

VIII. *On the Geographical Distribution of Ferns.* By J. G. BAKER, Esq., F.L.S.

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THERE is no extensive natural Order with the distribution of which we are nearly so well acquainted as we are with that of the Ferns. Their beauty and the popularity which they have enjoyed for the last twenty years has been such that all travellers in distant countries who have collected plants at all have paid a full share of attention to Ferns amongst the rest, and that many have neglected flowering plants altogether to concentrate their attention upon Ferns alone. The consequence is, that we now know so much about the distribution of the Order in the various parts of the world, that it is not likely that further discovery will modify materially our ideas of its general outlines. I do not know that any definite attempt has been made to reduce into systematic order the great body of information upon the subject which has been gradually accumulated; but, in the interests of that department of inquiry for which we still want one general comprehensive name (the study of the facts of the distribution of organized beings over the surface of the globe, and the laws which regulate those facts), it seems very desirable that such a classification should be attempted, especially for this reason, that if anywhere we may hope to find a large Order with distinctly marked and clearly definable climatic relations, it is here. Without a single prominent exception, we find that the whole Order, of between two and three thousand clearly marked species, requires shade and a damp atmosphere, that everywhere within the tropics there are no Ferns at all (or very few) in the dry countries and provinces, that, with the precision of an hygrometer, an increase in the fern-vegetation (it may be in species, or it may be in the number and luxuriance of individuals, but usually in both) marks the wooded humid regions, and that, receding from the tropics, although with latitude the species diminish in number, there is the same contrast between the two categories of climate—the dry continental type with a large, and the damp insular type with a small hiberno-æstival range. My aim, therefore, in the present paper is to bring together the leading facts of fern-dispersion in a form available for comparison and reference.

In the accompanying Table the ‘Synopsis Filicum’ (now in the press, planned and commenced by Sir William Hooker, which I have had the honour of being entrusted to carry on, and the material for which is now all prepared) has been followed implicitly for nomenclature and species-limitation. As has been already explained in the preface, we have included only the species respecting which we possess definite information, and have wished and intended to retain as species only such as are clearly separable. The application of this last test, employed as it has been with the help of an herbarium of fifty thousand specimens, a large proportion of them furnished or named by the leading writers on the subject, and a collection of the plates of Ferns which have been published which is complete for all practical purposes, has been to reduce the number of

recorded species to an extent which no one who has not made Ferns a special study is likely to anticipate. The great difficulty in botanical geography in comparing lists of species of one group or of one country with those of others is, that species are limited by different authors upon such widely different principles. The extent of this divergence amongst Ferns will be shown most clearly by a few figures. Where De Vriese has 94 Marattiaceæ, we have only been able to define 9; where Van den Bosch has 450 Hymenophyllaceæ, we have 149; where Presl has 21 species of *Osmunda*, we have 5; where Fée has 17 species of *Lomariopsis*, we can only define 1; where Sturm has 12 Brazilian species of *Lygodium*, we have only 2. The total number of species, in the Synopsis-sense of the term, which we have been able to make out is a little over 2200; but I am certainly within the mark in saying that if all the tribes were uniformly worked out upon the plan followed by all or any of the authors whose names have been quoted, we should have five or six thousand. All experience goes to show that if for botanico-geographical purposes we do not confine our numerical comparisons to well-marked species, we soon become entangled in a maze of confusion. The number of species which we have been able clearly to make out and define, of which there are not specimens in the Kew collection, is very small; and in the same way, in the following Table II. and the remarks founded upon it, in very few cases are they registered for districts without specimens having been actually examined. The districts adopted are as follows, viz.:—

1. The Arctic zone all round the world.
2. The rest of Europe and the extra-tropical part of Northern Africa, including the extra-tropical western islands. Species peculiar to these latter are marked C.
3. Temperate Asia. All the species in the third column marked with the figure 3 inhabit the temperate region of the Himalayas; but those marked S are confined to the subtropical zone on the southern flank of the Himalayan range. The few species peculiar to Western Asia are marked W; those peculiar to the rest of the continent outside the Himalayas are marked C, and those peculiar to Japan are marked J.
4. Temperate North America, not including any part of Mexico.
5. Extra-tropical South Africa, including the island of Tristan d'Acunha, the species peculiar to which, so far as this district is concerned, are marked T.
6. New Zealand, Van Diemen's Land, and temperate Australia, including the small south temperate islands. Species peculiar to the latter are marked N; those peculiar to Australia, with Van Diemen's Land, A; and those peculiar to New Zealand, Z.
7. Temperate South America.
8. Tropical Africa. Species peculiar to the eastern group of islands (Madagascar, Mauritius, Bourbon, and the Comoro Isles) marked M; to the Seychelles, marked S; to the east side of the continent, marked E; to the west side of the continent, marked W; to St. Helena, H; and to Ascension Island, A.
9. Tropical Asia, including the Malayan and tropical Polynesian islands. Species peculiar to the latter, marked M and P respectively, and species peculiar to Ceylon and peninsular Hindostan, marked H. Formosa, Hong Kong, tropical China, and the Philippines, and the Malay peninsula, are included under M. Species peculiar to Tropical Australia marked A.

10. Tropical America, including the whole of Mexico and Brazil. Species peculiar to the West-Indian Islands, marked I, should be under 9.

Table I. is intended to show roughly the area of the districts thus obtained, to which is added the temperature of a few selected stations at the sea-level.

TABLE I.

District.	Approximate area in millions of sq. miles.	Stations.	Temperature.		
			January.	July.	Difference.
1. Arctic	3	Torneo, Lapland	5°	59°	54°
		Siberia, 140°-130° East long.	-40	55	95
		East coast of Greenland	5	37	32
2. Temperate Europe and Africa	6	England	32-41	59-63	22-27
		Central Europe	23-32	63-72	40
		Moscow	14	65	51
		Barbary States	50-59	77-90	27-31
3. Temperate Asia	14	West Siberia	-5	59	64
		Pekin	26	77	51
		Palestine	50-59	80-85	26-30
4. Temperate North America	5½	Montreal	18	70	52
		Baltimore	32	73	41
		Fort Vancouver	34	65	31
5. Temperate South Africa	¾	Natal	77	70	7
		Cape Town	75	59	16
6. Temperate Australia and N. Zealand	2½	Sydney	70	50	20
		Van Diemen's Land	59	42	17
		New Zealand, north island	59	45	14
		" south island	55	41	14
7. Temperate South America	1¾	Valparaiso	68	54	14
		Buenos Ayres	72	55	17
		Cape Horn	42	34	8
8. Tropical Africa	10	Nubia	68	90	22
		Gold Coast	79	77	2
9. Tropical Asia and Polynesia	5½	Ceylon	77	81	4
		Mocha	77	90	13
10. Tropical America	6	Jamaica	77	81	4
		Amazon Valley	79	77	2

Table II. is a complete enumeration of species, with the districts in which they occur indicated:—

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
SUBORDER I. GLEICHENIACEÆ.										
1. <i>Platyzoma microphyllum</i> , <i>R. Br.</i> .....	..	A	..	..	A					
2. <i>Gleichenia moniliformis</i> , <i>Moore</i> .....	..	P								
3. — <i>polypodioides</i> , <i>Sm.</i> .....	..	..	W	..	..	5				
4. — <i>circinata</i> , <i>Sw.</i> .....	..	9	..	..	6					
5. — <i>rupestris</i> , <i>R. Br.</i> .....	..	..	..	..	A					
6. — <i>Boryi</i> , <i>Kunze</i> .....	..	..	M	..	..			
7. — <i>dicarpa</i> , <i>R. Br.</i> .....	..	9	..	..	6					
8. — <i>longissima</i> , <i>Blume</i> .....	..	9	..	..	..	..	..	3		
9. — <i>Bancroftii</i> , <i>Hook.</i>	10	..	..	..	..	
10. — <i>flabellata</i> , <i>R. Br.</i> .....	..	P	..	..	6					
11. — <i>tenera</i> , <i>R. Br.</i> .....	..	..	..	..	A					
12. — <i>Cunninghami</i> , <i>Hew.</i> .....	..	..	..	..	Z					
13. — <i>umbraculifera</i> , <i>Moore</i> .....	..	..	..	..	..	5				
14. — <i>pedalis</i> , <i>Kaulf.</i> .....	..	..	..	7	..					
15. — <i>cryptocarpa</i> , <i>Hook.</i> .....	..	..	..	7	..					
16. — <i>quadripartita</i> , <i>Hook.</i> .....	..	..	..	7	..					
17. — <i>revoluta</i> , <i>H., B. & K.</i>	10	..	..	..	..	
18. — <i>simplex</i> , <i>Hook.</i>	10	..	..	..	..	
19. — <i>pubescens</i> , <i>H., B. & K.</i>	10	..	..	..	..	
20. — <i>owhyhensis</i> , <i>Hook.</i> .....	..	P	..	..	..		
21. — <i>flagellaris</i> , <i>Spr.</i> .....	..	9	M	..	..			
22. — <i>hirta</i> , <i>Blume</i> .....	..	M	..	..	..		
23. — <i>vestita</i> , <i>Blume</i> .....	..	M	..	..	..		
24. — <i>pectinata</i> , <i>Presl</i>	10	..	..	..	..	
25. — <i>dichotoma</i> , <i>Willd.</i>	10	9	8	..	6	..	..	3		
SUBORDER II. POLYPODIACEÆ.										
Tribe I. CYATHEÆ.										
26. <i>Thyrsopteris elegans</i> , <i>Kunze</i> .....	..	..	..	7						
27. <i>Cyathea sinuata</i> , <i>Hook. & Gr.</i> .....	..	H	..	..	..		
28. — <i>Brunonis</i> , <i>Wall.</i> .....	..	M	..	..	..		
29. — <i>Hookeri</i> , <i>Thwaites</i> .....	..	H	..	..	..		
30. — <i>arborea</i> , <i>Smith</i>	10	..	..	..	..	
31. — <i>serra</i> , <i>Willd.</i>	10	..	..	..	..	
32. — <i>insignis</i> , <i>Eaton</i>	10	..	..	..	..	
33. — <i>Imrayana</i> , <i>Hook.</i>	10	..	..	..	..	
34. — <i>balanocarpa</i> , <i>Eaton</i>	I	..	..	..	..	
35. — <i>cuspidata</i> , <i>Kunze</i>	10	..	..	..	..	
36. — <i>divergens</i> , <i>Kunze</i>	10	..	..	..	..	
37. — <i>gracilis</i> , <i>Griseb.</i>	I	..	..	..	..	
38. — <i>Mettenii</i> , <i>Karst.</i>	10	..	..	..	..	
39. — <i>squamipes</i> , <i>Karst.</i>	10	..	..	..	..	
40. — <i>incana</i> , <i>Karst.</i>	10	..	..	..	..	
41. — <i>frondosa</i> , <i>Karst.</i>	10	..	..	..	..	
42. — <i>equestris</i> , <i>Kunze</i>	10	..	..	..	..	
43. — <i>Beyrichiana</i> , <i>Presl</i>	10	..	..	..	..	
44. — <i>vestita</i> , <i>Mart.</i>	10	..	..	..	..	
45. — <i>hirtula</i> , <i>Mart.</i>	10	..	..	..	..	
46. — <i>Schanschin</i> , <i>Mart.</i>	10	..	..	..	..	
47. — <i>Sprucei</i> , <i>Hook.</i>	10	..	..	..	..	
48. — <i>mexicana</i> , <i>Schlecht.</i>	10	..	..	..	..	
49. — <i>Gardneri</i> , <i>Hook.</i>	10	..	..	..	..	
50. — <i>ebenina</i> , <i>Karst.</i>	10	..	..	..	..	
51. — <i>microphylla</i> , <i>Mett.</i>	10	..	..	..	..	
52. — <i>Dregei</i> , <i>Kunze</i> .....	..	..	E	..	..	5				
53. — <i>Manniana</i> , <i>Hook.</i> .....	..	..	W	..	..			
54. — <i>Welwitschii</i> , <i>Hook.</i> .....	..	..	W	..	..			
55. — <i>Camerooniana</i> , <i>Hook.</i> .....	..	..	W	..	..			
56. — <i>Angolensis</i> , <i>Welw.</i> .....	..	..	W	..	..			
57. — <i>Kirkii</i> , <i>Hook.</i> .....	..	..	M	..	..			
58. — <i>Sechellarum</i> , <i>Mett.</i> .....	..	..	S	..	..			
59. — <i>excelsa</i> , <i>Sw.</i> .....	..	..	M	..	..			
60. — <i>canaliculata</i> , <i>Willd.</i> .....	..	..	M	..	..			
61. — <i>spinulosa</i> , <i>Wall.</i> .....	..	H	..	..	..	..	..	3		
62. — <i>crenulata</i> , <i>Blume</i> .....	..	M	..	..	..		
63. — <i>javanica</i> , <i>Blume</i> .....	..	M	..	..	..		
64. — <i>integra</i> , <i>J. Sm.</i> .....	..	M	..	..	..		
65. — <i>Sarawakensis</i> , <i>Hook.</i> .....	..	M	..	..	..		
66. — <i>assimilis</i> , <i>Hook.</i> .....	..	M	..	..	..		

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
67. <i>Cyathea Lobbiana</i> , Hook. ....	..	M								
68. — <i>hymenodes</i> , Mett. ....	..	M								
69. — <i>orientalis</i> , Moore ....	..	M								
70. — <i>arachnoidea</i> , Hook. ....	..	M								
71. — <i>Korthalsii</i> , Mett. ....	..	M								
72. — <i>Lindsayana</i> , Hook. ....	..		..	..	A					
73. — <i>medullaris</i> , Sw. ....	..	P	..	..	6					
74. — <i>Cunninghami</i> , Hook. fil. ....	..	..	..	..	Z					
75. — <i>dealbata</i> , Sw. ....	..	M	..	..	Z					
76. — <i>Aneitense</i> , Hook. ....	..	P								
77. — <i>nigricans</i> , Mett. ....	..	P								
78. — <i>leucolepis</i> , Mett. ....	..	P								
79. — <i>Milnei</i> , Hook. ....	..	..	..	..	N					
80. — <i>affinis</i> , Sw. ....	..	P	..	..	N					
81. — <i>Vieillardii</i> , Mett. ....	..	P								
82. <i>Hemitelia Karsteniana</i> , Kl.	10									
83. — <i>subincisa</i> , Kunze	10									
84. — <i>grandifolia</i> , Spr.	10									
85. — <i>horrida</i> , R. Br.	10									
86. — <i>petiolata</i> , Hook.	10									
87. — <i>speciosa</i> , Hook.	10									
88. — <i>Lindeni</i> , Hook.	10									
89. — <i>bella</i> , Reich.	10									
90. — <i>apiculata</i> , Hook.	10									
91. — <i>capensis</i> , R. Br.	10	M	..	..	..	5				
92. — <i>platylepis</i> , Hook.	10									
93. — <i>calolepis</i> , Hook.	10									
94. — <i>Wilsoni</i> , Hook.	I									
95. — <i>Moricandiana</i> , Kunze	10									
96. — <i>Guianensis</i> , Hook.	10									
97. — <i>Walkeræ</i> , Hook. ....	..	H								
98. — <i>denticulata</i> , Hook. ....	..	P								
99. — <i>Smithii</i> , Hook. ....	..	..	..	..	Z					
100. — <i>Junghuhniana</i> , Mett. ....	..	M	M							
101. <i>Alsophila blechnoides</i> , Hook.	10									
102. — <i>phegopteroides</i> , Hook.	10									
103. — <i>Tænitis</i> , Hook.	10									
104. — <i>elegans</i> , Mart.	10									
105. — <i>marginalis</i> , Klotzsch	10									
106. — <i>paleolata</i> , Mart.	10									
107. — <i>Miersii</i> , Hook.	10									
108. — <i>procera</i> , Kaulf.	10									
109. — <i>Schiediana</i> , Presl.	10									
110. — <i>armata</i> , Presl.	10									
111. — <i>Gardneri</i> , Hook.	10									
112. — <i>aspera</i> , R. Br.	10									
113. — <i>ferox</i> , Presl.	10									
114. — <i>leucolepis</i> , Mart.	10									
115. — <i>infesta</i> , Kunze	10									
116. — <i>elongata</i> , Hook.	10									
117. — <i>Pœppigii</i> , Hook.	10									
118. — <i>villosa</i> , Presl.	10	..	..	7						
119. — <i>plagiopteris</i> , Mart.	10									
120. — <i>hirta</i> , Kaulf.	10									
121. — <i>nigra</i> , Mart.	10									
122. — <i>radens</i> , Kaulf.	10									
123. — <i>pycnocarpa</i> , Kunze	10									
124. — <i>microphylla</i> , Kl.	10									
125. — <i>Salvinii</i> , Hook.	10									
126. — <i>Godmani</i> , Hook.	10									
127. — <i>sagittifolia</i> , Hook.	10									
128. — <i>melanopus</i> , Hook.	10									
129. — <i>Chimborazensis</i> , Hook.	10									
130. — <i>conjugata</i> , Spruce	10									
131. — <i>Sprucei</i> , Hook.	10									
132. — <i>aterrima</i> , Hook.	10									
133. — <i>pruinata</i> , Kaulf.	10	..	..	7						
134. — <i>frigida</i> , Karst.	10									
135. — <i>Mexicana</i> , Mart.	10									
136. — <i>myosuroides</i> , Liebm.	10									
137. — <i>Samoensis</i> , Brack. ....	..	P								
138. — <i>decurrens</i> , Hook. ....	..	P								

		Torrid zone.		South Temperate zone.		North Temperate zone.		Frigid zone.
139. <i>Alsophila truncata</i> , Brack.	..	P						
140. — <i>Novæ-Caledoniæ</i> , Mett.	..	P						
141. — <i>Tahitensis</i> , Brack.	..	P						
142. — <i>Leichhardtiana</i> , Muell.	..	..	..	..	A			
143. — <i>australis</i> , R. Br.	..	P	..	..	A			
144. — <i>Colensoi</i> , Hook. fil.	..	..	..	..	l			
145. — <i>excelsa</i> , R. Br.	..	..	..	..	A			
146. — <i>lunulata</i> , Brack.	..	P	..	..	..	..	J	
147. — <i>alternans</i> , Hook.	..	M						
148. — <i>Celebica</i> , Mett.	..	M						
149. — <i>comosa</i> , Hook.	..	M	..	..	..	..	S	
150. — <i>contaminans</i> , Wall.	..	M	..	..	..	..	S	
151. — <i>Rebecca</i> , Muell.	..	..	..	..	A			
152. — <i>Robertsiana</i> , Muell.	..	..	..	..	A			
153. — <i>crinita</i> , Hook.	..	9						
154. — <i>tomentosa</i> , Hook.	..	M						
155. — <i>caudata</i> , J. Sm.	..	M						
156. — <i>ramispina</i> , Hook.	..	M						
157. — <i>podophylla</i> , Hook.	..	M	..	..	..	..	C	
158. — <i>squamulata</i> , J. Sm.	..	M						
159. — <i>glabra</i> , Hook.	..	9	..	..	..	..	3	
160. — <i>latebrosa</i> , Hook.	..	9	..	..	..	..	S	
161. — <i>lurida</i> , Hook.	..	M						
162. — <i>crenulata</i> , Mett.	..	M						
163. — <i>tristis</i> , Blume	..	M						
164. — <i>subglandulosa</i> , Hance	..	M						
165. — <i>æthiopica</i> , Welw.	..	..	W					
166. — <i>obtusiloba</i> , Hook.	..	..	W					
167. <i>Dicalpe aspidioides</i> , Blume.	..	9	..	..	..	..	3	
168. <i>Matonia pectinata</i> , R. Br.	..	M						
Tribe 2. DICKSONIÆ.								
169. <i>Onoclea sensibilis</i> , L.	..	..	..	..	..	4	CJ	
170. — <i>germanica</i> , Willd.	..	..	..	..	..	4	C	2
171. — <i>orientalis</i> , Hook.	..	..	..	..	..	..	3	
172. <i>Hypoderris Brownii</i> , J. Sm.	I							
173. <i>Woodsia ilvensis</i> , R. Br.	..	..	..	..	..	4	3	2
174. — <i>hyperborea</i> , R. Br.	..	..	..	..	..	4	3	2
175. — <i>glabella</i> , R. Br.	..	..	..	..	..	4	3	2
176. — <i>lanosa</i> , Hook.	..	..	..	..	..	..	3	
177. — <i>mollis</i> , J. Sm.	10							
178. — <i>Guatemalensis</i> , Hook.	10							
179. — <i>caucasica</i> , J. Sm.	..	..	..	..	..	..	W	
180. — <i>elongata</i> , Hook.	..	..	..	..	..	..	3	
181. — <i>polystichoides</i> , Eaton	..	..	..	..	..	..	CJ	
182. — <i>manchuriensis</i> , Hook.	..	..	..	..	..	..	C	
183. — <i>Burgessiana</i> , Ger.	..	..	..	..	5	..		
184. — <i>obtusa</i> , Hook.	10	..	..	..	..	4		
185. — <i>Oregana</i> , Eaton	..	..	..	..	..	4		
186. — <i>scopulina</i> , Eaton	..	..	..	..	..	4		
187. — <i>incisa</i> , Gillies	..	..	..	7	..	..
188. — <i>Peruviana</i> , Hook.	10							
189. <i>Sphæropteris barbata</i> , Wall.	..	H	..	..	..	..	3	
190. <i>Dicksonia glauca</i> , Smith	..	P						
191. — <i>Barometz</i> , Link	..	9	..	..	..	..	S	
192. — <i>Menziesii</i> , Hook. & B.	..	P						
193. — <i>Chamissoi</i> , Hook. & B.	..	P						
194. — <i>Schiedel</i> , Hook. & B.	10							
195. — <i>arborescens</i> , L'Her.	..	..	H					
196. — <i>antarctica</i> , Lab.	..	P	..	..	6			
197. — <i>chrysotricha</i> , Moore	..	M						

				Torrid zone.			South Temperate zone.			North Temperate zone.		Frigid zone.
209.	Dicksonia	apiifolia, Sw.	10			M		A			S	
210.	—	rubiginosa, Kaulf.	10									
211.	—	flaccida, Sw.	..	P								
212.	—	Moluccana, Bl.	..	M								
213.	—	davallioides, R. Br.	..	A				A				
214.	—	Smithii, Hook.	..	M								
215.	—	obtusifolia, Willd.	10									
216.	—	scabra, Wall.	..	9						..	3	
217.	—	punctilobula, Hook.	..	..						..	4	
218.	—	appendiculata, Wall.	..	..						..	3	
219.	Deparia	prolifera, Hook.	..	P				A				
220.	—	concinna, Baker	10									
221.	—	Moorei, Hook.	..	P								
Tribe 3. HYMENOPHYLLÆ.												
222.	Loxosoma	Cunninghami, R. Br.	..	..			..	Z				
223.	Hymenophyllum	cruentum, Cav.	..	..			7					
224.	—	parvifolium, Baker	..	M								
225.	—	corticola, Hook.	..	H								
226.	—	marginatum, Hook. & Gr.	..	..			..	A				
227.	—	asplenioides, Sw.	10									
228.	—	abruptum, Hook.	10									
229.	—	mnioides, Baker	..	P								
230.	—	rarum, R. Br.	..	..	M		7	Z	5	..	J	
231.	—	capillaceum, Roxb.	..	..	H							
232.	—	gracile, Bory.	..	..	M		..	A				
233.	—	exsertum, Wall.	..	H			..			..	3	
234.	—	axillare, Sw.	10									
235.	—	reniforme, Hook.	10	..	..		7					
236.	—	crispum, H., B. & K.	10									
237.	—	undulatum, Sm.	10									
238.	—	myriocarpum, Hook.	10									
239.	—	microsorium, V. d. B.	..	..	..		..	..	..	..	3	
240.	—	polyanthos, Sw.	10	9	8		7	Z	..	..	3	
241.	—	andinum, V. d. B.	10									
242.	—	badium, Hook. & Gr.	..	M	..		..	..	..	..	S	
243.	—	Javanicum, Spreng.	..	9	..		..	6	..	..	3	
244.	—	demissum, Sw.	..	9	..		..	Z	..	..
245.	—	caudiculatum, Mart.	10	..	..		7					
246.	—	recurvum, Gaud.	..	P	..							
247.	—	flabellatum, Lab.	..	..	..		..	6				
248.	—	scabrum, Rich.	..	..	..		..	Z				
249.	—	dilatatum, Sw.	..	P	..		..	Z				
250.	—	fuciforme, Sw.	..	..	..		7					
251.	—	pulcherrimum, Col.	..	..	..		..	Z				
252.	—	Zollingerianum, Kze.	..	M	..							
253.	—	Borneense, Hook.	..	M	..							
254.	—	hirsutum, Sw.	10									
255.	—	Chiloense, Hook.	..	..	..		7					
256.	—	ciliatum, Sw.	10	..	M		7	Z				
257.	—	obtusum, Hook. & Arn.	..	P	..		..	..	5			
258.	—	æruginosum, Carm.	..	..	..		..	..	T			
259.	—	lanceolatum, Hook. & Arn.	..	P	..		..	..
260.	—	subtilissimum, Kze.	..	..	..		7	Z				
261.	—	hirtellum, Sw.	10									
262.	—	elasticum, Bory	..	..	M							
263.	—	Lindeni, Hook.	10									
264.	—	microcarpum, Desv.	10									
265.	—	valvatum, Hook. & Gr.	10									
266.	—	Sprucei, Baker	10									
267.	—	interruptum, Kze.	10									
268.	—	sericeum, Sw.	10									
269.	—	Malingii, Mett.	..	..	..		..	Z				
270.	—	lineare, Sw.	10	..	M							
271.	—	elegantulum, V. d. B.	10									
272.	—	Catherinæ, Hook.	10									
273.	—	Pastoensis, Hook.	10									
274.	—	Tunbridgense, Sm.	10	9	M		7	6	5	..	..	2
275.	—	Serra, Presl	..	..	..		7					
276.	—	tenerrimum, V. d. B.	10									
277.	—	Jamesoni, Hook.	10									
278.	—	barbatum, Baker	..	..	..		..	..	..	..	J	

