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A
FLORA OF ULSTER
AND
BOTANIST'S GUIDE
TO
THE NORTH OF IRELAND.

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P R E F A C E .

DURING some years' residence in Belfast, notes were taken of plants collected in excursions with students of the Queen's College, and also when occasionally visiting different parts of the district after close of the College sessions. It was suggested by friends in Belfast that a compilation of these notes might be useful. The following pages show, however, that much information has been received from others, and afford evidence that there have been, and still are, assiduous Botanists who have carefully examined the plants of the North of Ireland. To the friends of the late Mr. Templeton I am indebted for permission to take notes of species recorded in his Manuscript. The Botanical Memoranda of the late Mr. W. Thompson have also furnished valuable information. The publication of the "Flora Hibernica," in 1836, by the late Dr. Mackay, did good service to the cause of Botany in Ireland; it is to be hoped that a new revised edition will be brought out by some one familiar with the plants of Ireland. Localities of northern

species in that work are quoted freely in the following pages.

I must here specially acknowledge important assistance received from Dr. Moore, Director of the Botanic Garden, Glasnevin. His contributions to Irish Botany need no eulogy from me.

For many years there have been zealous observers in the North; Belfast Naturalists have laboured successfully in various departments of Natural Science. By his lectures and writings, the late Dr. Drummond contributed much to promote the study of Botany. Dr. Mateer also aided in the same way. The institution of a class of Natural History in the Queen's College has not been without its due influence. My friend, Mr. Millen, has always been very desirous to promote a taste for Botany among his private pupils. More recently lectures have been delivered on the subject by Mr. Tate, and by my late pupil, Mr. W. H. Ferguson. All these labours cannot fail to stimulate others, and add to the number of students in Botany. Mr. Patterson, Mr. Hyndman, the late Mr. James M'Adam, and others, active leading members of the Belfast Philosophical and Natural History Society, have done much to foster the cultivation of various branches of Natural Science by their personal influence as well as by their writings. There can be no doubt that the impulse given to the study of Natural History by the late Mr. Templeton, of Cranmore, led to the establishment of the Belfast Botanic Garden, by some zealous citizens, about the year 1828. It is to be hoped that the present generation will be induced to give increased

support to the Garden, and respond to the efforts of my friend, Mr. D. Ferguson, the present Curator, who has so long and ably filled that office.

In the following pages I have adopted, as a standard, the "British Flora," by Sir W. J. Hooker and Professor Arnott, of Glasgow. In order, however, to get a thorough knowledge of native plants, the student would derive important aid by consulting Professor Babington's Manual of British Botany, and Mr. Bentham's Handbook of the British Flora, each having its peculiar merits. Although I possess both notes and specimens illustrative of *Cryptogamia* found in the North, the higher forms of these, viz., Ferns and others, are alone included in this work.

The range of each species in Britain has been quoted from Mr. Watson's "Cybele Britannica," chiefly with the view of directing attention to the same subject in reference to Irish plants. By the words "Throughout Ireland," I mean that a species is included in the "Flora of Cork," and occurs also in the northern parts of Derry or Donegal. The expression "Ireland?" indicates that my information respecting its range in Latitude is imperfect. I frequently append the remark, that a species increases or decreases eastward or westward as the case may be; and I may here observe, that a complete list of species in any remote western part of the district would be interesting—that of Glen Columbkil for example. My visit to it was short, and a complete list could not be made.

In a Supplement, there are plants which may yet be

proved truly indigenous, and a list of others certainly not wild.

The Work is offered as "Collectanea" towards a more complete Flora of the North of Ireland.

G. D.

ABERDEEN, *January 28th*, 1864.

INTRODUCTION.

THE district to which the "Guide" refers may be stated, in general, as lying to the north of the 54th parallel of Latitude, extending duly west from Dundalk, and therefore including the whole of Ulster (excepting the most southern portions of Monaghan and Cavan), comprehending also the northern portions of Leitrim, Sligo, and Mayo belonging to Connaught.

The coast is of very irregular outline, owing to branches of the Atlantic—the Loughs of Strangford, Belfast, Foyle, Swilly, and the Bays called Donegal, Sligo, and Killala, each of which receives the drainage of a river basin of greater or less extent.

The Geological structure has been so fully discussed by different writers, that it is unnecessary to enter into details. In general terms, it may be said that Silurian formations occur in the south-east; Granite in the Mourne Mountains; in the east there is an extensive mass of Basalt; Chalk, Greensand, and Oolite being here and there exposed; Metamorphic and Granite rocks appear in the north and north-west, Carboniferous limestone in the south-west, and Devonian rocks in parts of the interior. The higher mountains are chiefly grouped in the east, north-west, and west; the extreme highest points are, in County Down, Slieve Donard, 2796 feet; in Donegal, Muckish and Erigal, respectively 2190 and 2460 feet; in Mayo, Nephin, 2646 feet.

Surrounded as Ireland is by the Atlantic, and its northern part so indented that arms of that ocean extend considerably inland, as might be inferred, the climate of even the most northern parts is comparatively mild and moist. The extreme ranges of temperature are moderate when contrasted with those

recorded in different parts of Great Britain. On the 15th February, 1855, the lowest temperature at the Belfast Botanic Garden, was 19° F.; at Glasgow Botanic Garden, 7° F.; at Aberdeen the thermometer indicated two degrees and a half below zero; there being a difference in favour of Belfast of 12° as contrasted with Glasgow, and of $21\frac{1}{2}^{\circ}$ compared with Aberdeen. Twelve years' observations at the Queen's College, Belfast, give a mean annual temperature of 48.8° F. The years 1854, 1858, 1862, and 1863, approached very near the annual mean above mentioned, and the chief vegetating season—April to August inclusive—of these years had a mean temperature of 54.1° . The mean annual amount of rain for 12 years at Belfast is 33 inches; the absolute highest was 40.7 in 1852, and the absolute lowest 24.1 in 1855.*

The following facts respecting Scotland are worthy of notice here, because the main inference applies even more emphatically to the North of Ireland. The temperature of the Atlantic is about three degrees (2.9°) above that of the North Sea, for the six months beginning with October and ending with March, the greatest excess being nearly four degrees in December and January, and the least a degree and seven-tenths in October. The excess of the annual mean temperatures of the sea, at different points above the mean temperature of the air on the West of Scotland, leads to the inference that the temperature of the Western Sea must be raised by currents from warmer regions. (Report of Meteorological Society of Scotland, 1862.) The presence of certain sea-weeds on the coasts of the North of Ireland affords evidence quite as notable as any indications of the thermometer. I have dredged at Portaferry abundance of *Steno-*

* The following notes of the temperatures of springs and pump wells may be worthy of record. Black Mountain, open spring at 800 feet, in June, 49° F.; at its base another showed 48° F. Spring at Lagan side, in July, 51° . Spring in Massereene Park, July, 50.6° F. Spring at Portaferry, in June, 49.5° ; in September, 52° . Pump well at Portaferry, 30 feet deep, September, 51° . Spring near Donard Lodge, September, 50° . Spring near Glenarm, 48.5° . Spring at Glenravel House, 50.5° . Observations on the air-temperature, made at Glenarm Castle during two years, gave an annual mean of 48° F.

gramme interrupta and other southern species. *Cystoseira granulata*, *C. fibrosa*, and *C. ericoides* occur on different parts of the coast, as well as *Kallymenia Dubyi*, *Chylocladia ovalis*, *Nitophyllum Gmelini*, *Sphaerococcus coronopifolius*, *Gigartina acicularis*, &c. &c. From the marine Fauna one example may be mentioned, that remarkable sea-urchin, *Echinus lividus*. At Bundoran it may be got in thousands making its cup-like nest in the soft rock. I have also found it in crevices of the harder rock at Malin Head, the most northern point of Ireland; it is in general distribution south-western.

A mere list of species cannot afford any definite information respecting the peculiar features of the Flora. The elaborate "Cybele Britannica" of Mr. Watson gives a useful standard for comparison. He refers all British plants to one or other of the following types, the name of each type indicating the parts of Britain where the plants predominate:—

1. *British*.—Those more or less diffused through the length and breadth of Britain, such as hazel, alder, chickweed, &c., &c.
2. *English*.—Those which occur chiefly in England, becoming rarer northwards.
3. *Germanic*.—Plants mostly confined to the south-eastern parts of England.
4. *Atlantic*.—Species found chiefly in the western and south-western districts.
5. *Scottish*.—Plants mainly confined to North Britain.
6. *Highland*.—"Boreal in a more intense degree, as regards climate, than the Scottish." Some are entirely Alpine.
7. *Local*.—Comprehends a small number of species, so limited in range that they do not come under any of the above.

Adopting the above types as a standard, we shall be able to get some idea respecting the features of the vegetation in the North of Ireland.

1. *British*.—Those belonging to this are the more common plants of the country, the number in this district being of Dicotyledons 347, Monocotyledons 136. Several of them, however, are less abundant here than in some parts, for example, *Draba verna*, *Cardamine amara*, *Arabis hirsuta*, *Adoxa moschatellina*, *Origanum vulgare*, *Myosotis collina*, *Mercurialis perennis*, *Milium effusum*, *Carex fulva*, &c. &c.

2. *English*.—The total number of this type in the British Flora is about 396; of these there are in this district 141 Dicotyledons, and 36 Monocotyledons, giving a total of 177, therefore not far under one-half of the entire number.

3. *Scottish*.—The total number in Britain may be estimated as about 69; those in our list are 34 Dicotyledons and 10 Monocotyledons; total 44.

4. *Highland*.—Species of this type are estimated as about 100; in the North of Ireland the number is 29, 26 of which are Dicotyledons.

5. *Atlantic*.—The total number in Britain is about 60, of these there are in our list 23, 20 of which are Dicotyledons.

6. *Germanic*.—The representatives of this are 190, and only 3 are in our list, 2 of which are Monocotyledons.

7. *Local*.—Under this head I include two species not found in Britain, viz.,—*Arenaria ciliata* and *Carex canescens*, and one, *Calamagrostis stricta*, extremely local in Britain.

The general characters of the Flora may be, in general terms, stated thus: Plants of Germanic and Highland types, especially the former, constitute a very insignificant part; the latter, as might expected, are mainly confined to the mountains, but some of them descend even lower than in the corresponding parts of Britain. In the more northern counties a few of the Scottish type are plentiful, such as *Empetrum nigrum* and *Ligusticum Scoticum*, generally, however, most of them are very local, and some are extremely rare. Although a third of the entire number belonging to the Atlantic type occur, they by no means form a prominent feature, most of them, so far as at present known, are scarce, a few more abundant, as *Sedum Anglicum*, *Cotyledon*

umbilicus, *Scilla verna*, and in some parts of the district *Scirpus Savii*. Although, in proportion, the number of plants called Scottish is greater than that which those called English bear to the total number of each of these types, yet the latter form a more decided character of the Flora; many of them are abundant and some are showy and prominent, for instance, *Erythraea Centaurium*, *Epilobium hirsutum*, *Lythrum Salicaria*, *Juncus glaucus* and *Arum maculatum*. The following tabular view will be a useful appendage to this summary.

TYPES.	B.	E.	G.	A.	S.	H.	L.	TOTAL.
DICOTYLEDONS	347	141	1	20	34	26	1	570
MONOCOTYLEDONS	136	36	2	3	10	3	2	192
Total.....	483	177	3	23	44	29	3	762

Ferns and allies are excluded from the above comparison, of such there are 43, which, added to the flowering plants, give a total of 805 species; doubtless additions will be made in time coming. The present work may serve as a stimulus to others, and assist in their investigations. Some of those which I have added by Supplement at the end may yet be proved as truly indigenous.

I shall now add a few remarks on the altitudinal range of some of the species, having, on several occasions, made notes respecting this on each of the highest mountains in the district, viz., Slieve Donard, Muckish, Erigal, and Nephin, as well as on some of lower elevation, Slieve Nanee, Slemish, Slieve League, and Ben Bulbin,—the instruments employed being the Mountain Sympiesometer and Aneroid.

The zones of altitude adopted by Mr. Watson in his "Cybele Britannica," already quoted, will be a good standard. He considers the common Brake Fern, in its upper limit, as marking also the limit of upland cultivation. In Scotland this fern usually ceases about 1600 feet, rarely reaching higher; in

North-East of Scotland there are cultivated fields nearly at that height. In the North of Ireland the general limit of culture may reach 1000 feet, as in some parts of Antrim. This, however, may not be the possible extreme; want of enterprise, or, more likely, want of due encouragement on the part of proprietors, must be taken into account. I believe, however, that the more copious and frequent rains and mists in the upland parts would certainly account for any difference between the North-East of Ireland and the North-East of Scotland.

All above the limit of the Brake Fern (*Pteris aquilina*) Mr. Watson calls the Arctic region, which is subdivided into three zones, the lower of which is called Sub-Arctic, and is marked by the upper limit of *Pteris aquilina*, already stated, and that of *Erica tetralix** at 2100 feet. The next, or Mid-Arctic, lies between 2100 feet and 3000 feet; the upper limit of *Calluna vulgaris*. The Super-Arctic Zone, is not represented in the North of Ireland, the highest point, Slieve Donard, falling short even of the upper limit of the Mid-Arctic.

Just as the Brake Fern (*Pteris*) ceases at a lower height in the North of Ireland than in some parts of Scotland, so, also, does *Erica tetralix*. On Muckish I did not observe it higher than 800 feet, on Slieve League it attains 1500, and on Slieve Donard 1600 feet.

Salix herbacea is a characteristic plant of the Mid-Arctic and Super-Arctic Zones. In the East of Scotland its lower limit is about 2100 feet; in the West Highlands it is 150 feet lower; and in Orkney it occurs at 1600 feet. This little willow is plentiful on the higher mountains of the North of Ireland, descending to 1700 feet on Erigal, to 1850 on Muckish, to 1800 on Slieve League, it occurs on Slieve Nanee at 1850 feet. The plant in question, therefore, descends lower in this district than in the West Highlands, and nearly as low as it does in Orkney. But there is also in the North of Ireland a decided fall of the

* The statement made in the body of the Work shows that, generally, *Erica tetralix* ceases lower on the mountains of the North of Ireland than *Erica cinerea*, a result different from that observed in Scotland. I can offer no explanation.

upper limits of some plants in passing from north or north-east to south-west. A few examples must suffice:—

	Upper Limit.
<i>Euphrasia officinalis</i> ,.....	N.E. Scotland, 3400
" " 	Muckish, 2000
" " 	Erigal, 2400
" " 	Nepkin, 1700
<i>Melampyrum pratense</i> ,.....	N.E. Scotland, 3000
" " 	Erigal, 2200
" " 	Nepkin, 1900
<i>Pinguicula vulgaris</i> ,.....	N.E. Scotland, 2800
" " 	Erigal, 2000
" " 	Nepkin, 800
<i>Orchis maculata</i> ,.....	N.E. Scotland, 3000
" " 	Muckish, 1950
" " 	Erigal, 1950
" " 	Nepkin, 1800
<i>Schoenus nigricans</i> ,	N.E. Scotland, 1600
" " 	Slieve Donard, 1400
" " 	Muckish, 800
<i>Carex binervis</i> ,	N.E. Scotland, 3000
" " 	Muckish, 2000
" " 	Nepkin, 1800
<i>Scirpus caespitosus</i> ,.....	N.E. Scotland, 3500
" " 	Slieve Donard, 2500
" " 	Erigal, 2300

The following lists of species, nearly in order of succession, as observed in a track from the summits downwards, may be of some interest; each is set down as nearly as may be at its upper limit.

SLIEVE DONARD, 2796 FEET.

On the summit eleven species, viz.:—*Arbutus U. Ursi*, *Calluna*, *Empetrum*, *Galium saxatile*, *Salix herbacea*, *Vaccinium*

Myrtillus, *Carex pilulifera*, *C. rigida*, *Festuca ovina*, *Luzula sylvatica*, *Poa pratensis* ?

Viola canina.
Scirpus caespitosus, 2500 feet.
Saxifraga stellaris, 2100 feet.
Blechnum boreale.
Campanula rotundifolia.
Listera cordata.
Saxifraga stellaris (lowest).
Anthoxanthum odoratum.
Vaccinium V. Idaea.
Salix herbacea (lowest) 1880 feet.
Juncus squarrosus.
Eriophorum angustifolium.
Potentilla Tormentilla.
Erica cinerea.
Cystopteris fragilis (dentata).
Oxalis Acetosella.
Erica tetralix.
Carex panicea.
 dioica.
 glauca.
Schoenus nigricans.
Thymus Serpyllum.
Carex flava.
Eriophorum vaginatum, 1200 feet.

MUCKISH, 2190 FEET.

On the summit seventeen species, viz. :—*Armeria vulgaris*, *Calluna*, *Campanula rotundifolia*, *Empetrum*, *Euphrasia officinalis*, *Galium saxatile*, *Potentilla Tormentilla*, *Rumex acetosa*, *Salix herbacea*, *Vaccinium Myrtillus*, *Agrostis vulgaris*, *Aira flexuosa*, *Carex pilulifera*, *C. rigida*, *Festuca vivipara*, *Juncus squarrosus*, *Lycopodium Selago*.

Eriophorum angustifolium.
Solidago Virgaurea.

Euphrasia officinalis.
Carex binervis.
Eriophorum vaginatum.
Melampyrum pratense.
Saxifraga umbrosa, 2000 feet.
Luzula sylvatica.
Erica cinerea (very dwarf).
Scirpus caespitosus.
Orchis maculata.
Carex rigida (lowest) 1900 feet.
Scabiosa succisa.
Saxifraga umbrosa (lowest) 1800 feet.
Carex pulicaris, 1700 feet.
Melica caerulea.
Pinguicula vulgaris.
Juniperus nana.

ERIGAL, 2460 FEET.

On the summit eleven species, viz., *Armeria vulgaris*, *Calluna*, *Empetrum*, *Galium saxatile*, *Potentilla Tormentilla*, *Rumex acetosa*, *Vaccinium Myrtillus*, *Agrostis vulgaris*, *Festuca vivipara*, *Luzula sylvatica*, *Lycopodium Selago*.

Luzula campestris.
Euphrasia officinalis.
Hymenophyllum Wilsoni.
Carex rigida.
Salix herbacea, 2400.
Galium saxatile.
Carex pilulifera.
Melampyrum pratense.
Aira flexuosa.
Pinguicula vulgaris.
Viola canina.
Scirpus caespitosus.
Polygala vulgaris.
Juncus squarrosus.
Orchis maculata.

Vaccinium Vitis-Idaea, 1900.
Nardus stricta.
Carex rigida, 1850.
Erica cinerea.
Salix herbacea, 1700.
Arctostaphylos Uva-Ursi.
Solidago Virgaurea.
Carex flava.
 „ *binervis*.
Silene maritima, 1500.

NEPHIN, 2646 FEET.

Plants on summit, *Armeria vulgaris*, *Calluna*, *Galium saxatile*, *Potentilla Tormentilla*, *Rumex acetosa*, *Saxifraga umbrosa*, *Vaccinium Myrtillus*, *Aira flexuosa*, *Carex rigida*, *Festuca vivipara*, *Luzula sylvatica*.

Lycopodium Selago.
Scabiosa succisa.
Empetrum nigrum.
Luzula campestris.
Solidago Virgaurea.
Jasione montana.
Melampyrum pratense.
Hymenophyllum Wilsoni.
Carex binervis.
 „ *rigida*, 1806.
Orchis maculata.
Erica cinerea.
Eriophorum vaginatum, 1750.

In conclusion, I add a few remarks on the plants of the outlying islands, although some of the lists are incomplete. Miss Gage has examined the plants of Rathlin Island, Mr. Hyndman those of Tory Island. I have visited the Copeland Islands, the Maiden Rocks at Larne, and the most northern of all, the Island of Innistrathull.

The Copelands, as the result of one visit, yielded 97 species, viz., 62 Dicotyledons, 28 Monocotyledons, and 7 Ferns. On Innistrathull I found 44 species,—32 Dicotyledons, 11 Monocotyledons, and 1 Fern. Tory Island has 36 Dicotyledons, 3 Monocotyledons, and 2 Ferns,—in all 41 species. The Copelands and Innistrathull have 25 species in common; the Copelands and Tory have 17. The following 12 occur on all three: *Sagina procumbens*, *Silene maritima*, *Armeria vulgaris*, *Lotus corniculatus*, *Sedum Anglicum*, *Apargia autumnalis*, *Bellis perennis*, *Plantago maritima*, *Juncus bufonius*, *Agrostis canina*, *Rumex acetosa*, *Euphrasia officinalis*, all belonging to the British type; Innistrathull and the Copelands have *Sedum Anglicum*. On Tory Island there are *Crambe* and *Crithmum*. The Maiden Rocks, near Larne, are in close proximity, of small extent, mainly occupied each by Lighthouse buildings, only a few crevices of rocks in which plants can grow; I only found three, viz., *Matricaria inodora*, var. β *maritima*, *Atriplex laciniata*, and *A. patula*. The Island of Rathlin is larger than any of the others, and Miss Gage's list is very complete, the Dicotyledons are 204, and the Monocotyledons 21; besides those of the British type, which are of course most numerous, there are representatives of the English, Atlantic, Scottish, and Highland types.

G. D.

THE BOTANIST'S GUIDE
TO
THE NORTH OF IRELAND.

CLASS I.
DICOTYLEDONOUS, OR EXOGENOUS
PLANTS.

Sub-Class I.—THALAMIFLORAE.

ORDER I.—RANUNCULACEAE.

1. THALICTRUM. MEADOW RUE.

1. *T. alpinum*, L. (*Alpine M.*)

Perennial. June, July. Highland type. Range in Britain, 53°—61°; Ireland, 54½°?

Alpine marshes. Very rare.

Moist spots near summit of Ben Bulbin, County Sligo, where it was first discovered by Mr. E. Murphy. I found the lowest limit of the plant to be about 1300 feet.

2. *T. minus* L. (*Small M.*)

Perennial. June, July. Scottish type. Range in Britain, 53°—61°; Ireland?

Dry pastures. Rare.

Var. α, maritimum; on sandy shores; Newcastle, Mr. Whitla; shores of Belfast Bay and Dundrum Bay, Mr. Millen.

Var. β, montanum; stony places inland; Portmore Park and Lough Beg, County Antrim, Mr. Templeton. Stony places on ascent from Kilkeel to Slieve-Donard, Drs. Mackay and Stokes, and Mr. Templeton.

3. *T. flavum*, L. (*Common M.*)

Perennial. June, July. English Type. Range in Britain, 50°—57°. Throughout Ireland.

Moist places. Rather local.

Shores of Lough Neagh near Maghery, Rev. G. Robinson. Frequent near Blackwater, County Armagh, Mr. Campbell. Near entrance of Lagan Canal, at Lough Neagh, Mr. Hyndman; Lough Neagh, at Shane's Castle, Mr. Thompson. Ram's Island, Mr. Whitla. County Derry, Dr. Moore. Lough Neagh, at Massereene Demesne, G. D.

2. ANEMONE. ANEMONE.

1. *A. nemorosa*, L. (*Wood A.*)

Perennial. March to June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and pastures. Very frequent.

3. RANUNCULUS. CROWFOOT. SPEARWORT.

1. *R. fluitans*, Lam. (*River C.*)

Perennial. June, July. English type.

Lakes and rivers. Rare?

Lough Neagh, at Ballyronan, Rev. W. T. Whan. Ditches by Lough Neagh, at Massereene Park, G. D.

2. *R. aquatilis*, L. (*Common water C.*)

Perennial. May to August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Lakes and rivers. Frequent in the North.

3. *R. tripartitus*, D. C. (*Three-lobed water C.*)

Perennial? June, July. English type. Range in Britain, 50°—52° Ireland?

Stagnant waters. Very rare?

Shaw's Bridge, at the Weir, near Belfast, Mr. Templeton.

4. *R. hederaceus*, L. (*Ivy C.*)

Perennial. May to September. British type. Common in marshy places, coast and inland. Range in Britain, 50°—59°. Throughout Ireland.

5. *R. Lingua*, L. (*Great Spearwort.*)

Perennial. June to September. English type. Range in Britain, 50°—58°. Throughout Ireland.

Margins of lakes and rivers. Very local.

County Armagh, Rev. G. Robinson; River Bann, Portglenone; Lough Beg, Portmore, Mr. Templeton; Loughgall, Mr. More; Shores of Lough Erne, and Lough Eske, near town of Donegal, Dr. Mackay; near Belfast, in Lagan Canal, Bog Meadows and King's Moss, Mr. Millen; bogs in Moira demesne, Mr. Whitla; Ram's Island, Lough Neagh, G. D.

6. *R. Flammula*, L. (*Small Spearwort*.)

Perennial. May to August. British type. Common in watery places everywhere. Range in Britain, 50°—61°. Throughout Ireland.

7. *R. Ficaria*, L. (*Pilewort Crowfoot*.)

Perennial. March to July. British type. Very general and abundant in woods and wet pastures. Range in Britain, 50°—61°. Throughout Ireland.

8. *R. auricomus*, L. (*Wood C.*)

Perennial. April, May. British type. Moist shady places; frequent in the district. Range in Britain, 50°—58°. Throughout Ireland.

Abundant near Belfast, Lagan side, Colin Glen, Crawfordsburn, Blackstaff Lane, Cave Hill, &c., &c.

9. *R. sceleratus*, L. (*Celery-leaved C.*)

Perennial. May to September. British type. Pools and ditches. Range in Britain, 50°—59°. Throughout Ireland.

County Armagh, Rev. G. Robinson; Loughgall, Mr. More; Island of Rathlin, Dr. Marshall. Frequent near Belfast, along shores of the Lough; Kinnegar, Holywood; Dam by Lagan side; shores of Strangford, &c., G. D.

10. *R. acris*, L. (*Upright meadow C.*)

Perennial. May, June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Everywhere abundant.

11. *R. repens*, L. (*Creeping C.*)

Perennial. May to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Meadows and pastures. Very common.

12. *R. bulbosus*, L. (*Bulbous C.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Meadows and pastures. General.

Reported by Rev. W. T. Whan as rare at Moneymore and Ballyronan. Near Belfast abundant, at Lagan side, Cave Hill, lawn of Queen's College, Kinnegar at Holywood, &c., &c.

13. *R. hirsutus*, Curt. (*Fale hairy C.*)

Annual. June to September. English type. Range in Britain, 50°—57°. Ireland?

Meadows and wastes. Very rare.

At Skeig O'Niel, near Belfast, Mr. Millen; base of Magilligan Rocks, County Derry, Dr. Moore; at Warrenpoint, G. D.

14. *R. parviflorus*, L. (*Small-flowered C.*)

Annual. June to September. English type. Range in Britain, 50°—55°. Ireland, S. to 54½°.

Cultivated fields. Very rare.

Near Belfast, in 1846, in a field among corn at Newforge, Malone, Mr. Thompson.

4. CALTHA. MARSH MARYGOLD.

1. *C. palustris*, L. (*Common M.*)

Perennial. March to July. British type.

Common in marshes and moist pastures.

5. TROLLIUS. GLOBE-FLOWER.

1. *T. Europæus*, L. (*Mountain G.*)

Perennial. June, July. Scottish type. Range in Britain, 52°—61°. Ireland, North only.

Shady rocks and woods. Very rare.

Near the Giant's Causeway, Mr. Whitla; in County Donegal, Mr. Templeton; Convoys and Lough Garten, Mr. E. Murphy.

ORDER II.—NYMPHAEACEAE.

1. NYMPHAEA. WHITE WATER-LILY.

1. *N. alba*, L. (*Great W.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Lakes and still waters. Very abundant and generally diffused in North of Ireland.

Lake near top of mountain west from Dromore, Glenarm, Miss Davison; Island of Rathlin, Dr. Marshall. This and the following in Ballyarnot Lake, County Derry, Dr. Moore; in Lagan Canal and ditches near it; in various parts of Lough Neagh; in great profusion in the numerous small lakes in north-west Donegal, near Gweedore, and elsewhere, G. D.

2. NUPHAR. YELLOW WATER-LILY.

1. *N. lutea*, Sm. (*Common Y.*)

Perennial. June, July. English type. Range in Britain, 50°—58°. Throughout Ireland.

Lakes. Not so abundant as the last.

Loughgall, Mr. Moore; lake between Ballynahinch and Belfast, Herbm. N. H. Society; lake at Loughbrickland, Mr. Thompson; Rathlin Island, Dr. Marshall; River at Rathmelton, Mr. Templeton; Lagan Canal and ditches near it; lakes at Tynan, Killilea, and Monaghan; rare in the lakes of north-west Donegal; in Loughs Erahesk and Inschach, Glen Columbkil, G. D.

ORDER III.—PAPAVERACEAE.

1. PAPAVER. POPPY.

1. *P. Argemone*, L. (*Long prickly-headed P.*)

Annual. May to July. English type. Range in Britain, 50°—58°. Ireland, S. to 54½°?

Corn fields. Apparently very local.

Fields at Malone, and Curran of Larne, Mr. Templeton; fields near Bangor, Mr. Orr.

2. *P. hybridum*, L. (*Round rough-headed P.*)

Annual. May, June. English type. Range in Britain, 50°—55°. Ireland, S. to 54½.

In cultivated fields. Rare.

Near Holywood, Mr. Templeton.

3. *P. dubium*, L. (*Long smooth-headed P.*)

Annual. May and June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Waste places and fields. Very frequent.

Lagan side; shores of Dundrum Bay, &c., &c.

4. *P. Rhoëas*, L. (*Common red P.*)

Annual. May to August. British type. Range in Britain, 50°—55°. Throughout Ireland.

In fields and waste places. Frequent.

Lisburn, Moira, &c., Mr. Templeton.

2. MECONOPSIS. WELSH POPPY.

1. *M. Cambrica*, Vig. (*Common W.*)

Perennial. June, July. Atlantic type. Range in Britain, 50°—55°. Throughout Ireland.

Rocky and shady places. Very rare.

Rocks by the stream on Rostrevor Hill, and south face of Ben Bulbin, Dr. Mackay; at Fairhead, County Antrim, Mr. Templeton; near Ballycastle, Miss Hincks, On Ben Bulbin I found the altitude of this species to be from 800 to 1000 feet, G. D.

3. GLAUCIUM. HORNED POPPY.

1. *G. luteum*, Scop. (*Yellow H.*)

Perennial. June to October. English type. Range in Britain, 50°—57°. Ireland, S. to 54½?

Sandy sea shores. Rare in the district.

Shore near Newcastle and near Rostrevor, Mr. Whitla; shore a mile south of Annalong, County Down, Mr. Thompson; near Greencastle, Mr. Millen.

4. CHELIDONIUM. CELANDINE.

1. *C. majus*, L. (*Common C.*)

Perennial. May to August. English type. Range in Britain, 50°—56°. Ireland?

Waste places. Very local.

Near Newcastle, Mr. Rea; between Whitehouse and Carrickfergus, Mr. Templeton; frequent about Moneymore and Ballyronan, Rev. W. T. Whan; roadsides near Donegore Hill, Mr. Orr; near Ballycarry Church, and on Ballycarry Common, and near Bellaghy, County Derry, Mr. W. H. Ferguson.

ORDER IV.—FUMARIACEAE.

1. FUMARIA. FUMITORY.

1. *F. capreolata*, L. (*Rampant F.*)

Annual. May to August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Fields, wastes, &c. Rather local.

County Armagh, Rev. G. Robinson; frequent at Moneymore and Ballyronan, Rev. W. T. Whan; roadside between Newcastle and Bryansford, Mr. Templeton; waste ground near Ladyhill, Mr. Orr; various places near Belfast, Mr. Millen; Curran of Larne; fields at Malin-well, north-east Donegal, G. D.

Var. γ, confusa, Jourdan. Near Lisburn, Mr. Davies.

2. *F. officinalis*, L. (*Common F.*)

Annual. March to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields, gardens, and wastes. Very common.

ORDER V.—CRUCIFERAE.

1. BARBAREA. WINTER CRESS.

1. *B. vulgaris*, Br. (*Bitter W., yellow rocket.*)

Perennial. May to August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Pastures, hedgerows, wastes. Frequent.

Near Belfast, about Malone, Blackstaff Lane, Kinnegar at Holywood, and roadsides at Carrickfergus, &c.

Var. β, arcuata, Reich. Loughgall, Mr. More.

Var. δ, intermedia, Bor. Near Armagh, English Botany.

2. ARABIS. ROCK CRESS.

1. *A. petraea*, D. C. (*Alpine R.*)

Perennial. June, July. Highland type. Range in Britain, 53°—61°. Ireland?

Mountain rocks. Very rare.

On Ben Bulbin, County Sligo, J. Wynne, Esq., of Hazlewood.

2. *A. hirsuta*, Br. (*Hairy R. C.*)

Biennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Walls and rocks. Very local.

Dundrum Castle, Mr. Templeton; at the Murloch, County Down, Miss Hincks. It has been long known on Ben Bulbin, where I have found it ranging from 900 to 1200 feet. At Doochary Bridge, between Dunglow and Glenties, west Donegal, G. D.

3. CARDAMINE. BITTER CRESS.

1. *C. amara*, L. (*Large-flowered B.*)

Perennial. April to June. British type. Range in Britain, 50°—58°. Ireland?

Wet places in meadows and woods. Rare.

Wet meadows near Toome Bridge, and side of Mayola River near Castledawson, Mr. Templeton; Derryloan graveyard, Cookstown, Rev. W. T. Whan; Banks of Lagan near Belfast, Mr. Orr.

2. *C. pratensis*, L. (*Common B.*)

Perennial. April to June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Moist meadows and river sides. Very common.

3. *C. hirsuta*, L. (*Hairy B.*)

Annual? March to June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist shady places. Common.

4. NASTURTIUM. WATER CRESS; YELLOW CRESS.

1. *N. officinale*, Br. (*Common W.*)

Perennial. May to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Ditches and rivulets. Very general.

2. *N. sylvestris*, Br. (*Creeping Y.*)

Perennial. June, July. English type. Range in Britain, 50°—56°. Ireland?

Margins of lakes, &c. Very local.

Banks of Lough Erne, Dr. Scott; Killikeen, County Cavan, Rev. N. J. Halpin; Lagan side, Mr. Templeton; Ballynahinch, Rev. R. Oulton; roadside, Lisburn to Hillsborough, Mr. Orr; abundant on shores of Lough Neagh, near Toome, G. D.

3. *N. terrestre*, Br. (*Marsh Y.*)

Annual. June to September. English type. Range in Britain, 50°—58°. Ireland, 52°—54½°.

Watery places. Rare.

Wet places a mile above Drumbridge, and bog-meadows, Belfast, Mr. Templeton; shores of Lough Neagh, at Maghera, Rev. G. Robinson; bogs in Moira Demesne, Mr. Hyndman.

5. ARMORACIA. WATER RADISH.

1. *A. amphibia*, Koch. (*W. Radish.*)

Perennial. June, July. English type. Range in Britain, 50°—56°. Ireland?

Watery places. Rather local.

Lough Erne, Dr. Scott; at Portmore and Lambeg, Mr. Templeton; at Lagan side, near Belfast, Mr. Orr; shores of Lough Neagh at Massereene Park, G. D.

6. COCHLEARIA. SCURVY GRASS.

1. *C. officinalis*, L. (*Common S.*)

Perennial? May to September. British type.

Sea coast, and on mountains, in one or other of its varieties. It occurs on the summit of Ben Bulbin.

Var. β, Groenlandica. Island of Rathlin, Dr. Moore.*Var. γ, Danica.* Shore of Belfast Lough near Macedon, Mr. Orr; strand road at Portaferry; at Castle Ward, opposite

Portaferry; shore at Larne; Glenarm; Hornhead; and Sligo Bay, G. D.

2. *C. Anglica*, L. (*English S.*)

Annual. May to August. English type. Range in Britain, 51°—55°. Throughout Ireland?

Margins of estuaries. Local.

Shore between Belfast and Carrickfergus, Mr. Millen; at Culmore Point, near Londonderry, Dr. Moore.

7. DRABA. WHITLOW GRASS.

1. *D. verna*, L. (*Common W.*)

Annual. March to July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry walls, rocks, and banks. Not common.

Sheep walk near Armagh, Admiral Jones; on walls two miles from Antrim, east side of Lough Neagh, and north wall of Massereene Park, Mr. Templeton; on the Cave Hill, Mr. Millen; Ballycastle, Miss Hincks; Island of Rathlin, Miss Gage; Sandhills near Railway Station, at Portrush, G. D.

2. *D. incana*, L. (*Twisted podded W.*)

Biennial. June, July. Highland type. Range in Britain, 53°—61°; Ireland, 54° to 55°.

Dry rocky places. Very rare.

Ben Bulben and other mountains of Sligo, Dr. Mackay; Sandy flat of Magilligan, and on Ben Evenagh, Dr. Moore. On Ben Bulben, I have seen it at 1200 feet. The plant, therefore, in one degree of latitude, ranges from near sea level to that height.

8. THLASPI. PENNY CRESS.

1. *T. arvense*, L. (*Field P.*)

Annual. May to August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Fields and wastes. Very local.

Loughgall, Mr. More; Donaghadee Pier; Red Bay, County Antrim, and at Newcastle, Mr. Templeton. Fields at Belfast, Mr. Millen; at Magilligan, Mr. E. Murphy; Ballycastle, Miss Hincks.

9. CAKILE. SEA ROCKET.

1. *C. maritima*. (*Sea R.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Sandy sea-shores. So general on sandy shores that it is unnecessary to specify localities.

