XXIV.—*Remarks on the Botany of the Antarctic Voyages. Flora of New Zealand,* Part I., *of* J. D. Hooker, M.D.R.N., F.R.S., &c. &c. *By* Ronald C. Gunn, Esq., F.L.S. [*Read 8th March,* 1853.]

The first part of the Flora of New Zealand, by Dr. J. D. Hooker, has recently arrived in the Colony, and as few persons are likely to possess copies of the work, it may be interesting to many to compare the Flora of those islands with that of Tasmania, lying, as they do, in the same latitude and not more than twenty degrees of longitude apart.

It may be as well to observe that the Flora of New Zealand forms the second part of the Botany of the Antarctic voyages of H. M. ships *Erebus* and *Terror*, and that as the Flora of Tasmania is to form the third and concluding portion, I will adopt with the present work the same course which I took with the "Flora Antarctica," (*vide* Tasmanian Journal, vol. iii. p. 66), and present in a tabular form the genera and species of the New Zealand Flora, so that its peculiarities may be seen at a glance.

The natural Orders and Genera *not* represented in Tasmania are distinguished by an asterisk.

Natural Orders.	Genera.	Total Species in New Zealand	Species common to New Zealand & Tasmania.
Ranunculaceæ	Clematis	5	
	* Myosurus	1	
	Ranunculus	12	1
	* Caltha	1	
Magnoliaceæ	* Drimys	1	
	Cardamine	2	
	Nasturtium	1	1
Cruciferæ	Barbarea	1	1
	Lepidium	2	
	Viola	2	
Violarieæ	Hymenanthera	1	
	* Melicytus	4	
Droseraceæ	Drosera	6	5
Pittosporeæ	Pittosporum	10	

Natural Orders.	Genera.	Total Species in New Zealand.	Species common to New Zealand & Tasmania.
Caryophylleæ	Stellaria	4	1
	Arenaria	1	1
	Colobanthus	1	1
Elatineæ	Elatine	1	1
Lineæ	Linum	1	1
Malvaceæ	* Hibiscus	1	
	Plagianthus	2	
	* Hoheria	2	
* Tiliaceæ	Entelea	1	
Elæocarpeæ	Elæocarpus	2	
	Aristotelia	2	
* Olacineæ	* Pennantia	1	
Hypericineæ	Hypericum	2	2
Sapindaceæ	* Alectryon	1	
	Dodonæa	1	1
Meliaceæ	* Hartighsea	1	
Geraniaceæ	Geranium	4	4
	Pelargonium	1	1
Oxalideæ	Oxalis	2	2
Rutaceæ	* Melicope	2	
	Phebalium	1	
* Coriaceæ	* Coriaria	2	
	Pomaderris	3	2
Rhamneæ	Discaria	1	1
Stackhouseæ	Stackhousea	1	
* Anacardiaceæ	* Corynocarpus	1	
	* Clianthus	1	
Leguminosæ	* Carmichælia	5	
	* Edwardsia	1	
Rosaceæ	Rubus	1	
	Potentilla	1	1
	Acæna	3	1
	Geum	2	1
Onagrarieæ	* Fuchsia	2	
	Epilobium	14	4
Haloragaceæ	Haloragis	4	3
	Myriophylum	2	2
	Callitriche	1	1
	Gunnera	2	
	* Metrosideros	9	
Myrtaceæ	* Myrtus	3	
	* Eugenia	1	
Cucurbitaceæ	Sicyos	1	1
* Passifloreæ	* Passiflora	1	
Portulaceæ	Claytonia	1	1
	Montia	1	1
Scleranthæ	Scleranthus	1	1
Crassolaceæ	Tillea... ..... [mum	4	2
Ficoideæ	Mesembryanthe-	1	1
	Tetragonia	1	1
Escallonieæ	* Carpodetus	1	
	* Quintinia	2	
Cunoniaceæ	* Ackama	1	
	Weinmannia	2	
	TOTAL	162	48

From the preceding table the following results appear :—

Of the 36 natural orders published, 30 are found in Tasmania,—

Of 69 Genera..... 43

Of 162 Species 48

Although it would thus appear that most of the natural orders, 43 out of the 69 genera, and upwards of one-fourth of the total number of species published in this number, are found in Van Diemen's Land, nevertheless the principal and main features of the Flora of the two countries must be strikingly different, from the total want in New Zealand of the two characteristic Australian genera, *Eucalyptus* and *Acacia ;* most of the 48 species, common to the two colonies, are herbaceous, and do not, therefore, strike the eye in the forest and larger masses of vegetation.

Until the whole work is completed it will be impossible, however, to make a minute comparison of the Floras of the two countries ; but the table will show that the natural orders, *Dilleniaceæ* and *Polygaleæ* and *Tremandreæ*, are entirely absent from New Zealand, although very common all over Tasmania.

In *Leguminosæ* there are also only 7 species, whereas Tasmania possesses at least 80 to 100.

The work is beautifully executed, and every one who feels the slightest interest in the Botany of the Southern Hemisphere ought to possess it. When completed, we will enter more fully into a comparison of the Botany of New Zealand and that of Tasmania.