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
351. <i>Trichomanes Lambertianum</i> , Hook.	10									
352. — <i>cæspitosum</i> , Hook.	7						
353. — <i>Javanicum</i> , Blume	9	M							
354. — <i>pinnatum</i> , Sw.	10	..	..	7						
355. — <i>tenue</i> , Brack.	P	..							
356. — <i>brevipes</i> , Baker	M	..							
357. — <i>Smithii</i> , Hook.	P	..							
358. — <i>caudatum</i> , Brack.	P	..	A						
359. — <i>tenerum</i> , Spreng.	10	..	..	..	..	T				
360. — <i>exsectum</i> , Kunze	7						
361. — <i>Colensoi</i> , Hook. fl.	Z					
362. — <i>trichoideum</i> , Sw.	10	..	..					
363. — <i>Lindeni</i> , Presl	10	I	..							
364. — <i>rigidum</i> , Sw.	10	9	8	..	Z	5	..	J		
365. — <i>meifolium</i> , Bory	9	..	..	N					
366. — <i>maximum</i> , Bl.	9	..							
367. — <i>Prieurii</i> , Kunze	10	..	..					
368. — <i>giganteum</i> , Bory	9	M							
369. — <i>Sprucei</i> , Baker	10	..	..					
370. — <i>gemmatum</i> , J. Sm.	10	9	..							
371. — <i>longisetum</i> , Bory	M	M	..	A					
372. — <i>feniculaceum</i> , Bory	M	M	..	A					
Tribe 4. DAVALLIÆ.										
373. <i>Davallia heterophylla</i> , Sm.	9	..							
374. — <i>angustata</i> , Wall.	9	..							
375. — <i>parallela</i> , Wall.	9	..							
376. — <i>pectinata</i> , Sm.	P	..							
377. — <i>sessilifolia</i> , Blume	9	..							
378. — <i>pedata</i> , Smith	9	M	..	A	..	..	J S		
379. — <i>alpina</i> , Blume	9	..	..	..	..	..	S		
380. — <i>pusilla</i> , Mett.	P	..							
381. — <i>vestita</i> , Blume	9	..							
382. — <i>Cumingii</i> , Hook.	M	..							
383. — <i>botrychioides</i> , Brack.	P	..							
384. — <i>Imrayana</i> , Hook.	10	..	..					
385. — <i>Parishii</i> , Hook.	M	..							
386. — <i>membranulosa</i> , Wall.	3		
387. — <i>immersa</i> , Wall.	9	..	..	..	..	..	3		
388. — <i>multidentata</i> , Hook.	3		
389. — <i>pulchra</i> , Don.	3		
390. — <i>falcinella</i> , Presl.	M	..							
391. — <i>Novæ-Zelandiæ</i> , Col.	Z						
392. — <i>chærophylla</i> , Wall.	9	..	..	..	..	..	3		
393. — <i>parvula</i> , Wall.	M	..							
394. — <i>affinis</i> , Hook.	9	..							
395. — <i>nodosa</i> , Hook.	M	..							
396. — <i>trichomanoides</i> , Hook.	P	..							
397. — <i>hymenophylloides</i> , Baker	M	..							
398. — <i>pulchella</i> , Hook.	9	..							
399. — <i>repens</i> , Desv.	9	M	..	..	..	..	S		
400. — <i>Parkeri</i> , Hook.	10	..	..					
401. — <i>triquetra</i> , Baker	9	..							
402. — <i>Blumeana</i> , Hook.	M	..							
403. — <i>Emersoni</i> , Hook. & Gr	9	..							
404. — <i>contigua</i> , Sw.	9	..							
405. — <i>triphylla</i> , Hook.	M	..							
406. — <i>pentaphylla</i> , Bl.	M	..							
407. — <i>Lobbiana</i> , Moore	M	..							
408. — <i>micans</i> , Mett.	3		
409. — <i>Moorei</i> , Hook.	P	..							
410. — <i>decurrens</i> , Hook.	M	..							
411. — <i>solida</i> , Sw.	9	..							
412. — <i>elegans</i> , Sw.	9	8	..	..	5				
413. — <i>epiphylla</i> , Blume	M	..							
414. — <i>divaricata</i> , Blume	M	..	..	..	..	..	S		
415. — <i>mauritiana</i> , Hook.	M							
416. — <i>Griffithiana</i> , Hook.	M	..	..	..	..	..	3		
417. — <i>pyxidata</i> , Cav.	A					
418. — <i>canariensis</i> , Sm.	2	
419. — <i>bullata</i> , Wall.	M	..	..	..	..	..	3		
420. — <i>Lorrainei</i> , Hance	M	..	..	..	..	..

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
421. <i>Davallia nitidula</i> , Kunze	..	..	W	..	..	5				
422. — <i>Fijiensis</i> , Hook.	..	P		..	..	..	
423. — <i>Hookeriana</i> , Wall.	..	M	..	..	..	..	..	S		
424. — <i>Saccoloma</i> , Spr.	10			..	..	..	
425. — <i>pinnata</i> , Cav.	..	9		..	..	..	..	J		
426. — <i>Wilfordii</i> , Baker	..	..	..	..	..	..	..	J		
427. — <i>pilosella</i> , Hook.	..	..	..	..	..	..	..
428. — <i>ciliata</i> , Hook.	..	M		..	..	..	..	3		
429. — <i>villosa</i> , Wall.	..	H	..	..	..	..	..	3		
430. — <i>strigosa</i> , Sw.	..	9	..	..	..	..	..	3		
431. — <i>platyphylla</i> , Don	..	H	..	..	..	..	..	S		
432. — <i>urophylla</i> , Hook.	..	..	..	..	..	..	..	S		
433. — <i>Thwaitesii</i> , Baker	..	H	..	..	..	..	..
434. — <i>inæqualis</i> , Kunze	10	9	..	..	..	..	..
435. — <i>campyleura</i> , Kunze	..	9	..	..	..	..	..
436. — <i>Denhami</i> , Hook.	..	P	..	..	..	..	..	3		
437. — <i>hirta</i> , Kaulf.	..	9	..	..	..	..	..	3		
438. — <i>speluncæ</i> , Baker	10	9	8	..	A	5	..	3		
439. — <i>concinna</i> , Schrad.	10	..	8	..	..	5	..			
440. — <i>gibberosa</i> , Sw.	..	P	..	..	..	..	..
441. — <i>nigrescens</i> , Hook.	..	..	W	..	..	..	..
442. — <i>fœniculacea</i> , Hook.	..	P	..	..	..	..	..
443. — <i>Goudotiana</i> , Kunze	..	..	M	..	..	..	..
444. — <i>bifida</i> , Kaulf.	10	..	..	..	..	..	..
445. — <i>scoparia</i> , Hook.	..	P	..	..	..	..	..
446. — <i>clavata</i> , Sw.	I	..	..	..	..	..	..
447. — <i>tenuifolia</i> , Sw.	..	9	M	..	..	..	..	3		
448. — <i>uncinella</i> , Kze.	..	I	..	..	..	..	..
449. — <i>aculeata</i> , Sw.	..	I	..	..	..	..	..
450. — <i>Melleri</i> , Hook.	..	..	M	..	..	..	..
451. — <i>fumarioides</i> , Sw.	..	I	..	..	..	..	..
452. — <i>Schlechtendahlia</i> , Pr.	10	..	..	..	..	..	..
453. — <i>Mannii</i> , Eaton	..	P	..	..	..	..	..
454. <i>Cystopteris fragilis</i> , Bernh.	10	P	8	7	6	5	4	3	2	1
455. — <i>alpina</i> , Desv.	..	..	..	..	..	..	..	W	2	
456. — <i>bulbifera</i> , Bernh.	..	..	..	..	..	..	4	..	2	
457. — <i>sudetica</i> , B. & M.	..	..	..	..	..	..	4	C	2	
458. — <i>montana</i> , Link	..	..	..	..	..	..	4		2	1
Tribe 5. LINDSAYÆÆ.										
459. <i>Lindsaya linearis</i> , Sw.	..	P	..	..	A	..	..	
460. — <i>falciformis</i> , Hook.	10	..	..	..	..	..	..
461. — <i>adiantoides</i> , J. Sm.	..	M	..	..	..	..	..
462. — <i>ovata</i> , J. Sm.	..	M	..	..	..	..	..
463. — <i>concinna</i> , J. Sm.	..	M	..	..	..	..	..
464. — <i>Seemanni</i> , J. Sm.	10	..	..	..	..	..	..
465. — <i>cultrata</i> , Sw.	..	9	M	..	A	..	..	3		
466. — <i>botrychioides</i> , St. Hil.	10	..	..	..	..	..	..
467. — <i>dubia</i> , Spr.	10	..	..	..	..	..	..
468. — <i>pectinata</i> , Blume	..	M	..	..	..	..	..	S		
469. — <i>scandens</i> , Hook.	..	M	..	..	..	..	..
470. — <i>Lapeyrousii</i> , Baker	..	P	..	..	..	..	..
471. — <i>filiformis</i> , Hook.	10	..	..	..	..	..	..
472. — <i>Catherinæ</i> , Hook.	10	..	..	..	..	..	..
473. — <i>virescens</i> , Sw.	10	..	..	..	..	..	..
474. — <i>flabellulata</i> , Dry.	..	9	..	..	..	..	..	S		
475. — <i>trapeziformis</i> , Dry.	10	9	..	..	..	..	..
476. — <i>Borneensis</i> , Hook.	..	M	..	..	..	..	..
477. — <i>Guianensis</i> , Dry.	10	..	..	..	..	..	..
478. — <i>stricta</i> , Dry.	10	..	..	..	..	..	..
479. — <i>rigida</i> , J. Sm.	..	M	..	..	..	..	..
480. — <i>Kirkii</i> , Hook.	..	..	S	..	..	..	..
481. — <i>pendula</i> , Klotzsch	10	..	..	..	..	..	..
482. — <i>Sprucei</i> , Hook.	10	..	..	..	..	..	..
483. — <i>Parishii</i> , Baker	..	M	..	..	..	..	..
484. — <i>reniformis</i> , Dry.	10	..	..	..	..	..	..
485. — <i>sagittata</i> , Dry.	10	..	..	..	..	..	..
486. — <i>Walkeræ</i> , Hook.	..	9	..	..	..	..	..
487. — <i>divergens</i> , Wall.	..	M	..	..	..	..	..
488. — <i>lanuginosa</i> , Wall.	..	M	E	..	A	..	..	
489. — <i>alutacea</i> , Mett.	..	P	..	..	..	..	..
490. — <i>trichomanoides</i> , Dry.	..	P	..	..	6	..	..	

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
491. <i>Lindsaya microphylla</i> , Dry.	..	..	..	..	6					
492. — <i>elongata</i> , Lab.	..	P	..	..				
493. — <i>retusa</i> , Mett.	..	9	..	•						
494. — <i>media</i> , R. Br.	..	A	..	..	A					
495. — <i>nitens</i> , Blume	..	9	..	..				
496. — <i>davallioides</i> , Bl.	..	M	..	..				
467. — <i>cordata</i> , Gaud.	..	M	..	..				
498. — <i>Gueriniana</i> , Gaud.	..	M	..	..				
499. — <i>ensifolia</i> , Sw.	10	9	8	..	A	5	..	S		
500. — <i>macrophylla</i> , Kaulf.	10	..	..	..	A					
501. — <i>Fraseri</i> , Hook.	..	9	M	..						
502. — <i>heterophylla</i> , Dry.	..	P	..	..				
503. — <i>pumila</i> , Hook.	..	P	..	..				
504. — <i>erecta</i> , Hook.	..	P	..	..				
505. — <i>falcata</i> , Hook.	..	P	..	..				
506. — <i>Michleriana</i> , Eaton	10	..	..	..			
507. <i>Dictyoxiphium panamense</i> , Hook	10	..	..	..			
Tribe 6. PTERIDÆ.										
508. <i>Adiantum reniforme</i> , L.	..	..	M	..	..	..	..	..	C	
509. — <i>Parishii</i> , Hook.	..	M	..	..	..	..	..	..
510. — <i>lunulatum</i> , Burm.	10	9	8	..	..	..	..	3		
511. — <i>Cantonense</i> , Hance	..	:	..	..	..	..	..	C		
512. — <i>caudatum</i> , L.	..	9	8	..	..	..	..	S		
513. — <i>calcareum</i> , Gard.	10	..	..	..	..	..	..
514. — <i>Kaulfussii</i> , Kze.	10	..	..	..	..	..	..
515. — <i>obliquum</i> , Willd.	10	..	..	..	..	..	..
516. — <i>Galeottianum</i> , Hook.	10	..	..	..	..	..	..
517. — <i>Peruvianum</i> , Kl.	10	..	..	..	..	..	..
518. — <i>subcordatum</i> , Sw.	10	..	..	..	..	..	..
519. — <i>intermedium</i> , Sw.	10	..	..	..	..	..	..
520. — <i>sinuosum</i> , Gard.	10	..	..	..	..	..	..
521. — <i>Shepherdii</i> , Hook.	10	..	..	..	..	..	..
522. — <i>diaphanum</i> , Bl.	..	9	..	..	A		..			
523. — <i>affine</i> , Willd.	..	..	..	..	2		..			
524. — <i>nigrescens</i> , Fée	I	..	..	..	..	..	..
525. — <i>trapeziforme</i> , L.	10	..	..	..	..	..	..
526. — <i>polyphyllum</i> , Willd.	10	..	..	..	..	..	..
527. — <i>glaucescens</i> , Kl.	10	..	..	..	..	..	..
528. — <i>Henslovianum</i> , Hook. fil.	10	..	..	..	..	..	..
529. — <i>cristatum</i> , L.	10	..	..	..	..	..	..
530. — <i>obtusum</i> , Desv.	10	..	..	..	..	..	..
531. — <i>hirtum</i> , Klotzsch	10	..	..	..	..	..	..
532. — <i>formosum</i> , Willd.	..	..	..	..	6		..			
533. — <i>cubense</i> , Hook.	I	..	..	..	..	..	..
534. — <i>fulvum</i> , Raoul	..	P	..	..	6		..			
535. — <i>pulchellum</i> , Bl.	..	9	..	..	..	..	..
536. — <i>crenatum</i> , Willd.	10	..	..	..	..	..	..
537. — <i>pectinatum</i> , Kze.	10	..	..	..	..	..	..
538. — <i>tetraphyllum</i> , Willd.	10	..	..	..	..	..	..
539. — <i>lucidum</i> , Sw.	10	..	..	..	..	..	..
540. — <i>Phyllitidis</i> , J. Sm.	10	..	..	..	..	..	..
541. — <i>macrophyllum</i> , Sw.	10	..	..	..	..	..	..
542. — <i>Seemannii</i> , Hook.	10	..	..	..	..	..	..
543. — <i>deltoideum</i> , Sw.	I	..	..	..	..	..	..
544. — <i>villosum</i> , L.	10	..	..	..	..	..	..
545. — <i>pulverulentum</i> , L.	10	..	..	..	..	..	..
546. — <i>incisum</i> , Presl	10	..	..	..	..	..	..
547. — <i>microphyllum</i> , Kl.	I	..	..	..	..	..	..
548. — <i>Capillus-veneris</i> , L.	10	9	8	..	..	5	4	3	2	
549. — <i>æthiopicum</i> , L.	10	9	8	7	6	5	4	..	2	
550. — <i>excisum</i> , Kunze	..	..	..	7	..	..	..	..	..
551. — <i>concinnum</i> , H. B. & K.	10	..	..	..	..	..	..	..	..
552. — <i>colpodes</i> , Moore	10	..	..	..	..	..	..	..	..
553. — <i>tenerum</i> , Sw.	10	..	..	..	..	..	..	..	..
554. — <i>cuneatum</i> , L. & F.	10	..	..	..	..	..	..	..	..
555. — <i>glaucophyllum</i> , Hook.	10	..	..	..	..	..	..	..	..
556. — <i>fragile</i> , Sw.	I	..	..	..	..	..	..	3	..	
557. — <i>venustum</i> , Don.	..	..	..	..	..	..	..	J	..	
558. — <i>monochlamys</i> , Eaton	..	..	..	..	..	..	..	..	..
559. — <i>digitatum</i> , Presl	10	..	..	..	..	..	..	..	..
560. — <i>Féei</i> , Moore	10	..	..	..	..	..	..	..	..

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
561. <i>Adiantum pedatum</i> , L. ....	..	..	..	..	..	..	4	3		
562. ——— <i>tetragonum</i> , Schrad.	10									
563. ——— <i>patens</i> , Willd.	10									
564. ——— <i>hispidulum</i> , Sw. ....	..	9	8	..	6					
565. ——— <i>flabellulatum</i> , L. ....	..	9	..	..	..	..	..	3		
566. ——— <i>Hewardia</i> , Kunze	10									
567. ——— <i>dolosum</i> , Kunze	10									
568. ——— <i>olivaceum</i> , Baker	10									
569. ——— <i>Leprieurii</i> , Hook.	10									
570. <i>Ochropteris pallens</i> , J. Sm. ....	..	..	M							
571. <i>Lonchitis pubescens</i> , Willd.	10	..	8	..	..	5				
572. ——— <i>occidentalis</i> , Baker ....	..	..	W							
573. <i>Hypolepis tenuifolia</i> , Bernh. ....	..	9	..	..	6					
574. ——— <i>distans</i> , Hook. ....	..	..	..	..	Z					
575. ——— <i>anthriscifolia</i> , Presl ....	..	..	8	..	..	5				
576. ——— <i>repens</i> , Presl.	10									
577. ——— <i>hostilis</i> , Presl.	10									
578. ——— <i>nigrescens</i> , Hook.	10									
579. ——— <i>Purdieana</i> , Hook.	10									
580. ——— <i>parallelogramma</i> , Hook.	10									
581. ——— <i>Millefolium</i> , Hook. ....	..	..	..	..	Z					
582. ——— <i>Bergiana</i> , Hook. ....	..	..	E	..	..	5				
583. ——— <i>Californica</i> , Hook. ....	..	..	..	..	..	..	4			
584. <i>Cheilanthes monticola</i> , Gard.	10									
585. ——— <i>Lindigii</i> , Mett.	10									
586. ——— <i>pteroides</i> , Sw. ....	..	M	..	..	..	5				
587. ——— <i>regularis</i> , Mett.	10									
588. ——— <i>paupercula</i> , Mett.	I									
589. ——— <i>radiata</i> , R. Br.	10									
590. ——— <i>capensis</i> , Sw. ....	..	..	..	..	..	5				
591. ——— <i>Kirkii</i> , Hook. ....	..	..	8							
592. ——— <i>pedata</i> , R. Br.	I									
593. ——— <i>propinqua</i> , Mett.	10									
594. ——— <i>dichotoma</i> , Sw.	10	..	..	7						
595. ——— <i>Seemannii</i> , Hook.	10									
596. ——— <i>Schimperi</i> , Hook. ....	..	..	E							
597. ——— <i>incisa</i> , Kunze.	10									
598. ——— <i>chlorophylla</i> , Sw.	10	..	..	7						
599. ——— <i>micropteris</i> , Sw.	10	..	..	7						
600. ——— <i>Matthewsii</i> , Kunze	10									
601. ——— <i>fragrans</i> , W. & B.	10	..	..	..	..	..	..	3	2	
602. ——— <i>arabica</i> , Dec. ....	..	W	E				4			
603. ——— <i>vestita</i> , Sw. ....	..	..	..	..	..	..	4			
604. ——— <i>pilosa</i> , Goldm.	10									
605. ——— <i>microphylla</i> , Sw.	10									
606. ——— <i>Mysurensis</i> , Wall. ....	..	9	..	..	..	..	..	C J		
607. ——— <i>fragilis</i> , Hook. ....	..	M	..	..	..	..	..
608. ——— <i>hirta</i> , Sw. ....	..	M	W	..	..	5	4			
609. ——— <i>viscosa</i> , Kaulf.	10	..	..	..	..	..	4			
610. ——— <i>hispanica</i> , Mett. ....	..	..	..	..	..	..	..
611. ——— <i>pulchella</i> , Bory. ....	..	..	..	..	..	..	..		2	
612. ——— <i>varians</i> , Hook. ....	..	M	..	..	..	..	..	S	C	
613. ——— <i>subvillosa</i> , Hook. ....	..	..	..	..	..	..	..	S		
614. ——— <i>Dalhousiae</i> , Hook. ....	..	..	..	..	..	..	..	3		
615. ——— <i>allosuroides</i> , Mett.	10									
616. ——— <i>Sieberi</i> , Kunze ....	..	P	..	..	6					
617. ——— <i>bullata</i> , Kunze ....	..	H	..	..	..	..
618. ——— <i>multifida</i> , Sw. ....	..	M	8	..	..	5				
619. ——— <i>Wrightii</i> , Hook. ....	..	..	..	..	..	..	4			
620. ——— <i>tenuifolia</i> , Sw. ....	..	9	..	..	6	..	..	S		
621. ——— <i>flexuosa</i> , Kunze	10									
622. ——— <i>induta</i> , Kunze ....	..	..	..	..	..	5				
623. ——— <i>lanuginosa</i> , Nutt. ....	..	..	..	..	..	..	4			
624. ——— <i>Szovitzii</i> , F. & M. ....	..	..	..	..	..	..	..	3	2	
625. ——— <i>gracillima</i> , Eaton ....	..	..	..	..	..	..	4			
626. ——— <i>Fendleri</i> , Hook. ....	..	..	..	..	..	..	4			
627. ——— <i>Lindheimeri</i> , Hook. ....	..	..	..	..	..	..	4			
628. ——— <i>myriophylla</i> , Desv.	10	H	..	7						
629. ——— <i>scariosa</i> , Kaulf.	10									
630. ——— <i>Eatoni</i> , Baker ....	..	..	..	..	..	..	4			
631. ——— <i>tomentosa</i> , Link	10	..	..	..	..	..	4			
632. ——— <i>lendigera</i> , Sw.	10									