10. SISYMBRIUM. HEDGE MUSTARD.

1. *S. officinale*, Scop. (*Common H.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Waste places and road-sides. Very frequent.

2. *S. Sophia*, L. (*Fine leaved H.*)

Annual. June, July. English type. Range in Britain, 50°—58°. Ireland?

Waste places. Rare.

By the road to Slieve Gullan, three miles from Dundalk, and near Carrickfergus, Mr. Templeton.

3. *S. Thalianum*, Hook. (*Common H.*)

Annual. March to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry walls, banks, and rocks. Very local.

Near Belfast on Deer Park wall, Mr. Templeton; old walls at Carrickfergus, Mr. W. H. Ferguson; Quarry North side of Cave Hill; south face of Black Mountain; ruins of Moyne Abbey, near Killala, G. D.

11. ALLIARIA. GARLIC MUSTARD.

1. *A. officinalis*, D. C. (*Common G.*)

Biennial. May, June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Hedge banks and wastes. Rather local.

About Belfast, at south-west corner of Deer Park and elsewhere, Mr. Templeton; road-side at Glenville, lower part of Colin Glen, Mr. Hyndman; at Ballycastle, Miss Hincks; at Shane's Castle, G. D.

12. SUBULARIA. AWL-WORT.

1. *S. aquatica*, L. (*Water A.*)

Perennial. June, July. Highland type. Range in Britain, 53°—59°. Ireland, 54½° to 55°?

Shallow margins of lakes. Rare.

Lake on Milrea mountain, County Mayo, at 1500 feet, Dr. Mackay; Lough Carlan, at gap of Barnesmore, in Donegal, Mr. E. Murphy; side of River Bann, below the salmon-leaps above Coleraine, and Lough Neagh, at Portmore Park, Mr. Templeton; in the Canal at Newry, Mr. Thompson; Lough Neagh, at Ballinderry, Mr. Hyndman.

13. CAPSELLA. SHEPHERD'S PURSE.

1. *C. Bursa Pastoris*, D. C. (*Shepherd's P.*)

Annual. Spring to Autumn. British type. Range in Britain, 50°—60°. Throughout Ireland.

Fields and Wastes. Very Common.

14. LEPIDIUM. PEPPER WORT.

1. *L. campestre*, Br. (*Mithridate P.*)

Biennial. May to August. British (English?) type. Range in Britain, 50°—60°. Throughout Ireland?

Fields and dry places. Very local.

Near Drumbo, Ballynahinch, and Kinnegar at Holywood, Mr. Templeton; at Giant's Ring, Belfast, and near Ballycarry, Mr. W. H. Ferguson; at Largy, on shore of Lough Neagh, Mr. Whitla; in County Armagh, Rev. G. Robinson; at New-castle, County Down, Mr. Millen.

2. *L. Smithii*, Hook. (*Common Field P.*)

Perennial. April to July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Borders, fields, and dry wastes. Not unfrequent.

Near Warrenpoint; gravel hills by the river a quarter of a mile above Comber, Mr. Templeton; near terminus of Ulster line at Belfast, Mr. Orr; road-sides at Ballylesson, Mr. W. H. Ferguson; in County Armagh, Rev. G. Robinson; Castlewellan demesne, Mr. Hyndman; at Portstewart, Rev. W. T. Whan; road-sides, from Belfast to Newtownards, at Portaferry and Strangford, G. D.

15. SENEBIERA. WART CRESS.

1. *S. Coronopus*, Poir. (*Common W.*)

Annual. June to September. English type. Range in Britain, 50°—58°. Throughout Ireland.

Waste places, usually near the sea. Very local.

Shore at Crawfordsburn, Mr. Hyndman; near Carrickfergus, and at Newcastle, Mr. Millen; Giant's Causeway and Rathlin Island, Mr. Templeton; County Armagh, Rev. G. Robinson; by the strand road, at Portaferry; and at Downpatrick Head, near Ballinglen, County Mayo, G. D.

16. BRASSICA. CABBAGE, &C.

1. *B. oleracea*, L. (*Sea C.*)

Biennial. May to August. Atlantic type. Range in Britain, 50°—54°. Throughout Ireland?

Cliffs and stony places near the sea. Very rare.

Among stones on the beach, Island of Rathlin, Miss Gage.

2. *B. campestris*, L. (*Common wild C.*)

Biennial. June, July. English type. Range in Britain, 50°—57°. Throughout Ireland.

Fields and wastes. Very local.

Corn fields, Dundrum, and at village of Faughan, County Donegal, Mr. Templeton; near Ballycastle, Miss Hincks.

17. SINAPIS. MUSTARD.

1. *S. nigra*, L. (*Common M.*)

Annual. June, July. English type. Range in Britain, 51°—56°. S. Ireland to 54½°.

Hedges and wastes. Very rare.

At Falls Road and Carrickfergus, Mr. Templeton.

2. *S. arvensis*. (*Wild M. Charlock.*)

Annual. May to August. British type. Range in Britain, 50°—51°. Throughout Ireland.

Fields and wastes. Very common.

18. DIPLOTAXIS. ROCKET.

1. *D. tenuifolia*, D. C. (*Wall R.*)

Perennial. June to September. English type. Range in Britain, 50°—56°. Ireland?

Walls and wastes. Very rare.

Rubbish heaps near Belfast terminus of Ballymena Railway, York Street, Mr. Millen. I have gathered the plant in this locality; it may not be truly a native, G. D.

19. CRAMBE. KALE.

1. *C. maritima*, L. (*Sea K.*)

Perennial. June. English type. Range in Britain, 50°—56°. Throughout Ireland.

Sandy and stony places near the sea. Very rare.

At Church Bay, Island of Rathlin, Mr. Templeton; on Tory Island, Mr. Hyndman. I have never seen it on the main land. It may have been extirpated, but still surviving on the islands, G. D.

20. RAPHANUS. RADISH.

1. *R. Raphanistrum*, L. (*Wild R.*)

Annual. Summer and Autumn. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Very common.

2. *R. maritimus*, Sm. (*Sea R.*)

Biennial. June to September. Atlantic type.

Sandy and stony places near the sea. Very local.

Sea coast below Bangor, Mr. Orr; sand hills at Curran of Larne, Mr. Templeton; roadside near the Pottery, at Larne, and shore at Innishowen head, G. D.

ORDER VI.—RESEDACEAE.

1. RESEDA. DYER'S ROCKET. MIGNONETTE.

1. *R. Luteola*, L. (*Common D.*)

Annual. June to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry sandy places. Very frequent.

Cave Hill, and near Giant's Ring, Mr. Hyndman; about Carrickfergus, Mr. Millen; roadsides at Castledawson, Mr. W. H. Ferguson; very abundant on railway embankments; at Shane's Castle; near Toome; between Newtownards and Greyabbey; at Killylea; strand road, at Portaferry; Knockglass, at Malin, and about town of Sligo, G. D.

ORDER VII.—VIOLACEAE.

1. VIOLA. VIOLET.

1. *V. palustris*, L. (*Marsh V.*)

Perennial. April, May. British type. Range in Britain, 50°—60°. Throughout Ireland.

Bogs and Marshes. Frequent.

Kinnegar, Holywood, and at Ballynahinch, Mr. Templeton; Dunglow to Glenties very abundant; large and plentiful at gap of Barnesmore, near town of Donegal; on table land of Innishowen, 300 to 400 feet, but smaller and less abundant than in the western parts of Donegal, G. D.

2. *V. odorata*, L. (*Sweet V.*)

Perennial. March, April. English type. Range in Britain, 50°—57°. South of Ireland to 54½°.

Woods and banks. Very rare.

Farnham woods, Millbrook and Oldcastle, County Cavan, Rev. N. J. Halpin; County Armagh, Rev. G. Robinson; road-side on a grassy bank opposite Cranmore, near Belfast, Mr. Templeton; Drumane, Bellaghy, County Derry, and near Carrickfergus Castle, Mr. W. H. Ferguson.

3. *V. canina*, L. (*Dog Violet.*)

Perennial. March to July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods, banks, and wastes. Common.

Var. *flavicornis*. At Loughgall, Mr. More; on Slieve Gallion, Rev. W. T. Whan; on the links at Newcastle, G. D.

4. *V. tricolor*, L. (*Pansy V.*)

Biennial. Spring to Autumn. British type. Range in Britain, 50°—61°. Very general.

Var. *a. Curtisii*. Mullaghmore, County Sligo, Mr. Syme; at Belfast, Mr. Orr; sandhills, &c., at Malin; links at Newcastle, and similar places in the district, G. D.

Var. *β. arvensis*. This is distinguished by very short petals, and is frequent in fields.

5. *V. lutea*, Huds. (*Yellow V.*)

Perennial. May to August. Scottish type. Range in Britain, 51°—59°. Throughout Ireland.

Dry pastures, &c. Very rare?

Carrickfergus Commons, but rare, Mr. W. H. Ferguson; sandhills at Dunfanaghy, County Donegal, Mr. Thompson; sandhills at Newcastle, G. D.

ORDER VIII.—DROSERACEAE.

1. DROSERA. SUN-DEW.

1. *D. rotundifolia*, L. (*Round-leaved S.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and moist heaths. Frequent.

About Belfast, on Black Mountain; Cavehill; Kinnegar, Holywood; King's Moss, &c., &c.

2. *D. longifolia*, L. (*Spathulate-leaved S.*)

Perennial. July, August. English Type. Range in Britain, 50°—58°. S. Ireland to 55°.

Bogs and Heaths. Very rare.

Birky Moss, Mr. Templeton; in Moyntagh bogs, Mr. Hyndman; bog at Culmore, near Derry, Dr. Moore.

3. *D. Anglica*, Huds. (*Great S.*)

Perennial. June, July. Scottish Type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and moist heaths. Very frequent.

Bog at Annaghmore, County Armagh, Rev. G. Robinson. Moyntagh bogs between Lisburn and Lough Neagh, Mr. Hyndman; Birky Moss, Mr. Templeton; Cotton Moss near Donaghadee, Mr. Millen; all the three in bog at Culmore, Derry, Dr. Moore; abundant at Gweedore, Dunglow, Dunfanaghy, and Glen Columbkil, G. D.

2. PARNASSIA. GRASS OF PARNASSUS.

1. *P. palustris*, L. (*Common G.*)

Perennial. August, September. British type. Range in Britain, 50°—61°. Ireland, North chiefly.

Bogs and marshes. Rather local.

Three miles west of town of Monaghan; Ballintoy; Islandmagee and Ballycastle, Mr. Hyndman; Islandmagee, near the Rocking Stone, Mr. W. H. Ferguson; near Cookstown, Rev. W. T. Whan; marshes at sandhills Magilligan; at Cushendall; Brown's Bay, Islandmagee; abundant near Ballyshannon and Sligo, Mr. Hyndman; in Rathlin Island, Miss Gage.

ORDER IX.—POLYGALACEAE.

1. POLYGALA. MILK-WORT.

1. *P. vulgaris*, L. (*Common M.*)

Perennial. May to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry pastures. Very frequent.

Var. β, calcarea. Banks by the roadside, on ascent to Divis Mountain from Ballygomartin Schoolhouse, Mr. Orr.

ORDER X.—ELATINACEAE.

1. ELATINE. WATER-WORT.

1. *E. hexandra*, D. C. (*Hexandrous W.*)

Annual. July to September. English type. Range in Britain, 50°—58°. Ireland, North chiefly.

Margins of lakes and ditches. Rare.

Castlewellan Lake, Mr. Templeton; King's Moss, Mr. Millen; Lough Enagh, near Derry, and River Bann, near Coleraine, Dr. Moore. In Lough Erigh, between Doochary Bridge and Glenties, County Donegal, G. D.

2. *E. Hydropiper*, L. (*Octandrous W.*)

Annual. August. English type. Range in Britain, 50°—56°. S. Ireland to 54½°.

Near Belfast, Dr. Mateer; Lagan Canal, between Lough Neagh and the first bridge, and in the canal at Newry, Mr. Thompson.

ORDER XI.—CARYOPHYLLACEAE.

1. SAPONARIA. SOAP-WORT.

1. *S. officinalis*, L. (*Common S.*)

Perennial. August, September. English type. Range in Britain, 50°—57°. S. Ireland to 55°.

At Lough Vaddy, and Glen of New river, at Newtownlimavady, Mr. Templeton; shores of Lough Neagh, Mr. Whitla. Massereene Park, G. D.

2. SILENE. CATCHFLY.

1. *S. acaulis*, L. (*Moss Campion.*)

Perennial. June, July. Highland type. Range in Britain, 53°—61°. Ireland, 54°—55°.

Mountains, on gravel, and rocks. Very rare.

On Ben Bulbin and other mountains of Sligo, Dr. Mackay; on trap rocks at Magilligan, County Derry, Dr. Moore.

2. *S. inflata*, Sm. (*Bladder C.*)

Perennial. June to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Pastures and wastes. Very frequent.

At Dundalk; Clough, County Down; frequent in Monaghan, Mr. Templeton; at Holywood, Bangor, Whitehouse, &c., Mr. Millen; about Newtownards, G. D.

3. *S. maritima*, With. (*Sea C.*)

Perennial. June to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Sea coast, and on mountains. Very general.

4. *S. Anglica*, L. (*English C.*)

Annual. June to October. English type. Range in Britain, 50°—58°. Throughout Ireland.

Dry pastures and wastes. Rare.

Fields near the sea at Kilkeel, Mr. White; in fields at Benone, County Derry, Dr. Moore. On the shore north from Newcastle, G. D.

5. *S. noctiflora*, L. (*Night-flowering C.*)

Annual. August, September. English type. Range in Britain, 50°—57°. Ireland?

Dry gravelly places. Very rare.

Parish of Drumbeg, at railway cutting near base of one of the Drumlins; and sand-pit at Crossroads, half a mile from Lisburn, on the road to Lurgan, Dr. Moore; near Belfast, at York Street terminus, Mr. Millen.

3. LYCHNIS. CAMPION LYCHNIS.

1. *L. Flos-Cuculi*, L. (*Meadow L.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist meadows and pastures. Very frequent.

2. *L. vespertina*, Sibth. (*White C.*)

Perennial. June to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields and hedges. Not common.

Roadside from Templepatrick to Donegore, Mr. Orr; bank at Derriagh, near Dunmurry, Mr. Millen; at Holywood, in hedges, Mr. W. H. Ferguson; Belmont, near Belfast. G. D.

3. *L. diurna*, Sibth. (*Red C.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods, hedges, and shady rocks. Very frequent.

Near Belfast, on Cave Hill; at Shaw's Bridge; in Colin Glen, and similar places, G. D.

4. AGROSTEMMA. COCKLE.

1. *A. Githago*, L. (*Corn C.*)

Annual. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Usually in fields. Frequent.

5. SAGINA. PEARL-WORT.

1. *S. apetala*, L. (*Annual Small-flowered P.*)

Annual. June, July. English type. Range in Britain, 50°—57°. Throughout Ireland.

Walls and dry places. Rather local.

Kinnegar, Holywood, and Whitehouse, Mr. Millen; walls and fortifications, Carrickfergus, Mr. W. H. Ferguson. Court of Armagh Cathedral; old walls at Ballymacarrett, and at Glenarm, G. D.

2. *S. maritima*, Don. (*Sea P.*)

Annual. May to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist places near the sea. Frequent.

Shores of Belfast Bay, Mr. Templeton. Shore at Portaferry; Castle Ward; Glenarm; Island of Innistrahull, G. D.

3. *S. procumbens*, L. (*Procumbent P.*)

Perennial. May to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wastes and pastures. Common.

4. *S. subulata*, Wimm. (*Awl-leaved P.*)

Perennial. June, July. Scottish type. Range in Britain, 50°—61°. Throughout Ireland.

Dry gravelly and stony places. Rather local.

Isle of Muck, south from Larne, Mr. Templeton; between Portstewart and Portrush, Dr. Moore; coast of Islandmagee south from lighthouse at Larne, G. D.

5. *S. nodosa*, E. Meyer. (*Knotted P.*)

Perennial. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Wet sandy places, and in marshes. Very frequent.

Near Belfast, on banks of Lagan; Colin River; Bog Meadows; Kinnegar, at Holywood; and similar places.

6. HONCKENYA. SEA PURSLANE.

1. *H. peploides*, Ehrh. (*Ovate-leaved S.*)

Perennial. May to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sandy sea-shores. Very frequent.

Along the coast and arms of sea, as at Kinnegar, Holywood; Dundrum Bay, &c.

7. ARENARIA. SAND-WORT.

1. *A. verna*, L. (*Vernal S.*)

Perennial. May to July. Scottish type. Range in Britain, 50°—58°. Ireland, 55° only?

Rocky places. Very rare.

Rocks at Carlingford Castle, County Antrim, Mr. Hyndman; on trap rocks at Magilligan, County Derry, Mr. Templeton.

2. *A. ciliata*, L. (*Fringed S.*)

Perennial. June, July. Type?

A mountain plant of middle Europe; not in Britain; in Ireland apparently confined to Ben Bulbin and other mountains of Sligo, where it is abundant, and has long been known. On Ben Bulbin I have found it from 1000 feet to the summit.

3. *A. serpyllifolia*, L. (*Thyme-leaved S.*)

Annual. May to August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Walls and dry places. Frequent.

Common, near Comber, Mr. Orr; at York Street terminus, Kinnegar, &c., Mr. Millen. On the Knockagh; Links, north of Newcastle; at Castle Ward; churchyard wall at Glenarm; at Malin, County Donegal, G. D.

4. *A. trinervis*, L. (*Three-nerved S.*)

Annual. May, June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Shady woods and hedge-rows. Rather local.

Counties of Tyrone and Leitrim, Mr. E. Murphy; Loughgall, Mr. More; south-west corner of Deer Park, at Belfast, Mr. Templeton; near Shaw's Bridge, Mr. Thompson; Bessbank, near Belfast, Herbarium N. History Society; hedge-row by road from Dunmurry to Colin, half a mile from the former, Mr. Millen and G. D.; Castledawson demesne, south side, near the suspension bridge, Mr. Ferguson and G. D.

8. STELLARIA. STITCH-WORT.

1. *S. media*, With. (*Common S. or Chickweed.*)

Annual. Nearly all seasons. British type. Range in Britain 50°—60°. Throughout Ireland.

Roadsides and wastes. Very common.

2. *S. Ho'ostea*, L. (*Great S.*)

Perennial. April, May. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and hedges. Very general.

Near Belfast. in Colin Glen; Lagan side; Blackstaff Lane; Cave Hill; Holywood, &c. &c.

3. *S. graminea*, L. (*Grass-leaved S.*)

Perennial. May to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures, fields, wastes. Very frequent.

Var. β, scapigera. In ditches and marshes.

4. *S. uliginosa*, Murr. (*Bog S.*)

Annual. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches and by rivulets. Very frequent.

9. CERASTIUM. MOUSE-EAR CHICKWEED.

1. *C. vulgatum*, L. (*Broad-leaved M.*)

Annual. April to August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Fields and wastes. Common.

2. *C. viscosum*, L. (*Narrow-leaved M.*)

Biennial? Spring and Summer. British type. Range in Britain, 50°—61°. Throughout Ireland.

Walls, pastures, wastes. Very common.

3. *C. semidecandrum*, L. (*Small M.*)

Annual. March to June. British type. Range in Britain, 50°—61°. Throughout Ireland.

4. *C. tetrandrum*, Curt. (*Four-cleft M.*)

Annual. May to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wastes and sandy places. Sandhills, frequent.

Kinnegar, Holywood; sandhills at Ballycashill, County Mayo; at Dunfanaghy and Culdaff, &c., G. D.

ORDER XII.—LINACEAE.

1. LINUM. FLAX.

1. *L. catharticum*, L. (*Purging F.*)

Annual. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and heaths. Very general.

2. RADIOLA. FLAXSEED.

1. *R. Millegrana*, Sm. (*Thyme-leaved F.*)

Annual. August, September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Moist gravelly and boggy places. Rather local.

Kinnegar, Holywood; Ballygowan Lough, County Down; and between Newcastle and Kilkeel, Mr. Templeton; at Bangor, Rev. R. Oulton; low grounds beyond Newtownards, Mr. Orr; Murlough, County Down, Dr. White; Rosses, in County Donegal, Mr. E. Murphy; in County Derry, Dr. Moore.

ORDER XIII.—MALVACEAE.

1. MALVA. MALLOW.

1. *M. sylvestris*, L. (*Common M.*)

Perennial. June to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Roadsides and wastes, &c. Rather local.

In County Armagh, Rev. G. Robinson; near Rostrevor, by Kilkeel road; Herbarium N. History Society; Downpatrick Cathedral, Mr. Hyndman; at Carrickfergus, Mr. Millen; Greyabbey, Mr. Templeton; Ballyronan and Moneymore, Rev. W. T. Whan; Island of Rathlin, Dr. Marshall. Links, north from Newcastle; roadside, half way between Newtownards and Greyabbey; at Kirkcubbin; Strand road, Portaferry; Castle Ward; town of Donegal; in Innishowen, at Culdaff and Malin, G. D.

2. *M. rotundifolia*, L. (*Dwarf M.*)

Perennial. July, August. British type. Range in Britain, 50°—58. Throughout Ireland.

Wastes, usually near the sea. Rather local.

On bank of a stream near a bridge at lower part of town of Rostrevor, Herbarium N. H. Society; road half way between Belfast and Milewater; shore half a mile west of Carrickfergus; frequent in the Ards, County Down, Mr. Templeton; roadside at village of Strangford, G. D.; Rathlin Island, Miss Gage.

3. *M. moschata*, L. (*Musk M.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Throughout Ireland.

Roadsides and wastes, &c. Rather local.

Two miles from Dundalk, left side of road to Slieve Gallion; field two miles north of Templepatrick; at Tandragee and Gilford, and along the Bann river, Mr. Templeton; near Holywood, and fields at Crumlin, Mr. Whitla; roadside near Lurgan, Herbarium N. History Society; Ballyronan and Moneymore, Rev. W. T. Whan.

2. LAVATERA. TREE MALLOW.

1. *L. arborea*, L. (*Sea T.*)

Perennial. August, September. Atlantic type. Range in Britain, 50°—56°. Ireland, Cork to Rathlin.

Sea-rocks. Very rare.

Carrick-a-Rede, near Ballintoy, Mr. Templeton; on a high rock at west end of Island of Rathlin, Miss Gage; coast at Newcastle, G. D.

ORDER XIV.—HYPERICACEAE.

1. HYPERICUM. ST. JOHN'S WORT.

1. *H. Androsaemum*, L. (*Common S.*)

Perennial. July, August. Atlantic type. Range in Britain, 50°—58°. Throughout Ireland.

Hedges, bushy rocks. Rather local.

Castle Dobbs demesne, and hedges near Bellaghy, Mr. W. H. Ferguson; at Ballyronan, Rev. W. T. Whan; bushy places by the shore near Crawfordsburn, Mr. Orr; glen at Slieve Croob, Ballynahinch, Mr. Hyndman; behind Holywood House; at head of Colin Glen, and at Carnmoney, Mr. Millen; at Cran-

field, Miss Hincks; Rathlin Island, Miss Gage. On Ben Bulben; roadside near Whitrock, Belfast; Moyne Abbey, Killala; at Kildrum, west from Crossroads, County Derry; strand at Glen Columbkil, G. D.

2. *H. perforatum*, L. (*Perforated S.*)

Perennial. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and bushy places. Very local.

Loughgall, Mr. More; Tullamore Park, Herbarium N. H. Society; Wolfhill, Mr. Thompson; at Shane's Castle, Miss Hincks; shores of Lough Neagh, at Toome, Mr. Ferguson and G. D.

3. *H. dubium*, Leers. (*Imperforate S.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. S. Ireland to 55°.

Woods and thickets. Very local.

Allan's meadow, north of second lock of Lagan, Mr. Templeton; near Antrim, Mr. Orr; abundant on the links north from Newcastle, G. D.

4. *H. quadrangulum*, L. (*Square-stalked S.*)

Perennial. August. British type.

Sides of rivers and ditches, &c. Not unfrequent.

Loughgall, Mr. More; Ballyronan and Moneymore, Rev. W. T. Whan; Island of Rathlin, Miss Gage. Near Belfast, at Bog Meadows; base of Colin Mountain; Lough Neagh, at Toome; banks of river at Culdaff, &c., G. D.

5. *H. pulchrum*, L. (*Small upright S.*)

Perennial. May to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry woods, heaths, and wastes. Very frequent.

6. *H. humifusum*, L. (*Trailing S.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry pastures and turf ditches. Frequent.

7. *H. hirsutum*, L. (*Hairy S.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Ireland, 53½° to 54½°?

Woods and thickets. Rare.

At Macedon Point, near Belfast, Mr. Templeton.

8. *H. elodes*, L. (*Marsh S*)

Perennial. July, August. Atlantic Type. Range in Britain, 50°—60°. Throughout Ireland.

Bogs and marshes. Rather local.

Newtown Park near a lake; Ballygowan Moss; bog south-east of Slieve Gallion; half way between Ballynahinch and Clough; Annahilt bog, Mr. Templeton; spongy bogs, Conlig hill, Newtownards, Mr. Orr; near Newcastle, Herbarium N. History Society. Drinly, near Culdaff; bogs at Barnes and Crossroads, near Dunfanaghy; common in marshes in Glen Columbkil, G. D.

ORDER XV.—GERANIACEAE.

1. GERANIUM. CRANE'S BILL.

1. *G. sanguineum*, L. (*Bloody C.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Ireland?

Natural pastures, &c. Apparently rare.

Bushy places by the shore, near Crawfordsburn, Mr. Orr; Coast at Portrush, G. D.

2. *G. sylvaticum*, L. (*Wood C.*)

Perennial. June, July. Scottish type. Range in Britain, 52°—60°. Ireland, north only.

Woods and shady rocks. Rare.

Murlough; Glenarm Park and Giant's Causeway, Mr. Templeton. Near town of Antrim; and in a small den above Holywood, G. D.

3. *G. pratense*, L. (*Blue meadow C.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Shady banks and rocks. Very local.

Limestone rocks, Whitepark, and roadside near Ballintoy, Dr. Moore; at Dunluce, Mr. Templeton; road at Port Ballintrae, Mr. Hyndman.

4. *G. lucidum*, L. (*Shining C.*)

Annual. May to August. British (English) type. Range in Britain, 50°—58°. Throughout Ireland.

Rocks, walls, and wastes. Rather local.

Rocks south-west corner of Deer Park at Belfast, and Sallagh Braes, near Larne, Mr. Templeton; rocks at Whitehead, Mr. W. H. Ferguson; along the Cave Hill Railway, Mr. Millen. Base of Knockagh, near Carrickfergus; at Manorhamilton and Blacklion, between Enniskillen and Sligo, G. D.

5. *G. Robertianum*, L. (*Stinking C.*)

Annual. May to August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and wastes. Very frequent.

6. *G. molle*, L. (*Dove's-foot C.*)

Annual. April to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Common.

7. *G. pusillum*, L. (*Small-flowered C.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry fields and wastes. Rare.

At Doagh, Mr. Millen; Cave Hill, Rev. R. Oulton; shore at Bath Lodge, Miss Hincks.

8. *G. rotundifolium*, L. (*Round-leaved C.*)

Annual. June, July. English type. Range in Britain, 50°—53°. S. Ireland, to 54½°?

Pastures and wastes. Very rare.

Near Cookstown, Rev. W. T. Whan; fields near Antrim, Mr. Orr.

9. *G. dissectum*, L. (*Jagged-leaved C.*)

Annual. May to August. British type. Range in Britain, 50°—59°. Throughout Ireland.

Pastures and wastes. Very general.

10. *G. columbinum*, L. (*Long-stalked C.*)

Annual. June, July. English type. Range in Britain, 50°—57°. Throughout Ireland?

Dry pastures, &c. Very rare.

Ballydoon, near Killinchy, Mr. Hyndman; at Malone, near Belfast, Mr. Orr; debris of quarries at Belfast mountains, Mr. Thompson.

2. ERODIUM. STORK'S BILL.

1. *E. cicutarium*, Sm. (*Hemlock S.*)

Annual. June to September. British type. Range in Britain, 50°—59°. Throughout Ireland.

Pastures and wastes. Common.

2. *E. moschatum*, Sm. (*Musky S.*)

Annual. June, July. English type. Range in Britain, 50°—55°. Throughout Ireland?

Waste places. Rare.

At Dunmurry; field by the shore below Carrickfergus; at Portaferry, and rocks at Carlingford, Mr. Templeton; ruins of a limekiln at Cave Hill, Mr. Orr; dry places north-east from Holywood, Mr. Millen; at Glenarm, Rev. R. Oulton.

3. *E. maritimum*, Sm. (*Sea S.*)

Perennial. June to September. Atlantic type. Range in Britain, 50°—55°. Throughout Ireland.

Sandy and gravelly sea-shores. Rare.

At Newcastle and Kirkestown, County Down, Mr. Templeton; fields by the shore between Whiteabbey and Carrickfergus, Mr. Orr; Eden, near Carrickfergus, on the shore, Mr. Millen; Castlerock, Coleraine, Rev. W. T. Whan; at Glenarm, Rev. R. Oulton; at Ballycastle, Miss Hincks.

ORDER XVI.—OXALIDACEAE.

1. OXALIS. WOOD SORREL.

1. *O. Acetosella*, L. (*Common W.*)

Perennial. May, June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and shady places. Very general.

Sub-Class II.—CALYCIFLORAE.

ORDER XVII.—CELASTRACEAE.

1. EUONYMUS. SPINDLE TREE.

1. *E. Europaeus*, L. (*Common S.*)

Perennial. May, June. English type. Range in Britain, 50°—56°; South of Ireland to 54½°.

Woods, &c. Very rare.

Rocks in Deer Park, Belfast, Mr. Templeton; shores of Lough Neagh, Mr. Whitla; shore of Lough Neagh at Shane's Castle, Mr. Thompson.

ORDER XVIII.—RHAMNACEAE.

1. RHAMNUS. BUCKTHORN.

1. *R. catharticus*, L. (*Purging B.*)

Perennial. June, July. English type. Range in Britain, 50°—55°. Throughout Ireland.

Woods and hedges. Rare.

Islands in Lough Erne, near Enniskillen, Dr. Mackay; shores of Lough Neagh, one mile west of the Blackwater, Mr. Templeton; Lough Beg, County Derry, Dr. Moore.

2. *R. Frangula*, L. (*Alder B.*)

Perennial. May, June. English type. Range in Britain, 50°—58°. Ireland, 54½°—55°.

Woods and thickets. Rare.

Townland of Crevetenan, near Ballynahinch; bog near Ballygowan Bridge, County Down, Mr. Templeton; near Castlestewart, Rev. W. T. Whan; side of Lough Neagh, at Shane's Castle, Mr. Thompson; Island in Lough Beg, Dr. Moore.

ORDER XIX.—LEGUMINOSAE.

1. ULEX. FURZE.

1. *U. Europaeus*, L. (*Common F.*)

Perennial. February to July. British type. Range in Britain, 50°—59°. Throughout Ireland.

Heaths and hedges, &c. Very general, but apparently rarer towards the west of Donegal, as at Killybegs and Glen Columbkil.

Var. β, strictus. Rare. First observed in Marquis of Londonderry's Park, County Down, by Mr. J. White.

2. *U. nanus*, Forst. (*Dwarf F.*)

Perennial. August to December. English type. Range in Britain, 50°—55°. Throughout Ireland.

Dry heaths. Local. Plentiful where it occurs.

The term *dwarf* is not always applicable to this species. In the grounds of Donard Lodge, Newcastle, I have seen it at least seven or eight feet high; beyond the shelter of the woods, on the flanks of Slieve Donard, it, however, becomes a small prostrate shrub, G. D.

Newtownards Park, and Rathlin Island, Mr. Templeton; hills at Newry, Mr. Thompson; at Glenravel, near Clough, County Antrim, Mr. E. Benn. By road to Ballynahinch, and between the last and Newcastle; Down road, two miles from Strangford. Rare toward the north-west. Near Newcastle it ranges from the sea level, at Bloody Bridge, to about 800 feet on Slieve Donard, G. D.

2. SAROTHAMNUS. BROOM.

1. *S. scoparius*, Wimm. (*Common B.*)

Perennial. May to August. British type.

Hills and heaths, &c. Frequent, but less so than the Whin. It appears to become rarer toward the west; I saw no trace of it in Glen Columbkil.

3. ONONIS. REST HARROW.

1. *O. arvensis*, L. (*Common R.*)

Perennial. June to September. British type. Range in Britain, 50°—59°. Throughout Ireland.

Pastures and wastes. Frequent.

Shore at Kirkiston; Clough, County Down; Red Bay, County Antrim, Mr. Templeton; Murlough, Mr. Rea; shore east from Portaferry, Mr. Hyndman. Links at Newcastle, in great profusion, G. D.

4. ANTHYLLIS. KIDNEY VETCH.

1. *A. vulneraria*, L. (*Common K.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures and rocks. Very frequent.

5. MEDICAGO. MEDICK.

1. *M. lupulina*, L. (*Black M.*)

Perennial. June to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields and wastes. Common.

6. TRIGONELLA. FENUGREEK.

1. *T. ornithopodioides*, D. C. (*Bird's-foot F.*)

Annual. July, August. English type. Range in Britain, 50°—57°. Ireland?

Dry sandy places near the sea. Very rare.

Near Holywood, on a gravel-bank at north end of Kinnegar, Mr. Templeton.

7. TRIFOLIUM. TREFOIL.

1. *T. repens*, L. (*White T.*)

Perennial. May to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Meadows, pastures, &c. Common.

2. *T. pratense*, L. (*Purple T.*)

Perennial. May to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Meadows and pastures. Very frequent.

3. *T. medium*, L. (*Zigzag T.*)

Perennial. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and rocks. Rather local.

Near Belfast, at Cave Hill; Carnmoney Hill; Black Mountain; Knockagh, &c.

4. *T. arvense*, L. (*Hare's-foot T.*)

Annual. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields, pastures, and wastes. Rather local.

Fields at Blackhead, County Antrim; Rathlin Island, at Church Bay, Mr. Templeton; embankment of Newtownards line, a mile from Belfast, Mr. Millen.

5. *T. striatum*, L. (*Soft-knotted T.*)

Annual. June, July. English type. Range in Britain, 50°—57°. Ireland, North only?

Dry pastures. Very rare.

Gravel banks on shore at Ranboy, quarter mile west from Carrickfergus, Mr. Templeton; Whitehead, Mr. Millen. Castle Chichester, G. D.

6. *T. agrarium*, L. (*Hop T.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry pastures and wastes. Frequent.

Larne; Dunluce, &c., Mr. Templeton; fields at Whitehead, and railway embankment at Randalstown, Mr. W. H. Ferguson.

7. *T. procumbens*, L. (*Small yellow T.*)

Annual. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Pastures and wastes. Very frequent.

8. *T. filiforme*, L. (*Slender yellow T.*)

Annual. June, July. British type. Range in Britain, 50°—58°. Ireland?

Dry pastures. Rather local?

Ballyronan, Rev. W. T. Whan; Kinnegar, Holywood, and along shores of Belfast Lough.

8. LOTUS. BIRD'S-FOOT TREFOIL.

1. *L. corniculatus*, L. (*Common B.*)

Perennial. June to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

The more common varieties abundant, inland and by sea.

2. *L. major*, Scop. (*Narrow-leaved B.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Sides of ditches and moist thickets. Very frequent.

Banks of Woodburn River, Mr. W. H. Ferguson; Blackstaff Lane; Lagan side; Ram's Island, Lough Neagh, &c.

9. VICIA. VETCH TARE.

1. *V. lathyroides*, L. (*Common V.*)

Annual. April, May. British type. Range in Britain, 50°—55°. Throughout Ireland.

Dry pastures. Very local.

Gravel bank on the shore at Three-mile-water Point, near Carrickfergus, Mr. Templeton; sandhills, Ballyholme Bay, Mr. Hyndman; at Ballycastle, Miss Hincks.

2. *V. sativa*, L. (*Common V.*)

Annual (Biennial?) May, June. British type. Range in Britain, 50°—59°. Throughout Ireland.

Fields, pastures, and wastes. Frequent.

Var. β, angustifolia. Loughgall, Mr. More; shores of Lough Neagh, at Bann foot, and Scrabo Hill, Mr. Hyndman; sandy shore at Magilligan.

3. *V. Sepium*, L. (*Bush V.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and shady banks. Very frequent.

4. *V. Cracca*, L. (*Tufted V.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Borders of woods and hedges. Very frequent.

5. *V. sylvatica*, L. (*Wood V.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and rocky places. Rather local.

Rostrevor Wood, Dr. Mackay; Ben Bulbin, Mr. Templeton; glen near Drumbo, Mr. Orr; railway embankment between Whiteabbey and Carrickfergus; and at Whitehead, Mr. W. H. Ferguson; Knockagh, Mr. Rea; Cave Hill and Woodburn Glen, Mr. Millen; Magilligan, County Derry, Dr. Moore; Ballycastle, Miss Hincks. Banks along the roadside north from Larne; Ram's Island; shore near town of Donegal, G. D.

6. *V. hirsuta*, Koch. (*Hairy V.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Fields and wastes. Not frequent.

Ballyronan, Moneymore, Rev. W. T. Whan; quarry above Holywood, and railway banks about Belfast, Mr. Millen; shores of Lough Neagh, at Bann-foot, Mr. Hyndman; Bally-

castle, Miss Hincks; Rathlin, Miss Gage; Lagan side, above first lock, G. D.

