860–1900
Fée.....	A. L. A. Fée.....	—
Ferraris.....	Teodoro Ferraris.....	—
Alf. Fischer.	Alfred Fischer.....	1858–1914
Ed. Fischer.	Eduard Fischer.....	1861–1939
Fisch. v. Waldh.	A. A. Fischer von Waldheim	1839–1920
Fitz.....	H. M. Fitzpatrick....	—
Flagey.....	C. Flagey.....	—
Floerke.....	H. G. Floerke.....	—
Flotow.....	Julius von Flotow.....	—
Fr.....	Elias Magnus Fries.....	1790–1878
Th. Fr.....	Theodor Magnus Fries..	—
Frag.....	R. G. Fragoso.....	1862–1928
Frank.....	A. B. Frank.....	1839–1900
Frege.....	? Frege.....	—
Fres.....	J. B. G. W. Fresenius..	1808–1880
Fron	Georges Fron.....	—
Fick.....	K. W. G. L. Fuckel....	1821–1876
Funck.....	N. Funck.....	—
Gaill.....	Albert Gaillard.....	1858–1903
Gall.....	B. T. Galloway.....	1863–1938
Galz.....	A. Galzin.....	1853–1925
Garov.....	Santo Garovaglio.....	1805–1882
Gasp.....	G. Gasperini.....	—
Gaudich....	Charles Gaudichaud-Beaupré	1789–1854
Gäumann...	E. A. Gäumann.....	—
Gerard.....	W. R. Gerard.....	1841–1914
Giard.....	Alfred Giard.....	—
Gibbs.....	Thomas Gibbs.....	1865–1919
Gill. or Gillet	C. C. Gillet.....	1806–1896
Gillot.....	F. X. Gillot.....	1842–1910
Gilman.....	J. C. Gilman.....	—
Gmel.....	J. F. Gmelin.....	1748–1804
Godfrey....	G. H. Godfrey.....	—
S. F. Gray..	S. F. Gray.....	1766–1836
Grev.....	R. K. Greville.....	1794–1866
Griff.....	E. Griffon.....	1869–1912
Gross.....	J. G. Grossenbacher....	—
Grotenf.....	Gösta Grotenfelt.....	—
Grout.....	A. J. Grout.....	—
Grove.....	W. B. Grove.....	1848–1938
Gruby.....	David Gruby.....	—
Guba.....	E. F. Guba.....	—
Guill.....	Guillermond.....	—
Gyelin.....	V. Gyelnik.....	—
Hahn.....	G. G. Hahn.....	—
Hall.....	J. G. Hall.....	—
Halst.....	B. D. Halsted.....	1852–1918
Hampe.....	E. Hampe.....	—
E. C. Hansen	Emil Christian Hansen	—
H. N. Hansen	H. N. Hansen.....	—
Hansf.....	C. G. Hansford.....	—
Har.....	Paul A. Hariot.....	1854–1917
Hara.....	Kanesuke Hara.....	—
Harm.....	J. Harmand.....	—
Harrison....	F. C. Harrison.....	—
Harz.....	Carl Otto Harz.....	1842–1906
Hazsl.....	Friedr. A. Hazslinszky	1818–1896
Heald.....	P. D. Heald.....	—
Hedgcock...	G. G. Hedgcock.....	—
Hedw.....	J. Hedwig.....	1730–1799
Hedw. f.....	R. A. Hedwig.....	1772–1806
Henn.....	Ernst J. Henning.....	1857–1929
P. Henn....	Paul C. Hennings.....	1841–1908
Hepp.....	Phillip Hepp.....	—
Hesse.....	Rudolf Hesse.....	1844–1912
Hillm.....	Johannes Hillman.....	—
Hoffm.....	G. F. Hoffmann.....	1761–1826

H. Hoffn....	H. C. Hermann Hoffmann	1819–1891
Hollós.....	László Hollós.....	1859–1940
Holmsk.....	Th. Holm (previously Holmskjöld)	1732–1794
Holw.....	E. W. D. Holway.....	1853–1923
Hook.....	William Jackson Hooker	1785–1865
Hook f....	Joseph Dalton Hooker	—
Hopkins....	J C F Hopkins.....	—
Hori.....	Shôyarô Hori.....	—
Hornem....	J. W. Hornemann	1770–1841
Howe jr....	Reg. H. Howe (jnr)....	—
Hudson....	William Hudson.....	1703–1793
Hue.....	A. Hue.....	—
Ito.....	Seiya Ito.....	—
Ivimey Cook	W. R. Ivimey Cook....	—
Jaap.....	Otto Jaap	1864–1922