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
633. <i>Cheilanthes speciosissima</i> , A. Br.	10									
634. — <i>rufa</i> , Desv.	10	..	..	..	..	..	..	S		
635. — <i>aurea</i> , Baker.	10									
636. — <i>aurantiaca</i> , Moore.	10									
637. — <i>Welwitschii</i> , Hook. ....	..	..	W							
638. — <i>argentea</i> , Hook.	10	M	..	..	..	..	..	3		
639. — <i>farinosa</i> , Kaulf.	10	9	8	..	..	..	..	3		
640. <i>Casebeera triphylla</i> , Kaulf.	10	..	..	7						
641. — <i>pinnata</i> , Kaulf.	10									
642. — <i>gleichenioides</i> , Gard.	10									
643. <i>Onychium melanolepis</i> , Dec. ....	..	..	E	..	..	..	..	W		
644. — <i>strictum</i> , Kunze.	I									
645. — <i>auratum</i> , Kaulf. ....	..	M	..	..	..	..	..	3		
646. — <i>japonicum</i> , Kunze. ....	..	M	..	..	..	..	..	3		
647. <i>Llavea cordifolia</i> , Lag.	10									
648. <i>Cryptogramme crispa</i> , R. Br. ....	..	..	..	..	..	..	4	3	2	1
649. <i>Pellaea auriculata</i> , Link. ....	..	..	..	..	..	5				
650. — <i>Breweri</i> , Eaton. ....	..	..	..	..	..	..	4			
651. — <i>Seemannii</i> , Hook.	10									
652. — <i>gracilis</i> , Hook. ....	..	..	..	..	..	..	4	3		
653. — <i>pilosa</i> , Hook. ....	..	..	M	..	..	..	
654. — <i>columbina</i> , Hook.	10									
655. — <i>geraniæfolia</i> , Fée.	10	9	E	7	A	5	..	C	..	
656. — <i>Tamburii</i> , Hook. ....	..	..	..	..	..	..	..	3	..	
657. — <i>deltoidea</i> , Baker. ....	..	..	..	..	..	5				
658. — <i>Skinneri</i> , Hook.	10									
659. — <i>rigida</i> , Hook.	10									
660. — <i>ambigua</i> , Baker.	10									
661. — <i>atropurpurea</i> , Link.	10	..	..	..	..	..	4			
662. — <i>dura</i> , Hook. ....	..	..	8	..	..	5				
663. — <i>ternifolia</i> , Fée.	10	P	..	7						
664. — <i>mucronata</i> , Eaton.	10	..	..	..	..	..	4			
665. — <i>profusa</i> , J. Sm. ....	..	..	..	..	..	5				
666. — <i>aspera</i> , Baker. ....	..	..	..	..	..	..	4			
667. — <i>Alabamensis</i> , Baker. ....	..	..	..	..	..	..	4			
668. — <i>intramarginalis</i> , J. Sm.	10									
669. — <i>ornithopus</i> , Hook. ....	..	..	..	..	..	..	4			
670. — <i>nitidula</i> , Baker. ....	..	..	..	..	..	..	..	3		
671. — <i>densa</i> , Hook. ....	..	..	..	..	..	..	4			
672. — <i>robusta</i> , Hook. ....	..	..	..	..	..	5				
673. — <i>Boivini</i> , Hook. ....	..	H	M	..	..	5				
674. — <i>andromedæfolia</i> , Fée.	10	..	..	7	..	5	4			
675. — <i>pulchella</i> , Fée.	10	..	..	..	..	..	4			
676. — <i>consobrina</i> , Hook. ....	..	..	8	..	..	5				
677. — <i>angustifolia</i> , Baker.	10									
678. — <i>glauca</i> , J. Sm.	10	..	..	7						
679. — <i>marginata</i> , Baker.	10	..	..	7						
680. — <i>Barklyæ</i> , Baker. ....	..	..	S							
681. — <i>Bridgesii</i> , Hook. ....	..	..	..	..	..	..	4			
682. — <i>rotundifolia</i> , Hook. ....	..	..	..	..	Z					
683. — <i>falcata</i> , Fée. ....	..	9	..	..	6					
684. — <i>paradoxa</i> , Hook. ....	..	..	..	..	A					
685. — <i>Doniana</i> , Hook. ....	..	..	8	..	..			
686. — <i>hastata</i> , Link. ....	..	..	8	..	..	5				
687. — <i>calomelanos</i> , Link. ....	..	..	8	..	..	5	..	3		
688. — <i>cordata</i> , J. Sm.	10	..	..	..	..	..	4			
689. — <i>Burkeana</i> , Baker. ....	..	..	..	..	..	5				
690. — <i>articulata</i> , Baker. ....	..	..	M	..	..			
691. <i>Pteris longifolia</i> , L.	10	9	8	..	A	5	..	S	2	
692. — <i>moluccana</i> , Blume. ....	..	9	..	..	..		
693. — <i>opaca</i> , J. Sm. ....	..	M	..	..	..		
694. — <i>cretica</i> , L.	10	9	8	..	..	5	4	3	2	
695. — <i>pellucida</i> , Presl. ....	..	9	W	..	..	..	..	S		
696. — <i>Hookeriana</i> , Ag. ....	..	H	..	..	..	..	..	3		
697. — <i>dactylina</i> , Hook. ....	..	..	..	..	..	..	..
698. — <i>umbrosa</i> , R. Br. ....	..	A	..	..	A		..			
699. — <i>serrulata</i> , L. fil. ....	..	..	..	..	..	5	..	C J		
700. — <i>crenata</i> , Sw. ....	..	9	..	..	..	..	..	S		
701. — <i>distans</i> , J. Sm. ....	..	M	..	..	..		
702. — <i>heteromorpha</i> , Fée. ....	..	M	..	..	..		
703. — <i>Griffithii</i> , Hook. ....	..	..	..	..	..		..	S		
704. — <i>madagascariæ</i> , Ag. ....	..	..	M	..	..			

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
705. <i>Pteris mutilata</i> , <i>L.</i>	I									
706. — <i>semipinnata</i> , <i>L.</i>	10	9	..	..	..	..	..	S		
707. — <i>paucinervata</i> , <i>Fée</i>	10									
708. — <i>litobrochioides</i> , <i>Kl.</i>	10									
709. — <i>marattiæfolia</i> , <i>Hook.</i> . . . . .	..		..	7						
710. — <i>Dalhousiæ</i> , <i>Hook.</i> . . . . .	..	M								
711. — <i>irregularis</i> , <i>Kaulf.</i> . . . . .	..	P								
712. — <i>quadriaurita</i> , <i>Retz.</i>	10	9	8	..	A	5	..	3		
713. — <i>longipinnula</i> , <i>Wall.</i> . . . . .	..	M	..	..	..	..	..	S		
714. — <i>excelsa</i> , <i>Gaud.</i> . . . . .	..	9	..	..	..	..	..	3		
715. — <i>pungens</i> , <i>Willd.</i>	I									
716. — <i>scabra</i> , <i>Bory</i> . . . . .	..	..	M							
717. — <i>paleacea</i> , <i>Roxb.</i> . . . . .	..	..	H							
718. — <i>Novæ-Caledoniæ</i> , <i>Hook.</i> . . . . .	..	P								
719. — <i>heterophylla</i> , <i>L.</i>	10									
720. — <i>gracilis</i> , <i>Fée</i>	10									
721. — <i>laciniata</i> , <i>Willd.</i>	10									
722. — <i>arguta</i> , <i>Ait.</i> . . . . .	..	..	..	..	..	..	..	..	2	
723. — <i>flabellata</i> , <i>Thunb.</i> . . . . .	..	..	8	..	..	5				
724. — <i>tremula</i> , <i>R. Br.</i> . . . . .	..	..	..	..	6					
725. — <i>Chilensis</i> , <i>Desv.</i>	10	..	W	7						
726. — <i>pellucens</i> , <i>Ag.</i> . . . . .	..	M	..	..	..	..	..	3		
727. — <i>deflexa</i> , <i>Link</i>	10									
728. — <i>coriacea</i> , <i>Desv.</i>	10									
729. — <i>brevisora</i> , <i>Baker</i> . . . . .	..	W								
730. — <i>aquilina</i> , <i>L.</i>	10	9	8	..	6	5	4	3	2	1
731. — <i>viscosa</i> , <i>Baker</i>	10	P	..	..				
732. — <i>scaberula</i> , <i>Rich.</i> . . . . .	..	..	..	..	Z					
733. — <i>rugulosa</i> , <i>Lab.</i> . . . . .	..	P								
734. — <i>lomariacea</i> , <i>Kunze</i>	10									
735. — <i>grandifolia</i> , <i>L.</i>	10									
736. — <i>biaurita</i> , <i>L.</i>	10	9	8	..	..	..	..	3		
737. — <i>patens</i> , <i>Hook.</i> . . . . .	..	9								
738. — <i>triplicata</i> , <i>Ag.</i> . . . . .	..	..	E							
739. — <i>Melleri</i> , <i>Baker</i> . . . . .	..	..	M							
740. — <i>Wallichiana</i> , <i>Ag.</i> . . . . .	..	M	..	..	..	..	..	3		
741. — <i>lonchophora</i> , <i>Mett.</i>	10									
742. — <i>sagittifolia</i> , <i>Raddi</i>	10									
743. — <i>ludens</i> , <i>Wall.</i> . . . . .	..	M								
744. — <i>ornithopus</i> , <i>Mett.</i>	10									
745. — <i>palmata</i> , <i>Willd.</i>	10	H								
746. — <i>pedata</i> , <i>L.</i>	10									
747. — <i>decipiens</i> , <i>Hook.</i> . . . . .	..	P								
748. — <i>Feliciennæ</i> , <i>Muell.</i> . . . . .	..	..	..	..	A					
749. — <i>decora</i> , <i>Brack.</i> . . . . .	..	P								
750. — <i>Vieillardii</i> , <i>Mett.</i> . . . . .	..	P								
751. — <i>lanceæfolia</i> , <i>Ag.</i> . . . . .	..	..	M							
752. — <i>splendens</i> , <i>Kaulf.</i>	10									
753. — <i>Mannii</i> , <i>Baker</i> . . . . .	..	..	W							
754. — <i>laurea</i> , <i>Desv.</i> . . . . .	..	..	M							
755. — <i>Curreri</i> , <i>Hook.</i> . . . . .	..	..	W							
756. — <i>denticulata</i> , <i>Sw.</i>	10									
757. — <i>Haenkeana</i> , <i>Presl.</i>	10									
758. — <i>pulchra</i> , <i>Schlecht.</i>	10									
759. — <i>macroptera</i> , <i>Link</i>	10									
760. — <i>vestita</i> , <i>Baker</i>	10									
761. — <i>Junghuhnii</i> , <i>Baker</i> . . . . .	..	M								
762. — <i>ciliaris</i> , <i>Eaton</i>	I									
763. — <i>spinulifera</i> , <i>Schum.</i> . . . . .	..	..	W							
764. — <i>woodwardioides</i> , <i>Bory</i> . . . . .	..	..	M							
765. — <i>Milneana</i> , <i>Baker</i> . . . . .	..	P	..	..	A					
766. — <i>decurrens</i> , <i>Presl</i>	10									
767. — <i>macilenta</i> , <i>Cunn.</i> . . . . .	..	..	..	..	Z					
768. — <i>comans</i> , <i>Forst.</i> . . . . .	..	P	..	7	6					
769. — <i>aculeata</i> , <i>Sw.</i>	10									
770. — <i>leptophylla</i> , <i>Sw.</i>	10									
771. — <i>incisa</i> , <i>Thunb.</i>	10	9	8	7	6	5	..	3		
772. — <i>tripartita</i> , <i>Sw.</i> . . . . .	..	9	8	..	A	..	..	S		
773. — <i>Luschnathiana</i> , <i>Baker</i>	10									
774. — <i>podophylla</i> , <i>Sw.</i>	10									
775. — <i>Kunzeana</i> , <i>Ag.</i>	10									
776. — <i>elata</i> , <i>Ag.</i>	10									

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
777. <i>Pteris gigantea</i> , Willd.	10									
778. — <i>latifolia</i> , H., B. & K.	10									
779. <i>Ceratopteris thalictroides</i> , Brong.	10	9	8	..	..	..	..	S		
780. <i>Lomaria Patersoni</i> , Spr. ....	..	9	..	..	6					
781. — <i>Vieillardii</i> , Baker ....	..	P								
782. — <i>ciliata</i> , Moore ....	..	P								
783. — <i>gibba</i> , Lab. ....	..	P								
784. — <i>discolor</i> , Willd. ....	..	..	..	..	6					
785. — <i>attenuata</i> , Willd.	10	P	8	7	6	5				
786. — <i>Lherminieri</i> , Bory	10	..	..	7						
787. — <i>divergens</i> , Kunze	10									
788. — <i>vulcanica</i> , Blume ....	..	9	..	..	6					
789. — <i>opaca</i> , Baker ....	..	P								
790. — <i>lanceolata</i> , Spr. ....	..	P	..	..	6					
791. — <i>blechnoides</i> , Bory ....	..	..	..	7						
792. — <i>dura</i> , Moore ....	..	..	..	..	N					
793. — <i>aspera</i> , Klotzsch ....	..	..	..	7						
794. — <i>onocleoides</i> , Spr.	10									
795. — <i>obtusata</i> , Lab. ....	..	P								
796. — <i>Spicant</i> , Desv. ....	..	..	..	..	..	..	4	C J	2	1
797. — <i>alpina</i> , Spr.	10	..	..	7	6	T				
798. — <i>Banksii</i> , Hook. fil. ....	..	..	..	..	Z					
799. — <i>pumila</i> , Raoul ....	..	..	..	..	Z					
800. — <i>punctulata</i> , Kunze ....	..	..	M	..	..	5				
801. — <i>procera</i> , Spr.	10	9	..	7	6	5				
802. — <i>caudata</i> , Baker	10									
803. — <i>Boryana</i> , Willd.	10	..	8	7	..	5				
804. — <i>acuta</i> , Desv.	10									
805. — <i>filiformis</i> , Cunn. ....	..	P	..	..	Z					
806. — <i>Germainii</i> , Hook. ....	..	..	..	7	..	..	..	J		
807. — <i>nigra</i> , Colen. ....	..	..	..	..	Z					
808. — <i>fluviatilis</i> , Spr. ....	..	..	..	..	6					
809. — <i>membranacea</i> , Col. ....	..	..	..	..	Z					
810. — <i>diversifolia</i> , Baker ....	..	P								
811. — <i>Lenormandi</i> , Baker ....	..	P								
812. — <i>Fraseri</i> , Cunn. ....	..	..	..	..	Z					
813. — <i>volubilis</i> , Hook.	10									
814. — <i>semicordata</i> , Baker	10									
815. — <i>adnata</i> , Blume ....	..	M	..	..	..	..	..	S		
816. — <i>glauca</i> , Blume ....	..	M	..	..	..	..	..	3		
817. — <i>pycnophylla</i> , Kunze ....	..	M	..	..	..	..	..	3		
818. — <i>euphlebia</i> , Kunze ....	..	M	..	..	A	..	..	3		
Tribe 7. BLECHNEÆ.										
819. <i>Blechnum lanceola</i> , Sw.	10									
820. — <i>asplenioides</i> , Sw.	10									
821. — <i>unilaterale</i> , Willd.	10									
822. — <i>cartilagineum</i> , Sw. ....	..	..	..	..	A					
823. — <i>nitidum</i> , Presl	10	M	..	..	..	..	..	S		
824. — <i>brasiliense</i> , Desv.	10									
825. — <i>longifolium</i> , H., B. & K.	10									
826. — <i>Fendleri</i> , Hook.	10									
827. — <i>occidentale</i> , L.	10	..	..	7						
828. — <i>arcuatum</i> , C. Gay ....	..	..	..	7						
829. — <i>hastatum</i> , Kaulf. ....	..	..	..	7						
830. — <i>australe</i> , L. ....	..	..	M	..	..	5				
831. — <i>lævigatum</i> , Cav. ....	..	..	..	..	A					
832. — <i>serrulatum</i> , Rich.	10	9	..	..	A	..	4	S		
833. — <i>orientale</i> , L. ....	..	9	..	..	A	..	..	3		
834. — <i>melanopus</i> , Hook. ....	..	..	..	..	..	..	..	S		
835. — <i>Finlaysonianum</i> , Wall. ....	..	M								
836. — <i>volubile</i> , Kaulf.	10									
837. <i>Sadleria cyatheoides</i> , Kaulf. ....	..	9								
838. — <i>squarrosa</i> , Gaud. ....	..	P								
839. <i>Woodwardia radicans</i> , Sm.	10	M	..	..	..	..	4	3	2	
840. — <i>orientalis</i> , Sw. ....	..	..	..	..	..	..	..	C J		
841. — <i>Virginica</i> , Sm. ....	..	..	..	..	..	..	4			
842. — <i>japonica</i> , Sw. ....	..	..	..	..	..	..	..	C J		
843. — <i>areolata</i> , Moore ....	..	..	..	..	..	..	4			
844. — <i>Harlandii</i> , Hook. ....	..	M								
845. <i>Doodia aspera</i> , R. Br. ....	..	..	..	..	A					
846. — <i>blechnoides</i> , Cunn. ....	..	..	..	..	A					

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
847. <i>Doodia dives</i> , Kunze .....	..	9								
848. — <i>media</i> , R. Br. ....	..	P	..	..	6					
849. — <i>caudata</i> , R. Br. ....	..	P	..	..	6					
Tribe 8. ASPLENIEÆ.										
850. <i>Asplenium nidus</i> , L. ....	..	9	M	..	A	..	..	3		
851. — <i>Grevillei</i> , Wall. ....	..	..	..	..	..	..	..	2		
852. — <i>Simonsianum</i> , Hk. ....	..	..	..	..	..	..	..	2		
853. — <i>ensiforme</i> , Wall. ....	..	9	..	..	..	..	..	2		
854. — <i>angustum</i> , Sw.	10									
855. — <i>concolor</i> , Hook. ....	..	M	W							
856. — <i>sinuatum</i> , Beauv. ....	..	..	W							
857. — <i>Currori</i> , Hook. ....	..	..	W							
858. — <i>coriaceum</i> , Baker .....	..	..	W							
859. — <i>squamulatum</i> , Bl. ....	..	M								
860. — <i>scolopendrioides</i> , J. Sm. ....	..	M								
861. — <i>Sundense</i> , Blume .....	..	9								
862. — <i>Fijiense</i> , Brack. ....	..	P								
863. — <i>simplicifrons</i> , Muell. ....	..	..	..	..	A	..	..	S		
864. — <i>Griffithianum</i> , Hook. ....	..	..	..	..	..	..	..
865. — <i>Gautieri</i> , Hook. ....	..	..	M							
866. — <i>serratum</i> , L.	10	P								
867. — <i>subhastatum</i> , Hook.	10									
868. — <i>trilobum</i> , Cav.	10			7						
869. — <i>Hemionitis</i> , L. ....	..	..	W	..	..	..	..	2		
870. — <i>attenuatum</i> , R. Br. ....	..	..		..	A	..				
871. — <i>variable</i> , Hook. ....	..	..	W							
872. — <i>pinnatifidum</i> , Nutt. ....	..	..	..	..	..	..	4	3		
873. — <i>alternans</i> , Wall. ....	..	..	E	..	..	..	..	3		
874. — <i>projectum</i> , Kunze	10						4	3	2	1
875. — <i>viride</i> , Huds. ....	..	..	..	..	..	..
876. — <i>Kraussii</i> , Moore .....	..	..	..	..	..	5				
877. — <i>fragile</i> , Presl	10									
878. — <i>Gilliesianum</i> , Hook. ....	..	..	..	7						
879. — <i>vagans</i> , Baker .....	..	..	W							
880. — <i>flabellifolium</i> , Cav. ....	..	..	..	..	A					
881. — <i>Quitense</i> , Hook.	10									
882. — <i>Sandersoni</i> , Hook. ....	..	..	8	..	..	5				
883. — <i>dentatum</i> , L.	10									
884. — <i>pygmaeum</i> , Hook. ....	..	..	M							
885. — <i>Heuffteri</i> , Reich. ....	..	..	..	..	..	..	..	2		
886. — <i>Trichomanes</i> , L.	10	P	..	..	6	5	4	3	2	
887. — <i>arcuatum</i> , Liebm.	10									
888. — <i>extensum</i> , Fée	10									
889. — <i>Petrarchæ</i> , DC. ....	..	..	..	..	..	..	..	2		
890. — <i>monanthemum</i> , L.	10	P	E	7	..	5	..	..	C	
891. — <i>multijugum</i> , Wall. ....	..	H	..	..	..	..	..	3		
892. — <i>subavenium</i> , Hook. ....	..	M	M							
893. — <i>ebeneum</i> , Ait.	10	..	..	..	..	5	4	3	2	
894. — <i>septentrionale</i> , L. ....	..	..	..	..	..	..	4	3	2	
895. — <i>Seelosii</i> , Lieb. ....	..	..	..	..	..	..	..	..	2	
896. — <i>angustifolium</i> , Mich. ....	..	..	..	..	..	..	4			
897. — <i>multilineatum</i> , Hook. ....	..	P								
898. — <i>longissimum</i> , Blume .....	..	M	M							
899. — <i>Wightianum</i> , Wall. ....	..	H	..							
900. — <i>Sumatranum</i> , Hook. ....	..	9	..							
901. — <i>salignum</i> , Blume .....	..	M								
902. — <i>alatum</i> , H., B. & K.	10									
903. — <i>Vieillardii</i> , Mett. ....	..	P								
904. — <i>salicifolium</i> , L.	10									
905. — <i>longicauda</i> , Hook. ....	..	..	W							
906. — <i>emarginatum</i> , Beauv. ....	..	..	W							
907. — <i>virens</i> , Presl	10									
908. — <i>vulcanicum</i> , Bl. ....	..	M								
909. — <i>oligophyllum</i> , Kaulf.	10	M								
910. — <i>tenerum</i> , Forst. ....	..	9	W							
911. — <i>lineatum</i> , Sw. ....	..	..	M							
912. — <i>prionurus</i> , J. Sm. ....	..	M								
913. — <i>erectum</i> , Bory	10	9	8	7	..	5				
914. — <i>persicifolium</i> , J. Sm. ....	..	9								
915. — <i>obtusifolium</i> , L.	10									
916. — <i>fuliginosum</i> , Hook. ....	..	M								

