附录1　雅鲁藏布大峡谷国家级自然保护区植被分类系统

Appendix 1　Vegetation classification system of the Yarlung Zangbo Grand Canyon National Nature Reserve

植被分类系统的编码体系参考《中国植被》的方法, 植被型组不加编码, 加粗显示; 植被型用罗马数字, 数字后加“.”号统一编号, 如“I”; 植被亚型用汉字, 数字后加“、”号, 在植被型下编号, 如“一、”; 群系用阿拉伯数字, 数字后加“.”, 在植被型下编号, 如“1.”。* 新记录类型。

植被亚型 Vegetation subformation	群系 Alliance
森林 Forest	
I. 落叶针叶林 Deciduous Needleleaf Forest	
一、寒温性落叶针叶林 Cold-Temperate Deciduous Needleleaf Forest	1. 西藏红杉林 *Larix griffithii* Forest
	2. 怒江红杉林 *Larix speciosa* Forest
II. 落叶与常绿针叶混交林 Mixed Deciduous and Evergreen Needleleaf Forest	
一、寒温性落叶与常绿针叶混交林 Cold-Temperate Mixed Deciduous and Evergreen Needleleaf Forest	1. 西藏红杉 + 急尖长苞冷杉林 *Larix griffithii* + *Abies georgei* var. *smithii* Forest*
	2. 西藏红杉 + 林芝云杉林 *Larix griffithii* + *Picea likiangensis* var. *linzhiensis* Forest*
	3. 怒江红杉 + 墨脱冷杉林 *Larix speciosa* + *Abies delavayi* var. *motuoensis* Forest*
III. 常绿针叶林 Evergreen Needleleaf Forest	
一、寒温性常绿针叶林 Cold-Temperate Evergreen Needleleaf Forest	1. 急尖长苞冷杉林 *Abies georgei* var. *smithii* Forest
	2. 墨脱冷杉林 *Abies delavayi* var. *motuoensis* Forest
	3. 苍山冷杉林 *Abies delavayi* Forest
	4. 林芝云杉林 *Picea likiangensis* var. *linzhiensis* Forest
	5. 高山柏林 *Juniperus squamata* Forest*
	6. 大果圆柏林 *Juniperus tibetica* Forest*
二、温性常绿针叶林 Temperate Evergreen Needleleaf Forest	7. 云南铁杉林 *Tsuga dumosa* Forest
	8. 华山松林 *Pinus armandii* Forest
	9. 高山松林 *Pinus densata* Forest
	10. 高山松 + 不丹松林 *Pinus densata* + *Pinus bhutanica* Forest
	11. 西藏红豆杉林 *Taxus wallichiana* Forest
三、暖性常绿针叶林 Subtropical Evergreen Needleleaf Forest	12. 不丹松林 *Pinus bhutanica* Forest
	13. 藏南柏木林 *Cupressus austrotibetica* Forest
IV. 针叶与阔叶混交林 Mixed Needleleaf and Broadleaf Forest	
一、温性针叶与阔叶混交林 Temperate Mixed Needleleaf and Broadleaf Forest	1. 高山松 + 阔叶树混交林 *Pinus densata* + Broadleaf Trees Mixed Forest
	2. 云南铁杉 + 阔叶树混交林 *Tsuga dumosa* + Broadleaf Trees Mixed Forest
	3. 高山松 + 川滇高山栎混交林 *Pinus densata* + *Quercus aquifolioides* Mixed Forest
二、暖性针叶与阔叶混交林 Subtropical Mixed Needleleaf and Broadleaf Forest	4. 不丹松 + 阔叶树混交林 *Pinus bhutanica* + Broadleaf Trees Mixed Forest*
V. 落叶阔叶林 Deciduous Broadleaf Forest	
一、寒温性落叶阔叶林 Cold-Temperate Deciduous Broadleaf Forest	1. 糙皮桦林 *Betula utilis* Forest
二、温性落叶阔叶林 Temperate Deciduous Broadleaf Forest	2. 藏南槭林 *Acer campbellii* Forest*
	3. 白桦林 *Betula platyphylla* Forest
	4. 长穗桦林 *Betula cylindrostachya* Forest*
	5. 米林杨林 *Populus mainlingensis* Forest*
	6. 藏川杨林 *Populus szechuanica* var. *tibetica* Forest
	7. 清溪杨林 *Populus rotundifolia* var. *duclouxiana* Forest
	8. 裸柱头柳林 *Salix psilostigma* Forest*
三、暖性落叶阔叶林 Subtropical Deciduous Broadleaf Forest	9. 野漆林 *Toxicodendron succedaneum* Forest*
	10. 尼泊尔桤木林 *Alnus nepalensis* Forest
	11. 云南黄杞林 *Engelhardia spicata* Forest
	12. 藏合欢林 *Albizia sherriffii* Forest
VI. 常绿阔叶林 Evergreen Broadleaf Forest	
一、典型常绿阔叶林 Typical Evergreen Broadleaf Forest	1. 曼青冈林 *Quercus oxyodon* Forest