Jacq.....	N. J. Jacquin.....	1727–1817
Jacz	A. A. de Jaczewski....	1863–1932
James	J. F. James.....	1857–1897
Jamieson...	Clara O. Jamieson.....	—
Jatta.....	Antonio Jatta.....	—
Jenkins....	Anna E. Jenkins.....	—
Jensen	J. L. Jensen.....	1836–1904
Johns or J. Johnson	James Johnson.....	—
Johnston...	J. R. Johnston.....	—
L R Jones	L. R. Jones.....	—
T A Jones	Theobald A. Jones....	—
Jørg.....	C. A. Jørgensen.....	—
Jørst	Ivar Jørstad.....	—
Jungh	F. F. W. Junghuhn....	1809–1864
Kalchbr....	Károly Kalchbrenner..	1807–1886
Karst.....	P. A. Karsten.....	1834–1917
Kauff.....	C. H. Kauffman.....	1869–1931
Kellern	W. A. Kellerman.....	1850–1908
Kern	F. D. Kern.....	—
Kev.....	A. G. Kevorkian.....	—
Kickx.....	Jean Kickx.....	1803–1864
Killerm....	S. Killermann.....	—
King.....	Charlotte M. King.....	1864–1937
Kleb.....	H. Klebahn.....	1859–1942
Klotzsch...	J. F. Klotzsch.....	1805–1860
Knight.....	Charles Knight.....	—
Koerb (see Körb)		
Koern	F. Koernicke	1828–1908
Koord.....	S. H. Koorders.....	1828–1908
Körb.....	G. W. Körber.....	–1885
Krass.....	J. M. Krassilstschik....	—
Krempelh..	Anton von Krempelhuber	—
Krombh....	J. V. von Krombholz..	1782–1843
Krüg.....	Wilhelm Krüger.....	—
Kühn.....	Julius G. Kühn.....	1825–1910
Kulk	G. S. Kulkarni	—
O. Kuntze..	Otto Kuntze.....	1843–1907
G. Kunze...	Gustav Kunze.....	1793–1851
LaBill	J. J. de la Billardière..	1755–1834
Lachner-Sandoval	Vicenzo Lachner-Sandoval	—
Laff.....	H. A. Lafferty.....	—
Lagerh.....	G. von Lagerheim.....	1860–1926
Lam.....	J. B. A. P. M. de Lamarck	1774–1829
Lamb.....	J. B. Ernest Lambotte	1832–1905
Lambert...	E. M Lambert.....	—
Lamy.....	Edouard Lamy de la Chapelle	—
J. E. Lange	Jakob Emanuel Lange	—
Langeron...	Maurice Langeron.....	—
Langl.....	A. B. Langlois.....	1832–1900
Lasch.....	W. G. Lasch.....	1787–1863
Laub.....	Karl Richard Laubert..	—
Laughton ..	Elaine M Laughton....	—
Laur.....	F. Laurer	—
Leb.....	Hermann Lebert.....	1813–1878
Lehm.....	S. G. Lehman.....	—
Leight.....	W. A. Leighton.....	—
Lendner....	A. Lendner	—
Lenz.....	H. O. Lenz.....	1799–1870
Leon.....	Leon H. Leonian	—
Le Prévost.	Auguste le Prévost. ...	—
Lettau	G. Lettau.....	—
Leus.....	Simeona Leus-Palo.....	—
Lév	J. H. Léveillé.....	1796–1870
Leyss	F. W. von Leysser.....	1731–1815
Lib.....	Marie Anne Libert.....	1782–1865
Libosch....	J. Liboschitz.....	–1824
Lind.....	Jens V. A. Lind.....	1874–1939
Lindau.....	Gustav Lindau.....	1866–1923
Linder.....	David H. Linder.....	—
Lindsay....	W. Lauder Lindsay....	—
Lingelsh....	A. Lingelsheim.....	1874–1937
Link.....	J. H. F. Link	1767–1851
Linn	Carl von Linné (Linnaeus)	1707–1778
Linn f.....	Carl von Linné (Linnaeus f)	1741–1783
Lindr. or Liro	J. I. Liro, formerly Lindroth	—
Lister.....	Arthur Lister.....	1830–1908
G. Lister...	Gulielma Lister.....	—
Litsch	V. Litschauer	1870–1939
Lloyd.....	C. G. Lloyd.....	1859–1926
Louw	A. J. Louw	—
Lucand.....	J. L. Lucand	1821–1896
Lucet.....	Adrien Lucet.....	—
Ludw.....	Friedrich Ludwig.....	1851–1918