10. LATHYRUS. BITTER VETCH.

1. *L. pratensis*, L. (*Meadow V.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist meadows, pastures, and banks. Very frequent.

2. *L. palustris*, L. (*Blue Marsh B.*)

Perennial. June, July. English type. Range in Britain, 50°—54°. Ireland, north only (?)

Moist meadows. Very rare.

Loughgall, Mr. More; a little north of junction of Lagan Canal and Lough Neagh, Mr. Templeton; island in Lough Neagh, near Maghery, Rev. G. Robinson; drains in Portmore Park, Mr. Hyndman.

3. *L. macrorhizus*, Wimm. (*Tuberous B.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and thickets. Very frequent.

ORDER XX.—ROSACEAE.

1. PRUNUS. PLUM AND CHERRY.

1. *P. communis*, L. (*Common P. or Sloe.*)

Perennial. April, May. British type. Range in Britain, 50°—59°. Throughout Ireland.

Woods and rocks. Very general.

Var. α, spinosa. Lagan banks; Cave Hill; Black Mountain, and along rocky shores; very dwarf at Glenravel, County Antrim, G. D.

Var. β, insititia. Colin Glen, &c.

2. *P. Avium*, L. (*Wild C. or Gean.*)

Perennial. May. English type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and hedges. Rare.

Various places round Lough Neagh, Mr. Templeton.

3. *P. Padus*, L. (*Bird Cherry*.)

Perennial. May. British (or Scottish) type. Range in Britain, 51°—59°. Throughout Ireland.

Woods and thickets. Very local.

At Comber; Sallagh Braes, near Larne; and at Glenarm, Mr. Templeton; banks of river in the glen behind Carnlough, Mr. Hyndman; side of Faughan River, County Derry, Dr. Moore; sides of streams at Glenravel, G. D.

2. SPIRAEA. MEADOW-SWEET.

1. *S. Ulmaria*, L. (*Common M.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist meadows and banks of streams. Very frequent.

3. DRYAS. DRYAS.

1. *D. octopetala*, L. (*White D.*)

Perennial. June, July. Highland type. Range in Britain, 54°—60°. Throughout Ireland.

Alpine rocks and pastures. Very rare.

Ben Bulbin; Magilligan, and rocks at Ballyshannon, Mr. Templeton; Ben Evenagh, County Derry, Dr. Moore.

4. GEUM. AVENS.

1. *G. urbanum*, L. (*Common A.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and hedges. Very frequent.

Blackstaff Lane; Lagan side; Cave Hill; Colin Glen; Crawfordsburn, &c.

2. *G. rivale*, L. (*Water A.*)

Perennial. May, June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Sides of streams and wet woods. Frequent.

Banks of Lagan; Colin Glen; Woodburn Glen, &c. &c.

Var. intermedium, a hybrid between the two.

Loughgall, Mr. More; Carr's Glen, Cave Hill, Mr. Orr; side of New Lisburn Road, two miles from Belfast, Mr. Thompson.

5. RUBUS. BRAMBLE. RASPBERRY.

1. *R. idaeus*, L. (*Common R.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and wastes. Very frequent.

2. *R. suberectus*, And. (*Upright B.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Thickets, &c. Very local.

Portmore Park, Mr. Hyndman; Ballyronan and Moneymore, Rev. W. T. Whan; Deer Park, near Newtownlimavady, Dr. Moore; Ballycastle, Miss Hincks.

3. *R. rhamnifolius*, W. & N. (*Buckthorn-leaved B.*)

Perennial. July, August. British type. Range in Britain, 50°—59°. Ireland, north only?

Hedges and woods. Frequent.

Frequent in Down and Antrim, Mr. Whitla; between Belfast and Comber, Dr. Mackay; side of Foyle, above Derry, Dr. Moore; Colin Glen, and similar places round Belfast, G. D.

4. *R. fruticosus*, L. (*Common B.*)

Perennial. July, August. English type. Range in Britain, 50°—60°. Throughout Ireland.

Thickets and wastes. Frequent.

Colin Glen; shore between Holywood and Bangor.

5. *R. carpinifolius*, W. & N. (*Hornbeam-leaved B.*)

Perennial. July, August. English type. Range in Britain, 50°—59°. Ireland?

Thickets and wastes. Frequent?

County Antrim, Dr. Moore.

6. *R. Koehleri*, W. & N. (*Koehler's B.*)

Perennial. July, August. English type. Range in Britain, 50°—55°. Ireland?

Thickets and hedges. Frequent?

In different parts of Antrim, Mr. Whitla; hedges, Newtownlimavady, and side of the Foyle above Derry, Dr. Moore.

7. *R. corylifolius*, Sm. (*Hazel-leaved B.*)

Perennial. June to September. British type. Range in Britain, 50°—59°. Throughout Ireland.

Thickets and hedges. Frequent.
Colin Glen; Shane's Castle Park, &c.

8. *R. plicatus*, W. & N. (*Plicate B.*)

Perennial. July, August. English type. Range in Britain,
50°—59°? Throughout Ireland.

Thickets and wastes. Local.
Near Clady and Kilrea, County Derry, Dr. Moore.

9. *R. glandulosus*, Bell. (*Glandular B.*)

Perennial. July, August. English type. Range in Britain,
50°—56°. Ireland?

Thickets and wastes. Local.
In Counties Antrim and Derry, Dr. Moore.

10. *R. leucostachys*, Sm. (*Downy B.*)

Perennial. July, August. English type. Range in Britain,
50°—56°. Ireland?

Thickets and wastes. Local.
Rocky and shady places at Sheggach, near Dunfanaghy, G. D.

11. *R. Radula*, Weihe. (*Rough B.*)

Perennial. July, August. English type. Range in Britain,
50°—56°. Ireland?

Woods and hedges. Local.
Near Belfast, in Colin Glen, and similar localities.

12. *R. cæsius*, L. (*Dewberry.*)

Perennial. June, July. English type. Range in Britain,
50°—60°. Throughout Ireland.

Thickets and wastes. Frequent.
Loughgall, Mr. More; at Newcastle, Mr. Rea; Shane's
Castle Park, Mr. Templeton; at Lough Beg, and on Ram's
Island, Lough Neagh, Mr. Whitla; Ballycastle, Miss Hincks;
side of the Foyle, above Derry, Dr. Moore.

13. *R. saxatilis*, L. (*Stone B.*)

Perennial. June, July. Scottish type. Range in Britain,
57°—61°. Ireland, north only?

Shady rocks. Rather local.
Colin Glen, Mr. Templeton; Cave Hill, Carr's Glen, Mr.
Millen. In a narrow ravine, south-west flank of the Black
Mountain, G. D.

14. *R. Chamaemorus*, L. (*Cloudberry*.)

Perennial. June, July. Highland type. Range in Britain, 53°—59°. Ireland, north only.

Alpine peat bogs. Very rare.

Glengana Mountain in the Stranagalvally range, County Tyrone, Mr. E. Murphy.

6. FRAGARIA. STRAWBERRY.

1. *F. vesca*, L. (*Wood S.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Thickets and wastes. Frequent.

Ballyronan, Rev. W. T. Whan. Near Belfast on Black Mountain; Cave Hill; Colin Glen, &c.; Knockglass, Malin.

7. COMARUM. MARSH CINQUE-FOIL.

1. *C. palustre*, L. (*Purple M.*)

Perennial. May, June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Marshes and peat bogs. Common.

8. POTENTILLA. CINQUE-FOIL.

1. *P. anserina*, L. (*Silver-weed*.)

Perennial. May to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

• Meadows and wastes. Common. Frequent along the seashore.

2. *P. reptans*, L. (*Creeping C.*)

Perennial. June to September. English type. Range in Britain, 50°—58°. Throughout Ireland.

Hedges and wastes. Very frequent.

Round Lough Neagh, Mr. Templeton; banks of Lagan; Colin Glen; Cave Hill, &c.

3. *P. Tormentilla*, Sibth. (*Tormentil*.)

Perennial. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moors, woods, and pastures. Very general. Abundant in all mountainous parts.

4. *P. Fragariastrum*, Ehrh. (*Strawberry-leaved C.*)

Perennial. February, March. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and banks, &c. Very general.

Very frequent about Belfast by hedgerows, as at Lagan side, Blackstaff Lane, Cave Hill, &c. &c.

9. *ALCHEMILLA*. LADY'S MANTLE.1. *A. vulgaris*, L. (*Common L.*)

Perennial. June to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Pastures and banks. Common.

2. *A. arvensis*, Sm. (*Field L.*)

Annual. May to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry fields and turf walls, &c. Very frequent.

3. *A. alpina*, L. (*Alpine L.*)

Perennial. June to September. Highland type. Range in Britain, 54°—60°. South of Ireland to 54½°.

Mountains. Very rare.

On Ben Bulbin, Dr. Mackay.

10. *SANGUISORBA*. BURNET.1. *S. officinalis*, L. (*Great B.*)

Perennial. June, July. English type. Range in Britain, 50°—56°. Throughout Ireland.

Moist meadows. Very rare.

Near the river Bann, between Coleraine and Kilrea, Dr. Moore.

11. *POTERIUM*. SALAD-BURNET.1. *P. Sanguisorba*, L. (*Common S.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Throughout Ireland.

Dry pastures. Very rare.

Ransh, Rasharkin, County Antrim, Dr. Moore.

12. *AGRIMONIA*. AGRIMONY.1. *A. Eupatoria*, L. (*Common A.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields and wastes. Rather local.

On the Knockagh, and at Holywood, Mr. Millen; Stouppes's Glen, Herbarium N. History Society; Rathlin Island, Miss Gage. Cave Hill; Links at Newcastle; Knockglass, Malin, G. D.

2. *A. odorata*, Mill. (*Fragrant A.*)

Perennial. August, September. English type. Range in Britain? Ireland?

Pastures and wastes. Very rare.

About Lough Neagh, H. & A. Brit. Flora.

13. ROSA. ROSE.

1. *R. spinosissima*, L. (*Burnet-leaved R.*)

Perennial. May, June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry pastures and heaths. Frequent.

Very rare at Ballyronan, Rev. W. T. Whan; very rare and dwarf, nearly herbaceous, on Tory Island, Mr. Hyndman; banks of Woodburn River, Mr. W. H. Ferguson. Lower part of Slemish Mountain; Cave Hill; Kinnegar, at Holywood; Ben Bulbin; Bunbeg, County Donegal; between Ballymena and Glenravel. Seemingly rarer inland than on coast line, G. D.

2. *R. Hibernica*, Sm. (*Irish R.*)

Perennial. June to September. Atlantic type. Range in Britain, 54°—55°? South of Ireland to 54½°.

Hedges and wastes. Very rare.

South bank of Lagan, below Stranmills; hedgerows half way between Holywood and Belfast; on road side at Richmond Lodge, and glen at Magilligan, County Derry, Mr. Templeton; cliffs on Ben Evenagh, Dr. Moore.

3. *R. Sabini*, Woods. (*Sabine's R.*)

Perennial. June. British type? Range in Britain? Ireland, south and north.

Waste places. Very rare.

Umbra Rocks, Magilligan, Dr. Moore.

Var. β, Doniana. Glenarm, Mr. Templeton; Umbra Rocks, Dr. Moore.

Var. γ, gracilis. Bennedy Glen, near Dungiven, Dr. Moore.

4. *R. villosa*, L. (*Villous R.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Thickets and wastes. Very local.

Ballyronan, Rev. W. T. Whan; base of Umbra Rocks, Magilligan, Dr. Moore.

5. *R. tomentosa*, Sm. (*Downy-leaved R.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Thickets and wastes. Frequent.

In north of Antrim and County Derry, Mr. Templeton; hedgebank, at Ballygomartin, Mr. Orr; Colin Glen, &c.; Innishowen, G. D.

6. *R. inodora*, Fries. (*Slightly-scented R.*)

Perennial. June, July. British type? Range in Britain? Ireland, north only?

Hedgerows, &c. Rare.

Near Belfast, Herbarium N. History Society.

7. *R. rubiginosa*, L. (*Sweet-briar.*)

Perennial. June, July. English type. Range in Britain, 50°—56°. Throughout Ireland.

Thickets. Rare.

Near Belfast, Mr. Templeton; thickets near Oldstone, County Antrim, Mr. Orr; side of River Roe, near Newtownlimavady, Dr. Moore.

8. *R. canina*, L. (*Common Dog R.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Hedges and wastes. Very frequent.

Several of its varieties about Belfast, as at Colin Glen, Cave Hill, Whiterock, &c.

9. *R. caesia*, Sm. (*Glaucous Dog R.*)

Perennial. June, July. British type? Range in Britain? Throughout Ireland.

Thickets and wastes. Local.

Ram's Island, Lough Neagh, Mr. Templeton; Hedgerow, New Lodge Road, Belfast, Rev. R. Oulton.

10. *R. arvensis*, Huds. (*Trailing Dog R.*)

Perennial. June, July. English type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and hedges, &c. Very local.

Tullamore Park; Glenarm, near a water-fall; and at Ballynahinch, County Down, Mr. Templeton; Ballycastle, Miss Hincks.

14. CRATAEGUS. HAWTHORN.

1. *C. Oxyacantha*, L. (*Common H.*)

Perennial. May, June. British type. Range in Britain, 50°—59°. Throughout Ireland.

Rocks and wastes. Frequent.

Cliffs, near Larne, Mr. Templeton; Rathlin Island, Miss Gage; Cave Hill and Knockagh. Frequent on sides of hills between Armagh and Enniskillen, &c., G. D.

15. PYRUS. PEAR. APPLE. SERVICE.

1. *P. Malus*, L. (*Crab A.*)

Perennial. May. English type. Range in Britain, 50°—57°. Throughout Ireland?

Margins of Lough Neagh, among natural wood, Mr. Templeton; at Ballyronan, Rev. W. T. Whan.

2. *P. Aria*, Sm. (*White Beam Tree.*)

Perennial. May, June. English type. Range in Britain, 50°—59°. Throughout Ireland.

Dry rocks, &c. Very rare.

Deer Park at Glenarm, Mr. Templeton. Steep cliffs south of Glenarm; and on the cliffs of Ben Bulbin, G. D.

3. *P. aucuparia*, Gaertn. (*Mountain Ash. Rowan.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Mountainous districts. Frequent.

Mourne Mountains, Mr. Templeton; Cave Hill, Mr. Millen; Glen behind Carnlough, Mr. Hyndman. Nephin Mountain, County Mayo; Slemish, County Antrim; and east face of Slieve Donard, G. D.

ORDER XXI.—ONAGRACEAE.

1. EPILOBIUM. WILLOW-HERB.

1. *E. angustifolium*, L. (*Rose-bay W.*)

Perennial. July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Moist banks and rocks. Very local.

Cave Hill; head of Six-mile-Water, and Murloch rocks, Mr. Templeton; Wolfhill Glen, Mr. Millen; Woodburn Glen, Mr. Whitla; Ballycastle, Miss Hincks; County Derry, Dr. Moore. Ravine at Glen Giveny, Innishowen; Erigal Mountain, near Gweedore, G. D.

2. *E. hirsutum*, L. (*Great hairy W.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Throughout Ireland.

Sides of rivers, ditches, &c. Frequent.

Near Belfast, at Lagan side, Blackstaff Lane, Bog Meadows, &c. &c.; Island of Rathlin, Miss Gage. Dunfanaghy, &c., in west of Donegal; general in Donegal, especially along coast line, G. D.

3. *E. parviflorum*, Schreb. (*Small flowered W.*)

Perennial. July, August. British type. Range in Britain, 50°—59°. Throughout Ireland.

Marshes and banks of rivers, &c. Frequent.

Antrim, Miss Hincks; Money more, Rev. W. T. Whan; marshes between Belfast and Greencastle, Mr. Millen; Rathlin Island, Miss Gage; on Slieve Donard at high elevations.

4. *E. montanum*, L. (*Smooth W.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Banks and wastes. Common.

5. *E. roseum*, Schreb. (*Pale W.*)

Perennial. July, August. English type. Range in Britain, 50°—58°. Ireland, north only?

Fields and Wastes. Rare?

Banks of Lagan, near Cranmore, Mr. Templeton; Glen on Holywood hills, Mr. Millen; waste ground near Belfast Workhouse, Mr. Orr; fields near terminus of Ulster Railway, at Belfast, Mr. W. H. Ferguson.

6. *E. tetragonum*, L. (*Square-stalked W.*)

Perennial. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Moist places. Very frequent.

7. *E. palustre*, L. (*Marsh W.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sides of lakes, ditches, &c. Very frequent.

2. CIRCAEA. ENCHANTER'S NIGHTSHADE.

1. *C. Lutetiana*, L. (*Common E.*)

Perennial. June, July. British type. Range in Britain, 51°—59°. Throughout Ireland.

Woods and shady places. Rather local.

Derryloan, Cookstown, Rev. W. T. Whan; Murlough, Miss Hincks; shady places by Foyle River, Dr. Moore. Hazelwood Demesne, Sligo; Glenarm Park, G. D.

2. *C. alpina*, L. (*Alpine E.*)

Perennial. July, August. Scottish type. Range in Britain, 51°—60°. Ireland, north only?

Woods and shady rocks. Rather local.

Moneymore, Rev. W. T. Whan; Colin Glen, Mr. Templeton; roadside at Cliftonville, Belfast, Mr. W. H. Ferguson; near Shane's Castle, Mr. Thompson; among stones on the Cave Hill, Mr. Orr; Muff Glen, Faughanvale, County Derry, Dr. Moore. Ben Bulbin; Innishowen Head, G. D.

ORDER XXII.—HALORAGACEAE.

1. HIPPURIS. MARE'S-TAIL.

1. *H. vulgaris*, L. (*Common M.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches and stagnant pools. Rather local.

Loughgall, Mr. More; Kellymoor, Cookstown, Rev. W. T. Whan; ditches at junction of Antrim and Doagh roads, and between Coleraine and Portrush, Mr. Hyndman; Bog Meadows; King's Moss; bog above Holywood; and Ballyeaston Moss, Mr. Millen; Castle Dobbs Demesne, and ditches near

Whitehead, Mr. W. H. Ferguson. Crossmolina, County Mayo ; bogs at Clones, G. D.

2. MYRIOPHYLLUM. WATER-MILFOIL.

1. *M. verticillatum*, L. (*Whorled W.*)

Perennial. July, August. English type. Range in Britain, 50°—55°. Throughout Ireland.

Ponds and ditches. Very local.

Bog drains, Portmore Park, Mr. Whitla.

2. *M. spicatum*, L. (*Spiked W.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Stagnant waters. Very frequent.

3. *M. alterniflorum*, D. C. (*Alternate-flowered W.*)

Perennial. May, June. British type. Range in Britain, 50°—60°. Ireland?

Ponds and lakes, &c. Probably frequent, but often confounded with the last species.

Lough Sheggach, near Dunfanaghy, G. D.

ORDER XXIII.—LYTHRACEAE.

1. LYTHRUM. PURPLE LOOSESTRIFE.

1. *L. Salicaria*, L. (*Spiked P. L.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Throughout Ireland.

Marshy places. Very general, and equally plentiful in east and west.

Newcastle, Mr. Rea ; Rathlin Island, Miss Gage. Bog Meadows, at Belfast ; shores of Lough Neagh at Shane's Castle, &c. ; Crossmolina, and other places in Mayo and Sligo ; Dunfanaghy ; a common weed in Glen Columbkil, where it is employed to yield a brown dye, G. D.

2. PEPLIS. WATER-PURSLANE.

1. *P. Portula*, L. (*Common W.*)

Annual. June to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Watery places. Rather local.

Frequent at Moneymore, Rev. W. T. Whan; Kinnegar, at Holywood, Mr. Millen; watery places on Carrickfergus Common, Mr. W. H. Ferguson; Tory Island, rare, Mr. Hyndman; at Culdaff, Innishowen, but rare, G. D.

ORDER XXIV.—PORTULACACEAE.

1. MONTIA. BLINKS.

1. *M. fontana*, L. (*Water B.*)

Annual. All Summer. British type. Range in Britain, 50°—60°. Throughout Ireland.

Rivulets and marshy places. Very common.

ORDER XXV.—PARONYCHIACEAE.

1. SPERGULARIA. SANDWORT-SPURREY.

1. *S. rubra*, A. St. H. (*Field S.*)

Annual. June to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry pastures and wastes. Very frequent.

2. *S. marina*, Camb. (*Sea-side S.*)

Biennial. All Summer. British type. Range in Britain, 50°—60°. Throughout Ireland.

Wet rocks and marshy spots by the sea. Common.

2. SPERGULA. SPURREY.

1. *S. arvensis*, L. (*Corn S.*)

Annual. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

ORDER XXVI.—CRASSULACEAE.

1. COTYLEDON. PENNYWORT.

1. *C. Umbilicus*, Huds. (*Wall P.*)

Perennial. June, July. Atlantic type. Range in Britain, 50°—57°. Throughout Ireland.

Walls and rocks. Very general; rarer northwards.

Loughgall, Mr. More; Moneymore, &c., Rev. W. T. Whan; Drumgooland, County Down, Mr. Rea; Mullagh Hill, County Down, Mr. Orr; Cave Hill, Woodburn, and Knockagh, Mr. Millen; Ballylesson, Mr. Hyndman; Carrickfergus Castle, Mr. W. H. Ferguson; wall at Tullamore Park, near Barbican gate, and stone walls, Letterkenny, Mr. Thompson. Old walls, Crossmolina, County Mayo; Moyne Abbey, near Killala; ruin at Manorhamilton; abundant between Enniskillen and Sligo; Castle Ward, County Down; Glen Columbkil; gap of Barnes, and rocks at Lough Sheggach, near Dunfanaghy; Innishowen Head and Glen Giveny; Culdaff and Malin, G. D.

2. SEDUM. STONECROP.

1. *S. Rhodiola*, D. C. (*Rose-root S.*)

Perennial. June, July. Highland type. Range in Britain, 52°—61°. Throughout Ireland.

Wet rocks inland and sea shore. Very local.

Ben Bulben; Donegal Mountains; south end of Slemish Mountain; Island of Rathlin, Mr. Templeton; abundant north end of Rathlin, Dr. Marshall; Innishowen Head; Culdaff and Giveny, Innishowen; rocks at Signal Tower, Malin; shore at Glen Columbkil, G. D.

2. *S. Anglicum*, Huds. (*English S.*)

Perennial. June, July. Atlantic type. Range in Britain, 50°—61°. Throughout Ireland.

Rocky places, usually on coast line. Abundant.

At Whitehead and on Tory Island, Mr. Hyndman; Rathlin Island, Miss Gage. Abundant on shore from Holywood to Bangor; Strand Road at Portaferry; wall tops from Kirkcubbin to Portaferry; Scrabo Hill; Innishowen head; along with *S. Rhodiola* covering the rocks north from Culdaff; Horn-head, in pure peat soil; Malin; Island of Innistrathull; Glen Columbkil in great profusion, G. D.

3. *S. Telephium* L. (*Live-long S.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Ireland S. to 54½°.

Banks and wastes. Very rare.

Near Coagh, Rev. W. T. Whan; at Ballynahinch, Rev. R. Oulton; Mallagh Hill, County Down, Mr. Orr.

4. *S. acre*, L. (*Biting S.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Walls and dry wastes. Rather local.

Walls near Coagh, Rev. W. T. Whan; at the Whitehead, Mr. Hyndman; walls at Carrickfergus, Mr. W. H. Ferguson; Ballycastle, Miss Hincks. Strand-road at Portaferry; sandhills, Newcastle; Innishowen head, but rare; sandhills, Culdaff and Malin; Portrush, G. D.

5. *S. reflexum*, L. (*Crooked yellow S.*)

Perennial. July, August. English (Atlantic?) type. Range in Britain, 50°—56°. Ireland, south to 55°.

Walls and house tops. Rare.

Wall near Ballytrain, Monaghan; and rock at Shane's Castle, Mr. Templeton; Benburb, County Tyrone, Mr. Hyndman; tops of houses in town of Antrim, Dr. Mackay; at Bellahill, near Carrickfergus, Mr. W. H. Ferguson; at Carrickfergus, Mr. Whitla; rocks at River Roe, near Newtownlimavady, Dr. Moore.

6. *S. rupestre*, L. (*St. Vincent's S.*)

Perennial. June, July. Atlantic type. Range in Britain, 50°—55°. Ireland?

Walls and rocks. Very rare.

Rocks near Shane's Castle, Mr. Thompson; on a wall by the path between Dundrum and Rathfarnham, Dr. Moore.

ORDER XXVII.—SAXIFRAGACEAE.

1. SAXIFRAGA. SAXIFRAGE.

1. *S. umbrosa*, L. (*London Pride*.)

Perennial. June, July. Atlantic type. Doubtful native in Britain. Throughout Ireland.

Mountainous districts. Very local, and chiefly towards the west.

Muckish Mountain, Mr. Templeton; the lowest point I found to be about 1800 feet. On Erigal Mountain, near Gweedore, the lowest point was 2000 feet. At Knockglass, Malin, close by the sea, and not more than 100 feet above its level, rare and barren. Very abundant on Nephin Mountain, County Mayo, commencing at 600 feet, and thence in great profusion to the top. At the lower limits it was rare in fruit. Early in July, on ascending I found it becoming more plentiful but less advanced; on and near the summit, the plant was in the greatest profusion, and just coming into flower, G. D.

2. *S. stellaris*, L. (*Starry S.*)

Perennial. July, August. Highland type. Range in Britain, 52°—59°.

Alpine marshes. Very rare.

Sides of river at Donard Lodge, base of Slieve Donard, at 500 feet, Mr. Hyndman; it ascends to above 2000 feet, beyond which there is no suitable locality for it. It occurs also on other parts of the Mourne range. On Muckish Mountain, Donegal, along with *Pinguicula lusitanica*, Mr. Thompson.

3. *S. nivalis*, L. (*Alpine S.*)

Perennial. July, August. Highland type. Range in Britain, 53°—58°. Ireland, 54½°.

Moist Alpine cliffs. Very rare.

Ben Bulbin, J. Wynne, Esq.

4. *S. oppositifolia*, L. (*Purple Mountain S.*)

Perennial. March, April. Highland type. Range in Britain, 52°—61°. Ireland, north only.

Bulbein Mountain, County Donegal, Mr. Templeton; Innishowen Mountains, R. Brown, Esq; Ben Evenagh, County Derry, Dr. Moore. On Ben Bulbin, in Sligo, I found the plant beginning at 700 feet, G. D.

5. *S. hirculus*, L. (*Yellow Marsh S.*)

Perennial. August. Scottish? type. Range in Britain, 53°—56°. Ireland, 55°.

Wet moors. Very rare.

A single locality in County Antrim, Dr. Moore.

6. *S. aizoides*, L. (*Yellow Mountain S.*)

Perennial. July, August. Highland type. Range in Britain, 54°—60°. Ireland, 54°—55°.

Upland marshes and rills. Rare.

In County Leitrim, Mr. E. Murphy; Ben Bulbin, Dr. Mackay, from near the base to near the top; by the side of the Cataract at Donard Lodge, Messrs. Thompson and Hyndman; Murloch, County Antrim, Miss Hincks.

7. *S. granulata*, L. (*White Meadow S.*)

Perennial. April, May. British type. Range in Britain, 50°—58°. Throughout Ireland.

Natural pastures. Rare.

Springhill, near Moneymore, County Derry, Dr. Moore.

8. *S. triductylites*, L. (*Rue-leaved S.*)

Annual. April to July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry pastures and walls. Very local.

Tops of walls near the Railway Station at Lisburn, Mr. Millen. On a bridge near the Lagan, between Lisburn and Dunmurry, Mr. Hyndman; basaltic rocks at Downhill, County Derry, Dr. Moore.

9. *S. hypnoides*, L. (*Mossy S.*)

Perennial. May to August. Scottish type. Range in Britain, 51°—60°. Ireland?

Rocks and stony places. Very frequent.

Abundant on rocks in Sligo and Antrim; Cave Hill; Sallagh braes; Cushendall and Magilligan, Mr. Templeton; Murloch, County Antrim, Miss Hincks; Rathlin, Miss Gage; Ben Bulbin; cliffs at Glenarm, &c., G. D.

2. CHRYSOSPENIUM. GOLDEN SAXIFRAGE.

1. *C. oppositifolium*, L. (*Common G.*)

Perennial. April, May. British type. Range in Britain, 50°—60°. Throughout Ireland.

Moist shady places. Very frequent.

Near Belfast, in Colin Glen, Crawfordsburn, and similar places.

2. *C. alternifolium*, L. (*Alternate-leaved G.*)

Perennial. April, May. British type. Range in Britain, 50°—58°. Ireland, 54°—55°?

Moist shady places. Very rare.

In County Tyrone, Mr. Murphy; near Belfast, in Colin Glen, Mr. Templeton.

ORDER XXVIII.—UMBELLIFERAE.

1. HYDROCOTYLE. WHITE-ROT.

1. *H. vulgaris*, L. (*Common W.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and marshes. Very frequent.

2. SANICULA. SANICLE.

1. *S. Europaea*, L. (*Wood S.*)

Perennial. June, July. British type. Range in Britain, 50°—59°. Throughout Ireland.

Woods and thickets. Frequent.

Money more, Rev. W. T. Whan; Tullamore Park and Bryansford, Mr. Patterson; Ballycastle, Miss Hincks. Hazelwood Demesne, Sligo; near Belfast, by roadside leading to White-rock; Cave Hill; Colin Glen; roadside between the sluice and the quay, at Downpatrick, &c. &c., G. D.

3. ERYNGIUM. ERYNGO.

1. *E. maritimum*, L. (*Sea Holly*.)

Perennial. August, September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sandy sea shores. Rather local.

Ballyholme Bay, and Newcastle, Mr. Millen; sand hills, Dundrum, Mr. Hyndman; Bush-Water foot, Mr. Templeton; Ballycastle shore, Miss Hincks. Shore at Glen Columbkil, west Donegal; sand hills south from Cushendall, G. D.

4. CICUTA. WATER-HEMLOCK.

1. *C. virosa*, L. (*Common W.*)

Perennial. July, August. English type. Range in Britain, 51°—57°. Ireland?

Ditches and margins of lakes, &c. Rare.

Loughgall, Mr. More; drain at Portmore Park, south side, near entrance to Lough Neagh; near foot of Blackwater; Laganerry mill-dam, on the road to Auchie, County Down; River Lagan, above Lisburn, Mr. Templeton; shores of Lough Neagh, and on a small island near Maghery, Rev. G. Robinson; Rathlin Island, Miss Gage.

5. APIUM. CELERY.

1. *A. graveolens*, L. (*Wild C.*)

Perennial. June, July. English type. Range in Britain, 50°—56°. Throughout Ireland.

Marshy spots near the sea. Rather local.

Along shores of Belfast Lough, Mr. Templeton; between Kilroot and Carrickfergus, Mr. W. H. Ferguson. Margin of Lough, east from town of Larne, and shores of Dundrum Bay, G. D.

6. HELOSCIADIUM. MARSH-WORT.

1. *H. nodiflorum*, Koch. (*Procumbent M.*)

Perennial. July, August. English type. Range in Britain, 50°—56°. Throughout Ireland.

Marshes and sides of rivers, &c. Frequent.

Loughgall, Mr. More; Moneymore, and Ballyronan, Rev. W. T. Whan; Stranmillis, and other places near Belfast, Mr. Templeton; near Bangor, and Curran of Larne, Mr. Millen; Ballycastle, Miss Hincks. Dunfanaghy, and Ballycashel, County Mayo, G. D.

Var. β, repens, rare. Near Kilkeel, and river side, at Kirkhall, County Down, Mr. Templeton.

2. *H. inundatum*, Koch. (*Least M.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Lakes and pools. Very frequent.

Bog at Greyabbey, Mr. Hyndman; lake at Slieve Croob, Herbarium N. History Society; Rathlin Island, Miss Gage. Kinnegar, Holywood; Bog Meadows, &c., G. D.

7. ÆGOPIDIUM. GOUT-WEED.

1. *A. Podagraria*, L. (*Common G.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields and wastes. Very frequent.

8. CARUM. CARAWAY.

1. *C. verticillatum*, Koch. (*Whorled C.*)

Perennial. July, August. Atlantic type. Range in Britain, 51°—57°. Throughout Ireland.

Moist pastures. Rare.

Marshes near Cranmore, and at the Bog Meadows, Mr. Templeton; marshes below Coleraine, Dr. Moore.

9. BUNIUM. EARTH-NUT.

1. *B. flexuosum*, With. (*Common E.*)

Perennial. May, June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and pastures. Very general.

10. PIMPINELLA. BURNET-SAXIFRAGE.

1. *P. Saxifraga*, L. (*Common B.*)

Perennial. July, August. British type. Range in Britain, 50°—59°. Throughout Ireland.

Dry pastures. Frequent.

At Newcastle, Mr. Rea; Cave Hill, Knockagh, &c., Mr. Millen. Strand Road, at Portaferry, G. D.

11. SIUM. WATER-PARSNIP.

1. *S. latifolium*, L. (*Broad-leaved W.*)

Perennial. July, August. English type. Range in Britain, 50°—56°. Throughout Ireland.

Ditches and river sides. Rare.

By the river from Portmore to Lough Neagh, Mr. Hyndman; Ballygowan Lough, Mr. Orr; marsh at Culmore Point, near Derry, Dr. Moore. Ditches, &c., west end of Glenarm Park, G. D.

2. *S. angustifolium*, L. (*Narrow-leaved W.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Ireland?

Ditches and rivulets. Rare.

Moneymore and Ballyronan, Rev. W. T. Whan; river at Ballynahinch, Mr. Templeton; Ballyknockan, County Down, Mr. Orr. Roadside between Downpatrick and the sluice; Mount Charles, and town of Donegal, G. D.

12. *CENANTHE*. WATER-DROPWORT.1. *C. fistulosa*, L. (*Common W.*)

Perennial. July, August. English type. Range in Britain, 50°—58°. Throughout Ireland.

Ditches and rivulets. Very local.

Armagh, Rev. G. Robinson; at Portmore, Mr. Templeton; shores of Lough Neagh, and Moyntagh Bogs, Mr. Hyndman; bogs near Carrickfergus, Mr. Rea; Rathlin Island, Miss Gage. Beside the Presbyterian Church at Malin; and at Lough Erahesk, in Glen Columbkil, G. D.

2. *C. crocata*, L. (*Hemlock W.*)

Perennial. July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Ditches and river banks. Frequent.

Newcastle, Mr. Rea; Culmore to Pennyburn, side of the Foyle, Dr. Moore. By the road, east from Quoil Castle, near Downpatrick; Lagan side, from first lock downwards; between Newtownards and Greyabbey; Crawfordsburn; Copeland Islands, and Glenarm; Innishowen Head, and Glen Giveny in the same district, G. D.

3. *C. Phellandrium*, Lam. (*Fine-leaved W.*)

Biennial. July, August. English type. Range in Britain, 50°—56°. Ireland, south to 55°.

Ditches and ponds. Rare.

Ditches and drains at Lake Farnham, and elsewhere in County Cavan, Dr. Mackay; Loughgall, Mr. More; Armagh, Rev. G. Robinson; Shandon, in Dungannon; bogs and drains, Lagan side, Mr. Templeton; near Lagan Cottage, Mr. Orr.

13. *ÆTHUSA*. FOOL'S-PARSLEY.1. *Æ. Cynapium*, L. (*Common F.*)

Annual. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Cultivated grounds and wastes. Rather local.

Loughgall, Mr. More; Moneymore and Ballyronan, Rev. W. T. Whan; about Holywood, Mr. Millen; fields at Carrickfergus, Mr. W. H. Ferguson; Ballycastle, Miss Hincks.

14. *LIGUSTICUM*. LOVAGE.1. *L. Scoticum*, L. (*Scottish L.*)

Perennial. July. Scottish type. Range in Britain, 55°—61°. Ireland, north only.

Rocky sea-coasts. Very local.

At Donaghadee, and Copeland Islands, Mr. Templeton; County Derry, Dr. Moore. In great profusion at Innishowen Head, and at Culdaff and Giveny, in the same district; not at Glen Columbkil, and, I believe, confined to the east side, G. D.

15. SILAUS. PEPPER-SAXIFRAGE.

1. *S. pratensis*, Besser. (*Meadow P.*)

Perennial. June, July. English type. Range in Britain, 50°—56°. Ireland?

Pastures and meadows. Rare.

Lagan side, near Belfast; and at Holywood, with *Juncus maritimus*, Mr. Templeton; near Ballyrobin, County Antrim, Mr. Orr; bank by the side of the Foyle, near Londonderry, Dr. Moore.

16. CRITHMUM. SAMPHIRE.

1. *C. maritimum*, L. (*Sea S.*)

Perennial. June, July. Atlantic type. Range in Britain, 50°—56°. Throughout Ireland.

Maritime cliffs. Rare.

Tory Island, Mr. Hyndman. Cliffs at Knockglass, Malin; rocks east from Dunfanaghy, near Hornhead; coast at Glen Columbkil, G. D.

17. ANGELICA. ANGELICA.

1. *A. sylvestris*, L. (*Wild A.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist woods and sides of ditches. Very frequent.

18. PASTINACA. PARSNIP.

1. *P. sativa*, L. (*Common wild P.*)

Perennial. July, August. English type. Range in Britain, 50°—55°. Throughout Ireland.