植被亚型 Vegetation subformation	群系 Alliance
	2. 环青冈林 *Quercus annulata* Forest
	3. 西藏柯林 *Lithocarpus xizangensis* Forest
	4. 西藏柯 + 毛曼青冈林 *Lithocarpus xizangensis* + *Quercus gambleana* Forest
	5. 西藏柯 + 薄片青冈林 *Lithocarpus xizangensis* + *Quercus lamellosa* Forest
	6. 格林柯林 *Lithocarpus collettii* Forest*
	7. 小箱柯林 *Lithocarpus arcaulus* Forest*
	8. 厚叶柯林 *Lithocarpus pachyphyllus* Forest*
	9. 头状四照花林 *Cornus capitata* Forest*
	10. 长蕊木兰林 *Alcimandra cathcarti*i Forest*
	11. 南亚含笑林 *Michelia doltsopa* Forest*
	12. 马蹄荷林 *Exbucklandia populnea* Forest*
	13. 假柿木姜子林 *Litsea monopetala* Forest*
二、季风常绿阔叶林 Monsoon Evergreen Broadleaf Forest	14. 瓦山锥林 *Castanopsis ceratacantha* Forest
	15. 短刺锥林 *Castanopsis echinocarpa* Forest
	16. 红锥林 *Castanopsis hystrix* Forest
	17. 印度锥林 *Castanopsis indica* Forest*
	18. 印度锥 + 细青皮林 *Castanopsis indica* + *Altingia excelsa* Forest*
	19. 蒺藜锥林 *Castanopsis tribuloides* Forest
	20. 鸡嗉子榕林 *Ficus semicordata* Forest
	21. 中平树林 *Macaranga denticulata* Forest
	22. 尼泊尔野桐林 *Mallotus nepalensis* Forest
	23. 泡腺血桐林 *Macaranga pustulata* Forest*
	24. 粗壮琼楠林 *Beilschmiedia robusta* Forest*
	25. 多脉水东哥林 *Saurauia polyneura* Forest
	26. 少脉水东哥林 *Saurauia polyneura* var. *paucinervis* Forest*
	27. 大花水东哥林 *Saurauia punduana* Forest*
	28. 绵毛水东哥林 *Saurauia griffithii* Forest
三、半常绿阔叶林 Semi-Evergreen Broadleaf Forest	29. 独龙江青冈林 *Quercus kiukiangensis* Forest
	30. 薄片青冈林 *Quercus lamellosa* Forest
	31. 薄片青冈 + 独龙江青冈林 *Quercus lamellosa* + *Quercus kiukiangensis* Forest
	32. 通麦栎林 *Quercus lanata* Forest
四、硬叶常绿阔叶林 Sclerophyllous Evergreen Broadleaf Forest	33. 川滇高山栎林 *Quercus aquifolioides* Forest
	34. 西藏栎林 *Quercus lodicosa* Forest
	35. 西藏栎 + 环青冈林 *Quercus lodicosa* + *Quercus annulata* Forest
	36. 高山栎林 *Quercus semecarpifolia* Forest*
VII. 雨林 Rainforest	
一、季节性雨林 Seasonal Rainforest	1. 千果榄仁林 *Terminalia myriocarpa* Forest
	2. 千果榄仁 + 细青皮林 *Terminalia myriocarpa* + *Altingia excelsa* Forest
	3. 细青皮林 *Altingia excelsa* Forest
	4. 小果紫薇林 *Lagerstroemia minuticarpa* Forest
	5. 大叶水榕林 *Ficus glaberrima* Forest*
VIII. 竹林 Bamboo Forest	
一、暖性竹林 Subtropical Bamboo Forest	1. 西藏牡竹林 *Dendrocalamus tibeticus* Bamboo Forest
	2. 马甲竹林 *Bambusa teres* Bamboo Forest
灌丛 Shrubland	
I. 常绿针叶灌丛 Evergreen Needleleaf Shrubland	
一、寒温性常绿针叶灌丛 Cold-Temperate Evergreen Needleleaf Shrubland	1. 香柏灌丛 *Juniperus pingii* var. *wilsonii* Shrubland