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
917. <i>Asplenium Borneense</i> , Hook.	..	M								
918. — <i>firmum</i> , Kunze	10									
919. — <i>cultrifolium</i> , L.	10									
920. — <i>auriculatum</i> , Sw.	10									
921. — <i>Prionitis</i> , Kunze	..	..	W	..	..	5				
922. — <i>anisophyllum</i> , Kunze	10	..	8	..	..	5				
923. — <i>Wrightii</i> , Eaton	..	..	..	..	..	..	..	J		
924. — <i>rhizophorum</i> , L.	10	P								
925. — <i>anisodontum</i> , Pr.	..	M								
926. — <i>contiguum</i> , Kaulf.	..	9								
927. — <i>hirtum</i> , Kaulf.	..	9	M							
928. — <i>hastatum</i> , Klotzsch	10	..	..	7						
929. — <i>enatum</i> , Brack.	..	P								
930. — <i>compressum</i> , Sw.	..	..	H							
931. — <i>vomeriforme</i> , Hook.	10									
932. — <i>macrosporum</i> , Bert.	..	..	..	7						
933. — <i>nitens</i> , Sw.	..	..	M							
934. — <i>platybasis</i> , Kunze	..	..	H							
935. — <i>serra</i> , L. & F.	10	..	W	..	..	5				
936. — <i>marinum</i> , L.	10	..	..	..	..	..	4	..	2	
937. — <i>obtusatum</i> , Forst.	10	..	..	7	6	T				
938. — <i>gemmiferum</i> , Schrad.	..	..	8	..	..	5				
939. — <i>auritum</i> , Sw.	10	H	M							
940. — <i>paleaceum</i> , R. Br.	..	A								
941. — <i>Hancei</i> , Baker	..	M								
942. — <i>erosum</i> , L.	I									
943. — <i>falcatum</i> , L.	..	9	8	..	6					
944. — <i>caudatum</i> , Forst.	..	9	M	..	A					
945. — <i>dimidiatum</i> , Sw.	10	..	W							
946. — <i>macrophyllum</i> , Sw.	..	9	M	..	..	..	..	S		
947. — <i>paradoxum</i> , Blume	..	M								
948. — <i>obesum</i> , Baker	10									
949. — <i>formosum</i> , Willd.	10	H	W							
950. — <i>pulchellum</i> , Raddi	10									
951. — <i>resectum</i> , Sm.	..	9	8	..	..	..	..	3		
952. — <i>lætum</i> , Sw.	10									
953. — <i>heterocarpum</i> , Wall.	..	9	..	..	..	..	..	S		
954. — <i>planicaule</i> , Wall.	..	H	..	..	..	..	..	3		
955. — <i>laciniatum</i> , Don	..	..	..	..	..	..	..	3		
956. — <i>bisectum</i> , Sw.	10									
957. — <i>horridum</i> , Kaulf.	..	9								
958. — <i>protensum</i> , Schrad.	..	..	7	..	..	5				
959. — <i>Hallii</i> , Hook.	10									
960. — <i>mucronatum</i> , Presl	10									
961. — <i>bipartitum</i> , Bory	..	..	M							
962. — <i>pumilum</i> , Sw.	10	..	E							
963. — <i>germanicum</i> , Weiss	..	..	..	..	..	..	..		2	
964. — <i>Ruta-muraria</i> , L.	..	..	..	..	..	5	4	3	2	1
965. — <i>Hookerianum</i> , Col.	..	..	..	..	Z					
966. — <i>magellanicum</i> , Kaulf.	..	..	..	7						
967. — <i>fissum</i> , Kit.	..	..	..	..	..	..	..		2	
968. — <i>sepulchrale</i> , Hook.	..	..	..	..	..	..	..	C J		
969. — <i>montanum</i> , Willd.	..	..	..	..	..	..	4			
970. — <i>Adiantum-nigrum</i> , L.	..	P	8	..	..	5	..	3	2	
971. — <i>solidum</i> , Kunze	..	..	..	..	..	5				
972. — <i>dissectum</i> , Brack.	..	P								
973. — <i>cuneatum</i> , Lam.	10	9	8	..	..	5				
974. — <i>furcatum</i> , Thunb.	10	9	8	..	A	5	..	3	C	
975. — <i>affine</i> , Sw.	..	9	M							
976. — <i>nitidum</i> , Sw.	..	9	..	..	..	..	..	3		
977. — <i>laserpitifolium</i> , Lam.	..	9	..	..	..	5	..	S		
978. — <i>nigritianum</i> , Hook.	..	..	W							
979. — <i>scandicinum</i> , Kaulf.	10									
980. — <i>fragrans</i> , Sw.	10									
981. — <i>Blakistoni</i> , Baker	..	..	..	..	..	..	..	C		
982. — <i>fontanum</i> , Bernh.	10	..	..	..	..	..	..	3	2	
983. — <i>varians</i> , Hook. & Gr.	..	H	..	..	..	5	..	3		
984. — <i>incisum</i> , Thunb.	..	..	..	..	..	..	C J			
985. — <i>lanceolatum</i> , Huds.	..	..	H	..	..	..	..	..	2	
986. — <i>angustatum</i> , Presl	10									
987. — <i>adiantoides</i> , Raddi	10									
988. — <i>Wardii</i> , Hook.	..	..	..	..	..	..	..	J		

		Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
989. <i>Asplenium pseudo-nitidum</i> , Rad.	10										
990. — <i>Jamesoni</i> , Hook.	10										
991. — <i>acuminatum</i> , H. & A.	..	P									
992. — <i>squamosum</i> , L.	10										
993. — <i>bulbiferum</i> , Forst.	10	9	M	..	6	5	..	3			
994. — <i>triphyllum</i> , Presl	10										
995. — <i>repens</i> , Hook.	10										
996. — <i>delicatulum</i> , Presl	10										
997. — <i>divaricatum</i> , Kunze	10	..	..	7							
998. — <i>Gibertianum</i> , Hook.	..	..	..	7							
999. — <i>Colensoi</i> , Hook. fil.	..	..	..	..	Z						
1000. — <i>Fadyeni</i> , Hook.	I										
1001. — <i>tenuifolium</i> , Don	..	9	..	..	..	..	..	3			
1002. — <i>rhizophyllum</i> , Kunze	10	P	..	..	..	5	4				
1003. — <i>rutaceum</i> , Mett.	10	..	..	..	..	5					
1004. — <i>cicutarium</i> , Sw.	10	..	8	..	..	5					
1005. — <i>Mannii</i> , Hook.	..	..	8	..	..	5					
1006. — <i>brachypterum</i> , Kunze	..	..	8	..	..	5					
1007. — <i>Dregeanum</i> , Kunze	..	..	..	..	..	5					
1008. — <i>obtusilobum</i> , Hook.	..	P									
1009. — <i>dichotomum</i> , Hook.	..	M									
1010. — <i>bipinnatifidum</i> , Brack.	..	P									
1011. — <i>davallioides</i> , Hook.	..	M	..	..	..	..	..	C J			
1012. — <i>irregulare</i> , Baker	..	..	W	..	..	..	..
1013. — <i>Richardi</i> , Hook. fil.	..	..	..	..	Z	..	..		
1014. — <i>flaccidum</i> , Forst.	..	P	..	..	6	5	..	S			
1015. — <i>rutæfolium</i> , Kunze	..	P	E	..	..	5	..				
1016. — <i>borbonicum</i> , Hook.	..	..	M	..	..	..	..
1017. — <i>Belangeri</i> , Kunze	..	M		..	..	5					
1018. — <i>Thunbergii</i> , Kunze	..	..	W	..	..	..	..
1019. — <i>viviparum</i> , Presl	..	M		..	..	..	..
1020. — <i>Novæ-Caledoniæ</i> , Hook.	..	P		..	..	..	..
1021. — <i>dimorphum</i> , Kunze	..	..	..	..	N	..	..		
1022. — <i>scandens</i> , J. Sm.	..	9	..	..	..	..	..
1023. — <i>multifidum</i> , Brack.	..	P		..	..	..	..
1024. — <i>Powellii</i> , Baker	..	P		..	..	..	..
1025. — <i>ferulaceum</i> , Moore	10			..	..	..	..
1026. — <i>Hillebrandi</i> , Baker	..	9	..	..	..	..	..	C J	2	1	
1027. — <i>crenatum</i> , Fries	..	..	..	..	..	..	..	C			
1028. — <i>spinulosum</i> , Baker	..	..	..	..	..	..	..	3			
1029. — <i>subtriangulare</i> , Hook.	..	..	..	..	..	..	..	J			
1030. — <i>medium</i> , Hook.	..	..	..	..	..	T	..	S			
1031. — <i>cystopteroides</i> , Hook.	..	..	..	..	..	..	..
1032. — <i>Hohenackerianum</i> , Kunze	..	9	..	..	..	..	..
1033. — <i>grammitoides</i> , Hook.	..	9	..	..	..	..	..
1034. — <i>thelypteroides</i> , Michx.	..	M	..	..	..	4	3				
1035. — <i>decurtatum</i> , Link	10		..	..	..	..	..
1036. — <i>deparioides</i> , Brack.	..	P		..	..	..	..
1037. — <i>Skinneri</i> , Baker	10			..	..	..	..
1038. — <i>achilleæfolium</i> , Liebm.	10			..	..	..	..
1039. — <i>macrocarpum</i> , Blume	..	9	..	..	..	..	..	3			
1040. — <i>nigripes</i> , Blume	..	9	..	..	..	..	..	3			
1041. — <i>niponicum</i> , Mett.	..	..	..	..	..	..	..	J			
1042. — <i>Filix-fœmina</i> , Bernh.	10	9	8	7	..	5	4	3	2	1	
1043. — <i>oxyphyllum</i> , Hook.	..	M	..	..	..	..	..	3			
1044. — <i>aspidioides</i> , Schlecht.	10	9	8	..	..	5	..				
1045. — <i>brevisorum</i> , Wall.	..	9	..	..	..	..	..	S			
1046. — <i>conchatum</i> , Moore	I			..	..	..	..
1047. — <i>fimbriatum</i> , Hook.	..	..	..	..	..	..	..	3			
1048. — <i>umbrosum</i> , J. Sm.	10	9	W	..	6	..	..	3	C		
1049. — <i>woodwardioides</i> , Baker	..	M		..	..	..	..
1050. — <i>lanceum</i> , Thunb.	..	H	..	..	..	..	..	S			
1051. — <i>subseriatum</i> , Bl.	..	M		..	..	..	..
1052. — <i>plantagineum</i> , L.	10			..	..	..	..
1053. — <i>zeylanicum</i> , Hook.	..	H		..	..	..	..
1054. — <i>humile</i> , Baker	..	..	M	..	..	..	..
1055. — <i>pallidum</i> , Bl.	..	M		..	..	..	..
1056. — <i>porrectum</i> , Wall.	..	M		..	..	..	..
1057. — <i>cultratum</i> , Mett.	..	M		..	..	..	..
1058. — <i>pinnatifido-pinnatum</i> , Hook.	..	..	..	..	..	..	..	S			
1059. — <i>Seemannii</i> , Baker	10			..	..	..	..
1060. — <i>bantamense</i> , Baker	..	9	..	..	..	..	..	S			

		Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1061. <i>Asplenium Lechleri</i> , Mett.	10										
1062. — <i>Callipteris</i> , Baker	10										
1063. — <i>grandifolium</i> , Sw.	10	M									
1064. — <i>flavescens</i> , Mett.	10										
1065. — <i>rhoifolium</i> , Mett.	10										
1066. — <i>celtidifolium</i> , Kunze	10	M									
1067. — <i>sylvaticum</i> , Presl	10	9	8								
1068. — <i>arboresum</i> , Willd.	10										
1069. — <i>Wichurae</i> , Mett.	10	..	..	..	..	..	..	J			
1070. — <i>Shepherdii</i> , Spr.	10										
1071. — <i>semihastatum</i> , Kunze	I										
1072. — <i>longifolium</i> , Don .....	..	..	..	..	..	..	..	S			
1073. — <i>Brackenridgii</i> , Baker .....	..	9		..	..	..	..
1074. — <i>tomentosum</i> , Hook. ....	..	M	..	..	..	..	..	S			
1075. — <i>Sprucei</i> , Baker	10										
1076. — <i>japonicum</i> , Thunb. ....	..	9	..	..	..	..	..	3			
1077. — <i>Thwaitesii</i> , A. Br. ....	..	H		..	..	..	..
1078. — <i>lasiopteris</i> , Mett. ....	..	9		..	..	..	..
1079. — <i>speciosum</i> , Mett. ....	..	M		..	..	..	..
1080. — <i>Welwitschii</i> , Hook. ....	..	..	W								
1081. — <i>crenulatum</i> , Baker	10										
1082. — <i>Lindbergii</i> , Mett.	10										
1083. — <i>Sorzogonense</i> , Presl .....	..	M	..	..	..	..	..	S			
1084. — <i>costale</i> , Swartz	10										
1085. — <i>Franconis</i> , Mett.	10										
1086. — <i>deltoideum</i> , Presl .....	..	M									
1087. — <i>virescens</i> , Mett. ....	..	..	..	..	..	..	..	J			
1088. — <i>squamigerum</i> , Mett. ....	..	..	..	..	..	..	..	J			
1089. — <i>Chinense</i> , Baker .....	..	..	..	..	..	..	..	C			
1090. — <i>nervosum</i> , Mett.	10										
1091. — <i>venulosum</i> , Baker	10										
1092. — <i>cyathæfolium</i> , Bory .....	..	M									
1093. — <i>Meyenianum</i> , Mett. ....	..	M									
1094. — <i>polypodioides</i> , Mett. ....	..	9	M	..	A	..	..	3			
1095. — <i>Griffithii</i> , Baker .....	..	..	..	..	..	..	..	S			
1096. — <i>maximum</i> , Don .....	..	9	..	..	..	..	..	3			
1097. — <i>melanochlamys</i> , Hook. ....	..	..	..	..	N	..	..		
1098. — <i>vestitum</i> , Presl .....	..	M	..	..	..	..	..
1099. — <i>latifolium</i> , Don .....	..	9	..	..	..	..	..	3			
1100. — <i>nigropaleaceum</i> , Baker .....	..	..	H								
1101. — <i>arborescens</i> , Mett. ....	..	P	M								
1102. — <i>melanocaulon</i> , Baker .....	..	P									
1103. — <i>Arnottii</i> , Baker .....	..	P									
1104. — <i>pulicosum</i> , Hook.	10										
1105. — <i>Klotzschii</i> , Mett.	10										
1106. — <i>flexuosum</i> , Presl	10										
1107. — <i>vastum</i> , Mett.	10										
1108. — <i>hians</i> , Kunze	10										
1109. — <i>radicans</i> , Schk.	10										
1110. — <i>gracilescens</i> , Mett.	10										
1111. — <i>Sandwichianum</i> , Mett.	10	P									
1112. — <i>Wilsoni</i> , Baker	I										
1113. — <i>divissimum</i> , Baker	10										
1114. — <i>ternatum</i> , Hook.	10										
1115. — <i>Kunzei</i> , Mett.	10										
1116. — <i>cordifolium</i> , Mett. ....	..	M									
1117. — <i>alismæfolium</i> , Hook. ....	..	M									
1118. — <i>lineolatum</i> , Mett. ....	..	M									
1119. — <i>heterophlebium</i> , Mett. ....	..	..	..	..	..	..	..	S			
1120. — <i>decussatum</i> , Sw. ....	..	9	8	..	A	..	..		
1121. — <i>chimborazense</i> , Spruce	10										
1122. — <i>rivale</i> , Spruce	10										
1123. — <i>stenocarpum</i> , Mett.	10										
1124. — <i>esculentum</i> , Presl .....	..	9	..	..	..	..	..	S			
1125. — <i>Smithianum</i> , Baker .....	..	H		..	..	..	..
1126. — <i>Vitiense</i> , Baker .....	..	P		..	..	..	..
1127. — <i>Ceterach</i> , L. ....	..	..	..	..	..	..	..	3	2		
1128. — <i>Purdieanum</i> , Hook.	10										
1129. — <i>Finlaysonianum</i> , Wall. ....	..	M	..	..	..	..	..	3			
1130. — <i>marginatum</i> , L.	10										
1131. <i>Actiniopteris radiata</i> , Link .....	..	H	8	..	..	5	..	S	2		
1132. <i>Allantodia Brunoniana</i> , Wall. ....	..	9	..	..	..	..	..	3			

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
Tribe 9. SCOLOPENDRIÆ.										
1133. <i>Scolopendrium vulgare</i> , Sym.	10	..	..	..	..	..	4	C	2	
1134. — <i>Hemionitis</i> , Sw. ....	..	..	..	..	..	..	..	..	2	
1135. — <i>pinnatum</i> , J. Sm. ....	..	M								
1136. — <i>Durvillei</i> , Bory ....	..	M								
1137. — <i>brasiliense</i> , Kunze	10									
1138. — <i>plantagineum</i> , Schrad.	10									
1139. — <i>nigripes</i> , Hook.	10									
1140. — <i>rhizophyllum</i> , Hook. ....	..	..	..	..	..	..	4			
1141. — <i>sibiricum</i> , Hook. ....	..	..	..	..	..	..	..	C J		
Tribe 10. ASPIDIÆ.										
1142. <i>Didymochlæna lunulata</i> , Desv.	10	9	8	..	..	5				
1143. — <i>polycarpa</i> , Baker ....	..	M								
1144. <i>Aspidium glandulosum</i> , H. & G.	I									
1145. — <i>Plaschnichianum</i> , Kunze	I									
1146. — <i>rhizophyllum</i> , Sw.	I									
1147. — <i>semicordatum</i> , Sw.	10	M								
1148. — <i>munitum</i> , Kaulf. ....	..	..	..	..	..	..	4			
1149. — <i>falcinellum</i> , Sw. ....	..	..	..	..	..	..	..	..	C	
1150. — <i>acrostichoides</i> , Sw. ....	..	..	..	..	..	..	4			
1151. — <i>lepidocaulon</i> , Hook. ....	..	..	..	..	..	..	..	J		
1152. — <i>Lonchitis</i> , Sw. ....	..	..	..	..	..	..	4	3	2	1
1153. — <i>mucronatum</i> , Sw.	I									
1154. — <i>Lachenense</i> , Hook. ....	..	..	..	..	..	..	..	3		
1155. — <i>triangulum</i> , Sw.	I									
1156. — <i>auriculatum</i> , Sw. ....	..	H	..	..	..	..	..	3		
1157. — <i>ilicifolium</i> , Don ....	..	..	..	..	..	..	..	3		
1158. — <i>Thomsoni</i> , Hook. ....	..	..	..	..	..	..	..	3		
1159. — <i>viviparum</i> , Fée	I									
1160. — <i>tridens</i> , Hook.	I									
1161. — <i>aculeatum</i> , Sw.	10	9	8	7	6	5	4	3	2	1
1162. — <i>pungens</i> , Kaulf. ....	..	..	..	..	..	5				
1163. — <i>mohrioides</i> , Bory ....	..	..	M	7						
1164. — <i>obtusum</i> , Mett. ....	..	M								
1165. — <i>californicum</i> , Eaton ....	..	..	..	..	..	..	4			
1166. — <i>Richardi</i> , Hook. ....	..	..	..	..	Z					
1167. — <i>oculatum</i> , Hook. ....	..	..	..	..	Z					
1168. — <i>cystostegia</i> , Hook. ....	..	..	..	..	Z					
1169. — <i>Prescottianum</i> , Hook. ....	..	..	..	..	..	..	..	3		
1170. — <i>anomalum</i> , Hook. & Arn. ....	..	H								
1171. — <i>amabile</i> , Blume ....	..	9	..	..	..	..	..	S		
1172. — <i>tripteron</i> , Kunze ....	..	..	..	..	..	..	..	J		
1173. — <i>laserpitiiifolium</i> , Mett. ....	..	..	..	..	..	..	..	J		
1174. — <i>varium</i> , Swartz ....	..	..	..	..	..	..	..	C J		
1175. — <i>capense</i> , Willd.	10	..	M	7	6	5				
1176. — <i>flexum</i> , Kunze ....	..	..	..	7						
1177. — <i>Seemanni</i> , Hook.	10									
1178. — <i>ascendens</i> , Hew.	I									
1179. — <i>frondosum</i> , Lowe ....	..	..	E	..	..	5	..	..	C	
1180. — <i>aristatum</i> , Sw. ....	..	9	..	..	A		..	3		
1181. — <i>melanostictum</i> , Kunze	10									
1182. — <i>melanochlamys</i> , Fée	I									
1183. — <i>multifidum</i> , Mett. ....	..	..	..	7						
1184. — <i>foeniculaceum</i> , Hook. ....	..	..	..	..	..	..	..	3		
1185. — <i>abbreviatum</i> , Schrad.	10									
1186. — <i>caducum</i> , Wall. ....	..	..	..	..	..	..	..	3		
1187. — <i>juglandifolium</i> , Kunze	10									
1188. — <i>falcatum</i> , Sw. ....	..	9	..	..	..	5	..	3		
1189. — <i>meniscioides</i> , Schrad.	10									
1190. — <i>Hookeri</i> , Baker ....	..	M								
1191. — <i>plantagineum</i> , Gr.	10									
1192. — <i>platanifolium</i> , Mett. ....	..	M								
1193. — <i>angulatum</i> , J. Sm. ....	..	9								
1194. — <i>trifoliatum</i> , Sw.	10									
1195. — <i>repandum</i> , Willd. ....	..	M								
1196. — <i>calcareum</i> , Presl. ....	..	M								
1197. — <i>membranaceum</i> , Hook. ....	..	9								
1198. <i>Nephrodium decursivo-pinnatum</i> , Baker ..	..	..	..	..	..	..	..	C J		
1199. — <i>pedatum</i> , Hook.	I									
1200. — <i>Braunianum</i> , Hook.	10									
1201. — <i>pusillum</i> , Baker	10									

		Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1202. <i>Nephrodium semihastatum, Hook.</i>	10	..	..	..	..	..	..	C			
1203. — <i>decipiens, Hook.</i>	..	H	..	..	..	..	..	3			
1204. — <i>cuspidatum, Baker</i>	..	..	..	..	..	..	..	C			
1205. — <i>podophyllum, Hook.</i>	..	..	..	..	..	..	..	J			
1206. — <i>Sieboldii, Hook.</i>	..	..	..	..	..	..	..	3			
1207. — <i>hirtipes, Hook.</i>	..	9	..	..	..	..	..
1208. — <i>biauratum, Hook.</i>	..	..	M								
1209. — <i>punctulatum, Baker</i>	..	..	W								
1210. — <i>macrotis, Hook.</i>	10										
1211. — <i>subobliquatum, Baker</i>	10										
1212. — <i>insigne, Baker</i>	10										
1213. — <i>gracilescens, Hook.</i>	..	M	..	..	..	..	..	S			
1214. — <i>chrysolobum, Fée</i>	10										
1215. — <i>patens, Desv.</i>	10	P	8	7	..	..	4				
1216. — <i>macrourum, Baker</i>	10										
1217. — <i>attenuatum, Baker</i>	..	M									
1218. — <i>abruptum, Baker</i>	10										
1219. — <i>invisum, Baker</i>	10										
1220. — <i>immersum, Hook.</i>	..	M	..	..	..	..	..	S			
1221. — <i>Spekei, Baker</i>	..	..	8								
1222. — <i>crinibulbon, Hook.</i>	..	..	W								
1223. — <i>ligulatum, Hook.</i>	..	M									
1224. — <i>obliquatum, Baker</i>	..	P									
1225. — <i>albopunctatum, Desv.</i>	..	P	8								
1226. — <i>calcaratum, Hook.</i>	..	9	..	..	..	..	..	S			
1227. — <i>viscosum, Baker</i>	..	M									
1228. — <i>falciculatum, Desv.</i>	10										
1229. — <i>vestitum, Baker</i>	10										
1230. — <i>Ctenitis, Baker</i>	10										
1231. — <i>crinitum, Desv.</i>	..	..	M								
1232. — <i>velleum, Baker</i>	I										
1233. — <i>Caripense, Hook.</i>	10										
1234. — <i>trichoneuron, Baker</i>	I										
1235. — <i>triste, Hook.</i>	10										
1236. — <i>tetragonum, Hook.</i>	10										
1237. — <i>crassifolium, Hook.</i>	..	M									
1238. — <i>echinatum, Baker</i>	..	M									
1239. — <i>Leprieurii, Hook.</i>	10										
1240. — <i>subfuscum, Baker</i>	10										
1241. — <i>sanctum, Baker</i>	10										
1242. — <i>exiguum, Hook.</i>	..	M									
1243. — <i>canum, Baker</i>	..	..	..	..	..	..	..	S			
1244. — <i>Beddomei, Baker</i>	..	9									
1245. — <i>Noveboracense, Desv.</i>	..	..	..	..	..	..	4				
1246. — <i>conterminum, Desv.</i>	10	..	M	7							
1247. — <i>Kaulfussii, Hook.</i>	10										
1248. — <i>concinnum, Baker</i>	10	..	..	7							
1249. — <i>Sprengelii, Hook.</i>	10										
1250. — <i>prolixum, Baker</i>	..	H	M	..	..	..	..	3			
1251. — <i>limbatum, Desv.</i>	I										
1252. — <i>resino-fetidum, Hook.</i>	10										
1253. — <i>Sprucei, Baker</i>	10										
1254. — <i>Bergianum, Baker</i>	..	..	..	..	..	5					
1255. — <i>tomentosum, Baker</i>	..	..	M	..	..	T					
1256. — <i>globuliferum, Hook.</i>	..	P									
1257. — <i>velatum, Hook.</i>	I										
1258. — <i>palustre, Baker</i>	10										
1259. — <i>diplazioides, Hook.</i>	10										
1260. — <i>pachyrachis, Hook.</i>	10										
1261. — <i>lonchodes, Hook.</i>	I										
1262. — <i>deltoideum, Desv.</i>	I										
1263. — <i>Thelypteris, Desv.</i>	..	..	W	..	Z	5	4	3	2		
1264. — <i>montanum, Baker</i>	..	..	..	..	..	..	..	W	2		1
1265. — <i>apiciflorum, Hook.</i>	..	..	..	..	..	..	..	3			
1266. — <i>microsorium, Hook.</i>	10										
1267. — <i>griseum, Baker</i>	..	H									
1268. — <i>sagenioides, Baker</i>	..	M									
1269. — <i>syrmaticum, Baker</i>	..	9	..	..	..	..	..	S			
1270. — <i>Filix-mas, Rich.</i>	10	9	8	..	..	5	4	3	2		1
1271. — <i>Preslii, Baker</i>	..	M									
1272. — <i>Goldieanum, Hook.</i>	..	..	..	..	..	..	4				
1273. — <i>marginale, Mich.</i>	..	..	..	..	..	..	4				