Lynge	B. Lynge.....	—
Macbr	T. H. Macbride	1848–1934
MacCarthy.	Lee MacCarthy.....	—
MacKinnon.	J. E. MacKinnon.....	—
MacOwan..	Peter MacOwan	1830–1909
Magn	Paul Magnus.....	1844–1914
H Magnusson	A. H. Magnusson.....	—
Maire	René C. J. Maire.....	—
Malme.....	Gustav O. A. V. Malme	—
Mang	L. Mangin.....	1852–1937
Marchal....	El. and Em. Marchal ..	—
	Élie Marchal.....	1839–1923
	Émile Julius Marchal	1871–
Marchion...	Juan B. Marchionatto..	—
Marign.....	G. B. Marignoni.....	—
Marloth	Rudolf Marloth.....	1855–1931
Martin.....	G. H. Martin.....	—
Martius.....	Carl F. P. von Martius..	1794–1868
Mason.....	E. W. Mason.....	—
Mass.....	G. Massee.....	1850–1917

Massal.....	A. B. Massalongo.....	1824–1860
Massey.....	L. M. Massey.....	—
Matruch. or Matr.	Louis Matruchot.....	1863–1921
Matsum....	Takashi Matsumoto....	—
Mattir.....	Oreste Mattirolo.....	—
Maubl.....	André Maublanc.....	—
McAlp.....	D. McAlpine.....	1849–1932
McRae.....	W. McRae.....	—
Megl.....	G. Megliola.....	—
Merrill.....	G. K. Merrill.....	—
Metsch.....	Elias Metschnikoff.....	—
Mey.....	G. F. W. Meyer.....	1782–1856
Mich.....	P. A. Micheli.....	1679–1737
Michx.....	André Michaux.....	1746–1802
Milbrath....	John A. Milbrath.....	—
Miles.....	L. E. Miles.....	1890–1941
Miller.....	Julian H. Miller.....	—
Milochevitch	S. Milochevitch.....	—
Minks.....	Arthur Minks.....	—
Miq.....	F. A. W. Miquel.....	1811–1871
Mitra.....	Manoranjan Mitra.....	1895–1942
Miyabe.....	Kingo Miyabe.....	—
Miyake.....	Tsutome Miyake.....	—
Molliard....	M. Molliard.....	—
Mont.....	J. C. F. Montagne.....	1784–1866
Morg.....	A. P. Morgan.....	1836–1907
Motyka.....	Josef Motyka.....	—
Moug.....	J. B. Mougeot.....	1776–1858
Mudd.....	William A. Mudd.....	—
Müll.....	O. F. Müller.....	1730–1784
Müll.-Arg...	J. Müller (Argau).....	1826–1896
Munn.....	Mancel Thornton Munn	—
Murrill.....	W. A. Murrill.....	—
Nannf.....	J. A. Nannfeldt.....	—
Nannizzi....	Arturo Nannizzi.....	—
Nattrass....	R. M. Nattrass.....	—
Neck.....	Noël Joseph de Necker	—
Nees.....	C. G. D. Nees von Esenbeck	1776–1858
Nel.....	G. C. Nel.....	—
Niehaus....	C. G. Niehaus.....	—
Niels.....	P. Nielsen.....	1829–1897
Niessl.....	G. von Niesel.....	1839–1919
Nish.....	Toji Nishida.....	1874–1927
Nisikado....	Yosikazu Nishikado....	—
Nitschke....	Theodor Nitschke.....	1834–1883
Noack.....	Fritz Noack.....	—
Norm.....	J. M. Norman.....	—
Nowak.....	L. Nowakowski.....	—
Nowell.....	William Nowell.....	—
Nyl.....	William Nylander.....	1822–1899
E. Nym....	E. O. A. Nyman.....	1866–1900
Oed.....	G. C. Oeder.....	1728–1791
Oliv.....	H. Olivier.....	—
Opiz.....	P. M. Opiz.....	1787–1858
Osbeck.....	Pehr Osbeck.....	1723–1805
Otth.....	G. H. Otth.....	1806–1874
Oud.....	C. A. J. A. Oudemans..	1825–1906
Overh.....	L. O. Overholts.....	—
Pamm.....	L. H. Pammel.....	1862–1931
Pass. or Passer.	G. Passerini.....	1816–1893
Pat.....	N. Patouillard.....	1854–1926
Pazschke...	Otto Pazschke.....	1843–1922
Peck.....	C. H. Peck.....	1833–1917
Peglion.....	Vittorio Peglion.....	—