植被亚型 Vegetation subformation	群系 Alliance
II. 落叶阔叶灌丛 Deciduous Broadleaf Shrubland	
一、高寒落叶阔叶灌丛 Alpine Deciduous Broadleaf Shrubland	1. 川滇柳灌丛 *Salix rehderiana* Shrubland
	2. 毛坡柳灌丛 *Salix obscura* Shrubland
	3. 丛毛矮柳灌丛 *Salix floccosa* Shrubland*
	4. 环纹矮柳灌丛 *Salix annulifera* Shrubland*
	5. 毛小叶垫柳灌丛 *Salix pilosomicrophylla* Shrubland
	6. 尖齿叶垫柳灌丛 *Salix oreophila* Shrubland
	7. 扇叶垫柳灌丛 *Salix flabellaris* Shrubland*
	8. 金露梅灌丛 *Dasiphora fruticosa* Shrubland
	9. 独龙江蔷薇灌丛 *Rosa taronensis* Shrubland*
	10. 弯月杜鹃灌丛 *Rhododendron mekongense* Shrubland*
	11. 卧生水柏枝灌丛 *Myricaria rosea* Shrubland*
	12. 无毛小舌紫菀灌丛 *Aster albescens* var. *glabratus* Shrubland*
	13. 长尾槭灌丛 *Acer caudatum* Shrubland*
二、温性落叶阔叶灌丛 Temperate Deciduous Broadleaf Shrubland	14. 细裂叶莲蒿灌丛 *Artemisia stechmanniana* Shrubland*
	15. 砂生槐灌丛 *Sophora moorcroftiana* Shrubland*
	16. 川滇野丁香灌丛 *Leptodermis pilosa* Shrubland*
	17. 小蓝雪花灌丛 *Ceratostigma minus* Shrubland*
	18. 峨眉蔷薇灌丛 *Rosa omeiensis* Shrubland
	19. 绢毛蔷薇灌丛 *Rosa sericea* Shrubland
	20. 毛叶蔷薇灌丛 *Rosa mairei* Shrubland*
三、暖性落叶阔叶灌丛 Subtropical Deciduous Broadleaf Shrubland	21. 红雾水葛灌丛 *Pouzolzia sanguinea* Shrubland*
	22. 墨脱紫菀灌丛 *Aster motuoensis* Shrubland*
III. 常绿阔叶灌丛 Evergreen Broadleaf Shrubland	
一、寒温性常绿阔叶灌丛 Cold-Temperate Evergreen Broadleaf Shrubland	1. 红粉白珠灌丛 *Gaultheria hookeri* Shrubland*
	2. 鳞腺杜鹃灌丛 *Rhododendron lepidotum* Shrubland
	3. 矮小杜鹃灌丛 *Rhododendron pumilum* Shrubland
	4. 林芝杜鹃灌丛 *Rhododendron nyingchiense* Shrubland*
	5. 栎叶杜鹃灌丛 *Rhododendron phaeochrysum* Shrubland
	6. 藏布杜鹃灌丛 *Rhododendron charitopes* subsp. *tsangpoense* Shrubland*
	7. 黄杯杜鹃灌丛 *Rhododendron wardii* Shrubland
	8. 毛喉杜鹃灌丛 *Rhododendron cephalanthum* Shrubland*
	9. 毛花杜鹃灌丛 *Rhododendron hypenanthum* Shrubland
	10. 美被杜鹃灌丛 *Rhododendron calostrotum* Shrubland
	11. 显绿杜鹃灌丛 *Rhododendron viridescens* Shrubland
	12. 雪层杜鹃灌丛 *Rhododendron nivale* Shrubland
	13. 樱花杜鹃灌丛 *Rhododendron cerasinum* Shrubland
	14. 云雾杜鹃灌丛 *Rhododendron chamaethomsonii* Shrubland*
	15. 紫玉盘杜鹃灌丛 *Rhododendron uvariifolium* Shrubland*
	16. 紫背杜鹃灌丛 *Rhododendron forrestii* Shrubland
	17. 弯柱杜鹃灌丛 *Rhododendron campylogynum* Shrubland
	18. 圆头杜鹃灌丛 *Rhododendron arizelum* Shrubland*
	19. 毛叶珍珠花灌丛 *Lyonia villosa* Shrubland*
	20. 长毛岩须灌丛 *Cassiope wardii* Shrubland
	21. 扫帚岩须灌丛 *Cassiope fastigiata* Shrubland
	22. 岩须灌丛 *Cassiope selaginoides* Shrubland
二、温性常绿阔叶灌丛 Temperate Evergreen Broadleaf Shrubland	23. 小叶栒子灌丛 *Cotoneaster microphyllus* Shrubland*