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1274. <i>Nephrodium lacerum, Baker</i>	J		
1275. — <i>erythrosorum, Hook.</i>	C J		
1276. — <i>Floridanum, Hook.</i>	4			
1277. — <i>cristatum, Mich.</i>	4	..	2	
1278. — <i>Borneense, Hook.</i>	M								
1279. — <i>Salvinii, Baker</i>	10									
1280. — <i>flaccidum, Hook.</i>	9	..	..	..	..	..	3		
1281. — <i>Brunonianum, Hook.</i>	3		
1282. — <i>barbigerum, Hook.</i>	3		
1283. — <i>setosum, Baker</i>	M								
1284. — <i>Welwitschii, Baker</i>	W							
1285. — <i>viridescens, Baker</i>	J		
1286. — <i>fragrans, Rich.</i>	4	C		
1287. — <i>rigidum, Desv.</i>	4	W	..	1
1288. — <i>spinulosum, Desv.</i>	M	..	..	5	4	3	2	1
1289. — <i>Eatoni, Baker</i>	J		
1290. — <i>mexicanum, Hook.</i>	10									
1291. — <i>sparsum, Don</i>	9	M	..	..	..	..	S		
1292. — <i>undulatum, Baker</i>	H								
1293. — <i>deparioides, Hook.</i>	H								
1294. — <i>Thwaitesii, Baker</i>	H								
1295. — <i>sphaerocarpum, Hook.</i>	10									
1296. — <i>athamanticum, Hook.</i>	W	..	..	5				
1297. — <i>inaequale, Hook.</i>	5				
1298. — <i>Falconeri, Hook.</i>	3		
1299. — <i>stipitatum, Baker</i>	M								
1300. — <i>hirtum, Hook.</i>	I	..	W							
1301. — <i>squamisetum, Hook.</i>	W							
1302. — <i>Chinense, Baker</i>	C J		
1303. — <i>glabrum, Baker</i>	P								
1304. — <i>tenuifolium, Hook.</i>	P								
1305. — <i>edentulum, Baker</i>	M								
1306. — <i>æmulum, Baker</i>	2	
1307. — <i>Karwinskianum, Baker</i>	10									
1308. — <i>Napoleonis, Bory</i>	H								
1309. — <i>Ascensionis, Hook.</i>	A								
1310. — <i>cognatum, Hook.</i>	H								
1311. — <i>rubiginosum, Hook.</i>	P								
1312. — <i>squamigerum, H. & A.</i>	P								
1313. — <i>Bojeri, Baker</i>	M							
1314. — <i>odoratum, Baker</i>	M	7	..	..	..	..	3		
1315. — <i>pubescens, Desv.</i>	I									
1316. — <i>Parishii, Hook.</i>	M								
1317. — <i>subquinquefidum, Hook.</i>	10	..	W							
1318. — <i>subsericeum, Baker</i>	P								
1319. — <i>decompositum, R. Br.</i>	P	..	..	6					
1320. — <i>velutinum, Hook. fil.</i>	P	..	..	6					
1321. — <i>recedens, Hook.</i>	9								
1322. — <i>Vieillardii, Baker</i>	P								
1323. — <i>membranifolium, Presl</i>	9	M	..	A	..	..	S		
1324. — <i>Milnei, Hook.</i>	P								
1325. — <i>splendens, Hook.</i>	M	..	..	..	..	..	S		
1326. — <i>latifrons, Hook.</i>	P								
1327. — <i>ferrugineum, Baker</i>	H								
1328. — <i>scabrosum, Baker</i>	H								
1329. — <i>angustifrons, Baker</i>	S		
1330. — <i>Thomsoni, Hook.</i>	3		
1331. — <i>oppositum, Hook.</i>	M							
1332. — <i>intermedium, Baker</i>	9								
1333. — <i>lepigerum, Baker</i>	J		
1334. — <i>obtusilobum, Baker</i>	H								
1335. — <i>Boryanum, Baker</i>	9	M	..	..	..	..	3		
1336. — <i>catopterum, Hook.</i>	8	..	..	5				
1337. — <i>setigerum, Baker</i>	9	..	..	..	..	..	3		
1338. — <i>subglandulosum, Baker</i>	M							
1339. — <i>Grisebachii, Baker</i>	I									
1340. — <i>amplum, Baker</i>	10									
1341. — <i>catocarpum, Hook</i>	10									
1342. — <i>furcatum, Hook</i>	10									
1343. — <i>villosum, Presl</i>	10	..	..	7						
1344. — <i>Trianae, Baker</i>	10									
1345. — <i>acutum, Hook.</i>	10									

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1346. <i>Nephrodium platypus</i> , <i>Hook.</i>.....	..	9	..	..	6	..	..	S	
1347. — <i>hispidum</i> , <i>Hook.</i>	10	..	M	..	6					
1348. — <i>denticulatum</i> , <i>Hook.</i>.....	..	P							
1349. — <i>davallioides</i> , <i>Baker</i>	10									
1350. — <i>effusum</i> , <i>Baker</i>	10									
1351. — <i>Cumingianum</i> , <i>J. Sm.</i>	10									
1352. — <i>Skinneri</i> , <i>Hook.</i>	10									
1353. — <i>Wrightii</i> , <i>Hook.</i>	J									
1354. — <i>scolopendrioides</i> , <i>Hk.</i>	I									
1355. — <i>incisum</i> , <i>Baker</i>	10									
1356. — <i>Otaria</i> , <i>Baker</i>.....	..	9							
1357. — <i>distans</i> , <i>Hook.</i>.....	..	..	M						
1358. — <i>unitum</i> , <i>R. Br.</i>	10	9	8	..	6	5	..	S	2	
1359. — <i>sophoroides</i> , <i>Desv.</i>.....	..	..	..	..	..	..	..	C J	
1360. — <i>pteroides</i> , <i>J. Sm.</i>.....	..	9	..	..	A	..	..	S	
1361. — <i>extensum</i> , <i>Hook.</i>.....	..	9	..	..	..	..	..	S	
1362. — <i>Serra</i> , <i>Desv.</i>	I									
1363. — <i>pallidivenium</i> , <i>Baker</i>.....	..	..	8						
1364. — <i>dissectum</i> , <i>Desv.</i>.....	..	P							
1365. — <i>procurrens</i> , <i>Baker</i>.....	..	M							
1366. — <i>longipes</i> , <i>Moore</i>.....	..	M							
1367. — <i>cucullatum</i> , <i>Baker</i>.....	..	9	M	..	..	..	..	S	
1368. — <i>Haenkeanum</i> , <i>Presl</i>.....	..	9							
1369. — <i>hirsutum</i> , <i>J. Sm.</i>.....	..	M							
1370. — <i>aridum</i> , <i>Baker</i>.....	..	M		..	..	..	..	3	
1371. — <i>venulosum</i> , <i>Hook.</i>.....	..	..	W						
1372. — <i>glandulosum</i> , <i>J. Sm.</i>.....	..	M	..	..	..	..	..	S	
1373. — <i>Amboinense</i> , <i>Presl</i>.....	..	M	..	..	..	..	..	S	
1374. — <i>arbuscula</i> , <i>Desv.</i>.....	..	9	M						
1375. — <i>abortivum</i> , <i>J. Sm.</i>.....	..	9							
1376. — <i>refractum</i> , <i>Hook.</i>	10									
1377. — <i>latipinna</i> , <i>Hook.</i>.....	..	M							
1378. — <i>pennigerum</i> , <i>Hook.</i>.....	..	9	8	..	..	..	..	S	
1379. — <i>cyatheoides</i> , <i>Kaulf.</i>.....	..	9							
1380. — <i>asplenioides</i> , <i>Baker</i>	I									
1381. — <i>hispidulum</i> , <i>Baker</i>.....	..	M							
1382. — <i>molle</i> , <i>Desv.</i>	10	9	8	..	6	5	..	S	C	
1383. — <i>heterocarpon</i> , <i>Moore</i>.....	..	M							
1384. — <i>stipellatum</i> , <i>Hook.</i>.....	..	M							
1385. — <i>crinipes</i> , <i>Hook.</i>.....	..	..	..	..	..	..	..	S	
1386. — <i>venustum</i> , <i>J. Sm.</i>	I									
1387. — <i>ferox</i> , <i>Moore</i>.....	..	M	..	..	..	..	..	S	
1388. — <i>sagittifolium</i> , <i>Moore</i>.....	..	M							
1389. — <i>truncatum</i> , <i>Presl.</i>.....	..	9	M	..	A	..	..	S	
1390. — <i>brachyodon</i> , <i>Hook.</i>	10	M								
1391. — <i>Fendleri</i> , <i>Hook.</i>	10									
1392. — <i>dissidens</i> , <i>Hook.</i>	I									
1393. — <i>heterophyllum</i> , <i>Hook.</i>.....	..	M							
1394. — <i>excellens</i> , <i>Blume.</i>.....	..	M							
1395. — <i>Leuzeanum</i> , <i>Hook.</i>.....	..	9	..	..	..	..	..	S	
1396. — <i>Singaporianum</i> , <i>Baker</i>.....	..	M							
1397. — <i>ternatum</i> , <i>Baker</i>.....	..	M							
1398. — <i>vastum</i> , <i>Baker</i>.....	..	M	..	..	..	..	..	S	
1399. — <i>melanocaulon</i> , <i>Baker</i>.....	..	M							
1400. — <i>subtriphyllum</i> , <i>Baker</i>	10	9	M							
1401. — <i>latifolium</i> , <i>Baker</i>	10	P	W							
1402. — <i>Lobbii</i> , <i>Baker</i>.....	..	M							
1403. — <i>semibipinnatum</i> , <i>Baker</i>.....	..	M							
1404. — <i>Menyanthidis</i> , <i>Baker</i>.....	..	9							
1405. — <i>irriguum</i> , <i>Baker</i>.....	..	M							
1406. — <i>polymorphum</i> , <i>Baker</i>.....	..	9	..	..	..	..	..	S	
1407. — <i>elatum</i> , <i>Baker</i>	10									
1408. — <i>Pica</i> , <i>Baker</i>.....	..	..	M						
1409. — <i>Zollingerianum</i> , <i>Baker</i>.....	..	M							
1410. — <i>variolosum</i> , <i>Baker</i>.....	..	M	..	..	..	..	..	S	
1411. — <i>irregulare</i> , <i>Baker</i>.....	..	P							
1412. — <i>decurrens</i> , <i>Baker</i>.....	..	9	..	..	..	..	..	S	
1413. — <i>siifolium</i> , <i>Baker</i>.....	..	M							
1414. — <i>pachyphyllum</i> , <i>Baker</i>.....	..	9							
1415. — <i>Barteri</i> , <i>Baker</i>.....	..	..	W						
1416. — <i>ciutarium</i> , <i>Baker</i>	10	9	8	..	..	..	..	S	
1417. — <i>Griffithii</i> , <i>Baker</i>.....	..	..	..	..	..	..	..	S	

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1418. <i>Nephrodium giganteum</i> , Baker	..	9								
1419. — <i>macrophyllum</i> , Baker	10	M								
1420. <i>Nephrolepis cordifolia</i> , Baker	10	9	8	..	A	..	..	S		
1421. — <i>exaltata</i> , Schott.	10	9	8	..	A	..	..	S		
1422. — <i>acuta</i> , Presl	10	9	8	..	A	5	..	S		
1423. — <i>ramosa</i> , Baker	..	9	8	..	A					
1424. — <i>altescandens</i> , Baker	..	P	..	7	A					
1425. — <i>floccigera</i> , Moore	..	M								
1426. — <i>davallioides</i> , Kunze	..	M								
1427. <i>Oleandra neriiformis</i> , Cav.	10	9	W	..	..	..	..	3		
1428. — <i>musæfolia</i> , Kunze	..	9								
1429. — <i>articulata</i> , Cav.	..	..	8	..	..	5				
1430. — <i>nodosa</i> , Presl	10	..								
1431. — <i>Wallichii</i> , Hook.	..	..	..	..	..	..	..	3		
1432. — <i>Cumingii</i> , J. Sm.	..	9								
1433. <i>Fadyenia prolifera</i> , Hook.	I									
Tribe 11. POLYPODIEÆ.										
1434. <i>Polypodium cordatum</i> , Hook.	I									
1435. — <i>hastæfolium</i> , Sw.	I									
1436. — <i>flavo-punctatum</i> , Kaulf.	10									
1437. — <i>Sancta-Gabrieli</i> , Hook.	10									
1438. — <i>alloopterum</i> , Kunze	10									
1439. — <i>Tijuccanum</i> , Raddi	10									
1440. — <i>Walkeræ</i> , Hook.	..	H								
1441. — <i>pauciflorum</i> , Hook.	10									
1442. — <i>obtusilobum</i> , Desv.	..	..	8							
1443. — <i>Sieberianum</i> , Kaulf.	..	..	M							
1444. — <i>erubescens</i> , Wall.	..	M	..	..	..	..	..	3		
1445. — <i>appendiculatum</i> , Wall.	..	..	..	..	..	..	..	S		
1446. — <i>auriculatum</i> , Wall.	..	..	..	..	..	..	..	3		
1447. — <i>Germanianum</i> , Baker	I									
1448. — <i>rusticum</i> , Baker	I									
1449. — <i>refulgens</i> , Klotzsch	10									
1450. — <i>rude</i> , Kunze	10									
1451. — <i>decussatum</i> , Linn.	10									
1452. — <i>unisorum</i> , Baker	..	P								
1453. — <i>platylobum</i> , Baker	10									
1454. — <i>fibrillosum</i> , Baker	10									
1455. — <i>macrophyllum</i> , Hook.	10									
1456. — <i>pteroideum</i> , Klotzsch	10									
1457. — <i>Phegopteris</i> , Linn.	..	..	..	..	..	..	4	CJ	2	1
1458. — <i>distans</i> , Don	..	9	..	..	..	..	..	3		
1459. — <i>obscurum</i> , Hook.	..	M								
1460. — <i>molle</i> , Roxb.	..	..	H							
1461. — <i>caudatum</i> , Kaulf.	10									
1462. — <i>biseriale</i> , Baker	10									
1463. — <i>deflexum</i> , Baker	10									
1464. — <i>hexagonopterum</i> , Mich.	..	..	..	..	..	..	4			
1465. — <i>Hasseltii</i> , Blume	..	M								
1466. — <i>rufescens</i> , Blume	..	9	W	..	A					
1467. — <i>Dryopteris</i> , Linn.	..	..	..	..	..	..	4	3	2	1
1468. — <i>glanduliferum</i> , Liebm.	10									
1469. — <i>drepanum</i> , Hook.	..	..	..	..	..	..	..	C		
1470. — <i>polystichoides</i> , Klotzsch	10									
1471. — <i>rigidum</i> , Hook. & Gr.	10									
1472. — <i>Mannianum</i> , Hook.	..	..	W							
1473. — <i>unidentatum</i> , Hook.	..	P								
1474. — <i>Oldhami</i> , Baker	..	M								
1475. — <i>alpestre</i> , Hoppe	..	..	..	..	..	..	4	..	2	1
1476. — <i>Bojeri</i> , Hook.	..	..	M							
1477. — <i>crinale</i> , Hook. & Arn.	..	P								
1478. — <i>asperulum</i> , J. Sm.	..	M								
1479. — <i>aquilinum</i> , Thouars	..	..	..	..	..	T				
1480. — <i>Hillebrandi</i> , Hook.	..	P								
1481. — <i>punctatum</i> , Thunb.	10	9	8	7	6	T	..	3		
1482. — <i>prasinum</i> , Baker	10									
1483. — <i>sandvicense</i> , Hook. & Arn.	..	P								
1484. — <i>connexum</i> , Kaulf.	10									
1485. — <i>splendidum</i> , Kaulf.	10									
1486. — <i>Vogelii</i> , Hook.	..	..	W							
1487. — <i>nigritianum</i> , Baker	..	..	W							

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1488. <i>Polypodium Keraudrenianum</i> , Gaud. ....	..	9								
1489. — <i>dubium</i> , Hook.	10									
1490. — <i>simplicifolium</i> , Hook. ....	..	9								
1491. — <i>debile</i> , Baker ....	..	M								
1492. — <i>Borneense</i> , Hook. ....	..	M								
1493. — <i>diversifolium</i> , Sw.	10									
1494. — <i>rubidum</i> , Hook. ....	..	M								
1495. — <i>pœcilophlebium</i> , Hook. ....	..	..	..	..	A					
1496. — <i>Kennedyi</i> , Muell. ....	..	..	..	..	A					
1497. — <i>meniscioides</i> , Liebm.	10									
1498. — <i>urophyllum</i> , Wall. ....	..	9	..	..	..	..	..	S		
1499. — <i>crenatum</i> , Sw.	10									
1500. — <i>Ghiesbreghtii</i> , Lind.	10									
1501. — <i>faucium</i> , Liebm.	10									
1502. — <i>proliferum</i> , Presl ....	..	9	E	..	..	5	..	S		
1503. — <i>arthrothrix</i> , Hook. ....	..	..	M	..	..	..	..	S		
1504. — <i>lineatum</i> , Cole. ....	..	9	..	..	..	..	..	S		
1505. — <i>multilineatum</i> , Wall. ....	..	P	..	..	..	..	..	S		
1506. — <i>stramineum</i> , Baker.	10									
1507. — <i>reptans</i> , Sw.	10									
1508. — <i>costatum</i> , Hook. ....	..	P								
1509. — <i>oppositifolium</i> , Hook. ....	..	..	W							
1510. — <i>stegnogrammoides</i> , Baker. ....	..	P								
1511. — <i>pennigerum</i> , Forst. ....	..	..	..	..	Z					
1512. — <i>unitum</i> , Hook. ....	..	..	W	..	..	5				
1513. — <i>tetragonum</i> , Sw.	10									
1514. — <i>Barberi</i> , Hook. ....	..	M								
1515. — <i>megalocarpum</i> , Hook. ....	..	M								
1516. — <i>ferrugineum</i> , Baker ....	..	M								
1517. — <i>tenerifrons</i> , Hook. ....	..	M								
1518. — <i>macrodon</i> , Rein. ....	..	9								
1519. — <i>Cameroonianum</i> , Hook. ....	..	..	W							
1520. — <i>Brongniartii</i> , Bory. ....	..	M								
1521. — <i>difforme</i> , Blume ....	..	M								
1522. — <i>sparsiflorum</i> , Hook. ....	..	..	W							
1523. — <i>draconopterum</i> , Hook.	10									
1524. — <i>Sprucei</i> , Hook.	10									
1525. — <i>parasiticum</i> , Mett. ....	..	9								
1526. — <i>Hookeri</i> , Brack. ....	..	9	M	..	A					
1527. — <i>pseudo-grammitis</i> , Gaud. ....	..	P								
1528. — <i>ligulatum</i> , Baker ....	..	P								
1529. — <i>subvenosum</i> , Baker ....	..	M								
1530. — <i>jungermannioides</i> , Klotzsch	10	..	..	7						
1531. — <i>hirtellum</i> , Blume ....	..	M								
1532. — <i>hirtum</i> , Hook. ....	..	M								
1533. — <i>setigerum</i> , Blume ....	..	M								
1534. — <i>zeylanicum</i> , Mett. ....	..	H								
1535. — <i>Samoense</i> , Baker ....	..	P								
1536. — <i>chrysolepis</i> , Hook.	10									
1537. — <i>bisulcatum</i> , Hook. ....	..	M								
1538. — <i>gramineum</i> , Sw.	10	M								
1539. — <i>Poppigianum</i> , Mett. ....	..	..	..	..	..	5				
1540. — <i>marginellum</i> , Sw.	10	..	H	7	Z	T				
1541. — <i>australe</i> , Mett. ....	..	P	..	7	Z	T				
1542. — <i>sessilifolium</i> , Hook. ....	..	M								
1543. — <i>fasciatum</i> , Mett. ....	..	M								
1544. — <i>Deplanchei</i> , Baker ....	..	P								
1545. — <i>multifidum</i> , Bory ....	..	..	M							
1546. — <i>furcatum</i> , Mett.	10									
1547. — <i>barbatulum</i> , Baker. ....	..	..	M							
1548. — <i>Andinum</i> , Hook.	10									
1549. — <i>trichosorum</i> , Hook.	10									
1550. — <i>trifurcatum</i> , L.	10									
1551. — <i>serrulatum</i> , Mett.	10	P	8	7						
1552. — <i>subpinnatifidum</i> , Blume ....	..	9								
1553. — <i>cucullatum</i> , Nees ....	..	9								
1554. — <i>subdimidiatum</i> , Baker	10									
1555. — <i>Organense</i> , Mett.	10									
1556. — <i>leucosorum</i> , Bojer ....	..	..	M							
1557. — <i>villosissimum</i> , Hook. ....	..	..	W							
1558. — <i>solidum</i> , Mett. ....	..	M								
1559. — <i>discolor</i> , Hook.	10									

		Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1632. <i>Polypodium Hartwegianum</i> , Hook.	10										
1633. — <i>biauriculatum</i> , Hook.	10										
1634. — <i>puberulum</i> , Schlecht.	10										
1635. — <i>subpetiolatum</i> , Hook.	10										
1636. — <i>sororium</i> , H., B. & K.	10										
1637. — <i>fraternum</i> , C. & S.	10										
1638. — <i>legionarium</i> , Baker	10										
1639. — <i>tenellum</i> , Forst. ....	..	..	..	..	6						
1640. — <i>hymenophylloides</i> , Kaulf. ....	..	9									
1641. — <i>fallax</i> , Schlecht.	10										
1642. — <i>tenuisectum</i> , Blume ....	..	M									
1643. — <i>myriophyllum</i> , Mett.	10										
1644. — <i>achilleæfolium</i> , Kaulf.	10										
1645. — <i>longisetosum</i> , Hook.	10										
1646. — <i>funiculum</i> , Fée	1										
1647. — <i>gracile</i> , Hook.	10										
1648. — <i>tamariscinum</i> , Kaulf. ....	..	9									
1649. — <i>athyrioides</i> , Hook.	10										
1650. — <i>murorum</i> , Hook.	10										
1651. — <i>microphyllum</i> , Mett.	10										
1652. — <i>millefolium</i> , Blume ....	..	M									
1653. — <i>onustum</i> , Hook.	10										
1654. — <i>Friedrichsthalianum</i> , Kunze	10										
1655. — <i>dareæforme</i> , Hook. ....	..	M	..	..	..	..	..	3			
1656. — <i>subdigitatum</i> , Blume ....	..	M	..	..	..	..	..	3			
1657. — <i>vacciniifolium</i> , L. & F.	10	..	..	7							
1658. — <i>piloselloides</i> , Linn.	10										
1659. — <i>nummularium</i> , Mett. ....	..	M									
1660. — <i>glaucophyllum</i> , Kunze	10	..	W								
1661. — <i>Matthewsii</i> , Mett.	10										
1662. — <i>Niponicum</i> , Mett. ....	..	..	..	..	..	..	..	J			
1663. — <i>amœnum</i> , Wall. ....	..	M	..	..	..	..	..	3			
1664. — <i>trilobum</i> , Cav. ....	..	..	..	7							
1665. — <i>ensiforme</i> , Thun. ....	..	..	..	..	5						
1666. — <i>Californicum</i> , Klff. ....	..	..	..	..	..	4					
1667. — <i>Scouleri</i> , Hook. & Gr. ....	..	..	..	..	..	4					
1668. — <i>patens</i> , J. Sm.	10										
1669. — <i>translucens</i> , Kunze ....	..	..	..	7							
1670. — <i>lachnopus</i> , Wall. ....	..	..	..	..	..	..	3				
1671. — <i>pubescens</i> , Hook.	10										
1672. — <i>plesiosorum</i> , Kunze	10										
1673. — <i>lasiopus</i> , Klotzsch	10										
1674. — <i>Catherinæ</i> , F. & L.	10										
1675. — <i>loriceum</i> , L.	10										
1676. — <i>eleutherophlebium</i> , Mett.	10										
1677. — <i>Chacopoyense</i> , Hook.	10										
1678. — <i>Surrucuchense</i> , Hook.	10										
1679. — <i>plectolepis</i> , Hook.	10										
1680. — <i>chnoodes</i> , Spreng.	10										
1681. — <i>persicæfolium</i> , Desv. ....	..	M									
1682. — <i>subauriculatum</i> , Blume ....	..	9	..	..	A	..	..	3			
1683. — <i>verrucosum</i> , Wall. ....	..	M									
1684. — <i>Korthalsii</i> , Mett. ....	..	M									
1685. — <i>attenuatum</i> , H., B. & K.	10										
1686. — <i>neriifolium</i> , Schk.	10										
1687. — <i>Guatemalense</i> , Hook.	10										
1688. — <i>adnatum</i> , Kunze	10										
1689. — <i>fraxinifolium</i> , Jacq.	10										
1690. — <i>menisciifolium</i> , L. & F.	10										
1691. — <i>incanum</i> , Sw.	10	..	E	7	..	5	4				
1692. — <i>lepidopteris</i> , Kunze	10										
1693. — <i>squamatum</i> , L.	10										
1694. — <i>nigripes</i> , Hook.	10										
1695. — <i>aureum</i> , Linn.	10	..	..	..	..	..	4				
1696. — <i>decumanum</i> , Willd.	10										
1697. — <i>angustifolium</i> , Sw.	10										
1698. — <i>lucidum</i> , Beyr.	10										
1699. — <i>sphenodes</i> , Kunze	10										
1700. — <i>coarctatum</i> , Kunze	10										
1701. — <i>lapathifolium</i> , Lam.	10										
1702. — <i>repens</i> , Linn.	10										
1703. — <i>Phyllitidis</i> , Linn.	10	..	..	..	..	..	4				