Penz.....	Otto Penzig.....	1856–1929
Perc.....	John Percival.....	—
Pers.....	C. H. Persoon.....	1761–1837
Petch.....	Thomas Petch.....	—
Pethybr....	G. H. Pethybridge.....	—
Petrak.....	Franz Petrak.....	—
Petri.....	Kionello Petri.....	—
Phill.....	William Phillips.....	1822–1905
Picard.....	F. Picard.....	—
Pierce.....	N. B. Pierce.....	1856–1916
Pijper.....	Adrianus Pijper.....	—
Plowr.....	C. B. Plowright.....	1849–1910
Poetsch.....	J. S. Poetsch.....	—
Poit.....	A. Poiteau.....	1766–1854
Pole Evans (see Evans)		
Porta.....	G. Porta.....	1540–1615
Potter.....	M. C. Potter.....	—
Preuss.....	C. G. T. Preuss.....	–1855
Priestley....	Henry Priestly.....	—
Prill.....	E. E. Prillieux.....	1829–1915
Pullinger....	B. Davidine Pullinger..	—
Putterill....	V. A. Putterill.....	—
Quél.....	Lucien Quélet.....	1832–1899
Rabenh.....	G. L. Rabenhorst.....	1806–1881
Rac.....	M. Raciborski.....	1863–1917
Ramond....	Louis Ramond.....	—
Rands.....	R. D. Rands.....	—
Rang.....	J. F. Rangel.....	—
Rav.....	H. W. Ravenel.....	1814–1887
Ravaz.....	L. E. Ravaz.....	1863–1937
Rayss.....	Tscharna Rayss.....	—
Rea.....	Carleton Rea.....	—
Rebent.....	J. F. Rebentisch.....	1772–1810
Redaelli....	Piero Redaelli.....	—
Reddick....	Donald Reddick.....	—
Redinger....	Karl Redinger.....	—
Reess.....	Max Reess.....	1845–1901
Rehm.....	H. Rehm.....	1829–1916
J. Reinke...	Johannes Reinke.....	1829–1916
Reinking....	O. A. Reinking.....	—
Relh.....	Richard Relhan.....	1753–1823
Remak.....	Robert Remak.....	—
Requien....	E. Requien.....	1788–1851
Retz.....	A. J. Retzius.....	1742–1821
Rex.....	G. A. Rex.....	—
Rick.....	Johann Rick.....	—
Riv.....	S. Rivolta.....	—
Roark.....	E. E. Roark.....	1894–1918
Roberts.....	J. W. Roberts.....	—
Robin.....	Charles Robin.....	—
Rodway....	L. Rodway.....	—
Röhl.....	J. C. Röhling.....	1757–1813
Roll.....	L. L. Rolland.....	1841–1912
Romell.....	L. G. Romell.....	1854–1927
Rost.....	J. T. Rostafinski.....	1851–1928
Rostr.....	F. G. E. Rostrup.....	1831–1907
Roth.....	A. W. Roth.....	1757–1834
Roum.....	C. Roumeguère.....	1828–1892
Rouss.....	Mariette H. Rousseau..	–1926
Roze.....	E. Roze.....	1833–1900
Rud.....	Fr. K. L. Rudolphi....	1801–1849
Ryan.....	R. W. Ryan (Sister Mary Hilaire)	—

Sabourand...	Raimond Sabouraud...	—
Sacc.....	P. A. Saccardo.....	1845–1920
D. Sacc.....	Domenico Saccardo....	—
Sadeb.....	R. E. B. Sadebeck.....	1839–1905
Salm.....	E. S. Salmon.....	—
Sandst.....	Heinrich Sandstede....	—
Sard.....	J. R. Sardiña.....	—
Sarnth.....	Ludwig von Sarntheim.	—
Sartory.....	Auguste Sartory.....	—
Savul.....	Trajan Savulescu.....	—
Sawada.....	Kaneyoshi Sawada.....	—
Scalia.....	Giuseppe Scalia.....	—
Schaeff.....	J. C. Schaeffer.....	1718–1790
Schaer.....	L. E. Schaerer.....	—
Schilb.....	K. Schilberszky.....	1863–1935
Schleich....	J. C. Schleicher.....	1768–1834
Schm.....	J. K. Schmidt.....	1793–1850
Schrad.....	H. A. Schrader.....	1767–1836
Schrank....	F. P. von Schrank.....	1747–1835