Fields and pastures. Very rare.

Foot of Crumlin River, Mr. Templeton; Townland of Margymonaghan, Magilligan, abundant, Dr. Moore.

19. HERACLEUM. COW-PARSNIP.

1. *H. Sphondylium*, L. (*Common C.*)

Biennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Hedges and wastes. Common.

20. CONIUM. HEMLOCK.

1. *C. maculatum*, L. (*Common H.*)

Biennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Waste places. Very frequent.

This species is widely diffused along the coast as well as inland.

Waste places, Carrickfergus, Mr. W. H. Ferguson. Abundant at Bangor and Donaghadee; shores of Lough Neagh at Toome; at Clones, Lisbellaw, and Newtownbutler; rare at Culdaff; in Counties of Mayo and Sligo, is frequent inland, G. D.

21. SMYRNIUM. ALEXANDERS.

1. *S. Olusatrum*, L. (*Common A.*)

Biennial. May, June. English type. Range in Britain, 50°—57°. Throughout Ireland.

Ruins and wastes. Not unfrequent.

Moneymore and Ballyronan, Rev. W. T. Whan; Greyabbey, Herbarium N. History Society; Island of Rathlin, Miss Gage; Islandmagee, Mr. W. H. Ferguson. Moyne Abbey, Killala; at town of Donegal; Crawfordsburn; Holywood; Carrickfergus; Woodburn; Curran of Larne, G. D.

22. SCANDIX. SHEPHERD'S NEEDLE.

1. *S. Pecten*, L. (*Common S.*)

Annual. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields and wastes. Very local.

Loughgall, Mr. More; Ballymacash lime quarry, near Lis-

burn; and fields at Armagh, Mr. Hyndman; at Comber; Holywood, near the terminus, Mr. Millen; fields at town of Antrim, Mr. Orr; at Glenarm, Mr. Whitla. Abundant on walls and house tops in town of Ballyshannon, G. D.

23. ANTHRISCUS. BEAKED PARSLEY.

1. *A. sylvestris*, Hoffm. (*Wild B.*)

Perennial. April to July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Hedges, borders of fields, &c. Common.

2. *A. vulgaris*. (*Common B.*)

Annual. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Roadsides and fields, &c. Very local.

Curran of Larne, Mr. Templeton; shore at Portaferry; town of Donegal, G. D.

24. CHAEROPHYLLUM. CHERVIL.

1. *C. temulentum*, L. (*Rough C.*)

Biennial. June, July. British type. Range in Britain, 50°—58°. Ireland?

Hedges and wastes. Very rare.

Near Dundalk, Mr. Templeton; on shores of Lough Neagh, Dr. Moore; Ballycastle, Miss Hincks.

25. MYRRHIS. CICELY.

1. *M. odorata*, Scop. (*Sweet C.*)

Perennial. May, June. Scottish type? Range in Britain, 50°—59°. Ireland?

Woods and wastes. Rare.

Tandragee, Rev. G. Robinson; Ballyronan and Moneymore, Rev. W. T. Whan; waste places at Bellaghy and Ballycarry, Mr. W. H. Ferguson; in Colin Glen, G. D.

26. DAUCUS. CARROT.

1. *D. Carota*, L. (*Wild C.*)

Biennial. June, July. British type. Range in Britain, 50°—54°. Throughout Ireland.

Pastures, roadsides, &c. Very frequent.

2. *D. maritimus*, With. (*Sea-side C.*)

Biennial. July, August. Atlantic type. Range in Britain, 50°—55°. Throughout Ireland.

Wastes by the sea. Rather local.

Near Holywood, Mr. Millen. Bunbeg Harbour, County Donegal; Dunfanaghy; Innishowen Head; Giveny, Malin, and rare at Culdaff, in the same district, G. D.

27. TORILIS. HEDGE PARSLEY.

1. *T. Anthriscus*, Gaertn. (*Upright H.*)

Annual. July, August. British type.) Range in Britain, 50°—58°. Throughout Ireland.

Roadsides and wastes. Frequent.

Near Belfast, at Blackstaff Lane; Lagan side; Cave Hill; Holywood; Bangor and Donaghadee, &c., G. D.; in Island of Rathlin, Miss Gage.

2. *T. nodosa*, Gaertn. (*Knotted H.*)

Annual. May, June. English type. Range in Britain, 50°—56°. Throughout Ireland.

Dry waste places. Very rare.

At Ballyronan, Rev. W. T. Whan; Gravel bank, Curran of Larne, Mr. Templeton; Ballycastle, Miss Hincks.

ORDER XXIX.—ARALIACEAE.

1. ADOXA. MOSCHATEL.

1. *A. moschatellina*, L. (*Tuberous M.*)

Perennial. April, May. British type. Range in Britain, 50°—58°. Ireland, N. only.

Woods and shady banks. Very rare.

Cave Hill, and glen of Jennymount, near Belfast, Dr. Drummond and Mr. F. Whitla; among bushes in the Deer-park at Cave Hill; and Belvoir Park, Mr. Millen; shady bank of Milewater river, a quarter of a mile above where the tide flows, Mr. Templeton; naturalized among trees at the south-east border of Belfast Botanic Garden.

2. HEDERA. IVY.

1. *H. Helix*, L. (*Common I.*)

Perennial. September, October. British type. Range in Britain, 50°—61° Throughout Ireland.

Rocks and wastes. Very frequent.

Near Belfast, head of Colin Glen; Cave Hill; Knockagh, &c. &c.; on Ben Bulbin at upwards of 1000 feet; on Erigal at 1100 feet; growing with *Ammophila* on sandhills at Culdaff; very rare in the isolated district of Glen Columbkil, G. D.; one of the few plants of Tory Island, Mr. Hyndman.

ORDER XXX.—CAPRIFOLIACEAE.

1. SAMBUCUS. ELDER.

1. *S. Ebulus*, L. (*Dwarf E.*)

Perennial. July, August. English type. Range in Britain, 50°—58°. Throughout Ireland?

Waysides and wastes. Rare.

Loughgall, Mr. More; Armagh, Rev. G. Robinson; Ballyronan, Rev. W. T. Whan; beside the stream east from Holywood; Bangor; Lylehill, north from Wolfhill, Mr. Millen; at Lisburn, Mr. Templeton; a quarter of a mile east from Magheralin, County Down, Mr. Harris; road between Tyrella and St. John's Point, Mr. Thompson; fields near Hannastown, County Antrim, Mr. Orr. At Warrenpoint; and at town of Antrim, G. D.

2. *S. nigra*, L. (*Common E.*)

Perennial. June. British type. Range in Britain, 50°—56°. Throughout Ireland.

Woods, &c. Rare in a wild state.

Lower Bann, Shane's Castle, &c., Mr. Templeton; Loughgall, Mr. More; near towns of Sligo and Donegal; Glen Tocher, Innishowen, G. D.; Ballycastle, Miss Hincks; Rathlin, Miss Gage.

2. VIBURNUM. GUELDER ROSE.

1. *V. Opulus*, L. (*Common G.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Ireland, S. to 54½°?

Woods and shady rocks. Rare.

Loughgall, Mr. More; head of Colin Glen; banks of Lough Neagh, &c., Mr. Templeton; Magherafelt, near the railway bridge, Rev. W. T. Whan; Glens at Newcastle, Mr. Thompson; Wolfhill Glen, Mr. Millen; Woodburn Glen, G. D.

2. *V. Lantana*. (*Mealy G.*)

Perennial. May, June. English type. Range in Britain, 50°—54°. Ireland?

Woods and rocks. Very rare.

Upper part of Colin Glen, Mr. Orr; in Colin Glen beyond the plantations, in 1842, sparingly, Mr. Thompson.

3. LONICERA. HONEYSUCKLE.

1. *L. Periclymenum*, L. (*Common H.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and rocks. Very frequent.

At 1100 feet on Erigal; cliffs by the sea as well as inland; along with *Hedera*, abundant in part of Donegal, but very rare in Glen Columbkil, G. D.

ORDER XXXI.—RUBIACEAE.

1. GALIUM. BED STRAW.

1. *G. verum*, L. (*Yellow B.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Ireland?

Dry banks and sandy shores. Frequent.

2. *G. saxatile*, L. (*Smooth Heath B.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Heathy and stony places. Very frequent.

3. *G. pusillum*, L. (*Least Mountain B.*)

Perennial. July, August. Scottish? type. Range in Britain, 52°—57°. Throughout Ireland.

Rocky places. Rare?

Near Belfast, at the Whiterock, Mr. Orr; Basaltic Rocks, County Antrim, "British Flora;" Rathlin Island, Miss Gage.

4. *G. uliginosum*, L. (*Rough Marsh B.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sides of ditches and pools. Frequent.

5. *G. palustre*, L. (*White Water B.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches, pools, &c. Very frequent.

Var. β, Witheringii. Near Belfast, at Bog Meadows; Kinnegar, Holywood, &c.

6. *G. Mollugo*, L. (*Great Hedge B.*)

Perennial. July, August. English type. Range in Britain, 50°—58°. Ireland?

Meadows and hedges. Very local.

Lawn at Mr. Vernon's, near Belfast, Mr. Templeton; lawn opposite Glenarm Castle, G. D.

7. *G. boreale*, L. (*Cross-leaved B.*)

Perennial. July, August. Highland type. Range in Britain, 53°—61°. Ireland, north only.

Moist rocky banks. Very local.

Lough Erne, near Ely Lodge, and Lough Neagh, at Shane's Castle, Dr. Mackay; Portmore, Mr. Hyndman; by Lough Neagh, near Ballyronan, Rev. W. T. Whan; Magilligan, Mr. Murphy; islands in Lough Neagh, Mr. W. H. Ferguson; island and shores of Lough Neagh, at Toome, G. D.

8. *G. Aparine*, L. (*Goose-grass B.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Hedges and wastes. Very common.

2. SHERARDIA. FIELD-MADDER.

1. *S. arvensis*, L. (*Blue F.*)

Annual. May to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry fields and wastes. Frequent.

Ballydrain, Mr. Templeton; Ballyronan, Rev. W. T. Whan; Holywood and Crawfordsburn, Mr. Millen; near Ballylesson Church, Mr. W. H. Ferguson. Beside the lead mine at Newtownards; roadsides, Newcastle and Bryansford, G. D.

3. ASPERULA. WOODRUFF.

1. *A. odorata*, L. (*Sweet W.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and shady places. Frequent.

Near Belfast, in Colin Glen; Woodburn Glen; Cave Hill; Knockagh, &c. &c.

ORDER XXXII.—VALERIANACEAE.

1. VALERIANA. VALERIAN.

1. *V. officinalis*, L. (*Great wild V.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Sides of rivers and moist woods. Very frequent.

Near Belfast, in Colin Glen; banks of Lagan; Bog Meadows, &c. &c.

2. FEDIA. CORN-SALAD.

1. *F. olitoria*, Vahl. (*Common C.*)

Annual. May, June. British type. Range in Britain, 50°—60°. Throughout Ireland.

About Moira; Knockmagunny, County Down; and Curran of Larne, Mr. Templeton; along shore of Lough Neagh, from Ballyronan to Toome, Rev. W. T. Whan; Bath Lodge, Miss Hincks; Bangor; beach at Holywood, and on the Knockagh Hill, Mr. Millen; roadside at Carlingford, Mr. Hyndman. Nursery wall at Newtownards; on banks, and on a ruin at upper part of Crawfordsburn; beach at Newcastle; abundant at Whitehead and Castle Chichester; Glenarm Park, and cliffs south from Glenarm, G. D.

2. *F. dentata*, Vahl. (*Smooth C.*)

Annual. June, July. English type. Range in Britain, 50°—58°. Throughout Ireland.

Dry fields and banks. Very rare.

Abundant at Oldcastle and at Lisabrin, County Cavan, Rev. Mr. Halpin; Curran of Larne, Mr. Templeton.

ORDER XXXIII.—DIPSACEAE.

1. SCABIOSA. SCABIOUS.

1. *S. succisa*, L. (*Devil's-bit S.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Meadows and heaths. Common.

2. KNAUTIA. KNAUTIA.

1. *K. arvensis*, Coult. (*Field K.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Fields and pastures. Rather local.

Ballyronan, Rev. W. T. Whan; near Holywood, and Maghera-mourne near Ballycarry, Mr. Millen; Rathlin, Miss Gage. Near Monaghan; roadside at Newtowncrommelin; abundant between Downpatrick and Strangford; Curran of Larne, G.D.

ORDER XXXIV.—COMPOSITAE.

1. APARGIA. HAWKBIT.

1. *A. hispida*, Willd. (*Rough H.*)

Perennial. June, July. English type. Range in Britain, 50°—57°. Throughout Ireland.

Pastures and heaths. Rather local.

Near Belfast on banks by the side of the Lagan, at first and second locks, Mr. Templeton; in the extreme north, as at Malin, &c., G. D.

2. *A. autumnalis*, Willd. (*Autumnal H.*)

Perennial. August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and heaths. Very frequent.

Var. β, Taraxaci. On the Cavehill, Mr. Millen. On the Black Mountain; Ben Bulbin; Erigal Mountain; Slieve Donard; and Island of Innistrathull, G. D.

2. HYPOCHAERIS. CAT'S-EAR.

1. *H. radicata*, L. (*Long-rooted C.*)

Perennial. July. British type. Range in Britain, 50°—60°.
Throughout Ireland.

Pastures and wastes. Common.

3. SONCHUS. SOW THISTLE.

1. *S. arvensis*, L. (*Corn S.*)

Perennial. August, September. British type. Range in Britain, 50°—61°. Throughout Ireland.

In fields, &c. Frequent.

2. *S. oleraceus*, L. (*Common S.*)

Annual. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Very common.

3. *S. asper*, Hoffm. (*Rough S.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland?

Fields and wastes. Probably frequent.

Often confounded with the last, if indeed it is distinct.

Ballyronan and Moneymore, Rev. W. T. Whan; occasionally about Belfast.

4. CREPIS. HAWK'S-BEARD.

1. *C. virens*, L. (*Smooth H.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry pastures, &c. Rather local.

Loughgall, Mr. More; Moneymore, Rev. W. T. Whan; Ballycastle, Miss Hincks. Bangor and Donaghadee, and in profusion on the sand hills at Newcastle, G. D. —

2. *C. paludosa*, Moench. (*Marsh H.*)

Perennial. July, August. Scottish type. Range in Britain, 51°—58°. Throughout Ireland.

Moist woods and rocks. Frequent.

Moist meadows at Lough Mourne, Mr. W. H. Ferguson. Colin Glen; Crawfordsburn, and similar places about Belfast; on Nephin Mountain, at 800 feet, G. D.

5. LEONTODON. DANDELION.

1. *L. Taraxacum*, L. (*Common D.*)

Perennial. All Summer. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures, wastes, &c. Very common.

No trace of this common plant could be seen in the remote district of Glen Columbkil, nor of the variety called *L. palustre*, G. D.

Var. β, palustre. Rare.

Island of Rathlin, Miss Gage; Ben Bulbin, G. D.

6. HIERACIUM. HAWKWEED.

1. *H. Pilosella*, L. (*Mouse-Ear H.*)

Perennial. May to August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Banks and dry places. Very frequent.

2. *H. cerinthoides*, L. (*Honey-wort H.*)

Perennial. July, August. Highland type. Range in Britain, 54°—59°. Throughout Ireland?

Rocky places. Rare.

Conlig Hill, Mr. Orr; rocks at Garron Head, and rocks in Glenariff, Dr. Moore.

Var. β, Anglicum. In County Antrim; and on Ben Evenagh, County Derry, Dr. Moore.

3. *H. Iricum*, Fries. (*Irish H.*)

Perennial. July, August. Highland type. Range in Britain, 54°—60°. Ireland, N. only.

Rocky places. Very rare.

Garron Head, County Antrim.

4. *H. lasiophyllum*, Koch. (*Hairy H.*)

Perennial. July, August. Highland type. Range in Britain? Ireland, N. only?

Dry cliffs. Very rare.

Ben Bulbin; and steep cliffs south from Glenarm, G. D.

5. *H. murorum*, L. (*Wall H.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Rocks and walls. Very frequent.

Near Belfast, on Cave Hill; Knockagh; Whiterock, &c.; frequent in similar places elsewhere.

6. *H. sylvaticum*, Sm. (*Wood H.*)

Perennial. July, August. British type. Range in Britain, 50°—59°. Throughout Ireland?

Woods and other shady places. Frequent?

River bank at Bryansford, County Down; and "Dog's-leap," Newtownlimavady, Mr. Templeton.

7. *H. Prenanthoides*, Vill. (*Rough-bordered H.*)

Perennial. July, August. Highland type. Range in Britain, 54°—58°. Ireland?

Moist shady places. Rare.

Glens about Belfast, Mr. Templeton; Cave Hill, Mr. Millen; river bank, near Cookstown, Rev. W. T. Whan.

8. *H. strictum*, Fries. (*Straight H.*)

Perennial. July, August. Highland type. Range in Britain, 54°—59°. Ireland, north only?

Rocky places. Very rare.

In County Derry, Dr. Moore.

9. *H. umbellatum*, L. (*Narrow-leaved H.*)

Perennial. July, August. British type. Range in Britain, 50°—59°. Ireland?

Woods and rocks. Rare.

Rocks, Tullamore Park, Mr. Templeton; rocks of Ben Evenagh, County Derry, Dr. Moore.

Var. γ, filifolium. Harper's Island, Lough Neagh, "British Flora."

10. *H. crocatum*, Fries. (*Saffron H.*)

Perennial. July, August. Highland type. Range in Britain, 54°—59°. Ireland, north only?

Rocky places. Very rare.

Glenbally and Carrickfergus, "British Flora."

11. *H. rigidum*, Hartm.? (*Rigid H.*)

Perennial. August, September. Highland type. Range in Britain, 54°—59°. Ireland, north only?

Rocky places. Very rare.

In County Antrim, Dr. Moore.

12. *H. boreale*, Fries. (*Shrubby H.*)

Perennial. July to October. British type. Range in Britain, 50°—58°. Ireland?

Woods and shady banks. Rare?

Rocks in Tullamore Park; Herbarium N. History Society.

7. LAPSANA. NIPPLE-WORT.

1. *L. communis*, L. (*Common N.*)

Annual. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

• Fields and wastes. Rather local.

Armagh, Rev. G. Robinson; Moneymore, Rev. W. T. Whan; Newcastle, Mr. Rea; Rathlin Island, Miss Gage; near Belfast, on the Black Mountain, &c. &c.

8. ARCTIUM. BURDOCK.

1. *A. Lappa*, L. (*Common B.*)

Biennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Waste places. Generally diffused.

Moneymore, Rev. W. T. Whan; Rathlin Island, Miss Gage. Near Belfast, and along shores of the Lough; Shane's Castle; Armagh to Enniskillen along with *Conium*; both associated elsewhere on coast and inland; Dunfanaghy; Bunbeg; Innishowen Head; sand hills, Culdaff; island of Innistrabull, G. D.

9. CARDUUS. THISTLE.

1. *C. nutans*, L. (*Musk T.*)

Biennial. May to August. English type. Range in Britain, 50°—56°. Throughout Ireland?

Dry waste places. Very rare.

Banks of the railway two miles from Carrickfergus, Mr. Orr and Mr. Millen; in County Derry, Dr. Moore.

2. *C. acanthoides*, L. (*Wetted T.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry wastes. Rather local.

Dundalk and Lambeg, Mr. Whitla. Cremorne, County Monaghan, Mr. ...

W. T. Whan ; roadside at Milltown, County Down, Mr. Orr ; near Belfast, at north end of York Street, &c., Mr. Millen ; at Antrim, Miss Hincks ; at Knockglass, Malin, G. D.

3. *C. tenuiflorus*, Curt. (*Slender-flowered T.*)

Annual. June, July. English type. Range in Britain, 50°—57°. Throughout Ireland.

Dry waste places. Rather local.

Holywood Warren, and Greyabbey, Mr. Templeton ; east from Newtownards, Mr. Millen ; waste places between Kilroot and Carrickfergus, Mr. W. H. Ferguson ; Rathlin Island, Dr. Marshall. Kirkcubbin ; strand road, Portaferry ; Castleward ; Strangford ; sandhills at Newcastle ; Bangor and Donaghadee ; Portrush, G. D.

10. CNICUS. PLUME THISTLE.

1. *C. lanceolatus*, Willd. (*Spear P.*)

Biennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Very frequent.

2. *C. palustris*, Willd. (*Marsh P.*)

Biennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist meadows and woods. Very frequent.

3. *C. arvensis*, Hoffm. (*Creeping P.*)

Perennial. July. British type. Range in Britain, 50°—61°. Throughout Ireland.

4. *C. pratensis*, Willd. (*Meadow P.*)

Perennial. July, August. English type. Range in Britain, 50°—54°. Throughout Ireland.

Moist pastures. Very general.

The Downs in Tyrone, Rev. W. T. Whan ; between Holywood and Bangor, Mr. Millen ; Meadow in Garvagh demesne, and by the side of the Bann below Coleraine, and Kilrea, County Derry, Dr. Moore ; Dungiven, &c., in County Derry, Mr. Templeton ; Ballycastle, Miss Hincks. At Sligo, and from Sligo to Bundoran ; at Mount Charles, at town of Donegal, gap of Barnesmore and Ballybofey ; Killybegs, Kilcar, and Glen Columbkil ; Glenties to Leachin bridge ; around Gweedore, and on the flanks of Erigal to 400 feet ; abundant near Dunfanaghy along with *Anagallis tenella* and *Lythrum Salicaria* ; at Hornhead ; table land of Innishowen ; at Culdaff and Malin ; on

Slieve League, near Glen Columbkil, I have found it at an elevation of 900 feet. This species occurs in great abundance toward the north-west, G. D.

11. CARLINA. CARLINE THISTLE.

1. *C. vulgaris*, L. (*Common C.*)

Biennial. June to September. English type.

Dry pastures. Very rare.

In County Antrim, Dr. Moore; at Ballycastle, Miss Hincks.

12. CENTAUREA. KNAPWEED.

1. *C. nigra*, L. (*Black K.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Very frequent.

2. *C. Cyanus*, L. (*Corn K.*)

Annual. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

In fields. Very frequent.

13. BIDENS. BUR-MARIGOLD.

1. *B. cernua*, L. (*Nodding B.*)

Annual. July, August. English type. Range in Britain, 50°—58°. Throughout Ireland?

Marshy places. Rather local.

Armagh, Rev. G. Robinson; near Lisburn, in bog-holes at Magheranane, Mr. Hyndman; Lagan side, and between Clough and Tullamore, Mr. Templeton; ditches at Lambeg, Mr. Millen.

2. *B. tripartita*, L. (*Trifid B.*)

Annual. July, August. English type. Range in Britain, 50°—56°. Throughout Ireland.

Marshy places. Local.

Armagh, Rev. G. Robinson; Lagan side, at Stranmills, Mr. Templeton; ditch near Laganvale, and bog-holes at Conlig, Mr. Orr; banks of River Bann at Toome, Mr. Thompson; marshes at Malin well, G. D.

14. TANACETUM. TANSY.

1. *T. vulgare*, L. (*Common T.*)

Perennial. August. British type. Range in Britain, 50°—61°.
Throughout Ireland.

Borders of fields and wastes. Very local.

Loughgall, Mr. More; banks of Lagan, near Lambeg, Mr. Orr; at Carrickfergus, Mr. Millen; in several places at Money-
more, Rev. W. T. Whan; at Newcastle, Mr. Rea; Ballycastle,
Miss Hincks; Rathlin, Miss Gage. Curran of Larne, and
Knockglass, at Malin, G. D.

15. ARTEMISIA. WORMWOOD.

1. *A. vulgaris*, L. (*Mugwort.*)

Perennial. July, August. British type. Range in Britain,
50°—61°. Throughout Ireland.

Fields and wastes. Frequent.

16. EUPATORIUM. HEMP-AGRIMONY.

1. *E. cannabinum*, L. (*Common H.*)

Perennial. July, August. British type. Range in Britain,
50°—59°. Throughout Ireland.

Watery places. Very local.

Round Lough Neagh; also at Ardglass, Mr. Templeton;
hedgebank, near Dunmurry, Mr. Orr; Cave Hill and White-
head, Mr. Hyndman; Shane's Castle, Mr. Thompson; on an
island in Lough Neagh, near Toome, Mr. W. H. Ferguson;
Rathlin Island, Miss Gage. Sea-cliffs at Innishowen Head and
Glen Giveny; by a rivulet among sandhills west from Knock-
glass, Malin, G. D.

17. ANTENNARIA. EVERLASTING.

1. *A. dioica*, Gaertn. (*Mountain E.*)

Perennial. June, July. Scottish type.

Upland heaths. Frequent.

Carnmoney Hill, &c., Mr. Templeton; moor on top of Cave
Hill, Mr. Rea; on Slieve Gallion, Rev. W. T. Whan; at New-
castle, Mr. Rea; heaths at Carrickfergus, Mr. W. H. Ferguson.
Bunbeg, in north-west Donegal, and on Slieve League at 1600
feet, G. D.

18. GNAPHALIUM. CUDWEED.

1. *G. sylvaticum*, L. (*Highland C.*)

Perennial. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry pastures and wastes. Very local.

Not unfrequent at Moneymore, Rev. W. T. Whan; Kinnegar, Holywood, Mr. Millen; sandhills north from Newcastle, G. D.

2. *G. uliginosum*, L. (*Marsh C.*)

Annual. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sides of ditches, &c. Very frequent.

19. FILAGO. FILAGO.

1. *F. minima*, Pers. (*Least F.*)

Annual. May to August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry places, walls, &c. Frequent.

Portmore, Mr. Whitla; shores of Lough Neagh; near Lisburn, &c., Mr. Templeton; sandy fields at Lambeg, Mr. Orr; on Kinnegar, at Holywood, Mr. Millen; Massereene Park, Mr. Thompson; sandhills at Newcastle, G. D.

2. *F. Germanica*, L. (*Common F.*)

Annual. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry wastes and walls. Local.

Sandhills Newcastle, Mr. Rea; Kinnegar, Holywood, Mr. Millen; Carlingford, Mr. Hyndman; Innishowen Head, G. D.

20. PETASITES. BUTTER-BUR.

1. *P. vulgaris*, Desf. (*Common B.*)

Perennial. March, April. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and wet meadows. Very frequent.

21. TUSSILAGO. COLT'S-FOOT.

1. *T. Farfara*, L. (*Common C.*)

Perennial. March, April. British type. Range in Britain, 50°—60°. Throughout Ireland.

Fields and wastes. Very frequent.

22. ASTER. STARWORT.

1. *A. Tripolium*, L. (*Sea S.*)

Perennial. August, September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Salt marshes. Very general and abundant.

23. SOLIDAGO. GOLDEN ROD.

1. *S. Virgaurea*, L. (*Common G.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Ireland?

Sea-cliffs and mountains. Rather local.

Tullamore Park, Herbarium N. History Society; rocks at the blue lake on the Mourne range; and on Tory Island, Mr. Hyndman. On the Knockagh, near Carrickfergus, Dr. Mateer. On Nephin; Erigal; Muckish at 2,000 feet; sea-cliffs Innishowen Head and Culdaff, G. D.

24. SENECEO. GROUNDSEL.

1. *S. vulgaris*, L. (*Common G.*)

Annual. All the year. British type. Range in Britain, 50°—60°. Throughout Ireland.

Fields, gardens, and wastes. Very common.

2. *S. sylvaticus*, L. (*Mountain G.*)

Annual. July, August. British type. Range in Britain, 50°—59°. Throughout Ireland.

Banks and wastes. Frequent.

Near Belfast, at Stranmills; Whiterock; Cave Hill; Kinnergar, Holywood, &c.

3. *S. Jacobaea*, L. (*Ragweed.*)

Perennial. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Pastures and wastes. Common.

4. *S. aquaticus*, Huds. (*Marsh R.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wet pastures, &c. Common.

25. INULA. ELECCAMPANE.

1. *I. Helenium*, L. (*Common E.*)

Perennial. July, August. English type. Range in Britain, 50°—55°. Throughout Ireland.

Moist pastures. Very rare.

Near Whiterock, Mr. Orr; Upper Ballysillan, and near Colin Mountain, Mr. Millen; banks of the river south from Glenarm, Mr. Templeton; shady banks near Whitehouse, and at Bellaghy, County Derry, Mr. W. H. Ferguson; Rathlin Island, Miss Gage.

26. PULICARIA. FLEA-BANE.

1. *P. dysenterica*, Gaertn. (*Common F.*)

Perennial. July, August. English type. Range in Britain, 50°—56°. Throughout Ireland.

Marshy places. Not unfrequent.

Mullaghmore, County Sligo, Mr. Syme; Armagh, Rev. G. Robinson; at Whitehouse, Mr. Templeton; Cave Hill, and near Carrickfergus, Mr. Millen; meadow between Carrickfergus and Ballycarry; and roadside near Colin Glen, Mr. W. H. Ferguson; various parts of shores of Lough Neagh; roadside between Antrim and Ballygeniff, and roadside near Crawfordsburn; ditches by the Falls Road, Herbarium N. History Society; Blackstaff Lane and Bog Meadows, G. D.

27. BELLIS. DAISY.

1. *B. perennis*, L. (*Common D.*)

Perennial. February to October. British type. Range in Britain, 50°—60°. Throughout Ireland.

Meadows and wastes. Very common.

28. CHRYSANTHEMUM. OX-EYE.

1. *C. leucanthemum*, L. (*White O.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures and wastes. Very frequent.

2. *C. segetum*, L. (*Yellow O.*)

Annual. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Frequent.

29. MATRICARIA. FEVERFEW.

1. *M. inodora*, L. (*Scentless F.*)

Annual. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

Var. β, maritima. Frequent along the coast.

2. *M. Chamomilla*, L. (*Common F.*)

Annual. June, July. English type. Range in Britain, 50°—56°. Ireland, south to 54½°.

Fields and wastes. Very rare.

Fields at Malone; Dunmurry, and near Comber, Mr. Templeton; near Belfast, at Duncairn, Mr. Orr.

30. ANTHEMIS. CHAMOMILE.

1. *A. nobilis*, L. (*Common C.*)

Perennial. July, August. English type. Range in Britain, 50°—56°. Throughout Ireland.

Dry pastures and wastes. Rare.

Roadside between Toome and Ballyronan, Rev. W. T. Whan; Tullybranaghan Mountain, County Down, Mr. Templeton; Commons, near Comber, Mr. Orr; pastures near Lough Beg, Mr. W. H. Ferguson; in County Derry, Dr. Moore.

2. *A. Cotula*, L. (*Stinking C.*)

Annual. June to September. English type. Range in Britain, 50°—57°. Ireland, south to 54½°?

Fields and wastes. Very rare.

Near Comber, County Down, Mr. Templeton; north from Belfast, in a field at Mount Collier, Mr. Orr; fields near Kilroot, Mr. W. H. Ferguson.

31. ACHILLAEA. MILFOIL.

1. *A. Ptarmica*, L. (*Sneeze-wort M.*)

Perennial. July August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist meadows, &c. Not unfrequent.

2. *A. Millefolium*, L. (*Common M.*)

Perennial. June, September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Pastures and wastes. Very frequent.

ORDER XXXV.—CAMPANULACEAE.

1. CAMPANULA. BELL-FLOWER.

1. *C. rotundifolia*, L. (*Round-leaved B.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures, turf-walls, &c. Frequent.

Near Belfast, on Cave Hill; Wolfhill; Black Mountain; Whitehead, &c. &c. Attains above 2,000 feet on Slieve Donard.

2. JASIONE. SHEEP'S-BIT.

1. *J. montana*, L. (*Annual S.*)

Biennial? June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures and rocks. Not unfrequent.

Murloch, Newcastle, Mr. Rea; railway banks near Belfast, Mr. Millen; Portstewart, Rev. W. T. Whan; Rathlin Island, Dr. Marshall; Tory Island, Mr. Hyndman. Cave Hill, &c.; Innishowen Head; Malin; Horn-head (in pure peat); Bunbeg near Gweedore; Glen Columbkil; on Nephin Mountain at 2,000 feet, G. D.

ORDER XXXVI.—LOBELIACEAE.

1. LOBELIA. LOBELIA.

1. *L. Dortmanna*, L. (*Water L.*)

Perennial. July, August. Scottish type. Range in Britain, 51°—59°. Throughout Ireland.

Lakes, &c. Very local.

Lough Neagh at Portmore, Mr. Templeton; at junction of Lagan Canal and Lough Neagh, and in the Blue Lake, Mourne range, Mr. Hyndman; lakes at base of Mourne Mountains, Dr.

Mackay; Castlewellan Lake, Mr. Thompson. Lake south from village of Strangford; Clady River, and lakes at Gweedore, abundant; lakes between Gweedore and Dunglow; Lough Erigh, near Glenties; Lough League, at north base of Slieve League, at 800 feet, very rare,—only one plant in flower, G. D.

ORDER XXXVII.—VACCINIACEAE.

1. VACCINIUM. WHORTLEBERRY.

1. *V. Myrtillus*, L. (*Bilberry*.)

Perennial. April, May. British type. Range in Britain, 50°—61°. Throughout Ireland.

Near Belfast, on Cave Hill, Wolfhill, &c. Sand-hills at Culdaff, small and scarce; very luxuriant at Glen Tocher, on table land of Innishowen; rare in Glen Columbkil; attains top of Muckish and Slieve Donard, G. D.

2. *V. Vitis Idaea*, L. (*Red W.*)

Perennial. June, July. Highland type. Range in Britain, 51°—59°. Ireland, N. chiefly.

Dry heaths and in woods. Very local.

Top of Divis Mountain; at south end of Lough Neagh, and Ballynahinch, Mr. Templeton; Slieve Donard, Mr. Thompson; Lough Gall, Mr. More; heaths near Dungannon, Mr. Campbell. Top of Binian, one of the Mourne range; very rare on cliffs at west end of the Cave Hill; top of Slieve Nanee, County Antrim; attains 1880 feet on Slieve Donard (the lowest limit of *Salix herbacea* on that Mountain); on Erigal, chiefly confined to a narrow zone, at 1900 feet; on Nephin, not seen below 1400 feet, G. D.

3. *V. Oxyccoccus*, L. (*Marsh W.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Spongy peat bogs. Rather local.

Bog at Annaghmore, County Armagh, Rev. G. Robinson; bogs about Moneymore, Rev. W. T. Whan; Birky Moss, County Down, and moors near Greyabbey, Mr. Hyndman; bog between Newtownards and Donaghadee, Mr. Millen. Bog near Bangor, G. D.

Sub-Class III.—COROLLIFLORAE.

ORDER XXXVIII.—ERICACEAE.

1. ERICA. HEATH.

1. *E. Tetralix*, L. (*Cross-leaved H.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wet heaths and bogs. Very general.

On Slieve Donard, ceases about 1600 feet; on Muckish at 800, and on Erigal at 1000; reaches 1500 feet on Slieve League, G. D.

2. *E. cinerea*, L. (*Fine-leaved H.*)

Perennial. August, September. British type. Range in Britain, 50°—61°. Throughout Ireland.

On Slieve Donard it ceases at 1700 feet, on Muckish at 1900, on Erigal at 1800, and on Nephin at 1800, G. D.

2. CALLUNA. LING.

1. *C. vulgaris*, Salisb. (*Common L.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland

Heaths and moors. Common.

In the western part of Donegal, from Dunglow to Glenties, there are only occasional patches of this and of *Erica cinerea*, in a wilderness of *Schæmus nigricans*, G. D.

3. ANDROMEDA. ANDROMEDA.

1. *A. polifolia*, L. (*Marsh A.*)

Perennial. May, June. Irish type. Range in Britain, 51°—57°. Throughout Ireland.

Peat bogs. Very local.

Bog at Greyabbey, County Down, Mr. Templeton; bogs in Armagh, Rev. G. Robinson; Moss between Newtownards and Donaghadee, Mr. Millen. This plant is rapidly disappearing in consequence of draining and paring of bogs.

4. ARCTOSTAPHYLOS. BEAR-BERRY.

1. *A. Uva-ursi*, Spreng. (*Red B.*)

Perennial. May, June. Highland type. Range in Britain, 54°—61°. Ireland, N.

Heathy and rocky places. Very local.

Fairhead and Muckish Mountain, Mr. Templeton; by the north lake at Fairhead, Mr. Hyndman; Rosskeen Mountains, Mr. Thompson. Sea-cliffs at the Signal Tower, Glen Columbkil; top of Slieve Donard; forming a zone on Erigal at 1,530 feet; not seen on Nephin, G. D.

ORDER XXXIX.—PYROLACEAE.

1. PYROLA. WINTER-GREEN.

1. *P. secunda*, L. (*Serrate W.*)

Perennial. July. Scottish type. Range in Britain, 54°—58°. Ireland, N. only.

Woods and shady rocks. Very rare.

Mountain Glen near Garvagh, County Derry, Dr. Moore.

2. *P. media*, Swartz. (*Intermediate W.*)

Perennial. July, August. Scottish type. Range in Britain, 52°—61°. Ireland, N.

Woods and heaths. Rare.

Side of Glen in Ballynascreen Mountain, County Derry; Newtownards Park; and in County Antrim, Mr. Templeton; Ballygowan bog, Mr. Whitla; Wolfhill and Crowglen, Mr. Millen; Colin Glen and Black Mountain, Mr. Rea; on hill of Conlig, Newtownards, G. D.