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1776. <i>Polypodium bifrons</i> , Hook.	10									
1777. — <i>spectrum</i> , Kaulf. ....	..	9								
1778. — <i>hastatum</i> , Thunb. ....	..	..	..	..	..	..	C J			
1779. — <i>pteropus</i> , Blume ....	..	9	..	..	..	..	S			
1780. — <i>Dipteris</i> , Blume ....	..	9	..	..	..	..	S			
1781. — <i>Wallichii</i> , R. Br. ....	..	..	..	..	..	..	S			
1782. — <i>Lobbianum</i> , Hook. ....	..	M								
1783. — <i>leucosporum</i> , Klotzsch	10									
1784. — <i>trifidum</i> , Don ....	..	H	..	..	..	..	3			
1785. — <i>malacodon</i> , Hook. ....	..	..	..	..	..	..	3			
1786. — <i>incurvatum</i> , Blume ....	..	M								
1787. — <i>angustum</i> , Mett.	10									
1788. — <i>insigne</i> , Blume ....	..	M								
1789. — <i>pustulatum</i> , Forst. ....	..	A	..	..	A					
1790. — <i>Billardieri</i> , R. Br. ....	..	P	..	..	A					
1791. — <i>phymatodes</i> , L. ....	..	9	8	..	..	5	..	C J		
1792. — <i>nigrescens</i> , Blume ....	..	9	..	..	..	..	..	S		
1793. — <i>affine</i> , Blume ....	..	M								
1794. — <i>Powellii</i> , Baker ....	..	P								
1795. — <i>dilatatum</i> , Wall. ....	..	9	..	..	..	..	..	3		
1796. — <i>laciniatum</i> , Blume ....	..	M								
1797. — <i>alatum</i> , Hook. ....	..	P								
1798. — <i>glaucum</i> , Kunze ....	..	M								
1799. — <i>lomarioides</i> , Kze. ....	..	M								
1800. — <i>ebenipes</i> , Hook. ....	..	..	..	..	..	..	..	3		
1801. — <i>longissimum</i> , Blume ....	..	9	..	..	..	..	..	S		
1802. — <i>Heracleum</i> , Kunze ....	..	M								
1803. — <i>Meyenianum</i> , Schott. ....	..	M								
1804. — <i>conjugatum</i> , Lam. ....	..	M	..	..	..	..	..	S		
1805. — <i>Fortunei</i> , Kunze ....	..	..	..	..	..	..	..	C		
1806. — <i>splendens</i> , Hook. ....	..	M								
1807. — <i>propinquum</i> , Wall. ....	..	M	W	..	..	..	..	3		
1808. — <i>Willdenovii</i> , Bory ....	..	..	M	..	..	..	..	S		
1809. — <i>rivale</i> , Mett. ....	..	..	..	..	..	..	..	S		
1810. — <i>quercifolium</i> , L. ....	..	9	..	..	A	..	..	S		
1811. — <i>Linnaei</i> , Bory ....	..	9	..	..	..	..	..	S		
1812. — <i>rigidulum</i> , Sw. ....	..	9	..	..	A					
1813. — <i>palmatum</i> , Blume ....	..	M								
1814. — <i>juglandifolium</i> , Don ....	..	..	..	..	..	..	..	3		
1815. — <i>Lehmanni</i> , Mett. ....	..	..	..	..	..	..	..	S		
1816. — <i>himalayense</i> , Hook. ....	..	..	..	..	..	..	..	3		
1817. — <i>leucorhizon</i> , Wall. ....	..	..	..	..	..	..	..	3		
1818. — <i>albosquamatum</i> , Blume ....	..	M								
Tribe 12. GRAMMITIDÆ.										
1819. <i>Jamesonia imbricata</i> , H. & G.	10									
1820. <i>Notochlaena Rawsoni</i> , P. & R. ....	..	..	..	..	..	5				
1821. — <i>sinuata</i> , Kaulf.	10	..	..	7	..	..	4			
1822. — <i>ferruginea</i> , Hook.	10	..	..	7	..	..	..
1823. — <i>lanuginosa</i> , Desv. ....	..	A	W	..	A	..	..	W	2	
1824. — <i>Brackenridgii</i> , Baker	10	..	..	..	..	..	..
1825. — <i>inæqualis</i> , Kunze ....	..	..	W	..	..	5				
1826. — <i>Aschenhorniana</i> , Baker	10	..	..	..	..	..	..
1827. — <i>squamosa</i> , Baker	10	..	..	7	..	..	3	2		
1828. — <i>Marantæ</i> , R. Br. ....	..	..	8	..	..	..	..
1829. — <i>Eckloniana</i> , Kunze ....	..	..	..	..	..	5				
1830. — <i>mollis</i> , Kunze	10	..	..	7	..	..		
1831. — <i>fragilis</i> , Hook. ....	..	A								
1832. — <i>hirsuta</i> , Desv. ....	..	9								
1833. — <i>distans</i> , R. Br. ....	..	P	..	..	6					
1834. — <i>hypoleuca</i> , Kunze ....	..	..	..	7	..	..		
1835. — <i>Pohlana</i> , Kunze	10	..	..	..	..	..
1836. — <i>eriophora</i> , Fée.	10	..	..	..	..	5				
1837. — <i>Buchanani</i> , Baker ....	..	..	..	7	..	..		
1838. — <i>tenera</i> , Gill.	10	..	..	..	..	..
1839. — <i>trichomanoides</i> , R. Br.	I	..	..	..	..	..
1840. — <i>affinis</i> , Hook.	10	..	..	..	..	..
1841. — <i>sulphurea</i> , J. Sm.	10	..	..	..	..	..	4			
1842. — <i>flavens</i> , Moore	10	..	..	..	..	..
1843. — <i>nivea</i> , Desv.	10	..	..	..	..	..
1844. — <i>Chilensis</i> , Hook. ....	..	..	..	7	..	..		
1845. — <i>dealbata</i> , Kunze ....	..	..	..	..	..	..	4			

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1846. <i>Notochlaena Fendleri</i> , Kunze	..	..	..	..	..	..	4			
1847. <i>Monogramme dareæcarpa</i> , Hook.	..	M		..	..	5				
1848. — <i>graminea</i> , Schk.	..	..	M	..	..			
1849. — <i>subfalcata</i> , Hook.	..	P		..	..			
1850. — <i>trichoidea</i> , J. Sm.	..	M		..	..			
1851. — <i>rostrata</i> , Hook.	10			..	..			
1852. — <i>Junghuhnii</i> , Hook.	..	9		..	..			
1853. — <i>graminoides</i> , Baker	10	..	H	7	..					
1854. — <i>seminuda</i> , Baker	10			..	..			
1855. — <i>immersa</i> , Fée	10			..	..			
1856. <i>Gymnogramma pilosa</i> , M. & G.	10			..	..			
1857. — <i>asplenoides</i> , Klf.	10			..	..			
1858. — <i>Totta</i> , Schlecht.	..	9	8	..	..	5	..	3	C	
1859. — <i>villosa</i> , Link	10			..	..			
1860. — <i>polypodioides</i> , Spr.	10			..	..			
1861. — <i>diplazioides</i> , Desv.	10			..	..			
1862. — <i>grandis</i> , Baker	10			..	..			
1863. — <i>gracilis</i> , Heward	I			..	..			
1864. — <i>aurita</i> , Hook.	..	..	..	..	..		..	3	J	
1865. — <i>decurenti-alata</i> , Hook.	..	..	..	..	..		..	S		
1866. — <i>opaca</i> , Spreng.	M	..	..	..	..		..
1867. — <i>ambigua</i> , Hook.	..	M	..	..	..		..	3		
1868. — <i>aspidioides</i> , Hook.	..	M	..	..	..		..
1869. — <i>reniformis</i> , Mart.	10			..	..		..
1870. — <i>marginata</i> , Mett.	..	P		..	..		..
1871. — <i>pumila</i> , Spreng.	10			..	A		..			
1872. — <i>Muelleri</i> , Hook.	..	..	..	..	..		..	3		
1873. — <i>vestita</i> , Hook.	..	..	..	..	..		..
1874. — <i>rufa</i> , Desv.	10			..	..		..
1875. — <i>cordata</i> , Schlecht.	..	..	W	..	..	5	..			
1876. — <i>Pozoi</i> , Kunze	..	..	..	7	6	..	..	..	2	
1877. — <i>tomentosa</i> , Desv.	10			..	..		..
1878. — <i>angustifrons</i> , Baker	10			..	..		..
1879. — <i>hirsutula</i> , Mett.	10			..	..		..
1880. — <i>Karstenii</i> , Mett.	10			..	..		..
1881. — <i>incisa</i> , M. & L.	10			..	..		..
1882. — <i>mohriæformis</i> , Mett.	10			..	..		..
1883. — <i>Ottonis</i> , Klotzsch	10			..	..		..
1884. — <i>Lindigii</i> , Mett.	10			..	..		..
1885. — <i>decipiens</i> , Mett.	..	P		..	..		..
1886. — <i>ferruginea</i> , Kunze	10			..	..		..
1887. — <i>Haughtoni</i> , Hook.	..	..	H	..	..		..
1888. — <i>Hookeri</i> , J. Sm.	10			..	..		..
1889. — <i>javanica</i> , Blume	..	9	..	..	..		..	3		
1890. — <i>Schomburgkiana</i> , Kunze	10			..	..		..
1891. — <i>aureonitens</i> , Hook.	10			..	..		..
1892. — <i>Matthewsii</i> , Hook.	10			..	..		..
1893. — <i>Warcewiczii</i> , Mett.	10			..	..		..
1894. — <i>cheilanthoides</i> , Klf.	..	..	M	..	..	T	..			
1895. — <i>flabellata</i> , Hook.	10			..	..		..
1896. — <i>myriophylla</i> , Sw.	10			..	..		..
1897. — <i>pedata</i> , Kaulf.	10			..	..		..
1898. — <i>leptophylla</i> , Desv.	10	I	E	..	6	..	..	W	2	
1899. — <i>Ascensionis</i> , Hook.	..	..	A	..	..		..
1900. — <i>choerophylla</i> , Desv.	10	..	..	7	..		..
1901. — <i>microphylla</i> , Hook.	..	..	..	..	..		..	S		
1902. — <i>hirta</i> , Desv.	10			..	..		..
1903. — <i>flexuosa</i> , Desv.	10			..	..		..
1904. — <i>Pearcei</i> , Moore	10			..	..		..
1905. — <i>trifoliata</i> , Desv.	10	..	..	7	..		..
1906. — <i>triangularis</i> , Kaulf.	10	..	..	..	..	5	4			
1907. — <i>tartarea</i> , Desv.	10	..	..	..	..		..
1908. — <i>calomelanos</i> , Kaulf.	10	P	W	..	..		..
1909. — <i>pulchella</i> , Lind.	10			..	..		..
1910. — <i>sulphurea</i> , Desv.	I			..	..		..
1911. — <i>rosea</i> , Desv.	..	..	8	..	..	5	..			
1912. — <i>borneensis</i> , Hook.	..	M		..	..		..
1913. — <i>cartilagidens</i> , Baker	..	M		..	..		..
1914. — <i>obtusifolia</i> , Hook.	..	M		..	..		..
1915. — <i>Lobbiana</i> , Hook.	..	M		..	..		..
1916. — <i>vittæformis</i> , Hook.	..	M		..	..		..
1917. — <i>Wallichii</i> , Hook.	..	M		..	..		..

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1918. <i>Gymnogramma alismæfolia</i> , Hook. ....	..	M								
1919. — <i>quinata</i> , Hook. ....	..	9								
1920. — <i>lanceolata</i> , Hook. ....	..	9	8	..	..	5	..	S		
1921. — <i>mexicana</i> , Baker	10	..								
1922. — <i>elongata</i> , Hook.	10	..		7						
1923. — <i>involuta</i> , Don ....	..	9		..	..		..	3		
1924. — <i>membranacea</i> , Hook. ....	..	M		..	..		..	J		
1925. — <i>Wrightii</i> , Hook. ....	..	M		..	..		..
1926. — <i>regularis</i> , Baker ....	..	M		..	..		..
1927. — <i>macrophylla</i> , Hook. ....	..	9		..	..		..
1928. — <i>spuria</i> , Baker ....	..	M		..	..		..
1929. — <i>Feei</i> , Hook. ....	..	M		..	..		..
1930. — <i>heterocarpa</i> , Blume ....	..	M		..	..		..
1931. — <i>Hamiltoniana</i> , Wall. ....	..	..	..	..	..		..	S		
1932. — <i>caudiformis</i> , Hook. ....	..	9		..	..		..
1933. — <i>elliptica</i> , Baker ....	..	9		..	A	..	..	3		
1934. — <i>pinnata</i> , Hook. ....	..	9		..	A		..			
1935. — <i>japonica</i> , Desv. ....	..	M		..	..		..	J		
1936. — <i>podophylla</i> , Hook.	10	..		..	..		4			
1937. <i>Brainea insignis</i> , Hook. ....	..	M		..	..		..	S		
1938. <i>Meniscium simplex</i> , Hook. ....	..	M		..	..		..	S		
1939. — <i>giganteum</i> , Mett.	10	..		..	..		..
1940. — <i>triphyllum</i> , Sw. ....	..	9		..	..		..	S		
1941. — <i>Thwaitesii</i> , Hook. ....	..	H		..	..		..
1942. — <i>pauciflorum</i> , Hook. ....	..	..	W	..	..		..
1943. — <i>salicifolium</i> , Wall. ....	..	M		..	..		..
1944. — <i>angustifolium</i> , Willd.	10	..		..	..		..
1945. — <i>serratum</i> , Cav.	10	..		..	..		..
1946. — <i>reticulatum</i> , Sw.	10	..		..	..		..
1947. <i>Antrophyum lineatum</i> , Kaulf.	10	..		..	..		..
1948. — <i>subfalcatum</i> , Brack. ....	..	9		..	..		..
1949. — <i>immersum</i> , Mett. ....	..	..	M	..	..		..	S		
1950. — <i>coriaceum</i> , Wall. ....	..	M		..	..		..	S		
1951. — <i>plantagineum</i> , Kaulf. ....	..	9		..	..		..	S		
1952. — <i>Cumingii</i> , Fée ....	..	M		..	..		..
1953. — <i>reticulatum</i> , Kaulf. ....	..	9		..	A	..	..	S		
1954. — <i>semicostatum</i> , Blume ....	..	9		..	..		..
1955. — <i>ensiforme</i> , Hook.	10	..		..	..		..
1956. — <i>lanceolatum</i> , Kaulf.	10	..		..	..		..
1957. — <i>subsessile</i> , Kunze	10	..		..	..		..
1958. — <i>Cayennense</i> , Kaulf.	10	..		..	..		..
1959. — <i>latifolium</i> , Blume ....	..	M		..	..		..
1960. — <i>Mannianum</i> , Hook. ....	..	..	W	..	..		..
1961. — <i>Boryanum</i> , Kaulf. ....	..	..	M	..	..		..
1962. — <i>giganteum</i> , Bory ....	..	..	M	..	..		..
1963. <i>Vittaria elongata</i> , Sw. ....	..	9	8	..	A	..	..	S		
1964. — <i>scabrida</i> , Klotzsch	10	..		..	..		..
1965. — <i>falcata</i> , Kunze ....	..	9		..	..		..
1966. — <i>Gardneriana</i> , Fée	10	..		..	..		..
1967. — <i>stipitata</i> , Kunze	10	..		..	..		..
1968. — <i>stricta</i> , Carm. ....	..	..		..	..	T	..			
1979. — <i>lineata</i> , Sw.	10	M	8	..	..	5	4	3		
1970. — <i>scolopendrina</i> , Thw. ....	..	9	E	..	..		..
1971. <i>Tænitis obtusa</i> , Hook. ....	..	M		..	..		..
1972. — <i>angustifolia</i> , R. Br.	10	..		..	..		..
1973. — <i>furcata</i> , Willd.	10	..		..	..		..
1974. — <i>lanceolata</i> , R. Br.	10	..		..	..		..
1975. — <i>blechnoides</i> , Sw. ....	..	M		..	..		..
1976. <i>Drymoglossum carnosum</i> , Hook. ....	..	M		..	..		..	S		
1977. — <i>piloselloides</i> , Presl ....	..	9		..	..		..	S		
1978. — <i>rigidum</i> , Hook. ....	..	M		..	..		..
1979. <i>Hemionitis lanceolata</i> , Hook. ....	..	P		..	..		..
1980. — <i>cordata</i> , Roxb. ....	..	9		..	..		..
1981. — <i>palmata</i> , L.	10	..		..	..		..
1982. — <i>hederæfolia</i> , J. Sm.	10	..		..	..		..
1983. — <i>pinnatifida</i> , Baker	10	..		..	..		..
1984. — <i>pinnata</i> , J. Sm.	1	..		..	..		..
1985. — <i>Griffithii</i> , Hook. fil. & Th. ....	..	M		..	..		..	S		
1986. — <i>citrifolia</i> , Hook.	10	..		..	..		..
Tribe 13. ACROSTICHEÆ.										
1987. <i>Acrostichum petiolosum</i> , Desv.	10	..		..	..		..

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
1988. <i>Acrostichum tambillense</i> , Hook.	10									
1989. — <i>micradenium</i> , Fée .....	..	9								
1990. — <i>simplex</i> , Sw.	10									
1991. — <i>nigrescens</i> , Hook.	10									
1992. — <i>leptophyllum</i> , Fée	10									
1993. — <i>conforme</i> , Sw.	10	9	8	7	..	5	..	3		
1994. — <i>Wrightii</i> , Mett.	I									
1995. — <i>flaccidum</i> , Fée	10									
1996. — <i>Burchellii</i> , Baker	10									
1997. — <i>Norrisii</i> , Hook. ....	..	M								
1998. — <i>Schlimense</i> , Fée	10									
1999. — <i>palustre</i> , Hook. ....	..	..	W							
2000. — <i>stenopteris</i> , Klotzsch	10									
2001. — <i>Herminieri</i> , Bory	I									
2002. — <i>lingua</i> , Raddi	10									
2003. — <i>luridum</i> , Fée	10									
2004. — <i>Sieberi</i> , Hook. & Gr. ....	..	..	8							
2005. — <i>latifolium</i> , Sw.	10	M								
2006. — <i>stramineum</i> , Mett.	10									
2007. — <i>melanopus</i> , Kunze	10									
2008. — <i>hybridum</i> , Bory	10	..	8	..	..	5				
2009. — <i>decurrens</i> , Desv. ....	..	M								
2010. — <i>decoratum</i> , Kunze	10									
2011. — <i>Feei</i> , Bory	10									
2012. — <i>cardiophyllum</i> , Hook.	10									
2013. — <i>squamipes</i> , Hook.	10									
2014. — <i>Lindenii</i> , Bory	10									
2015. — <i>squamosum</i> , Klotzsch	10									
2016. — <i>Lloense</i> , Hook.	10									
2017. — <i>heteromorphum</i> , Klotzsch	10									
2018. — <i>Huacsaro</i> , Ruiz	10									
2019. — <i>Gardnerianum</i> , Fée	10									
2020. — <i>alpestre</i> , Gardn.	10									
2021. — <i>lineare</i> , Fée	10	..	M							
2022. — <i>Aubertii</i> , Desv.	10	..	8	..	..	5				
2023. — <i>dimorphum</i> , Hook. & Gr. ....	..	..	H							
2024. — <i>viscosum</i> , Sw.	10	9	8	..	..	..	..	3		
2025. — <i>ciliatum</i> , Presl	10									
2026. — <i>pilosum</i> , H., B. & K.	10									
2027. — <i>Samoense</i> , Baker .....	..	P								
2028. — <i>apodum</i> , Kaulf.	10									
2029. — <i>scolopendrifolium</i> , Raddi	10									
2030. — <i>Cumingii</i> , Fée .....	..	M								
2031. — <i>Boryanum</i> , Fée	I									
2032. — <i>ovatum</i> , Hook.	10									
2033. — <i>procurrens</i> , Mett.	I									
2034. — <i>spathulatum</i> , Bory	10	H	M	..	..	5				
2035. — <i>Matthewsii</i> , Fée	10									
2036. — <i>acrocarpum</i> , Mart.	10									
2037. — <i>succisæfolium</i> , Thouars .....	..	..	M	..	..	T				
2038. — <i>cinnamomeum</i> , Baker .....	..	..	W							
2039. — <i>lepidotum</i> , Willd.	10									
2040. — <i>strictum</i> , Raddi	10									
2041. — <i>villosum</i> , Sw.	10	..	W							
2042. — <i>tectum</i> , Willd.	10									
2043. — <i>Bellermannianum</i> , Klotzsch	10									
2044. — <i>muscosum</i> , Sw.	10									
2045. — <i>obductum</i> , Kaulf.	10	..	M							
2046. — <i>auricomum</i> , Kunze	10									
2047. — <i>tomentosum</i> , Bory .....	..	..	M							
2048. — <i>cuspidatum</i> , Willd.	10									
2049. — <i>perelegans</i> , Fée	10									
2050. — <i>Sprucei</i> , Baker	10									
2051. — <i>squamosum</i> , Sw.	10	9	8	..	..	..	..	..	C	
2052. — <i>sorbifolium</i> , L.	10	9	8							
2053. — <i>decrescens</i> , Baker .....	..	..	W							
2054. — <i>scandens</i> , J. Sm. ....	..	9	..	..	A	..	..	S		
2055. — <i>laurifolium</i> , Hook. ....	..	9	..	..	..	5				
2056. — <i>tenuifolium</i> , Baker .....	..	..	M	..	..			
2057. — <i>bifurcatum</i> , Sw. ....	..	..	H							
2058. — <i>articulatum</i> , Hook. ....	..	M								
2059. — <i>Wilkesianum</i> , Hook. ....	..	P								