植被亚型 Vegetation subformation	群系 Alliance
IV. 竹丛 Bamboo Shrubland	
一、寒温性与温性竹丛 Cold-Temperate and Temperate Bamboo Shrubland	1. 黑穗箭竹竹丛 *Fargesia melanostachys* Bamboo Shrubland*
草本植被 Herbaceous vegetation	
I. 丛生草类草地 Tussock Grassland	
一、丛生草类典型草原 Tussock Typical Steppe Grassland	1. 喜马拉雅草沙蚕草原 *Tripogon hookerianus* Steppe*
二、丛生草类高寒草甸 Tussock Alpine Meadow Grassland	2. 高山嵩草草甸 *Carex parvula* Meadow
II. 根茎草类草地 Rhizome Grassland	
一、根茎草类高寒草甸 Rhizome Alpine Meadow Grassland	1. 显苞灯芯草草甸 *Juncus bracteatus* Meadow
二、根茎草类沼泽草甸 Rhizome Swamp Meadow Grassland	2. 具刚毛荸荠草甸 *Eleocharis valleculosa* var. *setosa* Meadow*
III. 杂类草草地 Forb Grassland	
一、杂类草高寒草甸 Forb Alpine Meadow Grassland	1. 察日脆蒴报春草甸 *Primula tsariensis* Meadow*
	2. 乳黄雪山报春草甸 *Primula agleniana* Meadow*
	3. 杂色钟报春草甸 *Primula alpicola* Meadow*
	4. 君范千里光草甸 *Senecio lingianus* Meadow*
	5. 莱菔叶千里光草甸 *Jacobaea raphanifolia* Meadow*
	6. 叶状柄垂头菊草甸 *Cremanthodium phyllodineum* Meadow
	7. 珠光香青草甸 *Anaphalis margaritacea* Meadow*
	8. 紫苞香青草甸 *Anaphalis porphyrolepis* Meadow*
	9. 美叶蒿草甸 *Artemisia calophylla* Meadow*
	10. 圆穗蓼草甸 *Bistorta macrophylla* Meadow
	11. 珠芽蓼草甸 *Bistorta vivipara* Meadow
	12. 岩白菜草甸 *Bergenia purpurascens* Meadow
	13. 大叶碎米荠草甸 *Cardamine macrophylla* Meadow*
	14. 滇川唐松草草甸 *Thalictrum finetii* Meadow*
	15. 腺萼落新妇草甸 *Astilbe rubra* Meadow*
	16. 黑秆蹄盖蕨草甸 *Athyrium wallichianum* Meadow*
	17. 剑叶蹄盖蕨草甸 *Athyrium attenuatum* Meadow*
	18. 多鳞鳞毛蕨草甸 *Dryopteris barbigera* Meadow*
	19. 绒紫萁草甸 *Claytosmunda claytoniana* Meadow*
	20. 狭叶蕨麻草甸 *Argentina stenophylla* Meadow*
	21. 象南星草甸 *Arisaema elephas* Meadow*
IV. 灌草丛 Shrubby Grassland	
一、亚热带与热带灌草丛 Subtropical and Tropical Shrubby Grassland	1. 斑茅灌草丛 *Saccharum arundinaceum* Shrubby Grassland
	2. 菅灌草丛 *Themeda villosa* Shrubby Grassland
	3. 尼泊尔芒灌草丛 *Miscanthus nepalensis* Shrubby Grassland
	4. 毛轴蕨灌草丛 *Pteridium revolutum* Shrubby Grassland*
	5. 野蕉灌草丛 *Musa balbisiana* Shrubby Grassland
高山冻原与稀疏植被 Alpine Tundra and Sparse Vegetation	
I. 高山稀疏植被 Alpine Sparse Vegetation	
一、高山稀疏植被 Alpine Sparse Vegetation	1. 风毛菊属稀疏植被 *Saussurea* spp. Sparse Vegetation
	2. 红景天属 + 苞叶雪莲 + 塔黄稀疏植被 *Rhodiola* spp. + *Saussurea obvallata* + *Rheum nobile* Sparse Vegetation
沼泽与水生植被 Swamp and Aquatic Vegetation	
I. 木本沼泽 Woody Swamp	
一、木本沼泽 Woody Swamp	1. 多枝玉山竹木本沼泽 *Yushania multiramea* Woody Swamp*
	2. 不丹松木本沼泽 *Pinus bhutanica* Woody Swamp*
II. 草本与苔藓沼泽 Herb and Moss Swamp	

植被亚型 Vegetation subformation	群系 Alliance
一、草本沼泽 Herb Swamp	1. 卵花甜茅草本沼泽 *Glyceria tonglensis* Herb Swamp
III. 水生植被 Aquatic Vegetation	
一、挺水植被 Emerged Aquatic Vegetation	1. 水毛花挺水植被 *Schoenoplectus mucronatus* subsp. *robustus* Emerged Aquatic Vegetation 2. 睡菜挺水植被 *Menyanthes trifoliata* Emerged Aquatic Vegetation
二、浮叶植被 Rooted Floating Leaf Aquatic Vegetation	3. 浮叶眼子菜浮叶植被 *Potamogeton natans* Rooted Floating Leaf Aquatic Vegetation*