3. *P. minor*, L. (*Small W.*)

Perennial. June, July. Scottish type. Range in Britain, 51°—58°. Ireland?

Woods and shady banks. Rare.

North side of Slemish mountain; and at Glenarm among heath, Mr. Templeton; Crowglen, Mr. Hyndman; Mountain Glen, near Garvagh, County Derry, Dr. Moore; woods at Ards House, near Dunfanaghy; also at Banagher, on the Owenbeg River near the fall called Linapaste, County Derry, Mr. E. Murphy.

ORDER XL.—MONOTROPACEAE.

1. MONOTROPA. BIRD'S-NEST.

1. *M. Hypopitys*, L. (*Yellow B.*)

Perennial. July, August. Germanic type. Range in Britain, 51°—59°. Ireland?

Beech and fir woods. Very rare.

Woods at St. Catherine's, and at Greyabbey, County Down (authority unknown).

ORDER XLI.—AQUIFOLIACEAE.

1. ILEX. HOLLY.

1. *I. Aquifolium*, L. (*Common H.*)

Perennial. May to August. British type. Range in Britain, 50°—59°. Throughout Ireland.

Woods and rocks. In a wild state rather local.

Cliffs, Ben Bulbin, Herbarium N. History Society. Head of Colin Glen; rocks on Slemish Mountain; Glen Tocher, Innishowen; rocks, Lough Sheggach, near Dunfanaghy; Gap of Barnesmore, town of Donegal, G. D.

ORDER XLII.—OLEACEAE.

1. FRAXINUS. ASH.

1. *F. excelsior*, L. (*Common A.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and rocks. Local in a wild state.

Loughgall, Mr. More; rocks, head of Colin Glen; Black Mountain, &c. &c.

ORDER XLIII.—GENTIANACEAE.

1. ERYTHRAEA. CENTAURY.

1. *E. Centaurium*, Pers. (*Common C.*)

Annual. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures. Frequent.

Abundant about Moneymore, Rev. W. T. Whan; at Newcastle, and on Cave Hill, Mr. Rea; on the Knockagh, and Kinnegar, at Holywood, Mr. Millen; Rathlin Island, Dr. Marshall; Tory Island, Mr. Hyndman; rocks, Lough Sheggach, and plentiful in different parts, especially along the coasts, G. D.

2. *E. pulchella*, Fries. (*Dwarf C.*)

Annual. July, August. English type. Range in Britain, 50°—55°. Throughout Ireland.

Sandy sea-shores. Rare.

Shore below Bangor, Mr. Templeton; shore of Strangford Lough opposite to Newtownards, Mr. Orr; Rathlin, Miss Gage.

3. *E. latifolia*, Sm. (*Broad-leaved C.*)

Annual. July, August. English type. Range in Britain, 51°—55°. Rare.

Lough shore near Bangor, Mr. Orr; Portstewart, Herbarium N. History Society; at Malin and Bunbeg, County Donegal, G. D.

4. *E. linarifolia*, Pers. (*Dwarf-tufted C.*)

Annual. July, August. English? type. Range in Britain, 50°—61°. Ireland?

Sandy wastes. Rare.

At Bangor and Copeland Islands, Mr. Templeton; shore west from Groomsport, Mr. Millen.*

2. GENTIANA. GENTIAN.

1. *G. Amarella*, L. (*Small-flowered G.*)

Annual. July, August. British? type. Range in Britain, 50°—61°. Ireland?

Dry pastures. Very rare?

Cave Hill, and other places in County Antrim, sometimes with double flowers, Mr. Templeton.

2. *G. campestris*, L. (*Field G.*)

Annual, August, September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures. Very frequent, especially along the coast line.

* There is reason for suspicion that some of the species usually given in Floras are but varieties of *E. Centaurium*.

On basalt at Magilligan, County Derry, with white flowers, Dr. Mackay; Tory Island, Mr. Hyndman. Near Belfast, on shore at Holywood; Cave Hill; Knockagh; links at Newcastle; at Glenarm, &c. &c., G. D.

3. CHLORA. YELLOW-WORT.

1. *C. perfoliata*, L. (*Perfoliate Y.*)

Annual. July, August. English type. Range in Britain, 50°—55°. Ireland, S. to 54½°.

Dry pastures. Very rare.

On the embankment of Ballymena Railway near King's Moss, Mr. Orr.

4. MENYANTHES. BUCKBEAN.

1. *M. trifoliata*, L. (*Common B.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland. .

Marshy places. Very frequent.

Moneymore, &c., abundant, Rev. W. T. Whan; near Lough Mourne, and Ballycarry, Mr. W. H. Ferguson; at 1,000 feet on Carey Mountain, north-west from Cushendall, Mr. Thompson; Island of Rathlin, Miss Gage; near Belfast, in marshes at Lagan side, and above Holywood.

ORDER XLIV.—CONVOLVULACEAE.

1. CONVULVULUS. BINDWEED.

1. *C. arvensis*, L. (*Small B.*)

Perennial. June, July. English type. Range in Britain, 50°—60°. Ireland S. to 54½°.

Fields and hedges. Rare.

County Armagh, Rev. G. Robinson; at Templepatrick, Miss Hincks; near Holywood, Mr. Millen; Curran of Larne, Mr. Whitla and Mr. Hyndman; Lagan side, near the towing path below the first lock, Mr. Orr.

2. CALYSTEGIA. HOODED-BINDWEED.

1. *C. sepium*, Br. (*Great H.*)

Perennial. June to September. English type. Range in Britain, 50°—58°. Throughout Ireland.

Moist hedges, &c. Very frequent.

Ballyronan, Moneymore, &c., Rev. W. T. Whan; Island of Rathlin, Miss Gage. Frequent at Belfast, Holywood, &c.; rocks and sandhills at Culdaff; Glen Columbkil, &c. &c., G. D.

2. *C. Soldanella*, Br. (*Sea-side H.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Throughout Ireland.

Sandy sea-shores. Very local.

Shore at Newcastle; Bush-Water foot at the salmon-weir, Mr. Templeton; coast near Holywood, Mr. Rea; shore at Cushendun, Mr. Whitla; Ballycastle, Miss Hincks; shore at Glen Columbkil, G. D.

ORDER XLV.—BORAGINACEAE.

1. ECHIUM. VIPER'S BUGLOSS.

1. *E. vulgare*, L. (*Common V.*)

Biennial. June, July. British type. Range in Britain, 50°—58°. Ireland, S. to 54½°.

Dry banks and pastures. Rare.

Fields at Belfast, Mr. Templeton; near York-street terminus; near the New Jail; and roadside at Holywood, Mr. Millen; Moneymore, Rev. W. T. Whan; at Newcastle, Mr. Thompson; Fields between Newcastle and Tullamore Park, Herbarium N. History Society; roadside at Dundrum, Mr. Hyndman.

2. LITHOSPERMUM. GROMWELL.

1. *L. officinale*, L. (*Common G.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry fields and wastes. Rather local.

Roadsides, Belfast, Mr. W. H. Ferguson; Cave Hill, Mr. Rea; Deer Park, Mr. Millen; at Whitehead, Mr. Hyndman.

2. *L. arvense*, L. (*Field G.*)

Annual. May, June. British type. Range in Britain, 50°—59°. Throughout Ireland.

Dry fields and wastes. Frequent.

Head of Cave Hill Railway; Deer Park wall; and banks of

Lagan, Mr. Hyndman; at Underwood, Belfast, Mr. Whitla; Holywood; Carrickfergus; embankment Newtownards Railway a mile from Belfast, Mr. Millen.

3. MERTENSIA. SMOOTH GROMWELL.

1. *M. maritima*, Don. (*Sea-side S. G.*)

Perennial. May, June. Scottish type. Range in Britain, 53°—61°. Ireland, N. chiefly.

Stony sea-shores. Very rare.

Coast near Dundrum, Mr. Templeton; Balloch, County Down coast, Mr. Rea; Islandmagee, Mr. Hyndman; near Castlerock station, Derry line, Rev. W. T. Whan.

4. MYOSOTIS. SCORPION-GRASS.

1. *M. palustris*, With. (*Water S.*)

Perennial. June, July. British type. Range in Britain, 50°—57°. Throughout Ireland.

Ditches and sides of rivers. Frequent.

2. *M. repens*, Don. (*Creeping Water S.*)

Perennial. June, July. British type. Range in Britain, 50°—59°. Ireland?

Wet bogs. Very rare?

Base of Nephin Mountain, in County Mayo, G. D.; Carrickfergus Common, Mr. W. H. Ferguson.

3. *M. cæspitosa*, Schultz. (*Tufted Water S.*)

Perennial? June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Boggy places. Frequent.

Cranmore, and other places at Belfast, Mr. Templeton; shores of Lough Neagh, Dr. Moore; bogs top of Cave Hill, Mr. Orr; bogs in Moira demesne, Mr. Hyndman; Ballycastle, Miss Hincks; table land of Innishowen and other parts of Donegal, G. D.

4. *M. sylvatica*, Hoffm. (*Wood S.*)

Perennial. June, July. English type. Range in Britain, 50°—57°. Ireland?

Dry shady places. Very rare.

Cave Hill, &c., Mr. Templeton; Wolfhill, Mr. Thompson; south side of Cave Hill, Mr. Orr.

5. *M. arvensis*, Hoffm. (*Field S.*)

Annual. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

6. *M. collina*, Hoffm. (*Early Field S.*)

Annual. April, May. British type. Range in Britain, 50°—61°. Ireland?

Dry sandy places. Very rare.

On a turf wall near Dundonald Bog, 1846, Mr. Thompson; fields near Dundonald, Mr. Orr.

7. *M. versicolor*, Reich. (*Yellow and Blue S.*)

Annual. May to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Very frequent.

5. LYCOPSIS. BUGLOSS.

1. *L. arvensis*, L. (*Small B.*)

Annual. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

6. SYMPHYTUM. COMFREY.

1. *S. officinale*, L. (*Common C.*)

Perennial. May, June. English type. Range in Britain, 50°—58°. Throughout Ireland.

Moist waste places. Very local.

Cave Hill, Mr. Templeton; Carnmoney, Mr. Millen; Colin Glen, Mr. Rea; at Newtownlimavady, white variety, Mr. Thompson; County Derry, Dr. Moore. Clones and Monaghan. White variety at Glen Givney, Innishowen, and also at Malin Well, G. D.

7. CYNOGLOSSUM. HOUND'S-TONGUE.

1. *C. officinale*, L. (*Common H.*)

Biennial. June, July. English type. Range in Britain, 50°—57°. Ireland, S. to 54½°.

Dry wastes. Rare.

Kirkiston and shore at Dundrum, Mr. Templeton; Carlingford, Mr. Hyndman. Sand-hills north from Newcastle, G. D.

ORDER XLVI.—SOLANACEAE.

1. HYOSCYAMUS. HENBANE.

1. *H. niger*, L. (*Common H.*)

Annual. July, August. English type. Range in Britain, 50°—58°. Ireland?

Dry wastes. Very rare.

Near Armagh Cathedral, Mr. Thompson; Greyabbey, Mr. Hyndman; waste places west side of Bangor Bay, Mr. Rea; fields near Carrickfergus, Mr. W. H. Ferguson; Curran of Larne, Mr. Millen; near Ballycastle, Miss Hincks.

2. SOLANUM. NIGHTSHADE.

1. *S. Dulcamara*, L. (*Woody N.*)

Perennial. June, July. British type. Range in Britain, 52°—58°. Throughout Ireland.

Hedges and wastes. Rather local.

Sides of drains in Bog Meadows, Belfast, Mr. Templeton; in hedges Upper Malone, Mr. Hyndman; Lagan side, near first lock, Mr. Millen; various places on shores of Lough Neagh; at Shane's Castle, Mr. Thompson; on the walls of Derry, Dr. Moore.

S. nigrum, L. (*Common N.*)

Annual? June to October. English type. Range in Britain, 50°—55°. Ireland, S. to 54½°.

Fields and wastes. Very rare.

On the Copeland Islands and the mainland opposite, Mr. Campbell.

ORDER XLVII.—OROBANCHACEAE.

1. OROBANCHE. BROOM-RAPE.

1. *O. rubra*, Sm. (*Red B.*)

Perennial. July, August. Scottish type? Range in Britain, 50°—58°. Ireland?

Parasitical on wild thyme. East coast, local.

Cave Hill, Belfast, Mr. Templeton. On the Magilligan Rocks, County Derry, Dr. Mackay; Rathlin Island, Miss Gage.

On the Knockagh, and on cliffs south from Glenarm; the plant seems confined to basaltic rocks, G. D.

2. *O. Hederas*, Duby. (*Ivy B.*)

Perennial. June, July. Atlantic type. Range in Britain, 50°—54°. Ireland?

Parasitical upon ivy. Very rare.

On the west shore of Lough Swilly, near Rathmelton, upon wild ivy; I have seen specimens from this locality, where it was discovered by the late Mr. Sawers of Londonderry.

2. LATHRAEA. TOOTH-WORT.

1. *L. squamaria*. (*Greater T.*)

Perennial. March, April. English type. Range in Britain, 50°—57°. Ireland, S. to 55°.

Woods and hedges. Very local.

Armagh, Rev. G. Robinson; under poplars on the margins of the Lagan, near Belfast, at Annadale, Mr. Thompson; Mace-don, near Belfast; Sinclair's Green, Falls Road; and at Mile-water Glen, or Jennymount, Mr. Hyndman; Colin Glen; Cave Hill; Whitehouse; Ballymenoch, Mr. Millen; abundant near the river side in Tullamore Park, G. D.

ORDER XLVIII.—SCROPHULARIACEAE.

1. VERONICA. SPEEDWELL.

1. *V. serpyllifolia*, L. (*Thyme-leaved S.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Common.

2. *V. scutellata*, L. (*Marsh S.*)

Perennial. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Marshy places. Rather local.

Loughgall, Mr. More; Moneymore, Rev. W. T. Whan; about Newcastle, Mr. Rea; Bog Meadows, Herbarium of N. History Society; bog at Greyabbey; Massereene Park on shore of Lough Neagh, Mr. Hyndman; King's Moss, near Carnmoney, Mr. Millen; Carrickfergus Common, Mr. W. H. Ferguson; Rathlin Island, Miss Gage; Kinnegar at Holywood, &c., G. D.

3. *V. Anagallis*, L. (*Water S.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches, &c. Very frequent.

4. *V. Beccabunga*, L. (*Brooklime.*)

Perennial. May to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches and river sides. Common.

5. *V. officinalis*, L. (*Common S.*)

Perennial. May to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and pastures. Very frequent.

Var. β, glabra. Sallagh Braes, near Larne, Mr. Templeton.

Var. γ, hirsuta. In the the North, very rare, Dr. Moore.

6. *V. montana*, L. (*Mountain S.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Moist woods and hedgerows. Very local.

Loughgall, Mr. More; Castlestewart, Rev. W. T. Whan; at Newcastle, Mr. Rea; at Holywood, by the side of the stream near the Church; at Wolfhill, and by the side of a hedge half a mile north-east from Greencastle station, Mr. Millen; Cave Hill Glen, Mr. Orr. Hedge by the side of the road from Dunmurry to Colin Glen, a mile from the former, G. D.

7. *V. Chamaedrys*, L. (*Germander S.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and wastes. Very frequent.

8. *V. hederæfolia*, L. (*Ivy-leaved S.*)

Perennial. March to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Frequent.

9. *V. agrestis*, L. (*Field S.*)

Annual. April to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Fields and wastes. Very frequent.

10. *V. arvensis*, L. (*Wall S.*)

Annual. April to August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and walls. Frequent.

2. BARTSIA. BARTSIA.

1. *B. Odontites*, Huds. (*Red B.*)

Annual. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Damp fields and wastes. Frequent.

Near Belfast, on Cave Hill; Blackstaff Lane; Kinnegar, Holywood, &c., and frequent in marshy spots throughout the North.

3. EUPHRASIA. EYEBRIGHT.

1. *E. officinalis*, L. (*Common E.*)

Annual. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Very general.

3. RHINANTHUS. YELLOW-RATTLE.

1. *R. Crista-Galli*, L. (*Common Y.*)

Annual. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Abundant.

4. MELAMPYRUM. COW-WHEAT.

1. *M. pratense*, L. (*Common C.*)

Annual. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods, and among long heath. Rather local.

Ballygowan Bog, Mr. Templeton; Muckish Mountain, Sir W. J. Hooker; woods at Drumnasole, Mr. Thompson; near Cookstown, Rev. W. T. Whan; on the Cave Hill, and in Colin Glen, Mr. Millen; on the Knockagh Hills, Mr. Orr; in Tullamore Park, along the side of the river, Mr. R. Patterson; near the Presbyterian Church at Malin, G. D.

Var. γ, montanum. On Ben Bulbin; on Muckish Mountain

at 2000 feet; on Erigal Mountain, from 2000 feet up to 2280; on Nephin Mountain, in County Mayo, 1760 to 1870 feet, G. D.

2. *M. sylvaticum*, L. (*Small-flowered C.*)

Annual. July. Scottish type. Range in Britain, 54°—58°. Ireland, south to 55°.

Upland woods. Rare.

Ballyligger Glen, near Larne, and shady places near Glenarm, Mr. Templeton; Glen of Altmore, Cushendall; Deer Park, at Glenarm, and Tullamore Park, Mr. Thompson; on the Cave Hill, Mr. Whitla; Woodburn Glen, and Craig Hill, near Ballyclare, Mr. Millen.

5. PEDICULARIS. LOUSE-WORT.

1. *P. palustris*, L. (*Marsh L.*)

Perennial? June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshy pastures. Very frequent.

2. *P. sylvatica*, L. (*Pasture L.*)

Perennial. April to July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist pastures and heaths. Very frequent.

With white flowers at Fair Head, Mr. Thompson; chiefly white on the flanks of Nephin Mountain, G. D.

6. SCROPHULARIA. FIGWORT.

1. *S. nodosa*, L. (*Knotted F.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and moist wastes. Frequent.

Near Belfast, on Cave Hill; Lagan side; Whiterock; Blackstaff Lane, &c. &c.

2. *S. Ehrharti*, C. A. Stev. (*Ehrhart's F.*)

Perennial. July, August. English type. Range in Britain, 50°—56°. Ireland?

Wet places. Rare?

In the Bog Meadows at Belfast, Dr. Mateer; river side between Edenderry and Purdysburn, Mr. Thompson.

3.S. *aquatica*, L. (*Water F.*)

Perennial. July, August. English type. Range in Britain, 50°—56°. Throughout Ireland?

Sides of rivers, &c. Very local?

Tullamore Park, Mr. Thompson; near Belfast, in the Bog Meadows, &c., Mr. Millen.

7. DIGITALIS. FOXGLOVE.

1. *D. purpurea*, L. (*Purple F.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry banks and rocks. Frequent.

8. LINARIA. TOAD-FLAX.

1. *L. vulgaris*, Moench. (*Yellow T.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Hedges and wastes. Very local.

Lisburn road, half-a-mile from Drumbridge; Lisburn; and foot of Crumlin river, Mr. Templeton; banks at Magherafelt, Rev. W. T. Whan; beach at Newcastle; at Shane's Castle; and roadside at Carnlough, Mr. Millen; near town of Antrim, at Dunsilly, Mr. Hyndman; Portrush, Miss Lanyon; Crawfordsburn, G. D.

9. VERBASCUM. MULLEIN.

1. *V. Thapsus*, L. (*Great M.*)

Biennial. June, July. English type. Range in Britain, 50°—57°. Throughout Ireland.

Dry banks and wastes. Very local.

Gravel pit at Whinny Hill on the road to Holywood, Mr. Templeton; Salter's Castle, Lough Neagh, Rev. W. T. Whan; at Dundrum, Mr. Hyndman; embankment of Newtownards Railway, a mile from Belfast, Mr. Millen; Ballycastle, Miss Hincks; at Moyne Abbey, near Killala, G. D.

ORDER XLIX.—LABIATAE.

1. LYCOPUS. GIPSY-WORT.

1. *L. Europaeus*, L. (*Common G.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Ireland, S. to 54½°.

Ditches and river banks. Very rare.

Armagh, Rev. G. Robinson; bog at Ballygillan, Rev. W. T. Whan; margin of Lagan, near first lock, Mr. Orr; shore of Lough Neagh at Shane's Castle, Mr. Thompson. Shore of Lough Neagh, at an Island near Toome, Mr. Ferguson and G. D.

2. MENTHA. MINT.

1. *M. rotundifolia*, L. (*Round-leaved M.*)

Perennial. August, September. English type. Range in Britain, 50°—56°. Throughout Ireland.

Moist wastes. Very rare.

In County of Derry, Dr. Moore.

2. *M. piperita*, Sm. (*Pepper M.*)

Perennial. August, September. English type. Range in Britain, 50°—57°. Throughout Ireland.

Watery places. Rare.

By the river, west side of Carnmoney Hill, Mr. Thompson; rivulet near Carnmoney Church, Mr. Orr; side of a mountain stream called Curleyburn, near Newtownlimavady, Dr. Moore. Shore of Lough Neagh, at Massereene Park, G. D.

3. *M. aquatica*, L. (*Water M.*)

Perennial. August, September. British type. Range in Britain, 50°—60°. Throughout Ireland.

River sides and marshes. Very frequent.

Near Belfast, at Lagan side; Bog Meadows; Blackstaff Lane, &c.

4. *M. sativa*, L. (*Marsh M.*)

Perennial. July, August. British type. Range in Britain, 50°—57°. Throughout Ireland.

Marshy places. Very rare.

At Moneymore, Rev. W. T. Whan; shores of Lough Neagh, Mr. Hyndman; in County Derry, Dr. Moore.

5. *M. arvensis*, L. (*Corn M.*)

Perennial. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry pastures and wastes. Frequent.

Var. β. agrestis. Rare in County Derry, Dr. Moore.

6. *M. Pulegium*, L. (*Pennyroyal*.)

Perennial. August, September. English type. Range in Britain, 50°—55°. Throughout Ireland.

Marshes and sides of streams. Very rare.

By the river at the lower end of Woodburn Glen, near Carrickfergus, Mr. Millen. On a small island called Creagh, in Lough Beg, County Derry, Dr. Moore.

3. THYMUS. THYME.

1. *T. Serpyllum*, L. (*Wild T.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures and rocks. Common.

4. ORIGANUM. MARJORAM.

O. vulgare, L. (*Common M.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Ireland, S. to 54½°.

Dry wastes. Rare.

Dry bank near the bog in Ballygillan, Rev. W. T. Whan; at Loughgall, Mr. More; roadside near Ballycarry, Mr. W. H. Ferguson.

4. TEUCRIUM. GERMANDER.

1. *T. Scorodonia*, L. (*Wood G.*)

Perennial. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry banks and rocks. Very frequent.

Near Belfast, on Cave Hill; Black Mountain; dry rocks along the shore, &c.

6. AJUGA. BUGLE.

1. *A. reptans*, L. (*Common B.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and moist pastures. Very frequent.

7. BALLOTA. HOREHOUND.

1. *B. nigra*, L. (*Black H.*)

Perennial. July, August. English type. Range in Britain, 50°—60°. Throughout Ireland.

Dry wastes. Very rare.

Between Ballynahinch and Seaforde; near Ballyhalbert and Portaferry; and a mile from Lisburn, left hand side of the road to Belfast, Mr. Templeton; roadside near Greyabbey, Mr. Hyndman; roadside near Ballylesson, Mr. Orr; Rathlin Island, Miss Gage.

8. GALEOPSIS. HEMP-NETTLE.

1. *G. Tetrahit*, L. (*Common H.*)

Annual. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry fields and wastes. Very frequent.

2. *G. versicolor*, Cart. (*Large-flowered H.*)

Annual. July, August. Scottish? type. Range in Britain, 51°—58°. Ireland, north chiefly?

Dry fields. Very local.

At Belfast; Glenarm; Ballycastle, Mr. Templeton; fields at Lambeg and Crawfordsburn, Mr. Orr; frequent in County Derry, Dr. Moore.

9. LAMTUM. DEAD-NETTLE.

1. *L. album*, L. (*White D.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Borders of fields and wastes. Very local.

At Monaghan and Antrim, Mr. Templeton; Loughgall, Mr. More; Moneymore, Rev. W. T. Whan; at Rostrevor, Herbarium N. History Society, roadside between Belfast and

Colin Glen, Mr. W. H. Ferguson; Newcastle, Mr. Rea; Rathlin Island, Miss Gage; roadside above Newtownbreda, G. D.

2. *L. purpureum*, L. (*Red D.*)

Annual. March to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

3. *L. incisum*, Willd. (*Cut-leaved D.*)

Annual. March to July. British type. Range in Britain 50°—61°. Throughout Ireland.

Fields and wastes. Rather local.

Ballinderry Road; Comber; Carrickfergus and other places, Mr. Templeton; Loughgall, Mr. More; near Killyleagh, County Down, Rev. W. T. Whan; at Ballycastle, Miss Hincks; Rathlin Island, Miss Gage.

4. *L. intermedium*, Fries. (*Intermediate D.*)

Annual. June, July. Scottish type. Range in Britain, 54°—61°. Ireland?

Fields and wastes. Very rare?

At Sligo, "Hooker's and Arnott's British Flora." Cultivated fields, Mullaghmore, Sligo, Mr. Syme.

5. *L. amplexicaule*, L. (*Henbit D.*)

Annual. April to August. British type. Range in Britain, 50°—59°. Ireland?

Fields and wastes. Rare.

Roddens, County Down, Herbarium N. History Society; Ballycastle, Miss Hincks.

10. BETONICA. BETONY.

1. *B. officinalis*, L. (*Wood B.*)

Perennial. June, July. English type. Range in Britain, 50°—57°. Ireland, south to 54½°.

Woods and thickets. Very rare.

County Armagh, Rev. G. Robinson; Shane's Castle woods, Mr. Templeton; at Parkmount, near Belfast, Mr. Orr.

11. STACHYS. WOUNDWORT.

1. *S. sylvatica*, L. (*Hedge W.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and shady places. Very frequent.

Near Belfast, in Colin Glen; at Wolfhill; Woodburn Glen; Crawfordsburn, &c.

2. *S. palustris*, L. (*Marsh W.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wet fields and river sides. Very frequent.

Var. β, ambigua. Rare. At Ballyronan, Rev. W. T. Whan; near Colin Glen, Mr. Templeton; at Ballynahinch, Dr. Wade; Blackstaff Lane, near the railway bridge, G. D.

3. *S. arvensis*, L. (*Field W.*)

Annual. May to September. British type. Range in Britain, 50°—59°. Throughout Ireland.

Dry fields and wastes. Very frequent.

12. NEPETA. CAT-MINT.

1. *N. Glechoma*, Benth. (*Ground Ivy.*)

Perennial. March to July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Hedges and wastes. Very frequent.

2. *N. Cataria*, L. (*Cat-Mint.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Throughout Ireland.

Dry waste places. Very rare.

Near the hotel at the Downhill station, between Coleraine and Londonderry, Mr. Hyndman; Ballycastle, Miss Hincks.

13. CALAMINTHA. CALAMINT.

1. *C. officinalis*, Moench. (*Common C.*)

Perennial. July, August. English type. Range in Britain, 50°—55°. Throughout Ireland.

Dry wastes. Very rare.

In County Derry, Dr. Moore.

14. PRUNELLA. SELF-HEAL.

1. *P. vulgaris*, L. (*Common S.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist pastures. Common.

15. SCUTELLARIA. SKULL-CAP.

1. *S. galericulata*, L. (*Common S.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Banks of rivers and lakes. Very local.

Portmore Wood; Tamlaght, County Derry; Lough near Killilea; Porthall lake, County Monaghan, Mr. Templeton; Loughgall, Mr. More; several stations at Ballygillan, near Ballyronan, Rev. W. T. Whan; shores of Lough Neagh at Shane's Castle, Mr. Thompson; marsh near Whitehouse, Mr. Millen.

ORDER L.—LENTIBULARIACEAE.

1. PINGUICULA. BUTTERWORT.

1. *P. vulgaris*, L. (*Common B.*)

Perennial. May, June. Scottish type. Range in Britain, 50°—61°. Throughout Ireland.

Moist bogs and pastures. Very frequent.

2. *P. Lusitanica*, L. (*Pale B.*)

Perennial. July, August. Atlantic type. Range in Britain, 50°—60°. Throughout Ireland.

Marshes and wet moors. Rather local.

About Clifony and Barduff, Mr. Syme; Ballynahinch water; and head of Six-mile water, Mr. Templeton; on Nephin, County Mayo, Messrs. Thompson and Ball; north side of river above Donard Lodge, Newcastle, at above 1000 feet; and Deer Park, Glenarm, Mr. Thompson; by the side of the cataract at Donard Lodge, Mr. Hyndman; top of Cogget Hill, Miss Hincks. At Innishowen Head, by the roadside near the farm of Stroove, G. D.

2. UTRICULARIA. BLADDERWORT.

1. *U. vulgaris*, L. (*Greater B.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches and pools. Rather local.

Lough Cowey, near Portaferry, Mr. Hyndman; King's Moss,

near Carnmoney, Mr. Millen; Race-course Bog, near Londonderry, Dr. Moore. Bogs at Culdaff; and in western Donegal, G. D.

2. *U. intermedia*, Hayne. (*Intermediate B.*)

Perennial. June, July. Scottish? type. Range in Britain, 50°—59°. Throughout Ireland.

Ditches and shallow pools. Very local.

At Ballynahinch, County Down, Mr. Templeton; at Kilkeel, Mr. Whitla. Apparently more abundant in the West; ditches by the roadside between Gweedore and Glenties, in many spots abundant in this species, G. D.

3. *U. minor*, L. (*Small B.*)

Perennial. July, August. British type. Range in Britain, 50°—59°. Throughout Ireland.

Ditches and pools. Rather local.

Bog near Annaghmore, County Armagh, Rev. G. Robinson; bog near the second lock, Lagan canal, Mr. Templeton; ditches by roadside at Magheraferry, Moyntagh bogs, and Blackwater, County Armagh, Mr. Hyndman; in the King's Moss, and in a bog above Holywood, Mr. Millen; at Greyabbey, and near Fairhead, Mr. Whitla; Race-course Bog, and similar places throughout Derry, Dr. Moore; at Ballycastle, Miss Hincks.

ORDER LI.—PRIMULACEAE.

1. HOTTONIA. WATER-VIOLET.

1. *H. palustris*, L. (*Common W.*)

Perennial. May, June. English type. Range in Britain, 50°—55°. Ireland?

Ditches and pools. Very rare.

In an old ditch near Downpatrick, Mr. W. H. Ferguson.

2. PRIMULA. PRIMROSE, &c.

1. *P. vulgaris*, Huds. (*Common P.*)

Perennial. April, May. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and woods. Common.

2. *P. veris*, L. (*Cowslip*.)

Perennial. April, May. British type. Range in Britain, 50°—60°. Throughout Ireland.

Meadows and pastures. Very rare.

At Loughgall, Mr. More; in County Armagh, Rev. G. Robinson; park at Lurgan, Mr. Hyndman; near Whitehouse, Herbarium N. History Society; on the Cave Hill, Mr. Millen.

3. GLAUX. SEA-MILKWORT.

1. *G. maritima*, L. (*Common M.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshy sea-shores. Very general.

4. LYSIMACHIA. LOOSE-STRIPE.

1. *L. vulgaris*, L. (*Great yellow L.*)

Perennial. July, August. English type.

At Monaghan; Killyleagh; Ballynahinch; and Lower Bann river, Mr. Templeton; Loughgall, Mr. More; Moyntagh Bogs, and banks of Upper Bann, Mr. Hyndman; at Ballyronan, on shores of Lough Neagh, Rev. W. T. Whan; frequent in County Down, and low grounds on shores of Lough Neagh, where many acres are covered with it, Mr. J. Campbell; at Shane's Castle, and side of the Bann below Toome Bridge, Mr. Thompson. On Ram's Island, and shores of Lough Neagh at Masse-reene Park, G. D.

2. *L. nemorum*, L. (*Wood L.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Wet places in woods and wastes. Very frequent.

3. *L. Nummularia*, L. (*Creeping L.*)

Perennial. June, July. English type. Range in Britain, 50°—56°. Ireland, S. to 54½°.

Shady banks. Very rare.

On a bank near Ballinderry Rectory, Rev. W. T. Whan; on a bank by the stream above Whitehouse, Mr. Millen; roadside near Dunsilly, County Antrim, Mr. Hyndman; along a hedge-bank at Ladyhill, County Antrim, Mr. Orr.

5. ANAGALLIS. PIMPERNEL.

1. *A. arvensis*, L. (*Scarlet P.*)

Annual. May to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields and dry wastes. Frequent.

Moneymore, Rev. W. T. Whan; Newcastle, Mr. Rea; Tory Island, Mr. Hyndman. Cave Hill, and Kinnegar, Holywood; Whitehead; Crawfordsburn; Innishowen Head; Malin; Gweedore; Glen Columbkil, G. D.

Var. β. caerulea. Rare. At Warrenpoint, Mr. Lyne; sandbanks at Portstewart, Herbarium N. History Society.

2. *A. tenella*, L. (*Bog P.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wet banks and bogs. Very general.

Islandmagee and near Bangor, Mr. Templeton and Mr. Campbell; Kinnegar at Holywood, Newtownards Park, Maghera, and Magilligan, Mr. Templeton; Slieve Gallion, Rev. W. T. Whan; roadside near Castlewellan, and on Tory Island, Mr. Hyndman; shore opposite the "Palace," near Belfast, and at Ballycastle, Mr. Millen; wet sandy fields at Portrush, Mr. W. H. Ferguson; Rathlin Island, Dr. Marshall. Shores of Lough Derg, near Pettigo; Glen Columbkil, and on Slieve League; in profusion at the base of Erigal; Downpatrick Head, County Mayo; abundant at Gweedore; a common weed in fields, at roadsides, and on turf walls at Dunfanaghy; at Innishowen Head, and at Culdaff in the same district; this beautiful species increases in abundance towards the West, G. D.

6. CENTUNCULUS. CHAFFWEED.

1. *C. minimus*, L. (*Small C.*)

Annual. June, July. English type. Range in Britain, 50°—58°. Throughout Ireland.

Moist gravelly places. Very rare.

Near the bridge at Ballygowan, County Down, Mr. Whitla; on the Ross Islands, County Donegal, Mr. E. Murphy; between Clifony and Mullaghmore, Mr. Syme; near Newtownards, Mr. Millen; coast at Coleraine, Dr. Moore.

7. SAMOLUS. BROOKWEED.

1. *S. Valerandi*, L. (*Common B.*)

Perennial. June, July. English type. Range in Britain, 50°—58°. Throughout Ireland.

Ditches and marshy places. Rather local.

Common at Mullaghmore, Sligo, Mr. Syme; marshes by the shore at Bangor, and along Belfast Lough; along the side of the Lagan, so far as the tide flows, Mr. Templeton; shore at Groomsport, Mr. Millen; shores of Lough Swilly, and at Castlerock, Rev. W. T. Whan; at Newcastle, Herbarium N. History Society. Copeland Islands; Culdaff and Malin; at Dunfanaghy; very abundant and luxuriant in ditches, Crossmolina, County Mayo, G. D.

ORDER LII.—PLUMBAGINACEÆ.

1. ARMERIA. THRIFT. SEA-PINK.

1. *A. vulgaris*, Willd. (*Common T.*)

Perennial. April to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sea-shores and mountains. Common.

2. STATICE. SEA-LAVENDER.

1. *S. Limonium*, L. (*Spreading S.*)

Perennial. June, July. English type. Range in Britain, 50°—55°. Ireland, south to 55½°.

Salt marshes. Rare.

Between Newry and Narrow-water, by the canal; and shore of Strangford Lough at Castle Espy, Mr. Hyndman; shore at Holywood, Mr. Kea. Dundrum Bay, and eastern shore of Ballyholme Bay; and near Downpatrick in a salt marsh, south side of the road, near Quoile Castle, G. D.

ORDER LIII.—PLANTAGINACEAE.

1. PLANTAGO. PLANTAIN.

1. *P. major*, L. (*Greater P.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Common.

2. *P. lanceolata*, L. (*Ribwort P.*)

Perennial. May to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Very common.

3. *P. maritima*, L. (*Sea-side P.*)

Perennial. May to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sea pastures and rocks. Very general.

4. *P. Coronopus*, L. (*Buck's-horn P.*)

Annual. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Gravelly wastes, shores and inland. Frequent.

2. LITTORELLA. SHORE-WEED.

1. *L. lacustris*, L. (*Plantain S.*)

Perennial. June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Lakes and marshes. Frequent.

Lough Neagh; Mourne Mountains; Lakes in Monaghan, Mr. Templeton; Lough Mourne, near Carrickfergus, Mr. Hyndman; Kinnegar, and bog and marshes at Bangor, Mr. Millen. Of general occurrence as a lake plant, as at Loughs Sheggach, Erahesk, League, Drimly, and Derg, G. D.

Sub-Class IV.—MONOCHLAMYDEAE.

ORDER LIV.—CHENOPODIACEAE.

1. BETA. BEET.

1. *B. maritima*, L. (*Common B.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Muddy sea-shores. Very rare.

Rocks near Mullaghmore, County Sligo, Mr. Syme; Rallycastle, Miss Hincks; Rathlin Island, Miss Gage.