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
2060. <i>Acrostichum apiifolium</i> , Hook. ....	..	M								
2061. — <i>plumbicaule</i> , Baker	10									
2062. — <i>fractiseriale</i> , Baker	10									
2063. — <i>aspidioides</i> , Baker	I									
2064. — <i>pubens</i> , Baker	10									
2065. — <i>acuminatum</i> , Hook.	10									
2066. — <i>caudatum</i> , Hook.	10									
2067. — <i>osmundaceum</i> , Hook.	10									
2068. — <i>canaliculatum</i> , Hook.	10									
2069. — <i>Lechlerianum</i> , Hook.	10									
2070. — <i>appendiculatum</i> , Willd. ....	..	9	..	..	..	..	..	S		
2071. — <i>flabellatum</i> , H. B. & K.	10									
2072. — <i>peltatum</i> , Sw.	10									
2073. — <i>foeniculaceum</i> , Hook.	10									
2074. — <i>subdiaphanum</i> , Hook. & Gr. ....	..	..	H							
2075. — <i>gorgoneum</i> , Kaulf. ....	..	P								
2076. — <i>cervinum</i> , Sw.	10									
2077. — <i>auritum</i> , Sw. ....	..	9								
2078. — <i>Cænopteris</i> , Kunze	10									
2079. — <i>Linnæanum</i> , Hook. ....	..	M								
2080. — <i>Gaboonense</i> , Hook. ....	..	..	W							
2081. — <i>variabile</i> , Hook. ....	..	9	..	..	..	..	..	S		
2082. — <i>oligarchicum</i> , Baker	10									
2083. — <i>quercifolium</i> , Retz. ....	..	9								
2084. — <i>Harlandii</i> , Hook. ....	..	M								
2085. — <i>taccæfolium</i> , Hook. ....	..	M								
2086. — <i>flagelliferum</i> , Wall. ....	..	9	..	..	..	..	..	S		
2087. — <i>repandum</i> , Blume .....	..	9	S	..	A					
2088. — <i>punctulatum</i> , Linn. ....	..	..	8							
2089. — <i>subrepandum</i> , Hook. ....	..	M								
2090. — <i>alienum</i> , Sw.	10									
2091. — <i>nicotianæfolium</i> , Sw.	10									
2092. — <i>Preslianum</i> , Hook. ....	..	9								
2093. — <i>virens</i> , Wall. ....	..	9	W	..	..	..	..	S		
2094. — <i>minus</i> , Mett. ....	..	M	..	..	..	..	..	S		
2095. — <i>lanceolatum</i> , Hook. ....	..	9	..	..	..	..	..	S		
2096. — <i>axillare</i> , Cav. ....	..	9	..	..	..	..	..	S		
2097. — <i>aureonitens</i> , Hook.	10									
2098. — <i>reticulatum</i> , Kaulf. ....	..	P								
2099. — <i>pachyphyllum</i> , Kunze	10									
2100. — <i>crinitum</i> , Linn.	10									
2101. — <i>bicuspe</i> , Hook. ....	..	9								
2102. — <i>tricuspe</i> , Hook. ....	..	..	..	..	..	..	..	S		
2103. — <i>fluviale</i> , Hook. ....	..	..	W							
2104. — <i>pandurifolium</i> , Hook.	10									
2105. — <i>Heudelotii</i> , Hook. ....	..	..	8							
2106. — <i>salicinum</i> , Hook. ....	..	..	W							
2107. — <i>semicordatum</i> , Baker .....	..	H								
2108. — <i>Blumeanum</i> , Hook. ....	..	9								
2109. — <i>Raddianum</i> , Kunze	10									
2110. — <i>serratifolium</i> , Mert.	10									
2111. — <i>præstantissimum</i> , Bory	10									
2112. — <i>aureum</i> , Linn.	10	9	8	..	A	5	4			
2113. — <i>polyphyllum</i> , Hook. ....	..	P								
2114. — <i>spicatum</i> , Linn. ....	..	9	M	..	A	..	..	3		
2115. — <i>platyrhynchos</i> , Hook. ....	..	M								
2116. — <i>rigidum</i> , Wall. ....	..	M								
2117. — <i>drynarioides</i> , Hook. ....	..	9								
2118. <i>Platyserium alciorne</i> , Desv.	10	..	M	..	A					
2119. — <i>æthiopicum</i> , Hook. ....	..	..	7	..	A					
2120. — <i>grande</i> , J. Sm. ....	..	M	..	..				
2121. — <i>Wallichii</i> , Hook. ....	..	M								
2122. — <i>biforme</i> , Blume .....	..	M								
SUBORDER III. OSMUNDACEÆ.										
2123. <i>Osmunda Javanica</i> , Blume .....	..	9	..	..	..	..	..	C		
2124. — <i>Claytoniana</i> , L. ....	..	..	..	..	..	..	4	3		
2125. — <i>cinnamomea</i> , L.	10	..	..	..	..	..	4	CJ		
2126. — <i>bipinnata</i> , Hook. ....	..	M								
2127. — <i>regalis</i> , Linn.	10	9	8	..	..	5	4	3	2	
2128. <i>Todea barbara</i> , Moore .....	..	..	..	..	6	5				
2129. — <i>Fraseri</i> , Hook. & Gr. ....	..	P	..	..	A					

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
2130. <i>Todea hymenophylloides</i> , R. & L. ....	..	..	..	..	Z					
2131. — <i>superba</i> , Cole .....	..	..	..	..	Z					
SUBORDER IV. SCHIZÆACEÆ.										
2132. <i>Schizæa australis</i> , Gaud. ....	..	..	..	7	N					
2133. — <i>pusilla</i> , Pursh. ....	..	..	..	..	..	..	4			
2134. — <i>Malaccana</i> , Baker .....	..	M	..	..	..	..
2135. — <i>tenella</i> , Kaulf. ....	..	..	..	..	..	5				
2136. — <i>fistulosa</i> , Lab. ....	..	P	..	7	6					
2137. — <i>robusta</i> , Baker .....	..	P	..	..	..	5				
2138. — <i>pectinata</i> , Smith .....	..	..	..	..	..	5				
2139. — <i>incurvata</i> , Schk.	10	..	..	..	..	
2140. — <i>bifida</i> , Sw. ....	..	..	..	..	6					
2141. — <i>rupestris</i> , R. Br. ....	..	..	..	..	A					
2142. — <i>Fluminensis</i> , Miers.	10	..	..	..	..	
2143. — <i>Sprucei</i> , Hook.	10	..	..	..	..	
2144. — <i>dichotoma</i> , Sw.	10	9	M	..	6					
2145. — <i>elegans</i> , Sw.	10	..	..	..	..	
2146. — <i>pennula</i> , Sw.	10	P	..	..	..		
2147. — <i>digitata</i> , Wall. ....	..	9	..	..	..	..	S			
2148. <i>Anemia Gardneri</i> , Hook.	10	..	..	..	..	
2149. — <i>filiformis</i> , Presl	10	..	..	..	..	
2150. — <i>oblongifolia</i> , Sw.	10	..	..	..	..	
2151. — <i>Dregeana</i> , Kunze .....	..	..	..	..	..	5				
2152. — <i>rotundifolia</i> , Schrad.	10	..	..	..	..	
2153. — <i>caudata</i> , Kaulf.	10	..	..	..	..	
2154. — <i>Mandiocana</i> , Raddi	10	..	..	..	..	
2155. — <i>collina</i> , Raddi	10	..	..	..	..	
2156. — <i>glareosa</i> , Gardn.	10	..	..	..	..	
2157. — <i>Breuteliana</i> , Presl	10	..	..	..	..	
2158. — <i>Langsdorffiana</i> , Presl	10	..	..	..	..	
2159. — <i>Mexicana</i> , Klotzsch	10	..	..	..	..	..	4			
2160. — <i>hirsuta</i> , Sw.	10	..	..	..	..	
2161. — <i>tomentosa</i> , Sw.	10	..	..	..	..	
2162. — <i>trichorhiza</i> , Gardn.	10	..	..	..	..	
2163. — <i>rutæfolia</i> , Mart.	10	..	..	..	..	
2164. — <i>adiantifolia</i> , Sw.	10	..	..	..	..	..	4			
2165. — <i>cuneata</i> , Kunze	I	..	..	..	..	
2166. — <i>Tweediana</i> , Hook.	10	..	..	..	..	
2167. — <i>Schraderiana</i> , Mart.	10	..	..	..	..	
2168. — <i>Phyllitidis</i> , Sw.	10	..	..	..	..	
2169. — <i>aurita</i> , Sw.	I	..	..	..	..	
2170. — <i>Wrightii</i> , Baker	I	..	..	..	..	
2171. — <i>bipinnata</i> , Moore	I	..	..	..	..	
2172. — <i>dichotoma</i> , Gardn.	10	..	..	..	..	
2173. — <i>millefolia</i> , Gardn.	10	..	..	..	..	
2174. <i>Mohria caffrorum</i> , Desv. ....	..	..	M	..	..	5				
2175. <i>Trochopteris elegans</i> , Gardn.	10	..	..	..	..	
2176. <i>Lygodium palmatum</i> , Sw. ....	..	..	..	..	..	..	4			
2177. — <i>dichotomum</i> , Sw. ....	..	9	..	..	..	..	..	C		
2178. — <i>digitatum</i> , Eaton	10	..	..	..	..	
2179. — <i>semihastatum</i> , Desv. ....	..	M	..	..	..		
2180. — <i>articulatum</i> , Rich. ....	..	..	..	..	Z					
2181. — <i>trifurcatum</i> , Baker .....	..	P	..	..	..		
2182. — <i>scandens</i> , Sw.	10	9	W	..	A	..	..	3		
2183. — <i>venustum</i> , Sw.	10	..	..	7	..					
2184. — <i>volubile</i> , Sw.	10	..	..	..	..	
2185. — <i>pinnatifidum</i> , Sw. ....	..	9	W	..	..	..	..	S		
2186. — <i>polystachyum</i> , Wall. ....	..	M	..	..	..		
2187. — <i>subalatum</i> , Bojer .....	..	..	M	..	..			
2188. — <i>japonicum</i> , Sw. ....	..	9	..	..	..	..	..	S		
2189. — <i>heterodoxum</i> , Kunze	10	..	..	..	..	
2190. — <i>reticulatum</i> , Schk. ....	..	P	..	..	..		
2191. — <i>lanceolatum</i> , Desv. ....	..	..	M	..	..			
SUBORDER V. MARATTIACEÆ.										
2192. <i>Angiopteris evecta</i> , Hoffm. ....	..	9	M	..	A	..	..	S		
2193. <i>Marattia fraxinea</i> , Sm. ....	..	9	7	..	6	5				
2194. — <i>attenuata</i> , Lab. ....	..	P	..	..	..		
2195. — <i>cicutæfolia</i> , Kaulf.	10	..	..	..	..	
2196. — <i>laxa</i> , Kunze	10	..	..	..	..	
2197. — <i>Douglasii</i> , Baker .....	..	P	..	..	..		

	Torrid zone.			South Temperate zone.			North Temperate zone.			Frigid zone.
2198. <i>Marattia alata</i> , <i>Sm.</i>	10									
2199. — <i>Kaulfussii</i> , <i>J. Sm.</i>	10									
2200. <i>Dancea simplicifolia</i> , <i>Rudge</i>	10									
2201. — <i>trifoliata</i> , <i>Reich.</i>	10									
2202. — <i>trichomanoides</i> , <i>Spr.</i>	10									
2203. — <i>Leprieurii</i> , <i>Kunze</i>	10									
2204. — <i>humilis</i> , <i>Moore</i>	10									
2205. — <i>alata</i> , <i>Smith.</i>	I									
2206. — <i>Augustii</i> , <i>Karst.</i>	10									
2207. — <i>Moritziana</i> , <i>Presl</i>	10									
2208. — <i>stenophylla</i> , <i>Kunze</i>	I									
2209. — <i>elliptica</i> , <i>Smith</i>	10									
2210. — <i>nodosa</i> , <i>Smith</i>	10									
2211. <i>Kaulfussia æsculifolia</i> , <i>Bl.</i> .....	..	M	..	..	..	..	..	S		
SUBORDER VI. OPHIOGLOSSACEÆ.										
2212. <i>Ophioglossum lusitanicum</i> , <i>L.</i> .....	..	H	W	..	6	..	..	W	2	
2213. — <i>rubellum</i> , <i>Welw.</i> .....	..	..	W							
2214. — <i>bulbosum</i> , <i>Mich.</i>	10	..	..	7	..	T	4			
2215. — <i>nudicaule</i> , <i>Kunze</i>	10	9	W	7	..	..	4			
2216. — <i>vulgatum</i> , <i>L.</i>	10	9	8	..	6	5	4	3	2	1
2217. — <i>reticulatum</i> , <i>L.</i>	10	9	8	..	..	5	..	S		
2218. — <i>intermedium</i> , <i>Hook.</i> .....	..	M								
2219. — <i>pendulum</i> , <i>L.</i> .....	..	9	M	..	A	..	..	S		
2220. — <i>palmatum</i> , <i>L.</i>	10	..	M							
2221. — <i>Bergianum</i> , <i>Schl.</i> .....	..	..	..	..	..	5				
2222. <i>Helminthostachys zeylanica</i> , <i>Hook.</i> .....	..	9	..	..	A	..	..	S		
2223. <i>Botrychium simplex</i> , <i>Hitch</i> .....	..	..	..	..	..	..	4	..	2	
2224. — <i>rutaceum</i> , <i>Sw.</i> .....	..	..	..	..	..	..	4	C	2	
2225. — <i>Lunaria</i> , <i>Sw.</i> .....	..	..	..	7	6	..	4	3	2	1
2226. — <i>ternatum</i> , <i>Sw.</i>	10	..	..	..	6	..	4	3	2	1
2227. — <i>daucifolium</i> , <i>Wall.</i> .....	..	9	..	..	..	..	..	3		
2228. — <i>virginicum</i> , <i>Sw.</i>	10	H	..	..	..	..	4	3	2	
Total	946	863	346	118	212	153	114	413	81	26
Species peculiar to the district	757	477	127	32	74	22	37	114	12	0
Percentage of total number of species which are peculiar	80	55	36	28	34	14	32	27	15	0

Going through the districts one by one, I will next endeavour to point out the principal characteristics which their fern-floras present.

1. *Arctic Zone*.—The Arctic region yields in all only 26 species, about one per cent. of the total number. Not one of them is peculiar to it, and no species can even be said to have its headquarters here. The two ferns most preeminently northern in their range are *Asplenium crenatum* and *Nephrodium fragrans*; and both are widely diffused in the north temperate zone. Fifteen species inhabit Arctic America, all of which, with one exception, are Arctic-European also; and, in the Arctic zone, the other eleven are confined to Europe. With one exception, *Nephrodium fragrans*, all the Arctic ferns have a wide range in temperate Europe; and only two, the species which have just been mentioned, are not British.

2. *Temperate Europe and Africa*.—Of all the temperate regions, this has the smallest fern-flora, and considerably the smallest number of peculiar species. The total number of species which it yields is 81, four per cent. of the Order. Taking, first, those of Europe, which are 67 in number, we may divide them into four classes, viz.:—1st, species almost universally, or at any rate widely, diffused through central Europe; the number of these may be put at 22; 2nd, species widely diffused through the centre of the con-

continent, but restricted to mountainous tracts, say 12; and, 3rd, species preeminently south-western, restricted to the vicinity of the Mediterranean and Atlantic, say 18. This leaves fifteen species, only one of which, *Asplenium crenatum*, is specially northern in its range; the other fourteen are scattered, more or less sparingly, through Central Europe, not a single one being preeminently eastern or having its head quarters in Asia and coming a little within European bounds. The only widely diffused Central-European species which we do not possess in Britain are, with some doubt as to the last, *Onoclea germanica*, *Cystopteris alpina*, *Asplenium fissum*, and *Botrychium rutaceum*. On the other hand, eight of the south-western species enter into the British list,—one of them, *Hymenophyllum Tunbridgense*, being widely dispersed, but two not reaching further north than the Channel Islands. Twelve species grow in the West African Islands which are not European. These are:—

* <i>Dicksonia Culcita</i> .	* <i>Aspidium falcinellum</i> .
<i>Adiantum reniforme</i> .	— frondosum.
* <i>Cheilanthes pulchella</i> .	<i>Nephrodium molle</i> .
<i>Asplenium monanthemum</i> .	* <i>Polypodium drepanum</i> .
— furcatum.	<i>Gymnogramma Totta</i> .
— umbrosum.	<i>Acrostichum squamosum</i> .

The four marked with an asterisk are quite peculiar to these islands, the *Dicksonia* being much the most distinctly marked specific type which this second district yields. Of the others, the *Adiantum* is Mauritian (but the Mauritian plant is a well-marked variety), and *Aspidium frondosum*, long supposed to be peculiar, has been detected recently in Natal. The other six are all widely diffused tropical and subtropical species, all being met with in tropical Africa, so that in the fern-flora of these islands we cannot find any trace of an American affinity. The number of Canarian species is 31, of Azorean 25. The species common to the islands and Europe are all of the south-western or general European type, the 12 montane European species being entirely absent. To the European list we get only two species added in North Africa, *Nephrodium unitum* and *Actiniopteris radiata*—a very significant fact in illustration of the connexion between climate and fern-geography, as we shall see best when we come to contrast this addition of only two species for an area of between two and three millions of square miles of sub-tropical country, with the large number of species which are added in subtropical Asia to those that grow further north. Both of these are widely dispersed tropical species. The number of species peculiar to continental Europe is only six—*Asplenium germanicum*, *Heufleri*, *Petrarchæ*, *fissum*, and *Seelosii*, and *Cheilanthes hispanica*; *Nephrodium æmulum* is confined to Britain, the Canaries, and Madeira, *Davallia canariensis* to the West African islands and Spanish peninsula; of species not quite, but nearly peculiar to this second district, *Nephrodium montanum* extends only into Lapland and Georgia, and *Asplenium Hemionitis* to the Cape Verde Islands.

3. *Temperate Asia*.—It is here, as compared with all the other temperate districts, that the fern-flora reaches its maximum development. This district yields 413 species, 18 per cent. of the total number, more than half the whole number of species that grow anywhere in temperate regions, twice as many as grow in any other temperate district,

more than five times as many as we possess in Europe; and of these one out of between every three and four is peculiar to it. But a large proportion of the species, and nearly all the peculiar ones, are concentrated in a small part of its area, in Japan, East China, and the Himalayas—a tract not embracing more than a tenth part of the fourteen million square miles which this district includes. In broad terms we may say that the northern half of this district belongs to Asiatic Russia. The total number of Russian species, European, Asiatic, and American added together, is only 49. Taking the provinces of Asiatic Russia as defined in Ledebour's *Flora*, and reckoning the species according to the Synopsis-standard, we find they only yield ferns as follows:—

Caucasian provinces . . .	28	Davurian Siberia . . .	14
Altaic Siberia . . .	20	Eastern Siberia . . .	8
Baikalian Siberia . . .	22	Kamschatka . . .	17
Uralian Siberia . . .	27	Eastern isles . . .	14

nearly all of them being in the list of the 34 species which belt the world in the north temperate zone. For Amurland, Maximowicz gives 21 species, six of which are not European. Turning to the south-west, we find for Asia Minor only 25 species, all of them European. The small Syrian and Palestinian fern-floras are also European entirely; in fact we do not get a single addition in this direction to the European list till we reach the Himalayas. The number of Himalayan species we may state safely at 320. In separating these out into subtropical and typically temperate, I have had to rely almost entirely upon the notes of Dr. Hooker and Dr. Thomson, who have observed and recorded carefully the altitudes of all the species they gathered. Taking the temperate region as beginning at 5000 feet above the sea-level in the Eastern Himalayas, and at the base of the hill-country in the north-west, we have definite knowledge that 184 species grow above this line. These are the species which are marked with the figure 3 in the third column of our table. There can be no doubt that this figure is too low, as we have no definite information as to the heights at which Wallich, Griffith, and others gathered their specimens, and I have not included any species as temperate on mere presumption alone; so that there is every probability that further exploration will raise it considerably above 200. Passing from north-west to south-east along the range, we find the European species gradually disappear; whilst from the Malayan isles, the second in importance and productiveness of the great tropical fern-centres, along the humid jungly shore of the Malay peninsula, a crowd of subtropical species extend to the slopes of the southern flank of the eastern extension of the Himalayan range, and find a congenial home in the close humid valleys of Khasia, Sikkim, and Assam, where the hill-spurs shut out the wind, and the rays of an almost vertical sun fall upon dense masses of subtropical forest-vegetation. According to our present knowledge, this subtropical region of the Himalayas yields 136 species not known in the temperate region above it; and many of the species that extend into the latter have their head quarters here. It is of course evident that it is through the combination of conditions of station and climate brought about by the Himalayan range filling the geographical position which it occupies, and no doubt partly also by reason of the proximity of the range to one of the great head

quarters of the order, with a suitable highway of communication between the two, that temperate Asia is so much richer in ferns than any other of our five temperate districts. To see this, we need only contrast the 136 subtropical species added here with the 2 species added to the European list in North Africa. Passing from the Himalayas eastward we have a few peculiar species in temperate East China, but the number is very small. The Japanese fern-flora is a remarkable one, on account of, latitude considered, its richness and southern character. Of the species in the Synopsis, 118 are known to us clearly as inhabiting the Japanese group of islands, exclusive of the Bonin and Loo-Choo clusters. In latitude Japan is about upon a par with the Spanish peninsula, and considerably smaller in area; but the Japanese ferns are to the Spanish as three to one—118 species against 39. We see here well shown, what was indicated before by the British list, how that with ferns an insular position may compensate to a very large extent for the effect of a higher latitude. Of the Japanese species, 20 are peculiar, 14 restricted to Japan and other parts of temperate Asia; we have only 17 out of the 34 European species which belt the globe; and the others, at any rate we may safely say 60 species, are characteristically subtropical, and nearly all of them Malayan. If we classify according to their geography the peculiar species of temperate Asia, the following will be the result:—

Restricted to the Himalayas	66
„ the Japanese isles	21
„ Korea and Siberia	4
„ East China	6
Common to Japan and the Himalayas	1
„ East China and the Himalayas	2
„ Japan and Siberia or Korea	5
„ Japan and East China	9
Total	114 species.

The most remarkable circumstance thus elicited is the absence of that affinity which we might *à priori* expect between the essentially temperate species of the Japanese and Himalayan lists. We find, in point of fact, that such an affinity can scarcely be said to have any existence, and that the species which the two floras have in common are the subtropical ones common to Malaya also, and not the characteristically temperate forms. Comparing the list for temperate Asia, as a whole, with that of the two other north temperate districts, we find 34 species common to it and both the other two. In addition to this there are 18 species which are European or North African and Asiatic, but not American, and eight species which are Asiatic and American, but not European. The latter are:—

Onoclea sensibilis.
 *Adiantum pedatum.
 *Pellaea gracilis.
 *Blechnum serrulatum.

*Asplenium thelypteroides.
 Nephrodium fragrans.
 Osmunda Claytoniana.
 *—— cinnamomea.

Of these the five marked with an asterisk extend to the Himalayas, and the other three are confined to Manchuria and Siberia.

4. *Temperate North America*.—Next to Europe and North Africa, this has the smallest fern-flora of the temperate districts—114 species, 5 per cent. of the whole. They may be classified as follows:—

Essentially temperate species peculiar to it	.	.	.	.	.	37
„ „ „ common to Asia and Europe	.	.	.	.	.	34
„ „ „ common to Europe	.	.	.	.	.	2
„ „ „ common to Asia	.	.	.	.	.	8
						—
						81

and the remaining 33 species are nearly all subtropical species common to this district and the tropical zone of the same continent. The most prominent point to be noted is the smallness of this last element. The northern half of Mexico is extratropical; and if the species which grow there were included, the number of subtropical species would be considerably increased. Comparing this district with Europe, which on the whole it resembles most, the greater range and abundance of several of the peculiar species is noteworthy. We have instances of this furnished by *Woodwardia areolata* and *virginica*, *Polypodium hexagonopterum*, *Dicksonia punctiloba*, *Cystopteris bulbifera*, *Scolopendrium rhizophyllum*, *Nephrodium marginale*, *noveboracense*, and *Goldieanum*. All these have their head quarters in the Northern United States, which yield altogether 51 species. Throughout British North America we have only 46 species, 7 of which are absent from the Northern States. In the Southern States east of the Mississippi there are 56 species, 19 of which are not known in the Northern States; the remaining 37 are peculiar to California and New Mexico. About one-fifth of the ferns of the district belong to *Pellaea* and *Cheilanthes*, a group proportionally preponderant also at the Cape.