Schreb.....	J. C. D. von Schreber..	—
Schroet.....	J. Schroeter.....	1837–1894
Schuler.....	J. Schuler.....	—
Schultz.....	C. F. Schultz.....	1765–1837
Schum.....	H. C. F. Schumacher...	1757–1830
Schw.....	L. D. von Schweinitz..	1780–1834
Schwend....	Simon Schwendener....	—
Scop.....	J. A. Scopoli.....	1723–1788
Seaver.....	F. J. Seaver.....	—
Secretan....	L. Secretan.....	1758–1839
Seeber.....	G. R. Seeber.....	—
Shaw.....	F. J. F. Shaw.....	1885–1936
Shear.....	C. L. Shear.....	—
Sheld.....	J. L. Sheldon.....	—
Sherb.....	C. D. Sherbakoff.....	—
Shirai.....	Mitsutaro Shirai.....	—
Shirley.....	J. Shirley.....	—
Siem.....	Wincenty Siemaszko....	—
Singer.....	Rolf Singer.....	—
Small.....	W. Small.....	—
A. L. Sm...	Annie Lorrain Smith...	1854–1937
C. O. Smith	Clayton O. Smith.....	—
E. F. Sm...	Erwin F. Smith.....	1854–1927
E. H. Sm...	Elizabeth H. Smith....	1877–1933
J. E. Sm....	James Edward Smith...	1759–1828
R. E. Sm...	Ralph E. Smith.....	—
W. G. Sm...	Worthington G. Smith..	1835–1917
Snyder.....	W. C. Snyder.....	—
Solh.....	W. G. Solheim.....	—
Sommerf....	Sören C. Sommerfelt..	1794–1838
Sopp.....	Olav Johan-Olsen Sopp	—
Sorokin.....	N. V. Sorokin.....	1846–1909
South.....	Effie A. Southworth....	—
Sow.....	James Sowerby.....	1757–1822
Spauld.....	P. Spaulding.....	—
Speare.....	A. T. Speare.....	—
Speg.....	C. Spegazzini.....	1858–1926
Spreng.....	Kurt P. J. Sprengel....	1766–1833
Starb.....	Karl Starbäck.....	—
Steiner.....	Julius Steiner.....	—
Steinm.....	A. Steinman.....	—
Steud.....	Ernst Gottlieb Steudel	—
Stev.....	F. L. Stevens.....	1871–1934
N. E. Stev..	N. E. Stevens.....	—
Stewart.....	F. C. Stewart.....	—
Stirt.....	James Stirton.....	—
Stizenb.....	E. Stizenberger.....	—
Stoddard...	James L. Stoddard.....	—
Stoll.....	O. Stoll.....	—
Stone.....	G. E. Stone.....	—
Stonem.....	Bertha Stoneman.....	1866–1943
Stout.....	G. L. Stout.....	—
Strauss.....	F. C. J. von Strauss....	1787–1855
Sturgis.....	W. C. Sturgis.....	1862–1942
Sw.....	Olof Peter Swartz.....	1760–1818
Swing.....	W. T. Swingle.....	—
Syd.....	Hans Sydow.....	1879–
	Paul Sydow.....	1851–1925
Talice.....	Rudolfo V. Talice.....	—
Tan.....	Tyozaburo Tanaka.....	—
Tassi.....	Flaminio Tassi.....	—
Taubenh....	J. J. Taubenhaus.....	1885–1937
Thaxt.....	R. Thaxter.....	1858–1932
Tayl.....	Thomas Taylor.....	—
Teh.....	L. R. Tehon.....	—
Theiss.....	F. Theissen.....	1877–1919
Thom.....	Charles Thom.....	—
Thuem.....	F. von Thuemen.....	1839–1892
Thunb.....	Carl Pehr Thunberg....	1743–1828
Tirab.....	Carlo Tiraboschi.....	—
Tisd.....	W. B. Tisdale.....	—
Tode.....	H. J. Tode.....	1733–1797
Togn.....	Filippo Tognini.....	1866–1896
Torn.....	Francesco Tornabene...	—
Torrend....	Camillo Torrend.....	—
Tourn.....	J. P. de Tournefort....	—
Tracy.....	S. M. Tracy.....	1847–1920
Trail.....	J. W. H. Trail.....	1851–1939
Tranzsch....	W. A. Tranzschel.....	—
Trav.....	G. B. Traverso.....	—
Trel.....	W. Trelease.....	—
Trevis.....	Vittore Trevisan.....	1818–1897
Trinch.....	G. Trinchieri.....	—