2. CHENOPODIUM. GOOSE-FOOT.

1. *C. olidum*, Curt. (*Stinking G.*)

Annual. August, September. English type. Range in Britain, 50°—56°. Ireland, S. to 54½°.

Dry waste places. Very rare.

In the neighbourhood of Belfast, Mr. Templeton.

2. *C. urbicum*, L. (*Upright G.*)

Annual. August, September. English type. Range in Britain, 50°—56°. Ireland, S. to 54½°.

Dry waste places. Very rare.

Near Carrickfergus, at the junction of the Templepatrick road, Mr. Templeton.

3. *C. murale*, L. (*Nettle-leaved G.*)

Annual. August, September. English type. Range in Britain, 50°—56°. Ireland?

Dry waste places. Very rare.

On the ruins of a mud cottage by the side of the New Lisburn Road, two miles from Belfast, Mr. Thompson.

4. *C. hybridum*, L. (*Maple-leaved G.*)

Annual. August. English type. Range in Britain, 50°—53°. Ireland?

Waste places, &c. Very rare.

Along with the last species, Mr. Thompson.

5. *C. album*, L. (*White G.*)

Annual. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Frequent.

6. *C. rubrum*, L. (*Red G.*)

Annual. August, September. English type. Range in Britain, 50°—56°. Throughout Ireland.

Dunhills and wastes. Rare.

Near Belfast, Dr. Mackay; Ballyhalbert, Newtownards, Mr. Templeton; Ballycastle, Miss Hincks.

7. *C. Bonus-Henricus*. (*Mercury G.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry waste places. Frequent.

At Lambeg, Lagan side, and Dunmurry, Mr. Templeton; Downpatrick, and Benburb Bridge, County Armagh, Mr. Hyndman; about town of Carrickfergus, Mr. W. H. Ferguson; at Holywood, and Ballycorr, near Ballyclare, Mr. Millen. At Portaferry, Bundoran, Culdaff, G. D.

3. ATRIPLEX. ORACHE.

1. *A. laciniata*, Sm. (*Frosted Sea O.*)

Annual. July, August. British type. Range in Britain, 50°—60°. Ireland?

Sandy sea-shores. Frequent.

2. *A. patula*, L. (*Spreading O.*)

Annual. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wastes and salt marshes. Frequent.

One of the few plants on the Maiden Rocks, near Larne, G. D.

3. *A. deltoidea*, Bab. (*Triangular-leaved O.*)

Annual. July, August. British type. Range in Britain, 50°—60°. Ireland?

Sea-shores and wastes. Frequent.

Var. γ, prostrata. At Newcastle, Portaferry, Dundrum, and Malin, G. D.

4. *A. angustifolia*, Sm. (*Narrow-leaved O.*)

Annual. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Frequent.

5. *A. littoralis*, L. (*Grass-leaved Sea O.*)

Annual. July, August. British type. Range in Britain, 50°—58°. Ireland?

Salt marshes. Very local.

Var. β, marina. Dundrum Bay, G. D.

4. SALICORNIA. GLASSWORT.

1. *S. herbacea*, L. (*Jointed G.*)

Annual. August, September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Salt marshes. Very general.

At Newcastle; Dundrum; in great profusion along muddy shores of Belfast Lough, &c. &c.

2. *S. radicans*, Sm. (*Creeping G.*)

Perennial. August, September. English type. Range in Britain, 50°—54°. Ireland, south to 54½°.

Muddy sea-shores. Very rare.

Strand at Narrow water, near Newry, Mr. Templeton.

5. SUAEDA. SEA-BLITE.

1. *S. maritima*, Dumort. (*Annual S.*)

Annual. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Muddy sea-shores. Rather local.

Kinnegar, at Holywood, and Narrow-water, near Newry, Mr. Templeton; Belfast shores, below Sydenham, Mr. Millen; Rathlin Island, Miss Gage. Sligo Bay; shore at Dundrum, and Copeland Islands, G. D.

6. SALSOLA. SALTWORT.

1. *S. Kali*, L. (*Prickly S.*)

Annual. July. British type. Range in Britain, 50°—58°. Throughout Ireland

Sandy sea-shores. Frequent.

Kirkiston and Clough, County Down, Mr. Templeton; at Balloch, Mr. Rea; at Bangor, County Down, Mr. W. H. Ferguson; Ballycastle, Miss Hincks. Links at Newcastle; Dundrum Bay; at Culdaff and Malin, G. D.

ORDER LV.—SCLERANTHACEAE.

1. SCLERANTHUS. KNAWEL.

1. *S. annuus*, L. (*Annual K.*)

Annual. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields and dry wastes. Frequent.

ORDER LVI.—POLYGONACEAE.

1. POLYGONUM. BISTORT, &C.

1. *P. Bistorta*, L. (*Common B.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and moist meadows. Very local.

Near Moira, Mr. Templeton; Springhill, near Moneymore, Dr. Moore; near Belfast, at Thornvale, Mr. Millen; meadow at Castle Dobbs, Mr. W. H. Ferguson. By the roadside, a little south from town of Sligo; lower part of Colin Glen, G. D.

2. *P. viviparum*, L. (*Alpine B.*)

Perennial. June, July. Highland type. Range in Britain, 53°—61°. Ireland, 54½°.

Mountain pastures. Very rare.

Ben Bulbin, Mr. E. Murphy.

3. *P. aviculare*, L. (*Common Knot-grass.*)

Annual. May to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Common.

Foot of Crumlin River, Mr. Templeton; Townland of Margymonaghan, Magilligan, abundant, Dr. Moore.

19. HERACLEUM. COW-PARSNIP.

1. *H. Sphondylium*, L. (*Common C.*)

Biennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Hedges and wastes. Common.

20. CONIUM. HEMLOCK.

1. *C. maculatum*, L. (*Common H.*)

Biennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Waste places. Very frequent.

This species is widely diffused along the coast as well as inland.

Waste places, Carrickfergus, Mr. W. H. Ferguson. Abundant at Bangor and Donaghadee; shores of Lough Neagh at Toome; at Clones, Lisbellaw, and Newtownbutler; rare at Culdaff; in Counties of Mayo and Sligo, is frequent inland, G. D.

21. SMYRNIUM. ALEXANDERS.

1. *S. Olusatrum*, L. (*Common A.*)

Biennial. May, June. English type. Range in Britain, 50°—57°. Throughout Ireland.

Ruins and wastes. Not unfrequent.

Monymore and Ballyronan, Rev. W. T. Whan; Greyabbey, Herbarium N. History Society; Island of Rathlin, Miss Gage; Islandmagee, Mr. W. H. Ferguson. Moyne Abbey, Killala; at town of Donegal; Crawfordsburn; Holywood; Carrickfergus; Woodburn; Curran of Larne, G. D.

22. SCANDIX. SHEPHERD'S NEEDLE.

1. *S. Pecten*, L. (*Common S.*)

Annual. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields and wastes. Very local.

Loughgall, Mr. More; Ballymacash lime quarry, near Lis-

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 Wooded ...
 Rev. ...
 Mr. W. E. ...

L. I. ...
 Biennial ...
 Pastures, ...

4. *P. Raii*, Bab. (*Ray's Knot-grass*.)

Annual. July, August. British type. Range in Britain, 50°—61°. Ireland?

Sandy sea-shores. Rather local.

Shores of Belfast Lough, Rev. W. T. Whan; at Newcastle, Dundrum, and Malin, G. D.

5. *P. Convolvulus*, L. (*Climbing B.*)

Annual. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

In corn fields. Frequent.

6. *P. amphibium*, L. (*Amphibious B.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Borders of ditches, lakes, &c. Frequent.

7. *P. Persicaria*, L. (*Spotted P.*)

Annual. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Moist meadows and wastes. Very frequent.

8. *P. lapathifolium*, L. (*Pale-flowered B.*)

Annual. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Fields and dunghills. Rather local.

Near Belfast, Mr. Templeton; Ballyronan, Moneymore, Rev. W. T. Whan. At Malin, G. D.

9. *P. minus*, Huds. (*Small B.*)

Annual. August, September. English type. Range in Britain, 50°—55°. Throughout Ireland.

Gravelly and watery places. Very local.

Shore of Ballygowan Lake, and Castleblayney Lake, near Churchhill, Mr. Templeton; near Carnmoney, by the dam which supplies Whitehouse mill, Mr. Orr; side of Bann, below Coleraine, Dr. Moore. Near Malin Well, and between Gweedore and Dunglow, G. D.

10. *P. Hydropiper*, L. (*Biting B.*)

Annual, August, September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sides of lakes and ditches. Rather local.

Ballyronan, Moneymore, Rev. W. T. Whan; mill-dam near Holywood, and between Whiteabbey and Carrickfergus, Mr.

Millen; shore of Lough Neagh at Shane's Castle, Mr. Thompson; Rathlin Island, Miss Gage. Ditches at Dunfanaghy, and beside Bloody Bridge, near Newcastle, G. D.

2. RUMEX. DOCK.

1. *R. Hydrolapathum*, Huds. (*Water D.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Throughout Ireland.

Lakes and river-sides. Rare.

Banks of Lough Erne, Dr. Mackay; shores of Lough Neagh, Mr. Templeton; Ballygowan Lough, County Down, Mr. Orr; several places in the parish of Ballyscullion, Bellaghy; old canal, Drumanee; small lake at Ballymackpeak, County Derry, Mr. W. H. Ferguson.

2. *R. crispus*, L. (*Curled D.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Frequent.

3. *R. pratensis*, Mert. & Koch. (*Meadow D.*)

Perennial. June, July. English type. Range in Britain, 50°—54°. Ireland?

Waste places. Very rare.

A few plants growing with *R. obtusifolius* and *R. crispus*, at Newforge, near Belfast, August, 1846, Mr. Thompson.

4. *R. obtusifolius*, L. (*Broad-leaved D.*)

Perennial. July August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Waste places. Common.

5. *R. sanguineus*, L. (*Bloody D.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Pastures and wastes. Frequent.

6. *R. conglomeratus*, Murr. (*Sharp D.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Watery places. Probably frequent, but often confounded with the last species.

Banks of Lagan above the first lock, &c. &c.; Bloody Bridge, near Newcastle, G. D.

7. *R. palustris*, Sm. (*Marsh D.*)

Perennial. July, August. English type. Range in Britain, 50°—55°. Ireland?

Marshy places. Rare.

At Lough Beg, Portmore; in the Bog Meadows at Belfast, and Bann at Portglenone, Mr. Templeton; between Portstewart and Portrush, Dr. Moore.

8. *R. Acetosa*, L. (*Common Sorrel*.)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and heaths. Common.

9. *R. Acetosella*, L. (*Sheep's Sorrel*.)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Common.

3. OXYRIA. MOUNTAIN-SORREL.

1. *O. reniformis*, Hook. (*Kidney-leaved M.*)

Perennial. July, August. Highland type. Range in Britain, 52°—60°. Ireland, 54½°.

Moist places on mountains. Very rare.

On Ben Bulbin, Dr. Mackay.

ORDER LVII.—EMPETRACEAE.

1. EMPETRUM.

1. *E. nigrum*, L. (*Crow-berry*.)

Perennial. April, May. Scottish type. Range in Britain, 51°—60°. Throughout Ireland.

Abundant in upland districts and on mountains. Northwards it occurs on sea rocks, as at Culdaff, Hornhead, and other localities.

ORDER LVIII.—EUPHORBIACEAE.

1. MERCURIALIS. MERCURY.

1. *M. perennis*, L. (*Perennial M.*)

Perennial. March, April. British type. Range in Britain, 50°—58°. Ireland, south to 54½°.

Woods and shady rocks. Very rare.

County Armagh, Rev. G. Robinson; a single locality known in the Glens of Antrim, Dr. Moore.

2. EUPHORBIA. SPURGE.

1. *E. Helioscopia*, L. (*Sun S.*)

Annual. June to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields, gardens, and wastes. Common.

2. *E. Hiberna*, L. (*Irish Spurge.*)

Perennial. May, June. Atlantic type.

Woods and hedges. Very rare.

County of Donegal, R. Brown, Esq.

3. *E. Paralias*, L. (*Sea-side S.*)

Perennial. August, September. Atlantic type. Range in Britain, 50°—55°. Ireland, south to 54½°.

Sandy shores. Very rare.

Shore at Newcastle, Mr. Thompson.

4. *E. Portlandica*, L. (*Portland S.*)

Perennial. May to September. Atlantic type. Range in Britain, 50°—55°. Throughout Ireland.

Sea-shores. Very rare.

Sandhills, Dundrum, Mr. Hyndman. Base of cliffs west from Knockglass, Malin, County Donegal, G. D.

5. *E. Peplus*, L. (*Petty S.*)

Annual. July to October. British type. Range in Britain, 50°—59°. Throughout Ireland.

Fields and wastes. Frequent.

6. *E. exigua*, L. (*Dwarf S.*)

Annual. July to October? English type. Range in Britain, 50°—57°. Throughout Ireland.

Fields and roadsides. Very local.

At Eden, near Belfast, and village of Randalstown, Mr. Millen; Lisburn road, near Lambeg, Mr. Hyndman. Roadside near the new church between Holywood and Bangor, and Glenarm park, G. D.

ORDER LIX.—CALLITRICHACEAE.

1. CALLITRICHE. WATER-STARWORT.

1. *C. verna*, L. (*Vernal W.*)

Annual. April to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches and pools. Common.

2. *C. pedunculata*, D. C. (*Pedunculated W.*)

Annual. June to September. British type. Range in Britain, 50°—58°. Ireland, S. to 54°?

Ditches. Rare.

Ditches near the "holy well" at Ballycashill, County Mayo, G. D.

3. *C. autumnalis*, L. (*Autumnal W.*)

Annual. July, August. Scottish type. Range in Britain, 53°—58°. Ireland, S. to 54½°.

Ditches and lakes. Rare.

Ditches by the shores of Lough Neagh, Mr. Templeton and Dr. Moore.

ORDER LIX.—CERATOPHYLLACEAE.

1. CERATOPHYLLUM. HORNWORT.

1. *C. demersum*, L. (*Common H.*)

Perennial. June, July. English type. Range in Britain, 50°—57°. Throughout Ireland.

Ditches and lakes. Rare.

Lough Neagh, Mr. Templeton; Lough Lea, near Killilea, Mr. Whitla; Lough Rinavlin, south end of Island of Rathlin, Dr. Marshall; marsh by the side of the Foyle above Derry, Dr. Moore.

2. *C. submersum*, L. (*Unarmed H.*)

Perennial. June, July. English type. Range in Britain, 50°—56°. Ireland, S. to 54½°.

Ditches and lakes. Very rare.

Lake at Ballynabinch, County Down, Mr. Templeton and Dr. Mackay.

ORDER LXI.—URTICACEAE.

1. URTICA. NETTLE.

1. *U. urens*, L. (*Small N.*)

Perennial. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Very frequent.

2. *U. dioica*, L. (*Great N.*)

Perennial. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

2. PARIETARIA. WALL-PELLITORY.

1. *P. officinalis*, L. (*Common W.*)

Perennial. June to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Walls and waste places. Frequent.

Salters' Castle, Rev. W. T. Whan; Ballymacarrett, Mr. Orr. Town of Sligo, Newtownards, Carrickfergus, Larne, town of Antrim, walls of Londonderry, &c. &c.

ORDER LXII.—ULMACEAE.

1. ULMUS. ELM.

1. *U. campestris*, L. (*Broad-leaved E.*)

Perennial. March, April. English type. Range in Britain, 50°.—58°. Ireland?

Hedges and wooded rocks. Rare in the wild state.

Colin Glen, Grugan's Glen, Glen of the Roe River, above Newtownlimavady, Mr. Templeton; Glenarm Deer Park, and other glens in Antrim, Mr. Thompson; in County Derry, Mr. Whitla.

ORDER LXIII.—MYRICACEAE.

1. MYRICA. GALE, OR BOG-MYRTLE.

1. *M. Gale*, L. (*Sweet G.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and wet moors. Frequent.

Abundant, County Armagh, Rev. G. Robinson; Ballycorr, and bog at Bangor, Mr. Millen; shores of Lough Neagh at Shane's Castle, &c. In great profusion, shore and inland, in County Donegal, as table land of Innishowen, Culdaff, Gweedore, Bunbeg; Rosses to Dunglow, &c. &c., G. D.

ORDER LXIV.—BETULACEAE.

1. BETULA. BIRCH.

1. *B. alba*, L. (*Common B.*)

Perennial. April, May. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and heaths. Truly wild in the north.

At Fair Head, Mr. Whitla; Rathmelton, Mr. Thompson. Glen Tocher, on table land of Innishowen; Gap of Barnes, near Dunfanaghy; Doochary Bridge; Gap of Barnesmore, near town of Donegal, &c. &c., G. D.

2. ALNUS. ALDER.

1. *A. glutinosa*, Gaertn. (*Common A.*)

Perennial. March, April. British type. Range in Britain, 50°—59°. Throughout Ireland.

Wet places. Frequent.

ORDER LXV.—SALICACEAE.

1. SALIX. WILLOW, &C.*

1. *S. purpurea*, L. (*Purple W.*)

Perennial. April, May. British type. Range in Britain, 50°—58°. Ireland?

Hedges about Newtownards, and between Stewartstown and Moneymore, Mr. Templeton; wet places above Carrickfergus, Mr. Orr; ditch bank near Garvagh, County Derry, Dr. Moore.

Var. β, Lambertiana. Side of Bann, and other places near Coleraine, Dr. Moore.

2. *S. Helix*, L. (*Rose W.*)

Perennial. March, April. English type. Range in Britain, 50°—58°. Ireland, south to 55°.

Marshes and river sides. Rare.

Hedges near Florencecourt, County Fermanagh, Dr. Mackay; County Derry, Dr. Moore.

3. *S. Forbyana*, Sm. (*Basket Osier.*)

Perennial. March, April. English type. Range in Britain, 50°—56°. Ireland, north only?

Moist meadows. Rare.

Glendermot, near Londonderry, Dr. Moore.

4. *S. rubra*, Huds. (*Red Osier.*)

Perennial. April, May. English type. Range in Britain, 50°—56°. Throughout Ireland.

Moist meadows. Rare.

* Some of the species enumerated here are frequently planted, but comparatively local in a wild state.

About Moneymore, Stewartstown, and Newtownards, Mr. Templeton; side of the Faughan River, County Derry, Dr. Moore.

5. *S. triandra*, L. (*Triandrous W.*)

Perennial. April, May. English type. Range in Britain, 50°—56°. Ireland?

Damp and shady places. Rare.

Wet woods and hedges, Florencecourt, Dr. Mackay; near Belfast, between Malone and Falls road; also at Portmore, Mr. Whitla.

Var. ♂, amygdalina. Side of the Bann River, and rocks at Fair Head, Dr. Moore.

6. *S. pentandra*, L. (*Bay-leaved W.*)

Perennial. May, June. Scottish type. Range in Britain, 51°—58°. Throughout Ireland.

Moist places. Not unfrequent.

Ditch banks at Florence-court, Dr. Mackay; bog west of Ballycastle; side of the Bann River near Coleraine; rocks at Fair Head, Mr. Templeton; roadside Glenarm to Cushendall, Mr. Thompson; common in County Derry, Dr. Moore.

7. *S. fragilis*, L. (*Crack W.*)

Perennial. April, May. British type. Range in Britain, 50°—58°. Ireland?

Moist woods, &c. Rare.

In Counties of Derry and Antrim.

Var. γ, decipiens. Hedges at Newtownlimavady and Parish of Tamlaght, Dr. Moore.

8. *S. alba*, L. (*Common White W.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Marshy places. Frequent.

9. *S. vitellina*, L. (*Yellow W.*)

Perennial. May. English type. Range in Britain, 50°—58°. Ireland?

Hedges and woods. Rare.

Sides of Faughan River, County Derry.

10. *S. fusca*, L. (*Silky W.*)

Perennial. April, May. British type. Range in Britain, 50°—61°. Throughout Ireland.

Waste places. Very frequent.

Var. β. repens. Mourne Mountains, Mr. Templeton; Rathlin Island, Miss Gage.

Var. γ. prostrata. Cave Hill, Mr. Templeton; Scrabo Hill, Mr. Orr; Rathlin, Miss Gage. Horn Head, and other parts of Donegal, G. D.

Var. δ. incubacea. Errigal banks, above Garvagh, Dr. Moore.

Var. ζ. argentea. Tory Island, Mr. Hyndman.

11. *S. viminalis*, L. (*Common Osier.*)

Perennial. April, May. British type. Range in Britain, 50°—60°. Throughout Ireland.

Marshy places. Frequently planted; certainly not frequent in a wild state.

In various parts of Antrim, &c. &c.

12. *S. acuminata*, Sm. (*Long-leaved S.*)

Perennial. April, May. English type. Range in Britain, 50°—56°. Ireland, S. to 54½°?

Moist places. Rare.

Side of Lagan, near Belfast, Mr. Templeton; near Lagan Cottage, Mr. Orr; bogs in County Down, Mr. Rea.

13. *S. cinerea*, L. (*Grey W.*)

Perennial. February, March. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods, banks of rivers, &c. Frequent.

14. *S. aurita*, (*Round-eared W.*)

Perennial. April, May. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist woods and thickets. Frequent.

15. *S. Caprea*, L. (*Great Round-leaved W.*)

Perennial. April, May. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and pastures. Frequent.

16. *S. nigricans*, Sm. (*Dark-leaved W.*)

Perennial. March, April. Scottish type. Range in Britain, 51°—58°. Ireland?

Waste places. Very local.

Var. γ. rupestris. Rocks on the hill called Skerries, County Antrim, Mr. Templeton.

Var. 3. hirta. Side of the River Roe, above Dungannon; roadside from Larne to Antrim; Lowton, Kilwaughter; and near Glenoe in Raloo, Dr. Moore.

17. *S. laurina*, Sm. (*Intermediate W.*)

Perennial. April, May. English type. Range in Britain, 56°—60°. Ireland?

Moist wastes. Very rare.

Roadside between Castledawson and Bellaghy, County Derry, Dr. Moore.

18. *S. phlycifolia*, L. (*Tea-leaved W.*)

Perennial. April, May. Scottish type. Range in Britain, 56°—60°. Ireland?

Upland districts. Very rare.

Side of Enagh Lough, County Derry, Dr. Moore.

19. *S. herbacea*, L. (*Least W.*)

Perennial. June. Highland type. Range in Britain, 52°—60°. Ireland?

Rocky and stony places on mountains. Very local.

On Slieve Donard and Slieve Namhady, in County Down; top of Slieve Nanee, County Antrim, Mr. Templeton; isolated rocks above pot of Laganhirry, near Slieve Donard, Mr. Thompson; Dart Mountain, in County Derry, Dr. Moore. On Slieve Donard it ranges from 1800 feet to the summit; on Muckish confined to the top and a narrow zone below; on Erigal from 1700 feet to the top; on Slieve League from 1800 feet to the top. The summit of Slieve Nanee (near Clough, County Antrim), where it was found by Mr. Templeton, is about 1850 feet, thus, therefore, all the above measurements give about 1800 as the mean lower limit in the North of Ireland, rather lower than that assigned to it in the West Highlands by Mr. Watson. On Nephin, in County Mayo, its lowest limit is about 1950 feet; I did not observe the plant on Ben Bulbin, G. D.

2. POPULUS. POPLAR.

1. *P. tremula*, L. (*Aspen*.)

Perennial. March, April. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and rocks. Rather local.

Loughgall, Mr. More; Red Bay, and Agnew's Hill, County Antrim; on the Ness, at the waterfall, Mr. Templeton; Cave Hill; sea cliffs at Givney and Malin; cliffs at Glenarm; about town of Sligo, &c., G. D.

ORDER LXVI.—CUPULIFERAE.

1. QUERCUS. OAK.

1. *Q. Robur*, L. (*Common Oak*.)

Perennial. April, May. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and rocks. Rather local in a wild state.

Tullamore Park; Glenarm Park, Mr. Templeton. Gap of Barnes, near Dunfanaghy; at Bunbeg; frequent in rocky spots West Donegal; numerous stumps at different places along Lough Neagh, at some distance from the margin and under several feet of water, G. D.

2. CORYLUS. HAZEL.

1. *C. Avellana*, L. (*Common H.*)

Perennial. February, March. British type. Range in Britain, 50°—60°. Throughout Ireland.

Hedges, rocks, and woods. Very frequent.

Near Belfast, on Cave Hill; in Colin Glen; Wolfhill; Woodburn Glen, &c., and rocks along the coast. In Bangor Bay, and at Carrickfergus, submerged peat, only to be seen at very low tides, abounds in remains of Hazel stems, leaves, and nuts, indicating one of those changes of level which the land has formerly undergone. Many of the nuts procured at Carrickfergus are full of a crystalline concretion, which occupies the place of the kernel. My colleague, Professor Brazier, has analysed this material, and informs me that in some the outer part of the concretion consists of pure carbonate of lime, the inner containing, in addition, a trace of iron. In other cases the contents consist also mainly of carbonate of lime, with some sulphate, traces of magnesia, and a feeble trace of iron, G. D.

ORDER LXVII.—CONIFERAE.

1. PINUS. FIR.

1. *P. sylvestris*, L. (*Scotch Fir*.)

Perennial. May, June. Scottish type. Range in Britain, 50°—59°. Ireland.

I have not seen any examples of this species in the North of Ireland which could be considered as truly wild; remains of it in bogs are abundant. Along shores of Lough Neagh I have seen ropes made from its fibres, and used as drag-ropes for fishing nets, G. D.

2. JUNIPERUS. JUNIPER.

1. *J. communis*, L. (*Common J.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and heaths, chiefly upland. Rather local.

Mourne Mountains, Shane's Castle, rocks at Glenarm, Mr. Templeton; Glen of Altmore, Mr. Thompson. Sea cliffs at Culdaff and Malin; at Dunfanaghy, and Gap of Barnes near it, G. D.

Var. β. nana. Tory Island, Mr. Hyndman; Black Mountain, Mr. Millen; on Muckish, Mr. Thompson. Sea rocks at Glen Columbkil, G. D.

1. TAXUS. YEW.

1. *T. baccata*, L. (*Common Y.*)

Perennial. March. English type. Range in Britain, 50°—58°. Throughout Ireland.

Upland woods. Rare in the wild state.

"Rocks in Glenariffe, County Antrim, north side, half way up the glen; formerly plentiful, being used as timber. It is now (August, 1795) reduced to a few stunted plants growing in crevices of the rocks, only accessible to a man lowered by ropes from above," Mr. Templeton, MSS. On Ben Evenagh, County Derry, in crevices of rocks at 1200 feet, where it assumes the appearance of a low shrub; large trunks and roots of it are dug up on the Magilligan flat, Dr. Moore.

CLASS II.

MONOCOTYLEDONOUS, OR ENDOGENOUS PLANTS.

Sub-Class I.—PETALOIDEAE.

ORDER LXVIII.—HYDROCHARIDACEAE.

1. HYDROCHARIS. FROG-BIT.

1. *H. Morsus-Ranae*, L. (*Common F.*)

Perennial. July, August. English type. Range in Britain, 50°—55°. Ireland?

Ditches and ponds. Very rare.

Bogs near Cavan, Dr. Mackay; shores of Lough Neagh at Portmore, Mr. Whitla and Mr. Hyndman; bog holes near Portaferry; Lough Neagh, at Crumlin, Mr. Templeton.

2. STRATIOTES. WATER-SOLDIER.

1. *S. aloides*, L. (*Common W.*)

Perennial. July, August. Germanic type. Range in Britain, 52°—54°. Ireland, south to 54½°.

Lakes and ponds. Very rare.

Near Crum Castle, and Castle Saunders, on banks of Lough Erne, Dr. Mackay; Belfast Water Course, Mr. Templeton; Dams at Whitehouse, Mr. Millen. There may be reason to doubt whether the plant is truly native in all the above places, G. D.

ORDER LXIX.—ORCHIDACEAE.

1. MALAXIS. BOG-ORCHIS.

Perennial. July, August. British type. Range in Britain, 50°—59°. Throughout Ireland.

Spongy bogs. Rare. Often overlooked, being rather inconspicuous.

Marshy ground on the ascent to Slieve Nanee, on the Clough side, Mr. Templeton; Moyntagh Bogs, between Lurgan and Lough Neagh, Mr. Hyndman; Rathlin Island, Miss Gage.

2. EPIPACTIS. HELLEBORINE.

1. *E. latifolia*, Sw. (*Broad-leaved H.*)

Perennial. July, August. British type. Range in Britain, 50°—59°. Throughout Ireland.

Woods and shady places. Rather local.

Loughgall, Mr. More; near Belfast, in Belvoir Park, Mr. Whitla; Greencastle; Holywood; Laganside, and Cliftonville, Mr. Millen; Colin Glen, Rev. R. Oulton; formerly at Solitude, now the site of the Water Works, Mr. Hyndman; woods near Whitehead, and Redhall Demesne, near Carrickfergus; *Var. β*, Stranmillis, Mr. W. H. Ferguson; abundant in Glenarm Park, G. D.

2. *E. palustris*, Sw. (*Marsh H.*)

Perennial. July. English type. Range in Britain, 50°—58°. Ireland?

Marshy places. Very rare.

Island in Lough Erne, opposite Crum Castle, and south side of Belfast Lough, half a-mile above Knockmagunny Hill, Mr. Templeton; Islandmagee, Mr. Rea.

3. *E. grandiflora*, Sm. (*Large White H.*)

Perennial. May, June. English type. Range in Britain, 50°—57°. Ireland?

Woods and thickets. Very rare.

At Duneane, near Antrim, Mr. Whitla.

3. LISTERA. TWAY BLADE.

1. *L. ovata*, Br. (*Common T.*)

Perennial. May, June. British type. Range in Britain, 50°—59°. Throughout Ireland.

Woods and moist pastures. Rather local.

Ballyronan and Moneymore, Rev. W. T. Whan; meadows 100 yards north from the second lock of the Lagan Canal, Mr. Templeton; boggy ground above the Crow Glen, also at Dunfanaghy, County Donegal, Mr. Thompson; Rosemount Demesne, Greyabbey, Mr. Hyndman; Cave Hill, Mr. Millen.

Lower part of Colin Glen; Glenarm Park; and at Eany Bridge, County Donegal, G. D.

2. *L. cordata*, Br. (*Heart-leaved T.*)

Perennial. May, June. Scottish type. Range in Britain, 51°—60°. Ireland, N. only.

In woods and on moors, under shade of long heath. Rather local.

At Newtownards; on Agnew's Hill; and south face of Slieve Nanee, Mr. Templeton; among heath on hills above Dundonald, Mr. Orr; Bulbein Mountain, County Donegal, R. Brown, Esq.; near Moneymore, Rev. W. T. Whan. On the summit of the Black Mountain; at Horn Head; on Slieve Donard, and on Slieve League, G. D.

3. *L. Nidus-Avis*, Hook. (*Bird's Nest.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Ireland?

In moist woods. Very local.

Colin Glen, Mr. Templeton; Cave Hill Glen, Mr. Orr; Glenarm Demesne, Mr. R. Patterson; Glen of Altmore, Cushendall, and at Drumnasole, Mr. Thompson.

4. ORCHIS. ORCHIS.

1. *O. mascula*, L. (*Early Purple O.*)

Perennial. April, May. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and pastures. Frequent.

Near Belfast, Colin Glen, Cave Hill, Wolf Glen, Crawfordsburn, Knockagh, coast at Bangor, &c.

2. *O. latifolia*, L. (*Marsh O.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshes and moist meadows. Very frequent.

Near Belfast, in King's Moss; head of Colin Glen; Kinnegar, Holywood, &c. &c.

3. *O. maculata*, L. (*Spotted O.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and heaths. Very frequent.

4. *O. pyramidalis*, L. (*Pyramidal O.*)

Perennial. June, July. Germanic type. Range in Britain, 50°—56°. Ireland?

Dry banks and pastures. Very rare.

Plentiful about Oldcastle, County Cavan, Rev. N. J. Halpin; Armagh, Rev. G. Robinson. Banks by the side of the road to Ballyshannon, a few miles from Enniskillen, G. D.

5. GYMNADENIA. GYMNADENIA.

1. *G. conopsea*, Br. (*Fragrant G.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures and heaths, &c. Frequent.

Cave Hill, Newtownards, Glenarm, &c., Mr. Templeton; Islandmagee and Cushendall, Mr. Whitla; Massereene Park, Mr. Hyndman; frequent in Derry, Dr. Moore. Lagan side, and other places near Belfast, G. D.

6. HABENARIA. HABENARIA.

1. *H. viridis*, Br. (*Green H.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures. Rather local.

On the Black Mountain, highest field above the southmost lime quarry, and head of Woodburn Glen, Mr. Templeton; Squire's Hill, Mr. Thompson; Straid, near Ballynure, and King's Moss, Mr. Millen; abundant in Antrim and Derry, Dr. Moore; on a low hill at Malin, G. D.

2. *H. albida*, Br. (*Small H.*)

Perennial. June, July. Scottish type. Range in Britain, 52°—61°. Throughout Ireland.

Upland pastures. Rare.

Old natural pastures on the top of the Knockagh, near the east end; also in pastures a mile east from Ballynure, Mr. Millen; on Squire's Hill, Mr. Thompson; on Carrickfergus Commons, Mr. W. H. Ferguson.

3. *H. bifolia*, Br. (*Two-leaved H.*)

Perennial. June, July. British type. Range in Britain, 50°—59°. Throughout Ireland.

Moist moors and pastures. Frequent.

4. *H. chlorantha*, Bab. (*Great H.*)

Perennial. May, June. English type? Range in Britain, 50°—59°. Ireland?

Dry or moist pastures. Very local.

On Squire's Hill, and pastures near Doagh, Mr. Thompson; Carrickfergus Commons, Mr. W. H. Ferguson; head of Colin Glen, Mr. Millen. At Leachin Bridge, and occasionally from that to Glenties, County Donegal, G. D.

ORDER LXX.—IRIDACEAE.

1. IRIS. IRIS.

1. *I. Pseud-acorus*, L. (*Yellow I.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Watery places. Frequent.

2. *I. foetidissima*, L. (*Fetid I.*)

Perennial. June, July. English type. Range in Britain, 50°—55°. Ireland, south to 55°.

Woods and pastures. Very rare.

County Armagh, Rev. G. Robinson; banks at Culmore Point, near Londonderry, Dr. Moore.

ORDER LXXI.—LILIACEAE.

1. AGRAPHIS. HYACINTH.

1. *A. nutans*, Link. (*Wild H.*)

Perennial. April, May. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and hedges. Very frequent.

2. ALLIUM. GARLIC.

1. *A. vineale*, L. (*Crow G.*)

Perennial. June. English type. Range in Britain, 50°—58°. Ireland?

Woods and wastes. Very rare.

Shady spots along shore between Holywood and Bangor, Mr. Millen; shores of Lough Neagh near Shane's Castle, Mr. Orr.

2. *A. ursinum*, L. (*Broad-leaved G.*)

Perennial. April, May. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and hedges. Rather local.

Near Belfast, at Cave Hill; Colin Glen; Crawfordsburn, &c.

3. SCILLA. SQUILL.

1. *S. verna*, L. (*Vernal S.*)

Perennial. May, June. Atlantic type. Range in Britain, 50°—61°. Throughout Ireland.

Maritime pastures. Rather local.

Bangor, Holywood, Donaghadee, Ardglass, headlands at Giant's Causeway, Mr. Templeton; Groomsport, Mr. Millen; Rathlin Island, Miss Gage; Portstewart, Rev. W. T. Whan; Portrush, G. D.

ORDER LXXII.—RESTIACEAE.

1. ERIOCAULON. PIPEWORT.

1. *E. septangulare*, With. (*Jointed P.*)

Perennial. August. Scottish type. Range in Britain, 56°—58°. Ireland, N. only?

Lakes. Very rare.

Rathlin Island, Miss Gage; Rosses, in north-west Donegal, Mr. E. Murphy.

ORDER LXXIII.—JUNCACEAE.

1. JUNCUS. RUSH.

1. *J. communis*, Meyer. (*Common R.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshy wastes. Common in both forms, viz., *J. effusus* and *J. conglomeratus*.

2. *J. glaucus*, Ehrh. (*Hard R.*)

Perennial. July. English type. Range in Britain, 50°—57°. Throughout Ireland.

Wet pastures and wastes. Frequent.

Tullaghan, near Monaghan, Mr. Templeton; near Belfast, at Springfield, and Lagan side, Mr. Millen. Frequent in Tyrone; Clones, and Monaghan; at town of Sligo; abundant between Ballyshannon and Enniskillen; Bundoran; abundant from town of Donegal to Killybegs; Donegal to Pettigo; by the Quoil River, near Downpatrick, &c. Increases in frequency towards the West, G. D.

Var. β. diffusus. At Ballyronan, Rev. W. T. Whan.

3. *J. maritimus*, Sm. (*Small Sea R.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Salt Marshes. Frequent and abundant.

Strangford and Belfast Loughs, Mr. Templeton; at Holywood, Mr. Millen. Sligo Bay; Glen Columbkil; shores of Donegal Bay; abundant at Malin, where I have seen it plaited to form nearly the whole of a cart harness; Dundrum Bay; salt marshes at Quoil Castle, near Downpatrick, G. D.

4. *J. acutiflorus*, Ehrh. (*Sharp-flowered R.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and marshes. Frequent.

5. *J. lamprocarpus*, Ehrh. (*Shining-fruited R.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and marshes. Frequent.

6. *J. uliginosus*, Sibth. (*Bog R.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and shallow pools. Frequent.