North Temperate Zone.—Taking the north temperate zone as a whole, we find it to yield 514 species, 34 of which are common to the three districts, 18 to the second and third, 8 to the third and fourth, and 2 to the second and fourth. Of these, 177 species, or one in three, are peculiar to it.

5. *Temperate South Africa*.—In temperate South Africa we have, within an area of under a million square miles, 153 species, or 7 per cent. of the order. Of these, 23 are peculiar to Cape Colony, 4 to the island of Tristan d'Acunha, 11 belt the world in the south temperate zone, 7 others are American, and 19 Australian; the remaining 89 are species common to this district and the tropics, 20 of them being confined exclusively to tropical Africa. When we consider the strongly marked peculiarity of the phanerogamic flora of this district, the lack of individuality in its fern-flora is remarkable. Even out of these 23 peculiar species 4 or 5 are doubtfully distinct. The three most distinct of them are pseudofilices—*Schizaea pectinata*, *Anemia Dregeana*, and *Ophioglossum Bergianum*. Ten species out of the 23 belong to *Pellaea*, *Cheilanthes*, and *Notochlæna*, of all groups perhaps the least moisture-needing in its stations. The species which the districts of the south temperate zone have in common, it may be noted here once for all, are several of them not

characteristically temperate, but plants which have their head quarters within the tropics and occur less abundantly outside them. Of well-marked truly temperate species common to the Cape and Australia we may note *Todea barbara*, *Asplenium bulbiferum*, and *flaccidum*, and, amongst those common to the Cape and temperate South America, *Polypodium incanum* and *Lomaria Magellanica*. To meet with *Aspidium falcatum* and *Asplenium varians* again we must go from the Cape to the Himalayas, and for *Asplenium ebeneum* and *Pellaea andromedæfolia* to North America. Of well-marked species confined to Africa, which have their head quarters here but pass slightly within the tropic, *Pteris flabellata*, *Mohria caffrorum*, *Cyathea Dregei*, and *Notochlæna inæqualis* are examples. Considering the smallness of the tropical-African list, the addition to that of this district of 89 tropical species is large; but several of them inhabit Mauritius and Madagascar, and do not pass further south than Natal.

We have included Tristan d'Acunha in this district. This little island is not more than twenty miles in circumference, and is situated in the midst of the Atlantic, nearly in the latitude of Cape Town and Monte Video, where the distance between the two continents is one-fifth of the whole circumference of the globe. It is about ten degrees nearer to Africa than America, and is remarkable for having the flora in which, as compared with all others that are known, the ferns are most nearly upon an equality in number of species with the flowering plants. The following is its fern-list, 23 species, Lycopodiaceæ not included, the number of flowering plants enumerated by Captain Carmichael (Linn. Trans. vol. xii. p. 483) being 29:—

*Hymenophyllum æruginosum.	Aspidium coriaceum.
Adiantum æthiopicum.	*Polypodium aquilinum.
Pteris incisa.	—— punctatum.
Blechnum australe.	—— australe.
Lomaria alpina.	Gymnogramme cheilanthoides.
—— Boryana.	*Vittaria stricta.
Asplenium obtusatum.	Acrostichum conforme.
—— erectum.	—— hybridum.
—— monanthemum.	—— spathulatum.
*—— medium.	—— succisæfolium.
Trichomanes tenerum.	Ophioglossum bulbosum.
Nephrodium tomentosum.	

It is curious to analyze this list and compare it with that of St. Helena. Here we have four peculiar species (those marked with an asterisk), three only found elsewhere in the Mauritius, nine which are both Cape and American, six which are American but not Cape, and one which is nominally Cape but not American, but very doubtfully distinct from a common American plant. There are only 18 species altogether which are common to temperate South America and the Cape; and here we have half of them on this little isolated halfway island. Whilst St. Helena, which is much nearer a continent, has more than half its ferns peculiar, here we have only a sixth of them; and although it is nearer Africa than America, the affinity is considerably closer with the latter. It is included by Dr. Hooker in the so-called Antarctic flora.

6. *Temperate Australia and New Zealand*.—Of the south temperate districts this is the largest and most fertile, yielding a much larger number of species and of peculiar ones than any other temperate district except the third. The total number of its ferns is 212; and of these one in three is peculiar to it. Taking Australia and New Zealand separately, we obtain the following results:—

New Zealand.

Species quite peculiar to the island	.	.	.	.	.	.	34
Not peculiar, but not Australian	.	.	.	.	.	.	12
Common to New Zealand and Australia	.	.	.	.	.	.	67
Total	.	.	.	.	.	.	113

Australia.

Species quite peculiar	.	.	.	.	.	.	25
Not peculiar, but not New Zealand	.	.	.	.	.	.	68
Common to New Zealand and Australia	.	.	.	.	.	.	67
Total	.	.	.	.	.	.	160

Of the 74 species peculiar to the district, 34 are confined to New Zealand, 25 to Australia, 11 only are common to both, and 4 inhabit the small adjacent islands. Eleven species are common to this district and the other two south temperate ones, 12 others to this and South temperate America, and 19 others to this and the Cape. The 12 New-Zealand species which are not peculiar, but do not occur in Australia, are nearly all plants of the Polynesian islands; and the 68 Australian species which are not peculiar, but do not occur in New Zealand, are many of them subtropical Malayan species which do not reach further south than Queensland. To complete the Australian list, it must be borne in mind that a few (not more than three or four) species require to be added, which are restricted to the tropical part of it.

7. *South Temperate America*.—We have included the whole of Brazil with tropical America, and know so little of the ferns of Uruguay and La Plata that our list for this district applies principally to Chili and Patagonia. It includes 118 species, of which 32 are peculiar, 11 common to this and the other two south temperate districts, 12 others to this and the last, 7 to this and the Cape. The other 58 are tropical American species which pass beyond the tropic; and, as before indicated, we cannot regard all those that are common to this and the other two south temperate zones as characteristically temperate.

South Temperate Zone.—Taking the south temperate zone as a whole, we find it to yield 423 species, 131 of which are peculiar to it. It is only one-fifth the area of the north temperate zone; but both the total number of species and the number of peculiar ones are to those of the latter as 4 to 5.

8. *Tropical Africa*.—This district offers a great contrast to the other two tropical ones in its fern-geography, and is even considerably below temperate Asia in the number of species it yields. Beginning with the Cape Verde islands, we find in the group a total

absence of individuality. There are only 13 species in all, not one of which is peculiar. *Asplenium Hemionitis* and *Notochlæna lanuginosa* are not tropical African, but they are both Canarian and Mediterranean; and *Nephrodium odoratum* is not known nearer than Mauritius. For the west side of the continent, from Senegambia southward, through Guinea to Angola, the botany of which the recent explorations of Barter, Mann, and Welwitsch have done so much to make known to us, we can now enumerate 197 ferns, 47 of which are peculiar. Of these, 116 are common to both sides of the continent, 6 being restricted to Angola, and most of the other 41 to Guinea and Senegambia. A small number (13) of West-African species are very interesting geographically, as being essentially tropical, and common to tropical America and Africa, but absent from Asia. This is the case with

Hymenophyllum ciliatum.	Nephrodium subquinquefidum.
Pteris Chilensis.	Polypodium cultratum.
Trichomanes crispum.	—— rigescens.
Asplenium serra.	—— glaucophyllum.
—— dimidiatum.	Acrostichum hybridum.
—— cicutarium.	—— villosum.
Nephrodium hirtum.	

St. Helena comes next of known floras to Tristan d'Acunha in the proportion which Ferns bear to Phanerogamia, which is nearly as two to three; and it is very remarkable from the fact that half of them are peculiar to it. The St. Helenan list is as follows:—

*Dicksonia arborescens.	*Nephrodium cognatum.
*Hymenophyllum capillaceum.	*Polypodium molle.
Cheilanthes multifida.	—— marginellum.
Pteris flabellata.	—— punctatum.
*—— paleacea.	—— lanceolatum.
*Asplenium compressum.	Monogramme, sp.
—— erectum.	—— graminoides.
*—— platybasis.	*Gymnogramma Haughtoni.
—— furcatum.	*Acrostichum dimorphum.
—— lanceolatum.	*—— bifurcatum.
*—— nigro-paleaceum.	*—— subdiaphanum.
Nephrodium patens.	—— conforme.
*—— Napoleonis.	Ophioglossum vulgatum.

The peculiar species are those marked with an asterisk. Analyzing the list, we find the result as follows:—

Species peculiar to the island	. . . . . 13
Common to Africa and America	. . . . . 7
African, not American	. . . . . 2
American, not African	. . . . . 2
Canarian, neither African nor American	. . . . . 1
Total	. . . . . 25

Ascension Island yields only seven species, as follows :—

<i>Pteris incisa</i> .	<i>Polypodium trichomanoides</i> .
— <i>flabellata</i> .	* <i>Gymnogramma Ascensionis</i> .
<i>Asplenium erectum</i> .	<i>Marattia fraxinea</i> .
* <i>Nephrodium Ascensionis</i> .	— —, var. <i>purpurascens</i> .

Two of these are peculiar, two common to Africa and America, two African only, one American only; so that it is very curious to note that, if we sum up in a single phrase the leading characteristic of the Fern-floras of the Atlantic islands, it is in each case different.

Of Tristan d'Acunha, the characteristic is	American affinity.
St. Helena	Individuality.
Ascension Island	The want of any decided characteristic.
Canaries, Madeira, and Azores	Mediterranean affinity.

We must note, in passing, the want of individuality in the Angolan Fern-flora. A few of the Angolan ferns are Cape species which do not reach Guinea; but the rest, with the exception of six species, all occur elsewhere in this district. For the east side of the continent, principally through the explorations of Schimper in Abyssinia, and Kirk in Zambesi-land, we know now 133 species; but here there is even still less individuality than in Angola—not a single peculiar species in Zambesi-land, and in Abyssinia only one. *Asplenium pumilum* is an east continental species only known elsewhere in America, *Cheilanthes Kirkii* in Angola, *Cheilanthes arabica* and *Onychium melanolepis* in Arabia and Persia.

Taking next the East African islands, including Madagascar, Mauritius, Bourbon, and the Seychelles and Comoro groups, we find that they have a Fern-flora which presents several points of interest. The total number of species is a little over 200; and very likely, when Madagascar is better explored, it will be raised to 250. But dealing with it as we know it at present, we find that more than half the species are not known in the tropical parts of the continent, that more than a quarter of them are absolutely peculiar, and that it has a strong Indo-Malayan affinity, as the following analysis will show :—

Species known in Tropical Africa	90
„ quite peculiar	56
„ Tropical Asiatic	40
„ Cape	12
„ American	7
„ Australian	3
„ Tristan d'Acunha	3
„ Temperate Asiatic	2
Total	213

The American species are, besides some already mentioned for West Africa, *Hymenophyllum lineare*, *Nephrodium conterminum*, *Aspidium mohrioides*, *Polypodium parvulum*,

Acrostichum lineare, and *Ophioglossum palmatum*; the Australian, *Hymenophyllum gracile*, *Nephrodium hispidum*, and *Platyserium alcicorne*. In the above analysis the Seychelles are included; but very likely, when we know them better, it will be worth while to consider them separately. So far as we know their flora, most of the species are both Mascarene and Indo-Malayan; but there are three peculiar species, and two which are Malayan but not African. Summing up the district as a whole, we find that it has 346 species, the peculiar ones being distributed as follows:—

Mascarene isles	54
Guinea and Senegambia	41
St. Helena	13
Common to East and West	8
Angola	6
Seychelles	3
Abyssinia	1
Common to East and Mauritius	1
Total	127

9. *Tropical Asia*.—We come now to the great centres of fern-distribution. Our list for tropical Asia and Polynesia as a whole includes 863 species, 39 per cent. of the whole order, out of which 477 species are peculiar to the district. Beginning in the west, we find a million square miles in tropical Arabia almost a blank so far as Ferns are concerned. Forskahl's list for Arabia Felix includes only nineteen species, and we do not know one that is peculiar. The Ferns of Peninsular India are very much concentrated in the range of hills that runs parallel with the western coast from Bombay to Cape Comorin, especially in the Neilgherries. Of the state of things in the drier tracts of the centre, we may form an idea from Mr. Edgeworth's florula of Banda, which only includes seven Ferns for a district which produces upwards of 600 flowering plants. There are probably very few additions yet to make to the Ferns of Southern India and Ceylon; and we have a full account of them in the recent works of Dr. Thwaites and Captain Beddome, the latter containing quarto plates of all the known species. We may reckon the number of species at 250, of which 200 are Ceylonese. The number of species which are neither Malayan nor Polynesian is 46, of which half are peculiar, the others nearly all Himalayan. Of well-marked peculiar species we have instances in *Cyathea Hookeri* and *sinuata*, *Asplenium zeylanicum*, *Nephrodium deparioides*, *Polypodium Gardneri* and *zeylanicum*; of species common to South India and the Himalayas, but not elsewhere known, in *Cyathea spinulosa*, *Sphæropteris barbata*, *Asplenium normale*, *Aspidium auriculatum*, *Nephrodium cuspidatum*, *Polypodium membranaceum* and *hemionitideum*. *Cheilanthes myriophylla* and *Pteris palmata* only grow elsewhere in tropical America, *Pellæa Boivini* in South Africa, and *Acrostichum spathulatum* in Natal, tropical America, and Tristan d'Acunha. Of the Ferns of Siam and the country to the east we know nothing. For the island of Hong Kong 75 species are enumerated in Bentham's 'Flora,' of which three are peculiar, and two interesting species—*Brainea insignis*, known elsewhere only

in Khasia, and *Alsophila podophylla* on the mainland further north. For Formosa the collections of Oldham, received lately, contain 81 species; and several others have been sent by Mr. Swinhoe, making the number about 100 in all. But the great concentration is in the narrow Malayan peninsula and Malayan and Philippine groups of islands. Here, in a space not more than a hundredth of the globe in area, we have more than a quarter of the known Ferns gathered together. For this tract we can now enumerate 630 species as they stand in the Synopsis; and still Borneo, Celebes, and Sumatra can only be regarded as very partially explored; but of these 630, 250 are absolutely peculiar, about one in nine of the known Ferns. Seventy other species are not known in Polynesia and peninsular India, of which upwards of fifty are Himalayan. Our list for Polynesia contains now 380 species, of which about 150 are absolutely peculiar, and 30 others not Malayan, the latter mostly occurring in New Zealand or Australia. Taking Polynesia as a whole, the most noteworthy point about it seems to be that the portion of its Fern-flora that is not peculiar is, with the exception of a faint Australian tinge, thoroughly Malayan, not American. We may conveniently subdivide the islands into three groups:—first, a western one, including New Guinea, New Caledonia, and the Solomon and Loyalty Isles; second, a central group, including the Society and Friendly isles, Samoa and Fiji; and, third, a north-eastern one, including the Sandwich Isles. About the first group we know very little; and that little has principally been gained through the recent travels in New Caledonia of M. Vieillard. His collections, happily for science, were worked up by Mettenius, in whose death, occurring as it has so soon after that of Sir W. Hooker, Fern-literature has sustained a loss that can scarcely be estimated too highly. We know already, in this western group, 55 of the species peculiar to Polynesia; and no doubt further investigation will add to the number largely, and add, in this group, to the Polynesian list many species now known in Malaya alone. The central group we know much more thoroughly, principally through the explorations of Powell in Samoa, of Seemann and others in Fiji, and of Brackenridge in nearly all the islands. For Samoa the list will reach nearly to 150 species, and for Fiji exceed 200. In this central group we know 47 of the peculiar Polynesian species, mostly special to the group; and here many of the Malayan types reach their eastern limit. The Sandwich Islands have a smaller list, many of the Malayan species that grow in the other two groups being absent here. The number of peculiar species is smaller than in the other two, being only 37; but several of them are very distinctly marked plants, as, for instance, the three species of *Cibotium*; whilst *Sadleria* is nearly, and *Diellia* (placed in the Synopsis under *Davallia*) quite confined to the group. The only American species which we can call to mind as known here and not further west are *Pellaea ternifolia* and *Asplenium fragile* and *Sandwichianum*. To this group in Polynesia *Aspidium aculeatum* and *Nephrodium Filix-mas* appear to be restricted; and we do not know *Cystopteris fragilis*, *Asplenium Adiantum-nigrum*, and *Trichomanes monanthemum* anywhere else in tropical Asia.

10. *Tropical America*.—But, taking it as whole, tropical America is the most productive district, in peculiar species especially, of which, indeed, it has nearly as many as all the other districts put together. It is here, amongst the dripping rocks of the higher

levels of the Andes, the forests of their slopes and ravines, and the dense humid flats that border the innumerable branches of the Amazon, where the sun's rays and the wind never penetrate the recesses of the primeval jungles, and climbers and parasites contest with the leaves of bright-flowering trees for the possession of the branches, that we obtain the great concentration of species. Our list for tropical America contains 946 species, 42 per cent. of all that are known; and of these more than three out of four are quite peculiar to it. And as by gradual degrees, as traveller after traveller brings or sends to Europe the result of his explorations, our knowledge of the distribution of the species is increased, two points are more and more brought out into prominence—that all this vast area constitutes, in any broad sense of the term, but one single and indivisible Fern-region, and how prominently individualized the characteristics of that region are. It has one Fern out of every three that are known in the world quite peculiar to itself; and yet a very considerable proportion of these reach from Mexico and the West-Indies on the north, to Peru and the south of Brazil; and how completely the West-Indian Islands form part of the same region may be judged from the fact that whilst they yield upwards of 400 species, and have been much better explored than the adjacent parts of the continent, only one species in seven has not been gathered on the mainland; and for the Galapagos group we know clearly only one species which does not occur upon the mainland.

Torrid Zone.—Taking the Torrid zone as a whole, we find that it yields 1901 species, 85 per cent. of the whole Order, and that of these 1437 species 65 per cent. of the Order are peculiar to it, upwards of 1000 species being confined to tropical America and Malaya.

Comprehensive Areas.—The following are all the species that grow in more than half the districts.

Six districts, 15:—*Hymenophyllum polyanthos*, *Trichomanes radicans* and *rigidum*, *Lomaria attenuata*, *Asplenium monanthemum*, *bulbiferum*, and *umbrosum*, *Nephrodium Thelypteris* and *spinulosum*, *Nephrolepis acuta*, *Polypodium vulgare*, *Gymnogramma leptophylla*, *Vittaria lineata*, *Acrostichum conforme*, *Botrychium Lunaria*.

Seven districts, 12:—*Hymenophyllum Tunbridgense*, *Adiantum Capillus-veneris*, *Pellaea geraniæfolia*, *Pteris longifolia*, *incisa*, and *cretica*, *Asplenium Trichomanes* and *furcatum*, *Nephrodium unitum* and *molle*, *Polypodium punctatum*, *Osmunda regalis*.

Eight districts, 2:—*Adiantum æthiopicum*, *Nephrodium filix-mas*.

Nine districts, 3:—*Pteris aquilina*, *Asplenium filix-femina*, *Ophioglossum vulgatum*.

Ten districts, 2:—*Cystopteris fragilis*, *Aspidium aculeatum*. Total, 34.

In the tropics 64 species belt the globe, in the north temperate zone 34, in the south temperate zone 11. Ninety-one species grow both north and south of the tropics, of which the following 26 have a range of 70 degrees of latitude:—

Hymenophyllum polyanthos.
— *Tunbridgense*.
Trichomanes filicula.
— *pyxidiferum*.
— *rigidum*.

Adiantum Capillus-veneris.
— *æthiopicum*.
Pteris aquilina.
Asplenium Trichomanes.
— *monanthemum*.

Asplenium Ruta-muraria.
 — Adiantum-nigrum.
 — solidum.
 Asplenium filix-fœmina.
 Aspidium aculeatum.
 Nephrodium Thelypteris.
 — filix-mas.
 — spinulosum.

Polypodium punctatum.
 — vulgare.
 Gymnogramma leptophylla.
 Osmunda regalis.
 Ophioglossum lusitanicum.
 — vulgatum.
 Botrychium Lunaria.
 — ternatum.

Dissevered Areas.—Besides those which have been noticed under the different districts, the following are instances of curiously dissevered areas :—

Aspidium falcatum.	Japan, Himalayas, Neilgherries, Sandwich Islands, Natal, Kaffraria.
Deparia prolifera.	Sandwich Isles, Queensland.
Hymenophyllum obtusum.	Sandwich Isles, Cape Colony.
Woodwardia radicans.	United States, California, Mexico, Himalayas, Java, shores of the Mediterranean, Canaries.
Gymnogramma Pozoi.	Spain, Australia, Chili.
Notochlæna lanuginosa.	Shores of the Mediterranean, Cape Verde Islands, Madeira, Australia temperate and tropical.
Nephrodium albo-punctatum	Mauritius, Guinea coast, Amboyna, Fiji.
Davallia concinna.	Cape, Angola, Abyssinia, tropical America, Guinea.
Gymnogramma calomelanos.	Guinea coast, Samoa, tropical America.
Asplenium anisophyllum.	Cape, West Africa, tropical America.
Acrostichum Aubertii.	Natal, Mauritius, tropical America.

The following is a summary of the distribution of the Order divided out into tribes :—

	Total species.	Frigid zone.	North Temperate zone.			South Temperate zone.			Torrid zone.		
		1	2	3	4	5	6	7	8	9	10
1. Gleicheniaceæ	25	0	0	2	0	2	8	3	4	11	6
2. Cyatheæ	143	0	0	8	1	3	11	4	12	50	74
3. Dicksoniææ	53	3	5	16	9	1	6	2	3	17	15
4. Hymenophylleæ	151	0	2	16	2	10	26	21	26	54	66
5. Davalliææ	86	2	5	26	3	4	4	1	12	57	12
6. Lindsayææ	49	0	0	4	0	1	8	0	5	29	17
7. Pteridææ	312	3	13	52	28	33	42	27	54	81	152
8. Blechnææ	31	0	1	7	4	1	8	3	1	10	11
9. Asplenîææ	284	4	21	64	12	29	19	11	64	116	102
10. Scolopendriææ	9	0	2	2	2	0	0	0	0	1	4
11. Aspidiææ	292	6	13	81	16	18	20	10	129	99	
12. Polypodiææ	384	4	5	72	14	21	26	17	42	170	165
13. Grammitidææ	168	0	5	29	7	13	9	13	22	61	80
14. Acrosticheææ	135	0	1	13	1	7	6	1	31	45	80
15. Osmundaceææ	9	0	1	4	3	2	4	0	1	4	2
16. Schizææææ	60	0	0	5	4	5	7	3	6	14	37
17. Marattiaceææ	21	0	0	2	0	1	2	0	2	5	15
18. Ophioglossaceææ	17	3	7	9	8	3	6	3	7	9	7
Total		25	81	412	114	154	212	119	346	863	944
Percentage of the order		1	4	18	5	7	9	5	15	39	42
Peculiar species		0	12	114	37	22	74	32	127	477	757

The general Plan of Distribution.—To illustrate the most striking point about the general distribution of the Order, I will borrow a quotation from Mr. Darwin* :—“Some few families, many subfamilies, very many genera, and a still greater number of sections of genera, are confined to a single region; and it has been observed by several naturalists that the most natural genera, or those genera in which the species are most closely allied to one another, are generally local, or confined to one area.” The remarkable point about the distribution of Ferns is, that, as may be seen from this last Table, there is so little trace amongst them of this concentration of allied forms in the same district. Most of the tribes are distributed through the districts in very much the same proportion as the whole Order; and in the genera there is no striking exception to the same plan. Although three-quarters of the species are confined to single districts, the only instances in which any district has more than half the species of a tribe are the following :—

Tropical America.—Cyatheæ, Acrosticheæ, Schizæaceæ, Marattiaceæ.

Tropical Asia.—Davalliæ, Lindsayeæ, Ophioglossaceæ.

Temperate Asia.—Ophioglossaceæ.

That is to say, in eight instances out of 180 possible cases; and the highest percentage which any tribe containing more than 100 species attains in any district is 68. Consequently the leading characteristic of each district is expressed by giving the percentage of the whole number of species which it yields,—not, as is so often the case in flowering plants, by saying that such and such orders, groups, or genera, characterize it specially. The theoretic bearings of this, which it is beyond the scope of my present paper to discuss, are well worthy of attention.

* Origin of Species, p. 353.