Trott.....	Alessandro Trotter.....	—
Trow.....	A. H. Trow.....	1863–1939
Tuckerm....	Edward Tuckerman....	1817–1886
Tul.....	L. R. Tulasne.....	1815–1885
	C. Tulasne.....	1816–1884
Turc.....	M. Turconi.....	1879–1929
Turn.....	Dawson Turner.....	—
Unger.....	Franz Unger.....	1800–1870
Uppal.....	B. N. Uppal.....	—
Vahl.....	M. H. Vahl.....	1749–1804
Vaill.....	Sébastian Vaillant.....	1669–1722
Vain.....	E. A. Vainio (see also Wainio)	—
van Breda..	J. van Breda de Haan..	—
v. d. Byl....	P. A. van der Byl.....	1888–1939
v. Schrenk..	H. von Schrenk.....	—
van Tiegh....	P. E. L. van Tieghem..	1839–1914
Vent.....	E. P. Ventenat.....	—
Verw.....	Len Verwoerd.....	—
Vi.....	Pierre Viala.....	1859–1936
Viand-Gr.-Marais	A. Viand-Grand-Marais.	—
Vincent.....	H. Vincent.....	—
Vitt.....	C. Vittadini.....	1800–1865
Vivian.....	D. Viviani.....	1772–1840
Vize.....	John E. Vize.....	1830–1916
Vogl.....	P. Voglino.....	1864–1933
Volkart.....	Albert Volkart.....	—
von Höhn....	F. von Höhnel.....	1852–1920
Vouaux.....	Leon Vouaux.....	1870–1914
Vuill.....	P. Vuillemin.....	1861–1932

Wadk.....	R. F. Wadkins.....	—
Wahlbg.....	Göran Wahlenberg.....	1780–1851
Wain.....	E. A. Wainio (later (Vainio)	1853–1929
Wakef.....	Elsie M. Wakefield.....	—
Wallr.....	C. F. W. Wallroth.....	1792–1857
Web.....	G. H. Weber.....	—
Wedd.....	H. A. Weddell.....	—
Weese.....	Josef Weese.....	—
Wehm.....	L. E. Wehmeyer.....	—
Weinm.....	J. A. Weinmann.....	1782–1858
Weiss.....	F. A. Weiss.....	—
Welch.....	D. S. Welch.....	—
Welw.....	F. Welwitsch.....	1807–1872
Went.....	F. A. F. C. Went.....	1863–1935
Werd.....	E. Werdermann.....	—
Wernham...	C. C. Wernham.....	—
Wernicke...	Robert Wernicke.....	—
West.....	G. D. Westendorp.....	1813–1868
Westling....	R. Westling.....	—
Weston.....	W. H. Weston.....	—
Wettstein...	R. von Wettstein.....	1863–1931
Wiggers.....	F. H. Wiggers.....	—
Wilcox.....	E. M. Wilcox.....	–1920
Willd.....	C. L. Willdenow.....	1765–1812
Willey.....	Henry Willey.....	—
Wiltsh.....	S. P. Wiltshire.....	—
Wingate....	H. Wingate.....	—
Wint.....	G. Winter.....	1848–1887
With.....	William Withering.....	1774–1799
Wolf.....	F. A. Wolff.....	—
Wollenw....	H. W. Wollenweber....	—
Woron.....	M. S. Woronin.....	1838–1903
Woronich...	N. Woronichine.....	—
Wrobl.....	Anton Wróblewski.....	—
Wulf.....	F. X. von Wulfen.....	1728–1805
Yam.....	Wataro Yamamoto.....	—
Yoshino....	Kiichi Yoshino.....	—
Yukawa....	K. Yukawa.....	—
Zach.....	F. Zach.....	—
Zahlbr.....	Alexander Zahlbruckner	1860–1938
Zal.....	K. Zaleski.....	—
Zeller.....	Sanford M. Zeller.....	—
Zenk.....	Jonathan Carl Zenker..	—
Zimm.....	A. Zimmermann.....	1860–1931
Zoll.....	H. Zollinger.....	1818–1859
Zopf.....	F. W. Zopf.....	1846–1909
Zundel.....	G. L. I. Zundel.....	—
Zwackh.....	Wilhelm von Zwackh-Holzhausen	—

Grateful thanks are due to Miss E. M. Wakefield for revising the list of author's names, for indicating standard abbreviations and for filling in details not available in South Africa.