7. *J. compressus*, Jacq. (*Round-fruited R.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wet places near the sea. Frequent.

Var. β. cænosus. Holywood shore, Mr. Millen. Lagan side, near Botanic Garden, G. D.

8. *J. bufonius*, L. (*Toad R.*)

Annual. August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshy wastes. Very frequent.

9. *J. squarrosus*, L. (*Heath R.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moors and heaths. Abundant in upland places.

2. LUZULA. WOOD-RUSH.

1. *L. sylvatica*, Bich. (*Great W.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and shady rocks. Very frequent.

Very general on mountains, at high elevations. Summits of Nephin, Bulben, Slieve Nanee, Slieve League, and Erigal, G. D.

2. *L. pilosa*, Willd. (*Small Hairy W.*)

Perennial. March, April. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and hedges. Frequent.

3. *L. campestris*, Willd. (*Field W.*)

Perennial. April, May. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and pastures. Common.

3. NARTHECIUM. BOG-ASPHODEL.

1. *N. ossifragum*, Huds. (*Bog A.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wet moors and on mountains. Frequent.

ORDER LXXIV.—BUTOMACEAE.

1. BUTOMUS. FLOWERING-RUSH.

1. *B. umbellatus*, L. (*Common F.*)

Perennial. May, June. English type. Range in Britain, 50°—55°. Ireland, south to 54½°.

County Armagh, Rev. G. Robinson; Lough Clay, near Killyleagh, Mr. Templeton; Lagan, near Belfast, but introduced.

ORDER LXXV.—ALISMACEAE.

1. ALISMA. WATER-PLANTAIN.

1. *A. Plantago*, L. (*Greater W.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Margins of lakes, rivers, ditches, &c. Frequent.

2. *A. ranunculoides*, L. (*Lesser W.*)

Perennial. May to September. British type. Range in Britain, 50°—58°. Throughout Ireland.

Ditches and sides of lakes. Rather local.

Portaferry Road, near Kirkcubbin, Mr. Templeton; marshes on Conlig Hill, Mr. Orr; Balloch, County Down, Mr. Rea; Kinnegar, Holywood, Mr. Millen; marshes among sandhills at Dundrum, Mr. Hyndman; Lough Neagh, near Ballyronan, Rev. W. T. Whan; Rathlin Island, Miss Gage; boggy ground by Lough Foyle, Dr. Moore; between Cliffony and Mullaghmore, Sligo, Mr. Syme. Shores of Lough Gill, at town of Sligo near the Holy Well, at Ballycashill, and ditches at Crossmolina, County Mayo, G. D.

3. *A. natans*, L. (*Floating W.*)

Perennial. July, August. Atlantic type. Range in Britain, 41°—55°. Ireland, south to 54½°.

Lakes, &c. Very rare.

In late Mr. Templeton's MSS. there is a note of this species having been found by him in County Down, but no special locality mentioned.

2. SAGITTARIA. ARROW-HEAD.

1. *S. sagittifolia*, L. (*Common A.*)

Perennial. July, August. English type. Range in Britain, 50°—56°. Ireland?

Ditches and margins of rivers, &c. Very local.

Plentiful in Fermanagh, Dr. Mackay; lake at Killikeen, and at Drigget, County Cavan, Rev. N. J. Halpin; drains in Portmore Park, and other places near Lough Neagh, Mr. Templeton; between Portadown and Coalisland, also in the Moyutagh Bogs, Mr. Hyndman; near Maghera Ferry, Herbarium N. History Society; by the side of an old quay, a short distance west from Shane's Castle, and rivulet in the same Park, nearest Antrim, at a bridge, Mr. Thompson.

ORDER LXXVI.—JUNCAGINACEÆ.

1. TRIGLOCHIN. ARROW-GRASS.

1. *T. palustre*, L. (*Marsh A.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Wet meadows and marshes. Frequent.

2. *T. maritimum*, L. (*Sea-side A.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Salt marshes. Frequent.

ORDER LXXVII.—TYPHACEÆ.

1. TYPHA. CAT'S-TAIL.

1. *T. latifolia*, L. (*Great C.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Ireland, S. to 55°.

Lakes and ponds. Very local.

Ballyronan and Moneymore, Rev. W. T. Whan; River Main, at Shane's Castle Park, Mr. Thompson; ditches by the railway

near Carrickfergus, half a mile west from the terminus, Mr. Millen. Abundant in the marsh near the railway terminus at Downpatrick, and ditches, &c., by the road from that town to Strangford, and also to Newcastle, G. D.

2. *T. angustifolia*, L. (*Narrow-leaved C.*)

Perennial. July. English type. Range in Britain, 50°—56°. Ireland ?

Pools and ditches. Very rare.

Ditch by the Carrickfergus road, at the turnpike gate near Belfast, Mr. Templeton. Probably now extirpated.

2. SPARGANIUM. BUR-REED,

1. *S. ramosum*, Huds. (*Branched B.*)

Perennial. July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Ditches, &c. Frequent.

2. *S. simplex*, Huds. (*Unbranched B.*)

Perennial. July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Ditches and pools. Very local.

Lakes in Monaghan, and at Newtownards, County Down, Mr. Templeton; lake by the road between Ballynahinch and Belfast, Herbarium N. History Society; drains at Lagan side, near Belfast, Mr. Millen; ditch by the Lagan, near Botanic Garden, Mr. W. H. Ferguson; Ballyarnot Lake, Dr. Moore. Ditches at town of Dunfanaghy, G. D.

3. *S. natans*, L. (*Floating B.*)

Perennial. August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Lakes and bog pools. Not unfrequent.

Summerhill, near Clones, Mr. Templeton; Castlewellan Lake, Mr. Whitla; Ballyarnot Lake, Dr. Moore. Lakes near Slieve League, and Lough Drimly near Culdaff, in Donegal, G. D.

4. *S. minimum*, Bauh. (*Small B.*)

Perennial. July. British type. Range in Britain, 50°—60°. Ireland ?

Lakes, &c. Probably frequent, but often confounded with the last.

Lakes and bogs north-west Donegal, G. D.

ORDER LXXVIII.—ARACEAE.

1. ARUM. CUCKOO-PINT.

1. *A. maculatum*, L. (*Common C.*)

Perennial. April, May. English type. Range in Britain, 50°—56°. Throughout Ireland.

Woods and hedges. Frequent, but apparently less so towards north and west.

Near Belfast, in Blackstaff Lane; Colin Glen; Lagan side; Cave Hill, &c. &c.

ORDER LXXIX.—PISTIACEAE.

1. LEMNA. DUCKWEED.

1. *L. trisulca*, L. (*Ivy-leaved D.*)

Annual. June, July. English type. Range in Britain, 50°—57°. Throughout Ireland.

Clear waters. Not unfrequent.

Near Belfast, pools behind Linfield Mill, Mr. Orr; Bog Meadows, Lagan side, &c. &c.

2. *L. minor*, L. (*Small D.*)

Annual. July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Stagnant waters. Frequent.

3. *L. gibba*, L. (*Gibbous D.*)

Annual. June to September. English type. Range in Britain, 50°—56°. Ireland?

Stagnant waters. Rare.

"Ditch near west corner of Belfast White Linen Hall, September, 1799," Mr. Templeton; Lagan Canal, near Belfast, Dr. Moore; pools by the Lagan, beyond Lagan Cottage, Mr. Orr.

ORDER LXXX.—NAIADACEAE.

1. POTAMOGETON. POND-WEED.

1. *P. pectinatus*, L. (*Fennel-leaved P.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Ireland?

Lakes and brackish pools. Rather local.

Portmore, Mr. Templeton. Near Belfast, in Lagan Canal, from the Botanic Garden upwards; ditches along shores of Belfast Lough; ditches by Lough Neagh, at Massereene Park, G. D.

2. *P. pusillus*, L. (*Small P.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Pools and ditches. Frequent.

3. *P. gramineus*, L. (*Grassy P.*)

Perennial. July. English type. Range in Britain, 50°—58°. Throughout Ireland.

Ponds and ditches. Very local.

Drains at Portmore, Mr. Templeton; ditches by the Lagan, near Belfast, Mr. Millen; bog drains at Enagh Lough, Dr. Moore.

4. *P. zosteraefolius*, Schum. (*Grass-wrack P.*)

Perennial. July. English type. Range in Britain, 51°—57°. Ireland?

Lakes and ditches. Very rare.

In a pool on the right hand side of the road leading from Newtownards to Bangor, Mr. Orr.

5. *P. crispus*, L. (*Curly P.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Lakes and rivers. Frequent.

Lough Neagh, at Ballyronan, Rev. W. T. Whan; near Belfast, in Lagan Canal; Blackstaff River, at Bog Meadows; King's Moss; ditches in Massereene Park, &c.

6. *P. perfoliatus*, L. (*Perfoliate P.*)

Perennial. July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Ditches and lakes. Frequent.

Portmore; lakes in Monaghan; lake at Castlewellan, Mr. Templeton; marshes at Conlig, Mr. Orr; River Bann, at Toome; Rathlin Island, Miss Gage. Ditches by Lough Neagh, in Massereene Park; river at Gweedore; Lough League, G. D.

7. *P. praelongus*, Wulf. (*Long-stalked P.*)

Perennial. July. Scottish type. Range in Britain, 51°—58°. Ireland?

Lakes and pools. Very rare.

Ditches by the Lagan, half way between the first and second locks, in 1852, G. D. In one of the small lakes above Kilrea, in County Derry, Dr. Moore.

8. *P. lucens*, L. (*Shining P.*)

Perennial. June, July. English type. Range in Britain, 50°—58°. Throughout Ireland.

Lakes and pools. Frequent.

Rivers running into Lough Neagh, on the west side, Rev. W. T. Whan; pools above Lagan Cottage, Mr. Orr; River Bann, at Toome, Mr. Thompson. At Dunfanaghy, and Lough Gill, at town of Sligo, G. D.

9. *P. heterophyllus*, Schreb. (*Various-leaved P.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Ireland, south to 55½°.

Lakes and ditches. Rather local.

Lakes in Monaghan and Down, Mr. Whitla; near Bangor, Mr. Orr; in the River Bann, Dr. Moore.

10. *P. rufescens*, Schrad. (*Reddish P.*)

Perennial. July. British type. Range in Britain, 50°—59°. Ireland, south to 55°.

Ditches and slow streams. Rare.

In the Lagan Canal, near Lagan Cottage, Mr. Orr; Enagh Lough and River Roe, Dr. Moore.

11. *P. natans*, L. (*Floating P.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches and bog-pools. Common.

2. RUPPIA. RUPPIA.

1. *R. maritima*, L. (*Sea R.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Brackish pools and ditches. Frequent.

Milewater, Belfast Lough, Mr. Templeton; abundant along shores of Lough Foyle, Dr. Moore.

Var. β, rostellata. Ditches at Sydenham, near Belfast, and on the north shore to Carrickfergus, Mr. Millen. Brackish pools on the Mew Island, one of the Copelands, G. D.

3. ZANICHELLIA. HORNED POND-WEED.

1. *Z. palustris*, L. (Common H.)

Annual. May to September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Ditches and pools. Rather local.

Ardree, County Tyrone, Rev. W. T. Whan; King's Moss, Mr. Millen. Ditches by the Lagan, and at Holywood, &c., G. D.

4. ZOSTERA. GRASS-WRACK.

1. *Z. marina*, L. (Common G.)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

In great profusion, both forms of it, in all the sea-loughs of the district.

Sub-Class II.—GLUMACEAE.

ORDER LXXXI.—CYPERACEAE.

1. SCHœNUS. BOG-RUSH.

1. *S. nigricans*, L. (Black B.)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshes and wet moors. Frequent.

Kirkiston, County Down; Clanbrasil Park, near Bryansford; shore near Knockmagunny Hill, Mr. Templeton; near the beach, two miles below Holywood; in parts of Islandmagee, Mr. Millen; Balloch, Mr. Rea; Slieve Gallion, Rev. W. T. Whan. Portrush, Slieve Donard, &c.; along with *Molinia caerulea* it is the principal heath plant from Gweedore to Dunglow, and miles of waste ground are occupied by it from Dunglow to Doochary Bridge. In Donegal, especially to the westward, it occurs in the greatest profusion, G. D.

2. CLADIUM. TWIG-RUSH.

1. *C. Mariscus*, Br. (*Prickly T.*)

Perennial. July, August. English type. Range in Britain, 50°—59°. Throughout Ireland.

Marshes and ditches. Very local.

Lakes in Antrim, Cavan, and Fermanagh, Mr. Templeton; second lake by the side of the road from Castlewellan to Rathfriland, Mr. Whitla. Ditches at Dunfanaghy, and Lough Sheggach, near the same place, G. D.

3. RHYNCOSPORA. BEAK-RUSH.

1. *R. alba*, Vahl. (*White B.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and wet pastures. Rather local.

Bogs at Annaghmore, Rev. G. Robinson; between Toome and Ballyronan, Rev. W. T. Whan; bogs near Newtownards, Mr. W. H. Ferguson; bog at Culmore Point, near Londonderry, Dr. Moore. In Glen Columbkil, and boggy places from Dunglow to Doochary Bridge, G. D.

4. BLYSMUS. BLYSMUS.

1. *B. rufus*, Link. (*Narrow-leaved B.*)

Perennial. July. Scottish type. Range in Britain, 53°—61°. Ireland?

Marshy spots near the sea. Rather local.

Near Donaghadee, and at Ballygally Head, near Larne, Mr. Templeton; shore at Sydenham; shore west from Bangor, and at Tillysburn, between the railway and the Lough, Mr. Millen; by the shore at Newtownards and Holywood, Mr. W. H. Ferguson; side of the Foyle, near Brookhall, Dr. Moore. Shores of Donegal Bay, at town of Donegal, G. D.

5. ELEOCHARIS. SPIKE-RUSH.

1. *E. palustris*, Br. (*Creeping S.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches, dams, lakes, &c. Common.

2. *E. multicaulis*, Sm. (*Many-stalked S.*)

Perennial. July. British type. Range in Britain, 50°—60°.
Throughout Ireland.

Marshy places. Apparently local.

Ballygowan Bog, County Down, Mr. Templeton; near Mullaghmore, Sligo, Mr. Syme; bogs in County Derry, Dr. Moore. On Nephin Mountain, County Mayo, G. D.

5. *E. acicularis*, Br. (*Least S.*)

Perennial. July, August. English type. Range in Britain,
50°—57°. Ireland, south to 55°.

Wet sandy places. Very rare.

Loch Erne, Dr. Scott; Bann River, near Portglenone, Mr. Templeton; in County Derry, Mr. E. Murphy.

6. ISOLEPIS. MUD-RUSH.

1. *I. fluitans*, R. Br. (*Floating M.*)

Perennial. June. British type. Range in Britain, 50°—60°.
Throughout Ireland.

Ditches and pools. Not unfrequent.

Near Belfast, in marshes on Kinnegar at Holywood; Bog Meadows, &c.; Culdaff, Lough Sheggach, Glen Columbkil, &c.

2. *I. setacea*, R. Br. (*Bristle-stalked M.*)

Perennial. June, July. British type. Range in Britain,
50°—60°. Throughout Ireland.

Moist gravelly places. Frequent.

Kinnegar, Holywood, Mr. Millen. By the Dam near second lock of Lagan; coast between Crawfordsburn and Bangor; Slemish Mountain; Copeland Islands; plentiful in the district of Innishowen, G. D.

3. *I. Savii*, Schultes. (*Savis' M.*)

Perennial. June. Atlantic type. Range in Britain, 50°—56°.
Throughout Ireland.

Marshy places. Local, but abundant where it occurs.

Mullaghmore, Sligo, Mr. Syme; abundant in County Derry, Dr. Moore. At Downpatrick Head, and near the "Holy Well," Ballycashill, County Mayo; very fine at Dunfanaghy, G. D.

7. SCIRPUS. BULL-RUSH OR CLUB-RUSH.

1. *S. lacustris*, L. (*Lake B.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Lakes and ponds. Frequent.

Lough Cowey, near Portaferry, Mr. Hyndman. Ditches at Lough Neagh, Massereene Park; in profusion in the numerous lakes of north-west Donegal, G. D.

2. *S. Tabernaemontani*, Gmel. (*Glaucous B.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Throughout Ireland.

Salt marshes. Rather local.

Lagan side, below the first lock, Mr. Templeton; marsh at Sydenham, Mr. Millen; Larne Lough, Herbarium N. History Society. Near the Lighthouse at Innishowen Head, and at the head of the bay in Glen Columbkil, G. D.

3. *S. maritimus*, L. (*Sea Club-rush.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Lagan side, below the first lock; shores of Belfast Lough; Copeland Islands; Island of Innistrahull, &c. &c., G. D.

4. *S. sylvaticus*, L. (*Wood C.*)

Perennial. July. British type. Range in Britain, 51°—58°. Throughout Ireland.

Banks of Blackwater, and other places in County Down, Mr. Templeton; Lough Neagh, at Ballyronan, Rev. W. T. Whan; banks of Lough Erne, near Enniskillen, Rev. Dr. O'Beirne; County Derry, Dr. Moore; Lagan side, near the second lock, Mr. Millen; growing under a bridge near Kilroot, Mr. W. H. Ferguson. Shores of Lough Neagh, at Massereene Park and Shane's Castle, G. D.

5. *S. pauciflorus*, Lightf. (*Few-flowered C.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Ireland?

Marshes and wet moors. Very local.

On shores of Lough Neagh; Castleblayney Lake; and near Newcastle, Mr. Templeton. Ram's Island, Lough Neagh, at Portrush, &c., G. D.

6. *S. cæspitosus*, L. (*Scaly C.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moors and mountains. Abundant.

8. ERIOPHORUM. COTTON-GRASS.

1. *E. vaginatum*, L. (*Hare's tail C.*)

Perennial. March, April. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and marshy moors. Frequent.

Slieve Gallion, Rev. W. T. Whan; Wolfhill and Divis, Mr. Orr. Bogs in most parts of the district, and very general on mountains, as Slemish, Muckish, Ben Bulben, &c. &c., G. D.

2. *E. angustifolium*, Roth. (*Narrow-leaved C.*)

Perennial. April, May. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs, wet moors, &c. Very frequent.

9. CAREX. CAREX. SEDGE.

1. *C. dioica*, L. (*Creeping dioecious C.*)

Perennial. May, June. Scottish type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and wet moors. Very local.

Bogs in Down and Antrim, Mr. Orr; marshes at Malin Presbyterian Church, G. D.*

2. *C. pulicaris*, L. (*Flea C.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshes and wet moors. Frequent.

Bogs at Ballynahinch, Mr. Templeton; marshes near Carrickfergus, Mr. Rea; Slieve Gallion, Rev. W. T. Whan; Rath-

* *C. Davalliana*, reported in Mackay's Irish Flora, as found in County Down by the late Mr. Templeton, is, like other localities recorded in Britain, subject to doubt, since the true plant is probably not a native.

lin Island, Miss Gage. On Ben Bulben; Muckish Mountain; Slemish; Slieve Donard; in Glen Columbkil; Hornhead; the sward near the shore at Culdaff is chiefly composed of this plant, G. D.

3. *C. ovalis*, Gooden. (*Oval-spiked C.*)

Perennial. June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshes and wet moors. Frequent.

On Nephin Mountain; Lough Neagh, at Toome; and Massereene Park; near Belfast, at head of Colin Glen; Blackstaff Lane; Cave Hill, &c. &c., G. D.

4. *C. stellulata*, Gooden. (*Small Prickly C.*)

Perennial. May, June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Marshes and wet moors. Frequent.

Near Belfast, on Cave Hill, Black Mountain, Bog Meadows, &c. &c.

5. *C. curta*, Gooden. (*White C.*)

Perennial. June. British type. Range in Britain, 50°—58°. Ireland?

Bog pools. Rather local.

Loughgall, Mr. More; Moneymore, Rev. W. T. Whan; Carnmoney, Rev. R. Oulton; King's Moss, Mr. Millen; Birkey Moss, south of Castlereagh Hills, Mr. Hyndman; bogs near Toome, Mr. W. H. Ferguson.

6. *C. elongata*, L. (*Elongated C.*)

Perennial. June. English type. Range in Britain, 51°—55°. Ireland, north only?

Marshy places. Very rare.

"Aghagallan, County Antrim," British Flora; banks of Lough Neagh, near Galley's Gate (authority unknown).

7. *C. remota*, L. (*Distant-spiked C.*)

Perennial. June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Moist woods and hedges. Rather local.

Loughgall, Mr. More; island in Lough Neagh, at Maghery, Rev. G. Robinson; Moneymore, Rev. W. T. Whan. Near Belfast, in Colin Glen; Blackstaff Lane; Lagan side; Crawfordsburn; Knockagh and other places, G. D.

8. *C. paniculata*, L. (*Great-panicled C.*)

Perennial. June. British type. Range in Britain, 50°—60°.
Throughout Ireland.

Spongy bogs. Very local.

Rathlin Island, Miss Gage. Fine "tussacs" of this species are abundant near Belfast, by the dam near the second lock of the Lagan; in bogs at and near Glen Columbkil, G. D.

9. *C. teretiusecula*, Gooden. (*Small panicled C.*)

Perennial. June. British type. Range in Britain, 50°—58°.
Ireland, S. to 55°.

Boggy places. Rather rare.

Marble Hall, Carnmoney, Mr. Templeton; boggy places at Purdysburn, Mr. Orr; various parts of County Down, Rev. R. Oulton.

10. *C. vulpina*, L. (*Great C.*)

Perennial. June. British type. Range in Britain, 50°—58°.
Throughout Ireland.

Wet places. Frequent.

Near Belfast, at Blackstaff Lane; Lagan side, below the first lock; Crawfordsburn; shore east from Bangor; Copeland Islands; beach at Innishowen Head; Island of Innistrathull, &c., G. D.

11. *C. arenaria*, L. (*Sea C.*)

Perennial. June. British type. Range in Britain, 50°—61°.
Throughout Ireland.

Sandy sea-shores. Very frequent.

12. *C. intermedia*, Gooden. (*Soft Brown C.*)

Perennial. June. English type. Range in Britain, 50°—57°.
Ireland, S. to 44½°.

Marshy places. Very local.

Lagan side, above Lisburn; meadow below Shaw's Bridge; meadow half way between Dundrum and Bryansford, Mr. Templeton; at Cultra, near Holywood, Rev. R. Oulton; meadows on borders of Lough Mourne, Mr. W. H. Ferguson; island in Lough Neagh, near Maghery, Rev. G. Robinson and G. D. Bogs near town of Monaghan, G. D.

13. *C. canescens*, L. (*Hoary C.*)

Perennial. July. Not in Britain.

Marshy places. Very rare.

On a small island in Lough Neagh, near Toome, discovered by Dr. Moore.

14. *vulgaris*, Fries. (*Common C.*)

Perennial. May, June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Marshy places. Common.

15. *C. rigida*, Gooden. (*Rigid C.*)

Perennial. July, August. Highland type. Range in Britain, 53°—61°. Ireland, 53°—55½°.

Mountains. Very local.

Bulbein Mountain, County Donegal, Dr. Mackay. Slieve Donard; on Muckish, 1900 feet to the top; on Erigal, from 1850 feet; on Nephin, in County Mayo, from 1850 feet to the summit, on this mountain the specimens gathered were the largest I have ever seen anywhere. Near the sea level at Innishowen Head, in the north-east border, and at Downpatrick Head, on the south-west limits of the district, I have gathered a plant which seems to belong to this species, G. D.

16. *C. acuta*, L. (*Slender-spiked C.*)

Perennial. May. British type. Range in Britain, 50°—58°. Ireland?

Marshes and borders of rivers, &c. Rather local.

Loonburn, near Doagh; Lagan side, above Dromore; left side of Newtownards road, near Edwards' Foundry, Mr. Templeton; Moneymore, Rev. W. T. Whan; Sinclair's Green, Falls Road, Mr. Hyndman. River side at Glen Columbkil; shores of Lough Neagh at Massereene Park, G. D.

17. *C. caespitosa*, L. (*Tufted Bog C.*)

Perennial. May, June. English type. Range in Britain, 50°—56°. Ireland?

Marshy places. Rather local.

Loughgall, Mr. More; Lough Neagh, at Portmore Park; Lagan side; near the mill at Lambeg, Mr. Templeton.

18. *C. extensa*, Gooden. (*Long-bracteate C.*)

Perennial. June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Marshes near the sea. Rare.

Shore of Belfast Lough, near Knockmagunny Hill, and coast at Donaghadee, Mr. Templeton; side of the Foyle, near the River Roe, Dr. Moore. Shores of Donegal Bay, at town of Donegal; between Crawfordsburn and Bangor; on the Cope-land Islands, G. D.

19. *C. flava*, L. (*Yellow C.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshy spots and wet moors. Very frequent.

Var. β. Ederi, Ehrh. Not unfrequent.

20. *C. fulva*, Gooden. (*Tawny C.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshy places, chiefly upland. Very local.

Mourne Mountains, Mr. Templeton. Slemish Mountain; on Muckish, and on Nephin, chiefly about 800 feet; abundant in Innishowen district, G. D.

Var. β. speirostachya. On Slieve Donard, Dr. M'Creight; on the Commons at Carrickfergus, Mr. W. H. Ferguson. I have gathered it abundantly on the north-east face of Slieve Donard, above the wood, G. D.

21. *C. distans*, L. (*Loose C.*)

Perennial. June. British type. Range in Britain, 50°—59°. Throughout Ireland.

Marshes near the sea. Very local.

Near Holywood, Mr. Templeton. Between Crawfordsburn and Bangor; at Innishowen Head; Copeland Islands; Island of Innistrathull; shore at town of Donegal, G. D.

22. *C. binervis*, Sm. (*Green-ribbed C.*)

Perennial. June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and moors. Very frequent.

Near Belfast, on Kinnegar, Holywood; Conlig Hill; Colin Mountain; Knockagh, &c.; and abundant in all upland places.

23. *C. levigata*, Sm. (*Smooth C.*)

Perennial. June. British type. Range in Britain, 50°—57°. Throughout Ireland.

Marshes and moist woods. Rare.

At Belvoir Park, by the rivulet, 100 yards from the lodge, and banks of the Lagan, Mr. Templeton; Lagan side, near Botanic Gardens, Rev. R. Oulton. In Colin Glen, and head of Woodburn Glen, G. D.

24. *C. panicea*, L. (*Pink-leaved C.*)

Perennial. June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshy places. Very frequent.

25. *C. pallescens*, L. (*Pale C.*)

Perennial. June. British type. Range in Britain, 50°—59°. Ireland?

Marshy and shady places. Rather local.

Bog at second lock of Lagan, Mr. Templeton; on an island in Lough Neagh, near Maghery, Rev. G. Robinson and G. D. Woodburn Glen, and shores of Lough Neagh, at Toome, G. D.

26. *C. limosa*, L. (*Mud C.*)

Perennial. June. Scottish type. Range in Britain, 51°—59°. Ireland?

Bogs and marshes. Very rare.

Ballygowan Bog, and bog near Donaghadee, Mr. Templeton; bog near Saintfield, County Down, Mr. Campbell.

Var. β, irrigua. In great profusion in marshes on the southwest shore of Lough Erahesk, Glen Columbkil, G. D.

27. *C. sylvatica*, Huds. (*Wood C.*)

Perennial. May, June. British type. Range in Britain, 50°—59°. Ireland, south to 54½°.

Loughgall, Mr. More; glens about Slieve Gallion, Rev. W. T. Whan. Colin Glen and Crawfordsburn, G. D.

28. *C. Pseudo-cyperus*, L. (*Cyperus-like C.*)

Perennial. June. English type. Range in Britain, 50°—58°. Ireland, south to 54½°.

Marshy places. Very rare.

Drains at Cranmore, and in the Bog Meadows, Belfast, Mr. Templeton.

29. *C. strigosa*, Huds. (*Loose C.*)

Perennial. May, June. English type. Range in Britain, 50°—55°. Throughout Ireland.

Woods and hedgerows. Rather local.

By the Forth River, near the bridge on the Falls Road, Mr. Templeton. In Blackstaff Lane; Colin Glen; on the Knockagh; Woodburn Glen; Crawfordsburn; near Shane's Castle; Glenarm Park; and town of Donegal, G. D.

30. *C. glauca*, Scop. (*Glaucous C.*)

Perennial. June. British type. Range in Britain, 50°—61°.
Throughout Ireland.

Marshy places. Very frequent.

31. *C. pilulifera*, L. (*Round-headed C.*)

Perennial. April, May. British type. Range in Britain,
50°—60°. Throughout Ireland.

Dry pastures and heaths. Frequent.

Top of Black Mountain, mountain south of Grugan's Glen,
Mr. Templeton; Slieve Gallion, Rev. W. T. Whan. Muckish,
to the summit, Erigal top, Slieve League, and general in upland
districts, G. D.

32. *C. praecox*, Jacq. (*Vernal C.*)

Perennial. June. British type. Range in Britain, 50°—61°.
Throughout Ireland.

Dry pastures and heaths. Frequent.

Near Belfast, on Cave Hill; Colin Mountain; Knockagh;
at Crawfordsburn; Kinnegar, Holywood, &c.; Conlig Hill,
Nepin, &c., G. D.

- 33. *C. filiformis*, L. (*Slender-leaved C.*)

Perennial. May. Scottish type. Range in Britain, 52°—59°.
Ireland, S. to 54½°.

Marshy places. Very rare.

In County Antrim, Dr. Moore.

34. *C. hirta*, L. (*Hairy C.*)

Perennial. May, June. British type. Range in Britain,
50°—58°. Throughout Ireland.

Blackstaff Lane, Lagan side, Knockagh, Massereene Park,
Lough Neagh at Toome, G. D.

35. *C. ampullacea*, Gooden. (*Bottle C.*)

Perennial. June. British type. Range in Britain, 50°—61°.
Throughout Ireland.

Bogs and marshes. Very frequent.

Near Belfast, in Bog Meadows; the Lagan, &c.

36. *C. vesicaria*, L. (*Bladder C.*)

Perennial. May, June. British type. Range in Britain,
50°—58°. Throughout Ireland.

Marshy places. Frequent.

Ballynahinch River, Mr. Templeton; Loughgall, Mr. More; bogs near Lisburn, Mr. Orr. Shores of Lough Neagh at Maghera, and near Toome, G. D.

37. *C. paludosa*, Gooden. (*Smaller Common C.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Ireland.

Banks of rivers, &c. Rare.

Lake two miles south-east of Kilmore, County Down, Mr. Templeton; Loughgall, Mr. More; Ballynochan Lough, Mr. Orr.

38. *C. riparia*, Curtis. (*Great Common C.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Ireland?

Sides of rivers, &c. Rare.

Ditch at Whitehouse, near Mr. Grimshaw's Mill, Mr. Templeton; banks of Lagan, and shores of Lough Neagh, Mr. Hyndman; shores of Lough Neagh, near Shane's Castle, Mr. Orr; Island of Rathlin, Miss Gage.

ORDER LXXXII.—GRAMINEAE.

1. ANTHOXANTHUM. VERNAL-GRASS.

1. *A. odoratum*, L. (*Sweet-scented V.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods, pastures, and heaths. Common.

2. NARDUS. MAT-GRASS.

1. *N. stricta*, L. (*Mat-grass.*)

Perennial. June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures and moors. Very frequent.

Near Belfast, on Cave Hill; Black Mountain; Colin Mountain; Kinnegar, at Holywood, &c. Abundant on mountains and upland wastes.

3. ALOPECURUS. FOX-TAIL GRASS.

1. *A. pratensis*, L. (*Meadow F.*)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Cultivated fields and natural pastures. Frequent.

2. *A. geniculatus*, L. (*Floating F.*)

Perennial. May to August. British type. Range in Britain 50°—61°. Throughout Ireland.

Pools and marshy places. Common.

4. PHALARIS. CANARY-GRASS.

1. *P. arundinacea*, L. (*Reed C.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sides of lakes and rivers. Common.

Near Belfast, in Lagan, Forth River, Blackstaff, &c. Abundant along the borders of Lough Neagh.

5. PHLEUM. CAT'S-TAIL GRASS.

1. *P. pratense*, L. (*Common C.*)

Perennial. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Meadows and pastures. Frequent.

2. *P. arenarium*, L. (*Sea C.*)

Annual. May, June. English type. Range in Britain, 50°—55°. Throughout Ireland.

Sandy sea-shores. Very local.

Newcastle, County Down; and Magilligan, County Derry, Mr. Templeton. Very abundant on sandhills at Dunfanaghy, G.D.*

6. PSAMMA. SEA-REED.

1. *P. arenaria*, Roem. et Sch. (*Common S.*)

Perennial. June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sandy sea-shores. Frequent.

* *Phleum alpinum* has been reported as growing on the summit of Lettery Mountain, Connemara, and near top of Slieve Donard, south side. I have never met with it in Ireland, G. D.

7. MILIUM. MILLET-GRASS.

1. *M. effusum*, L. (*Spreading M.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Ireland?

Moist shady woods and hedges. Very rare.

Colin Glen, Mr. Orr; at the Old Lodge Road, near Belfast, Herbarium N. History Society.

8. CALAMAGROSTIS. SMALL-REED.

1. *C. Epigejos*, Roth. (*Wood S.*)

Perennial. July. English type. Range in Britain, 50°—58°. Ireland?

Moist shady places. Very rare.

Formoyle Hill, Parish of Dunboe, County Derry, Dr. Moore.

2. *C. stricta*, Nutt. (*Narrow S.*)

Perennial. June, July. Local type. Range in Britain, 53°—57°. Ireland?

Marshy places. Very rare.

Island at Lough Neagh, near Toome, Dr. Moore; Loughgall, Mr. More; Island in Lough Neagh, near Maghery, Rev. G. Robinson. I have seen this extremely rare plant at Toome and Maghery, where it is very scarce, and, in consequence of the partial drainage of Lough Neagh, is likely to become extinct, G. D.

9. AGROSTIS. BENT-GRASS.

1. *A. canina*, L. (*Brown B.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist heaths, &c. Common.

2. *A. vulgaris*, With. (*Fine B.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Meadows and wastes. Very frequent.

10. CATABROSA. WHORL-GRASS.

1. *C. aquatica*, Beauv. (*Water W.*)

Perennial. May, June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Pools and banks of rivers. Rather local.

By the side of the road from Cromac to Malone, Herbarium N. History Society. Abundant by the side of a dam near the second lock of the Lagan; marshes a little east of the village of Culdaff, County Donegal, G. D.

11. AIRA. HAIR-GRASS.

1. *A. caespitosa*, L. (*Tufted H.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist woods and wastes. Very frequent.

2. *A. flexuosa*, L. (*Waved H.*)

Perennial. July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and heaths. Frequent.

Mountains, glens, and woods near Belfast. A frequent plant on all the mountains, reaches the summits of Ben Bulbin, Nephin, and Muckish, G. D.

3. *A. caryophyllacea*, L. (*Silvery H.*)

Annual. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Gravelly places. Very frequent.

4. *A. praecox*, L. (*Early H.*)

Annual. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Gravelly places. Frequent.

12. MOLINIA. MOLINIA.

1. *M. caerulea*, Moench. (*Purple M.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and moist heaths. Abundant.

Near Belfast, on Colin Mountain, &c.; very plentiful in County Donegal; from Gweedore to Dunglow it is the most

abundant grass of waste lands; from Dunglow to Doochary Bridge it occurs as green patches in a waste of *Schoenus nigricans*.

13. MELICA. MELIC-GRASS.

1. *M. uniflora*, Retz. (*Wood M.*) *

Perennial. May, June. English type. Range in Britain, 50°—58°. Throughout Ireland.

Shady woods. Rather local.

Loughgall, Mr. More; Moneymore, Rev. W. T. Whan; glen above Holywood, Mr. Millen. Warrenpoint; Crawfordsburn; Tullamore Park; Hazelwood Demesne, near town of Sligo; shady rocks near the Presbyterian Church at Malin, G. D.

14. HOLCUS. SOFT-GRASS.

1. *H. mollis*, L. (*Creeping S.*)

Perennial. July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and woods. Frequent.

2. *H. lanatus*, L. (*Meadow S.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and woods. Common.

15. ARRHENATHERUM. OAT-GRASS.

1. *A. avenaceum*, Beauv. (*Common O.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Hedges and pastures. Very frequent.

16. KOELERIA. KOELERIA.

1. *K. cristata*, Pers. (*Crested K.*)

Perennial. June, July. British type. Range in Britain, 50°—59°. Ireland?

Dry pastures. Rather local.

Cave Hill; shore at Strangford town, and at Castle Ward; Innishowen Head; Ben Bulbin, &c., G. D.

* *M. nutans*, L. is reported as having been found in the Mourne Mountains; I have never seen it in Ireland, and suspect some error.

17. SESLERIA. MOOR-GRASS.

1. *S. caerulea*, Scop. (*Blus M.*)

Perennial. May, June. Highland type. Range in Britain, 54°—58°. Ireland?

Mountains. Very rare.

Ben Bulbin and other mountains of Sligo, Dr. Mackay. This beautiful grass is plentiful on Ben Bulbin, ranging from about 900 feet to near the top, G. D.

18. POA. MEADOW-GRASS.

1. *P. fluitans*, Scop. (*Floating M.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches and pools. Common.

2. *P. maritima*, Huds. (*Sea M.*)

Perennial. July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sea-shores. Rather local.

