

Plant regeneration through cell and tissue culture

completed protocol including the acclimatisation

in vitro establishment is successful but the acclimatisation is still difficult

it takes a long time to establish the in vitro culture

Explants used for culture: Bud (**b**), calyx (**c**), Epicotyl (**ep**), flower (**fl**), hypocotyl (**hy**), leaf (**le**), ovule (**ov**), Petiole (**p**), Pollen (**po**), root (**r**), seed (**s**), Shoot (**sh**), spore (**sp**)

Plants at present in culture

	Scientific name	Explants used	current state
1	<i>Acer palmatum (bloodgood)</i>	sh/le	
2	<i>Acer rubrum (red rocker)</i>	sh/le	
3	<i>Acer rubrum (sun valley)</i>	sh/le	
4	<i>Actinidia chinensis</i>	s	
5	<i>Amorphophallus bulbifer</i>	le	
6	<i>Amorphophallus konjac (syn A. rivieri)</i>	le	
7	<i>Amorphophallus prainii</i>	le	
8	<i>Amorphophallus titanum</i>	le	
9	<i>Antigonon leptopus</i>	le	
10	<i>Araucaria rulei</i>	le	
11	<i>Aristolochia arborea</i>	sh/le	
12	<i>Aristolochia tricaudata</i>	le	
13	<i>Asimina triloba</i>	sh/le	
14	<i>Blechnum moorei</i>	sp	
15	<i>Calanthe vestita (white)</i>	s	
16	<i>Campanomoea lancifolia</i>	s	
17	<i>Camptotheca acuminata</i>	s/sh/le	
18	<i>Clivia miniata</i>	s	
19	<i>Coactizis</i>	le	
20	<i>Codonopsis delloidea</i>	s	
21	<i>Coffea arabica</i>	s/le	
22	<i>Comptonia perigrina</i>	sh/le/s	
23	<i>Cremastantha</i>	le	
24	<i>Crinum giganteum</i>	unripe/ s	
25	<i>Cupressus sempervirens</i>	sh	

26	<i>Cyathea cooperi</i>	sp	
27	<i>Cycas circinalis</i>	le	
28	<i>Cycas micholitzii</i>	le	
29	<i>Cymbidium dayanum</i>	s	
30	<i>Cymbidium finlaysonianum</i>	s	
31	<i>Cypripedium reginae</i>	s	
32	<i>Daphne acutiloba</i>	s	
33	<i>Daphne bholua (Jacqueline Pastill)</i>	sh	
34	<i>Daphne blagayana</i>	le	
35	<i>Daphne laureole</i>	sh	
36	<i>Daphne pontica</i>	sh	
37	<i>Daphne tangutica</i>	s	
38	<i>Davidia involucrata</i>	s	
39	<i>Dendrobium orealla</i>	s	
40	<i>Dendromecon rigida</i>	sh/le	
41	<i>Deppea splendens</i>	sh/le	
42	<i>Dicksonia antarctica</i>	sp	
43	<i>Dionaea muscipula</i>	s	
44	<i>Dipelta yunnanensis</i>	s	
45	<i>Disa hybrida Elwesii</i>	s	
46	<i>Disa uniflora</i>	sh/r	
47	<i>Drosera capensis</i>	s	
48	<i>Encephalartos ferox</i>	le	
49	<i>Episcia cupreata</i>	le	
50	<i>Eucalyptus spp.</i>	sh/le/le	
51	<i>Eugenia uniflora</i>	s	
52	<i>Euphorbia pulcherrima</i>	sh/hy/le	
53	<i>Fagus sylvatica f. purpurea</i>	sh/le	
54	<i>Fitzroya cupressoides</i>	sh	
55	<i>Fragaria spec</i>	s	
56	<i>Franklinia alatamaha</i>	sh/le	
57	<i>Frithia pulchra</i>	le	
58	<i>Fritillaria meleagris</i>	s	
59	<i>Gentiana dahurica</i>	s	
60	<i>Grammatophyllum stapeliflorum</i>	s	
61	<i>Griffinia ituberae</i>	s	
62	<i>Gymnospermium smirnowii</i>	s	

63	<i>Haemanthus</i>	s	
64	<i>Hamamelis interm. (Arnold promise)</i>	sh/le	
65	<i>Hamamelis virginiana</i>	s/le	
66	<i>Helleborus niger</i>	s/sh	
67	<i>Heuchera spp</i>	le	
68	<i>Ibicella lutea</i>	s	
69	<i>Ilex paraguariensis</i>	le	
70	<i>Jovellana punctata</i>	le /Sh	
71	<i>Lapageria rosea</i>	le	
72	<i>Lilium martagon var. album</i>	s	
73	<i>Lilium martagon var. cattaniae</i>	s	
74	<i>Lilium pomponium</i>	s	
75	<i>Litsea spec.</i>	s	
76	<i>Luz marina x Mixtarot</i>	le	
80	<i>Microcycas calocoma</i>	le	
81	<i>Myrciaria cauliflora (Jaboticaba)</i>	s	
83	<i>Osmanthus fragrans</i>	le	
84	<i>Osmanthus heterophyllus</i>	sh	
85	<i>Osmanthus serrulatus</i>	sh	
125	<i>Passiflora Caerulea</i>	se	
86	<i>Passiflora cumbalensis (ar. goudotiana)</i>	le	
87	<i>Passiflora parritae</i>	le	
88	<i>Peliosanthes 10-G-599</i>	le	
89	<i>Peliosanthes 97-G-126</i>	le	
90	<i>Pinnatistipula alba</i>	le	
91	<i>Pinus nelsonii</i>	sh/le	
92	<i>Polygonatum spec.</i>	s	
93	<i>Pyrostegia venusta</i>	le	
94	<i>Rauvolfia cambodiana</i>	s/le	
95	<i>Rauvolfia serpentina</i>	s/le	
96	<i>Renanthera imschootiana</i>	le	
97	<i>Ruellia macrantha</i>	sh/le	
98	<i>Sarracenia oreophila</i>	s	
99	<i>Sassafras albidum</i>	sh/le	
100	<i>Scadoxus multiflorus</i>	s	
101	<i>Schisandra chinensis</i>	s	
102	<i>Schisandra rubrifolia</i>	s	

103	<i>Schisandra spec</i>	s	
104	<i>Sequoia sempervirens</i>	sh	
105	<i>Sequoiadendron giganteum</i>	sh	
106	<i>Sorbus aria</i>	s	
107	<i>Sorbus x erubescens</i>	s	
108	<i>Spathoglottis plicata</i>	s	
109	<i>Stachyurus chinensis</i>	s	
110	<i>Stewartia pseudocamellia</i>	s	
111	<i>Synsepalum dulcificum</i>	Sa	
112	<i>Tacsonia insignis</i>	le	
113	<i>Taxus bacata</i>	s	
114	<i>Taxus chinensis (var. mairei)</i>	sh	
115	<i>Taxus chinensis (var. mairei)</i>	sh	
116	<i>Tetrapanax papyrifer</i>	le/fl/ov	
117	<i>Theobroma cacao</i>	s	
118	<i>Torreya taxifolia</i>	s	
119	<i>Trifoliata</i>	le	
120	<i>Tripartita tripartita (Passiflora tripartita var.</i>	le	
121	<i>Wollemia nobilis</i>	sh/le	
122	<i>Worsleya rayneri</i>	s/le	
123	<i>Zamia furfuracea.</i>	le	
124	<i>Zamia pseudo-parasitica</i>	le	