Shore at Portstewart, Rev. W. T. Whan; shore near Carrickfergus, Mr. W. H. Ferguson. Shores of Dundrum Bay, &c. &c., G. D.

3. *P. distans*, L. (*Reflexed M.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Ireland.

Sandy shores. Frequent.

Shore from Belfast to Holywood, Mr. Millen. Shore at Portaferry, &c., G. D.

4. *P. procumbens*, Cart. (*Procumbent Sea M.*)

Annual. June, July. English type. Range in Britain, 50°—55°. Ireland, S. to 54½°.

Salt marshes. Very rare.

Near Larne, Dr. Moore.

5. *P. rigida*, L. (*Hard M.*)

Annual. June. English type. Range in Britain, 50°—57°. Ireland, South to 55°.

Walls and rocks. Very rare.

Walls of Carlingford Castle, Mr. Hyndman.

6. *P. loliacea*, Huds. (*Wheat M.*)

Annual. June, July. English type. Range in Britain, 50°—57°. Throughout Ireland.

Sandy sea-shores. Rather local.

At Portaferry; quay at Carrickfergus; Curran of Larne; pier at Ballycastle; Island of Rathlin, Mr. Templeton; Portstewart, Rev. W. T. Whan. Coast at Innishowen head; sandy links at Dunfanaghy in profusion; and at Culdaff, G. D.

7. *P. compressa*, L. (*Flat-stemmed M.*)

Perennial. June, July. British type. Range in Britain, 50°—57°. Throughout Ireland.

Wastes and walls. Rare.

Walls at Larne, Mr. Whitla; on the walls of Derry, Dr. Moore. Along the south wall of Derry it is rather plentiful, G. D.

8. *P. pratensis*, L. (*Smooth-stalked M.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Meadows and pastures. Frequent.

9. *P. trivialis*, L. (*Roughish M.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Frequent.

10. *P. alpina*, L. (*Alpine M.*)

Perennial. June, July. Highland type. Range in Britain, 53°—59°. Ireland?

On mountains. Very rare.

Ben Bulbin, Dr. Mackay; Slieve Gallion, County Derry, Dr. Moore.

11. *P. nemoralis*, L. (*Wood M.*)

Perennial. June, July. British type. Range in Britain, 50°—58°. Ireland?

Woods and shady rocks. Very local.

North branch of Glenarve river below the waterfall, and near the bridge at Cushendall road, Mr. Templeton; Knockree mountain, County Down, Dr. White; Donard Lodge, Newcastle, Mr. Thompson.

12. *P. annua*, L. (*Annual M.*)

Annual. April to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Meadows and wastes. Very common.

19. TRIODIA. HEATH-GRASS.

1. *T. decumbens*, Beauv. (*Decumbent H.*)

Perennial. July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures and heaths. Frequent.

Near Belfast on Black Mountain; top of Cave Hill; Kinnegar, Holywood, &c. Frequent on the mountains.

20. BRIZA. QUAKING-GRASS.

1. *B. media*, L. (*Common Q.*)

Perennial. June. British type. Range in Britain, 50°—60°. Throughout Ireland.

Meadows and pastures. Rather local.

Loughgall, Mr. More; Lagan side, near second lock, Mr. Templeton; Hazelbank, Mr. Hyndman; at Macedon; Toldarg; Ballycorr; banks of Six-mile-Water, at Ballyclare, Mr. Millen; on the Knockagh, Mr. Rea; Belvoir Park and shore below Whiteabbey, Herbarium Natural History Society; meadows near Whitehead, Mr. W. H. Ferguson.

21. DACTYLIS. COCK'S-FOOT GRASS.

1. *D. glomerata*, L. (*Rough C.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Very frequent.

22. CYNOSURUS. DOG'S-TAIL GRASS.

1. *C. cristatus*, L. (*Crested D.*)

Perennial. July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry pastures. Frequent.

23. FESTUCA. FESCUE-GRASS.

1. *F. uniglumis*, Soland. (*Single-glumed F.*)

Annual. June. English type. Range in Britain, 50°—54°. Ireland?

Sandy sea-shores. Very rare.

Copeland Isles, Mr. Whitla; at Cushendall, Mr. Templeton.

2. *F. bromoides*, L. (*Barren F.*)

Annual. June. British type. Range in Britain, 50°—58°. Throughout Ireland.

Walls and dry wastes. Frequent.

Lagan side; Newcastle; Bryansford; Toome, &c. &c.

Var. β, Myurus. Boyle, at Ballycastle, Mr. Whitla; at Belfast, Mr. Templeton. On the Knockagh; coast at Malin, G. D.

3. *F. ovina*, L. (*Sheep's F.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Pastures and wastes. Very frequent.

Var. α, vivipara. Carlingford Mountains, and by the cataract at Donard Lodge, Mr. Hyndman. Hornhead; Slieve Nanee; Slieve Donard; one of the few plants on the tops of Erigal, Nephin, Muckish, and Slieve League, descending, also, low down on all; by the roadside at Malinmore and Cashel, Glen Columbkil, not far from the sea level, G. D.

Var β, duriuscula. Very frequent.

Var. γ, rubra. Chiefly near the sea, all round the coast line, G. D.

4. *F. sylvatica*, Vill. (*Reed F.*)

Perennial. July. Scottish type. Range in Britain, 50°—58°. Ireland?

Upland woods. Very rare.

Colin Glen, Mr. Templeton; Ness Glen, County Derry, Dr. Moore; Whiterock Mountain, Mr. Orr.

5. *F. pratensis*, Huds. (*Meadow F.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Moist meadows, &c. Frequent.

6. *F. elatior*, L. (*Tall F.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist pastures, &c. Rather local.

Lagan side, Mr. Templeton; shores of Lough Neagh, near Toome, Mr. Ferguson and G. D. Near the dam at Lagan side; Massereene Park; coast at Innishowen Head, G. D.

7. *F. gigantea*, Vill. (*Tall-bearded F.*)

Perennial. July, August. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and moist hedges. Frequent.

Demesne at Moneymore, Rev. W. T. Whan; Colin Glen, Mr. W. H. Ferguson; Woodburn Glen, Mr. Millen; limestone rocks, near Garron Head, and demesne at Drumnasole, Dr. Moore. Blackstaff Lane, at Belfast, G. D.

24. BROMUS. BROME-GRASS.

1. *B. asper*, L. (*Hairy Wood B.*)

Biennial. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Woods and hedges. Frequent.

Near Belfast, in Colin and Woodburn Glens; sides of road to Whiterock, &c.; Glenarm Park, G. D.

2. *B. sterilis*, L. (*Barren B.*)

Annual. June. British type. Range in Britain, 50°—58°. Ireland?

Wastes and hedges. Rare.

Loughgall, Mr. More; near Lisburn, and at Curran of Larne, Mr. Templeton; near Belfast, by the roadside near Ballygomartin School-house, Mr. Millen.

3. *B. secalinus*, L. (*Smooth Rye B.*)

Annual. June, July. British type. Range in Britain, 50°—58°. Ireland?

Cultivated fields. Very rare.

Ballyronan, Rev. W. T. Whan; at Lambeg, Rev. R. Oulton.

4. *B. racemosus*, L. (*Smooth B.*)

Annual. June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Meadows and pastures. Very frequent.

5. *B. commutatus*, Schrad. (*Tumid Field B.*)

Annual. June, July. British type. Range in Britain, 51°—59°. Ireland?

Fields and wastes. Rare.

Loughgall, Mr. More.

6. *B. mollis*, L. (*Soft B.*)

Biennial? June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

25. AVENA. OAT.

1. *A. pratensis*, L. (*Field O.*)

Perennial. June, July. British type. Range in Britain, 50°—58. Throughout Ireland.

Dry pastures and rocks. Very rare.

By the New Lodge Road, near Belfast, Herbarium N. History Society. Coast at Culdaff, County Donegal, G. D.

2. *A. pubescens*, L. (*Downy O.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Dry pastures. Rather local.

Newcastle; Slemish Mountain, Mr. Templeton; in County Derry, Dr. Moore; Ballycastle, Miss Hincks. Knockagh and Woodburn Glen; cliffs south from Glenarm; rocks by the waterfall at head of Colin Glen; coast at Innishowen Head, G. D.

3. *A. flavescens*, L. (*Yellow O.*)

Perennial. July. English type. Range in Britain, 50°—58°. Ireland?

Dry pastures and wastes. Rather local?

In Allan's Meadow, below the second lock of the Lagan, Mr. Templeton.

26. PHRAGMITES. REED.

1. *P. communis*, Trin. (*Common R.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Ditches and margins of rivers and lakes. Frequent.

27. ELYMUS. LYME-GRASS.

1. *E. arenarius*, L. (*Sea L.*)

Perennial. July. Scottish type. Range in Britain, 50°—61°. Throughout Ireland.

Sandy sea-shores. Very local.

Bays at Ballyhome, Dundrum, and Ballywalter, Mr. Millen; sand-hills at Hornhead, Mr. Thompson. Coast near Dunfanaghy, and between Ballyshannon and Sligo, Mr. E. Murphy. Sandy shores north from Innishowen Head, G. D.

28. HORDEUM. BARLEY.

1. *H. pratense*, Huds. (*Meadow B.*)

Perennial. June, July. English type. Range in Britain, 50°—56°. Ireland?

Moist meadows. Rare.

At Whitehouse, and Conn's Water, Mr. Templeton.

2. *H. murinum*, L. (*Wall B.*)

Annual. June, July. English type. Range in Britain, 50°—57°. Ireland.

Dry walls and wastes. Very rare.

Carlingford Castle-walls, Mr. Hyndman.

29. TRITICUM. WHEAT-GRASS.

1. *T. junceum*, L. (*Rushy Sea W.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Sandy sea-shores. Not unfrequent.

Hollywood shores, and Eden near Carrickfergus, Mr. Millen. Strand road at Portaferry; shore north from Newcastle; at Innishowen head; shores at Malin, Culdaff, Dunfanaghy; Sandhills near Ballycashel, County Mayo, G. D.

2. *T. repens*, L. (*Creeping W.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

3. *T. caninum*, Huds. (*Fibrous-rooted W.*)

Perennial. July. British type. Range in Britain, 50°—58°. Throughout Ireland. Wastes and banks. Frequent.

30. BRACHYPODIUM. FALSE BROME-GRASS.

1. *B. sylvaticum*, Beauv. (*Slender T.*)

Perennial. June, July. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods and dry rocks. Not unfrequent.

Loughgall, Mr. More. Knockagh; shore at Portaferry; Innishowen head; shores of Donegal Bay, &c., G. D.

31. LOLIUM. RYE-GRASS.

1. *L. perenne*, L. (*Perennial R.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

2. *L. temulentum*, L. (*Darnel*.)

Annual. June, July. British type. Range in Britain, 50°—58°. Throughout Ireland.

Dry fields. Rare.

Ballyronan, Rev. W. T. Whan; fields at Balloch and Newcastle, Mr. Rea; wheat fields at Holywood, Mr. Hyndman.

Var. β, arvense. At Saintfield, Rev. R. Oulton.

32. LEPTURUS. HARD-GRASS.

1. *L. incurvatus*, Trin. (*Sea H.*)

Annual. July. English type. Range in Britain, 50°—56°. Ireland, South to 54½°.

Sea-shores. Very rare.

Shore of Belfast Lough, near Sydenham station; west end of Kinnegar, Holywood; and north-east corner of Ballyholme Bay, Mr. Millen. I have seen very luxuriant specimens from these localities, G. D.

CLASS III.
ACOTYLEDONOUS PLANTS.

Sub-Class I.—FILICES.

ORDER I.—POLYPODIACEAE.

1. CETERACH. CETERACH.

1. *C. officinarum*, Willd. (*Common C.*)

Perennial. April to October. English type. Range in Britain, 50°—57°. Ireland, south to 55°.

Rocks and walls. Very local.

Near Cappagh, County Tyrone, Dr. Kinahan; Rostrevor, Mr. Crawford; Bryansford, Mr. Thompson; old walls in town of Donaghadee, Rev. G. Robinson; Cave Hill, on Deer Park wall, and old walls at Galgorm, County Antrim, Mr. Templeton; on walls near Castle Dobbs, Mr. W. H. Ferguson.

2. POLYPODIUM. POLYPODY.

1. *P. vulgare*, L. (*Common P.*)

Perennial. June to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Walls, rocks, and woods. Common.

Rare in Glen Columbkil, G. D.

2. *P. Phegopteris*, L. (*Mountain P.*)

Perennial. June to September. Scottish type. Range in Britain, 50°—61°. Ireland, north.

Damp woods. Rather local.

Top of Slieve Bignian, Mourne Mountains; rough ground two miles south of Slieve Croob, County Down; Glenarm River, half a mile from Cushendall, and Ness Glen, County Derry, Mr. Templeton; waterfall above Lough Esk, County Donegal, Dr. Mackay; by the Glenarve River, near Cushendall, and at a rock on the Black Mountain, above Tullamore Park, Mr. Thompson.

3. *P. Dryopteris*, L. (*Oak-fern*.)

Perennial. July, August. Scottish type. Range in Britain, 51°—59°. Ireland?

Dry shady places. Rare.

Mourne Mountains, Dr. Mackay; on Knockagh, County Antrim (Moore's British Ferns).

3. ASPIDIUM. SHIELD-FERN.

1. *A. Lonchitis*, Sm. (*Alpine S.*)

Perennial. June to September. Highland type. Range in Britain, 53°—59°. Ireland, north-west.

On mountains. Very rare.

Ben Bulbin, and other mountains in Sligo, Dr. Mackay and Mr. Murphy.

2. *A. lobatum*, Sm. (*Lobed S.*)

Perennial. July, August, British type. Range in Britain, 50°—58°. Ireland, south to north.

Moist woods and banks. Frequent.

Glenarm; Cushendall, &c., Mr. Templeton; near Belfast, at head of Colin Glen, &c.; Tullamore Park, near the Hermitage, Mr. Thompson.

3. *A. aculeatum*, Sw. (*Common Prickly S.*)

Perennial. July, August. English type. Range in Britain, 50°—57°. Throughout Ireland.

Woods and hedge banks. Very frequent.

About Belfast, in Colin Glen, Holywood, Crawfordsburn, &c.

4. *A. angulare*, Willd. (*Angular-leaved S.*)

Perennial. July, August. English type. Range in Britain, 60°—56°. Throughout Ireland.

Woods and hedge banks. Very general.

5. *A. Thelypteris*, Sw. (*Marsh-fern*.)

Perennial. July, August. English type. Range in Britain, 50°—57°. Ireland.

Marshy places. Rare.

At lower part of Portmore Park, among bushes, near the shores of Lough Neagh; and banks of the Six-mile-Water, at Ballyclare, Mr. Hyndman and Mr. Whitla.

6. *A. Oreopteris*, Sw. (*Heath S.*)

Perennial. July, August. British type. Range in Britain, 50°—61°. Throughout Ireland.

Heaths and pastures. Very local.

In the most western plantation on the face of the Black Mountain above Tullamore Park, Mr. Templeton; meadows at the base of the hill above Carrickfergus, Mr. Rea; in County Donegal, at Milroy Bay, Mr. Newman; Killybegs, and at Lough Eske, Mr. Barrington; gap of Barnesmore, County Donegal, Mr. Thompson; County Derry, Dr. Moore.

7. *A. Filix-mas*. Sw. (*Male-fern.*)

Perennial. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Mr. Thompson found its fronds 5 feet long in Tullamore Park.

Woods and wastes. Common.

8. *A. dilatatum*, Sw. (*Broad Prickly S.*)

Perennial. August, September. British type. Range in Britain, 50°—60°. Throughout Ireland.

Woods, moors, and rocks. Frequent.

Very widely diffused, and especially frequent in upland districts.

Var. α, spinulosum. At Dartrey, County Monaghan, Mr. Darby; Dungiven, County Derry, Dr. Moore. Glen Columbkill, &c., G. D.

Var. β, recurvum. (*L. Fœnisecii.*) In Moore's British Ferns the following localities are recorded:—Fairhead; Cushendall; Coleraine; Rushbrook; Garvagh; Milroy Bay; Arrigal head; Killybegs; Lough Eske; Lough Derg; between Sligo and Manorhamilton; Lough Gill; Nephin base. I have gathered it about the lower flanks of Slieve Donard, and in wet places on the links of Dundrum, G. D.

4. CYSTOPTERIS. BLADDER-FERN.

1. *C. fragilis*, Bernh. (*Brittle B.*)

Perennial. July, August. British type. Range in Britain, 50°—59°. Ireland.

Rocks and walls. Very local.

Beside the waterfall in Woodburn Glen, Mr. Templeton; on the Black Mountain above Tullamore Park, Mr. Thompson; Sallagh Braes near Larne, Mr. Hyndman; Manorhamilton and

Glencar, County Leitrim, Mr. Barrington; near town of Sligo, Mr. Newman.

Var. β, dentata. Rocks in Woodburn Glen, near Carrickfergus, Mr. Templeton; in Donegal, Mr. Barrington. Abundant on Ben Bulben, along with *Asplenium viride* and *A. Trichomanes*, at an elevation of 1200 feet, G. D.

5. ASPLENIUM. SPLEENWORT, &C.

1. *A. Ruta-muraria*, L. (*Wall-Rue*.)

Perennial. June to November. British type. Range in Britain, 50°—59°. Throughout Ireland.

Walls and rocks. Very frequent.

Near Belfast, on Shaw's Bridge and the Deer Park wall, Mr. Orr; Cave Hill, Mr. Hyndman; at Carrickfergus and Whitehead, Mr. W. H. Ferguson; at Holywood, Mr. Millen. On old walls at Newtownards; on the ruins at town of Donegal; at town of Kildrum, County Donegal, on limestone rocks; at Manorhamilton; Moyne Abbey; Ben Bulben, at 1,200 feet, G. D.

2. *A. Trichomanes*. L. (*Common S.*)

Perennial. May to November. British type. Range in Britain, 50°—60°. Throughout Ireland.

Rocks and walls. Frequent.

Cave Hill; Wolfhill; Holywood, Mr. Millen; Bridge near Ballycarry, Mr. W. H. Ferguson. Cliffs south from Glenarm; Bunbeg, County Donegal; on Ben Bulben; old walls, Newtownards, G. D.

4. *A. viride*, Huds. (*Green S.*)

Perennial. June to October. Highland type. Range in Britain, 51°—59°. Ireland, south to 55°.

Alpine rocks. Very rare.

Near Lough Esk, County Donegal, Mr. Murphy; on Ben Bulben, Dr. Mackay. The lowest limit on Ben Bulben is about 1100 to 1200 feet; the plants seen by me have been chiefly the *Var. incisum* of Moore's British Ferns, G. D.

5. *A. marinum*, L. (*Sea S.*)

Perennial. June to November. Atlantic type. Range in Britain, 50°—60°. Throughout Ireland.

Maritime rocks and caves. Frequent.

This species is of general occurrence along rocky shores, and is one of the plants found in Tory Island and Innistrathull.

6. *A. Adiantum-nigrum*, L. (*Black S.*)

Perennial. June to November. British type. Range in Britain, 50°—60°. Throughout Ireland.

Walls and rocks. Very frequent.

Cave Hill, Wolfhill, Holywood, Carrickfergus, Mr. Millen; at Ballycarry, Mr. W. H. Ferguson; walls of Cranfield Church, Mr. Thompson. Cliffs at Glenarm; Crawfordsburn and Copeland Isles; at Harbour of Bunbeg; rocks near Malin Presbyterian Church; Innishowen Head; on Erigal up to 700 feet, and numerous other places, G. D.

7. *A. Filix-foemina*, Bernh. (*Lady-Fern.*)

Perennial. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist places. Common.

6. SCOLOPENDRIUM. HART'S TONGUE.

1. *S. vulgare*, Sym. (*Common H.*)

Perennial. July to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and shady banks and rocks. Very frequent.

This species is common about Belfast, and so generally diffused in the North that it is unnecessary to specify localities.

7. PTERIS. BRAKE.

1. *P. aquilina*, L. (*Common B.*)

Perennial. July to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods, heaths, and sandy shores. Common.

8. CRYPTOGRAMME. ROCK-BRAKE.

1. *C. crispa*, Br. (*Common R.*)

Perennial. August, September. Highland type. Range in Britain, 51°—59°. Ireland, north.

Upland places among rocks and stones. Very rare.

Abundant about the Mourne Mountains, Dr. Mackay; Killeel, Mr. Whittle; among loose stones on the Cave Hill, Mr. Orr; on a stone ditch between Doagh and Sandy Braes, near Ballyclare, Mr. Hyndman. In crevices of rocks upon the south brow of Slieve Nanee, at 1500 feet, G. D.

9. BLECHNUM. HARD-FERN.

1. *B. boreale*, Sw. (*Northern H.*)

Perennial. July to November. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and heaths. Very frequent.

10. HYMENOPHYLLUM. FILMY-FERN.

1. *H. Tunbridgense*, Sm. (*Tunbridge F.*)

Perennial. June, July. Atlantic type. Range in Britain, 50°—57°. Throughout Ireland.

Moist shady places. Very rare.

Growing on trees, Tullamore Park, Mr. W. H. Ferguson. On Slieve Donard, above Donard Lodge; this is the only place in the district where I have seen the species, it will, doubtless, be found in localities more to the west and south, G. D.

2. *H. Wilsoni*, Hook. (*Scottish F.*)

Perennial. June to September. Highland type. Range in Britain, 50°—61°. Throughout Ireland.

Wet rocks and under heath. Frequent.

Florencecourt, Hon. J. L. Cole; Gortin Gap, County Tyrone, Dr. Kinahan; Mourne Mountains, and by the Glenarve River, near Cushendall, Mr. Templeton; head of Colin Glen, Mr. Orr; rocks by the river side, Tullamore Park, and on the Innishowen Mountains, Mr. Thompson. Beneath the shade of large basaltic blocks at base of M^r Art's Fort, Cave Hill; on Slieve Nanee, County Antrim; on Errigal from 2000 feet to near the top; on Nephin at 2000 feet; forming a compact green sward on Slieve League at 1500 feet and upwards, G. D.

ORDER II.—OSMUNDACEAE.

1. OSMUNDA. OSMUND.

1. *O. regalis*, L. (*Royal O.*)

Perennial. June to October. British type. Range in Britain, 50°—61°. Throughout Ireland.

Marshes and margins of streams. Frequent.

Shores of Lough Neagh, near Shane's Castle, Mr. Hyndman;

side of the river above Newcastle, Mr. Thompson. At Culdaff, north-east Donegal; common and luxuriant about Gweedore and as far as Doochary Bridge, thence to Glenties not so frequent; at Killybegs *Osmunda* occurs in low wet places, whence it increases in abundance to Glen Columbkil where it is in great profusion. The Rev. G. Robinson showed me what might be called a small forest of this fine plant, not far from Maghery, where it forms large *tussacs*, like those of *carex paniculata*; drainage is, however, gradually destroying it. This Fern increases in frequency and luxuriance toward the western parts of the district, G. D.

ORDER III.—OPHIOGLOSSACEAE.

1. OPHIOGLOSSUM. ADDER'S TONGUE.

1. *O. vulgatum*, L. (Common A.)

Perennial. May, June. British type. Range in Britain, 50°—61°. Throughout Ireland.

Moist natural pastures. Rather local.

Armagh, Dr. Kinahan; bank by the Lagan, on the east side of the Botanic Gardens, Mr. Orr; at Greyabbey, Mr. Hyndman. Grassy places by the side of the stream, and near the bridge, north from Malone Cemetery, and along the same stream a mile or two westward, G. D.

2. BOTRYCHIUM. MOON-WORT.

1. *B. Lunaria*, Sw. (Common M.)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Dry natural pastures. Rather local.

On the Knockagh, Black Mountain, and Scrabo Hill, Mr. Templeton; Altmore Glen, near Cushendall, and grassy places on Scrabo Hill, Mr. Thompson; by the new road to Crumlin, above Wolfhill, Mr. Hyndman; near Carrickfergus, Mr. Millen; Ben Evenagh Mountains, near Magilligan, Dr. Moore. On the Cave Hill, by the side of the footpath leading to the caves, and on the north side of the river at Culdaff, G. D.

ORDER IV.—LYCOPODIACEAE.

1. LYCOPODIUM. CLUB-MOSS.

1. *L. clavatum*, L. (*Common C.*)

Perennial. July, August. British type. Range in Britain, 50°—60°. Throughout Ireland.

Heathy pastures. Frequent.

2. *L. Selaginoides*, L. (*Small Alpine C.*)

Perennial. August. Highland type. Range in Britain, 53°—61°. Throughout Ireland.

Marshy places. Rather local.

Mourne Mountains, Mr. Templeton; Agnew's Hill, near Larne, Mr. Whitla; at Balloch, County Down, Mr. Rea; flat sandy marsh beyond the sand-hills, Magilligan, Dr. Moore. On Slemish Mountain; at Hornhead; marshy places about Lough Derg; abundant on wet sand-hills near the sea at Cull-daff and Malin, G. D.

3. *L. alpinum*, L. (*Alpine C.*)

Perennial. August. Highland type. Range in Britain, 51°—61°. Ireland, north.

Stony places on mountains. Very rare.

Donegal, Derry, and Mourne Mountains, Dr. Mackay; on the mountain above Whiterock, Mr. Orr; near the top of Muckish, Mr. Thompson; on Divis Mountain, Mr. Rea. On the Black Mountain, G. D.

4. *L. Selago*, L. (*Fir C.*)

Perennial. June to September. British type. Range in Britain, 50°—61°. Throughout Ireland.

Heathy and stony places. Rather local.

Muckish Mountains to the top, Mr. Thompson. Bog near Bangor; frequent in Donegal, on the mountains as well as the moors, G. D.

2. ISOETES. QUILL-WORT.

1. *I. lacustris*, L. (*European Q.*)

Perennial. June, July. Highland type. Range in Britain, 52°—59°. Ireland, north.

Bottoms of lakes. Rare.

Castleblayney Lake, in County Monaghan, Mr. Whitla; lakes in the Rosses, County Donegal, Mr. Murphy.*

ORDER V.—MARSILEACEAE.

1. PILULARIA. PILL-WORT.

* 1. *P. globulifera*, L. (*Creeping P.*)

Perennial. July, August. British type. Range in Britain, 50°—59°. Ireland, north.

Margins of lakes and ponds. Rare.

Abundant in marshy ground two miles from the mouth of the Blackwater, near Lough Neagh, Mr. J. Campbell; stagnant pools by the River Lagan, Mr. Orr; Selshan Harbour, Lough Neagh, Mr. Hyndman.

ORDER VI.—EQUISETACEAE.

1. EQUISETUM. HORSE-TAIL.

1. *E. Telmateia*, Ehrh. (*Great Water H.*)

Perennial. April. English type. Range in Britain, 50°—57°. Throughout Ireland.

Usually in wet places. Frequent.

Frequent about Belfast, and elsewhere in the North of Ireland. In some parts of West Donegal it is plentiful, I did not observe it, however, in Glen Columbkil, G. D.

2. *E. umbrosum*, Willd. (*Blunt-topped H.*)

Perennial. April. Scottish type. Range in Britain, 53°—58°. Ireland?

Wet places. Rather local.

At Wolfhill, and at the base of Divis Mountain, Mr. Orr; Loonburn (west side), near Donegore, between Doagh and Antrim, and Boyd's Glen, at Wolfhill, Mr. Thompson; Woodburn Glen, Carrickfergus, Mr. Hyndman. At Culdaff; near

* It may be that the plant, in one or other of the above localities, belongs to the species which has only been of late years shown as distinct, viz., *I. echinospora*, Dur, the essential character being this, "larger spores very acutely tubercled." This species ought to be looked after in the North of Ireland, it is smaller than *I. lacustris*, and of a pale green colour.

an old mine between Dunfanaghy and Gweedore; at Mount Charles, and also near the town of Donegal, G. D.

3. *E. arvense*, L. (*Field H.*)

Perennial. April. British type. Range in Britain, 50°—61°. Throughout Ireland.

Fields and wastes. Common.

4. *E. sylvaticum*, L. (*Branched Wood H.*)

Perennial. April, May. British type. Range in Britain, 50°—61°. Throughout Ireland.

Woods and hedge-rows. Very frequent.

5. *E. limosum*, L. (*Smooth Naked H.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Lakes and sides of rivers. Frequent.

6. *E. palustre*, L. (*Marsh H.*)

Perennial. June, July. British type. Range in Britain, 50°—61°. Throughout Ireland.

Bogs and marshes. Frequent.

7. *E. trachyodon*, A. Braun. (*Long H.*)

Perennial. July, August. Scottish type. Range in Britain, 57°.—58°. Ireland, N. only.

Wet shady places. Very rare.

Upper part of Colin Glen, beyond the wood. It has been long known in this locality, where it was first found by Mr. Templeton, who considered it a variety of *E. hyemale*.

8. *E. hyemale*, L. (*Rough H.*)

Perennial. July, August. Scottish type. Range in Britain, 51°—58°. Throughout Ireland.

Wet shady places. Rather local.

Colin Glen, Mr. Templeton; at Springfield, Belfast, above Mr. Stevenson's Mill, Mr. Orr; shore of Lough Neagh at Shane's Castle, Mr. Thompson. Banks of the Forth River, near Belfast, and marshy and shady spots among the sand-hills at Dundrum, G. D.

9. *E. variegatum*, Schleich. (*Variiegated H.*)

Perennial. July, August. Scottish type. Range in Britain, 50°—58°. Ireland?

Woods and moist places. Very rare.

Ballyharrigan, near Dungiven, Dr. Moore.

S U P P L E M E N T .

Species reported as in the District, of which some doubt may be entertained at present.

- Ranunculus circinatus*, Sibth. Lough Neagh.
R. cœnosus, Gass. Moneymore.
Corydalis claviculata, D. C. Near Warrenpoint.
Brassica Monensis, Br. North of Ireland.
Sinapis alba, L. In County Derry.
Reseda lutea, L. Banks of river near Ballycastle.
Polygala Austriaca, Crantz. On dry rocky debris at Mount Gilbert.
Dianthus deltoides, L. Pastures at Sandymount, near Belfast.
Tilia parvifolia, Ehrh. Woods in County Down.
Hypericum montanum, L. Malloch Hill, County Down.
Helianthemum vulgare, Gaerten. Glen Darragh, near Longford Lodge, Country Antrim.
Lotus angustissimus, L. Shore below Holywood.
Vicia Orobus, D. C. Rostrevor Hill.
Vicia tetrasperma, Moench. Ballyronan, and at Ballycastle.
Lathyrus Aphaca, L. At Whiteabbey.
Petroselinum segetum, Koch. Shore near Portstewart.
Centaurea Scabiosa, L. In County of Armagh, and near Holywood.
Artemisia maritima, L. Near the beach at Holywood; also near Ballycastle.
Scrophularia Scorodonia, L. Cave Hill and Crawfordsburn.
Galeopsis ochroleuca, Lam. At Shankhill.
Galeopsis Ladanum, L. Near Ballycastle.
Plantago media, L. Carnmoney Hill, and at Newcastle.
Polygonum maritimum, L. Holywood shore.

Salix arenaria, L. *Var. Stuartiana*. On shores of Lough Neagh, near Antrim.

Epipactis ensifolia, Sw. County Down.

Carex axillaris. Crawfordsburn.

Species which may be considered not strictly Indigenous.

Aquilegia vulgaris, L. On shores of Lough Neagh, near Salterstown, and at Crawfordsburn.

Helleborus viridis, L. Drummartin, near Dundrum.

Corydalis lutea, D. C. On a wall near the village of Purdysburn.

Cheiranthus Cheiri, L. Walls at Strangford and Carrickfergus; on the ruins of Abbey and Castle at town of Donegal, &c.

Draba muralis, L. Old walls about Belfast, &c.

Camelina sativa, Cr. In fields about Belfast; Castlereagh; Ballycastle.

Reseda fruticulosa, L. Beach near Bangor.

Viola hirta, L. In a plantation at Fortwilliam, on the side of the road from Forth River to Black Mountain, and in the graveyard near Shane's Castle.

Silene Armeria, L. Sandy fields by the River Roe, County Derry.

Hypericum Anglicum, Bertol. In the plantation above Donard Lodge.

Acer campestre, L. Counties Armagh, Antrim, Derry.

Geranium Pyrenaicum, L. County Armagh.

Trifolium resupinatum, L. Fields between Edenderry and Purdysburn; fields near the Giant's Causeway.

Spiraea salicifolia, L. Roadsides at Ballynahinch, and hedges near Drumbo.

Prunus Cerasus, L. Various places round Lough Neagh.

Sempervivum tectorum, L. On houses and walls in different parts of the district.

Sedum dasphyllum, L. County Armagh; high ground north-west from Carrickfergus; on the "Scat Knowe," near Ballyclare; at Ballycastle; Island of Rathlin. I fear a mistake about the plant in some of the above localities, and there-

fore it might have been included in the doubtful species ; one at least may refer correctly to the plant, but it has probably escaped from a garden.

Ribes nigrum, L. In different parts of the district, along with the next.

Ribes Grossularia, L.

Saxifraga Geum, L. Naturalised in Cultra Demesne.

Saxifraga granulata, L. A variety, with double flowers, in Castle Dobbs Demesne.

Lonicera Xylosteum, L. On walls at Bellahill, near Carrickfergus.

Centranthus ruber, D. C. At Newcastle, County Down.

Dipsacus sylvestris, L. Roadside at Ballyronan.

Hieracium aurantiacum, L. On the garden wall at Castle Dobbs.

Cichorium Intybus, L. Squire's Hill ; Sydenham ; reclaimed land near Jennymount ; Salter's Castle, &c.

Ligustrum vulgare, L. Lagan side ; Maine River, Shane's Castle Park, &c.

Villarsia nymphaeoides, Vent. In the Lagan, and various parts of Lough Neagh.

Polemonium caeruleum, L. Near Bellaghy, &c.

Cuscuta Epilinum, Weihe. Flax fields at Moneymore, &c. ; Rathlin Island.

Anchusa sempervirens, L. Tandragee ; ruins of Greyabbey ; Portglenone ; Magherafelt ; Ballycastle ; near Bangor, &c.

Symphytum tuberosum, L. Rubbish heaps at the Antrim road, and near Carnmoney.

Veronica Buxbaumii, Ten. Loughgall ; Moneymore ; Comber ; fields at the Cave Hill ; Holywood Railway banks.

Veronica peregrina, L. Belfast and Londonderry.

Antirrhinum majus, L. Walls at Lisburn and Carrickfergus.

Tragopogon porrifolius, L. Sydenham Station ; and churchyard of Glenarm.

Carduus Marianus, L. Loughgall ; between Larne and Ballyclare ; between Newtownards and Greyabbey.

Centaurea Jacea, L. Roadside near Drumbridge ; fields at Belfast ; dry bank near Enagh Lough, County Derry.

Senecio Saracenicus, L. Balloch, County Down.

Artemisia campestris, L. Near Belfast.

Artemisia Absinthium, L. At Lambeg.

Gnaphalium luteo-album, L. At Lambeg.

Matricaria Parthenium, L. At Holywood; about the Deer Park, Cave Hill; roadside near Ballygeniff; Moyne Abbey, near Killala.

Campanula Rapunculus, L. Banks by the Old Lisburn Road, near Ballydrain.

Linaria Cymbalaria, L. Ballyronan; Crawfordsburn; Bryansford; Balloch; Newtownards.

Linaria repens, Ait. Antrim, and Curran of Larne.

Sibthorpia Europaea, L. Naturalised on the lawn of the Belfast Botanic Garden near the lodge.

Mentha viridis, L. Near Belfast, &c.

Asarum Europaeum, L. Waste places at village of Pettigoe.

Euphorbia Cyparissias, L. Crawfordsburn.

Euphorbia Lathyris, L. By the side of an old road near Carnmoney.

Humulus Lupulus, L. Formerly on the roadside near Malone, also at Greyabbey.

Anacharis Alsinastrum, Bab. Known to have been near Lisburn for more than twenty years, from which locality it has, doubtless, become more widely spread.

A D D E N D A .

THE habitat, frequency, and range of the following species have been inadvertently omitted in the text:—

- Page 2. *Ranunculus fluitans*. Britain, 50°—56°.
,, 4. *Caltha palustris*. Britain, 50°—61°.
,, 9. *Cochlearia officinalis*. Britain, 50°—61°.
,, 14. *Raphanus maritimus*. Britain, 50°—56°.
,, 25. *Hypericum quadrangulum*. Britain, 50°—58°.
,, 30. *Sarothamnus scoparius*. Britain, 50°—59°.
,, 69. *Carlina vulgaris*. Britain, 50°—58°. Ireland, S. to 55°.
,, 70. *Antennaria dioica*. Britain, 50°—61°. Throughout Ireland.
,, 76. *Vaccinium Myrtillus*. Woods and heaths. Frequent.
,, 80. *Erythraea Catifolia*. Sandy shores. Ireland?
,, 98. *Lysimachia vulgaris*. Wet places. Rather local. Range in Britain, 50°—58°. Throughout Ireland.
,, 119. 1. *Malaxis paludosa*, Sw.
,, 127. *Butomus umbellatus*. Ponds and lakes. Very rare.
,, 136. *Scirpus maritimus*. Salt marshes. Frequent.
,, 136. *Scirpus sylvaticus*. Marshy places. Rare.
,, 143. *Carex hirta*. Marshy places. Rather local.

E R R A T U M .

- ,, 147. For *Aira caryophyllaea*, read *A. caryophyllea*.

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