

# Plant and Fungal Growth Forms Classification Scheme

Version: 1.1

\*The subdivisions of the Raunkiaer Life-form system are based on the place of the plant's growth-point (bud) during seasons with adverse conditions (cold seasons, dry seasons)

## Raunkiaer Life-form Definitions\*

Growth Form	Definition	
1 Tree - size unknown	Tree (any size), also termed a Phanerophyte (>1 m)	Phanerophyte: Projecting into the air on stems – normally woody perennials - with resting buds more than 25 cms above soil level, e.g. trees and shrubs
2 Tree - large	Large tree, also termed a Phanerophyte (>15 m)	
3 Tree - small	Small tree, also termed a Phanerophyte (1-15 m)	
4 Shrub - size unknown	Perennial shrub (any size), also termed a Phanerophyte if >1m or a Chamaephyte if <1 m	
5 Shrub - large	Perennial shrub (>1m), also termed a Phanerophyte (>1 m)	
6 Shrub - small	Perennial shrub small (<1 m) or dwarf shrub, also termed a Chamaephyte (<1 m)	Chamaephyte: Buds on persistent shoots near the ground – woody plants with perennating buds borne close to the ground, no more than 25 cm above the soil surface, (e.g. bilberry and periwinkle)
7 Forb or Herb	Biennial or perennial herbaceous plant, also termed a Hemicryptophyte	Hemicryptophyte: Buds at or near the soil surface, e.g. daisy, dandelion
8 Annual	An annual plant, also termed a Therophyte	Therophyte: Annual plants which survive the unfavorable season in the form of seeds and complete their life-cycle during favorable seasons. Annual species are therophytes. Many desert plants are by necessity therophytes
9 Graminoid	Grasses, sedges, restios	
10 Geophyte	Plants with underground bulbs, corms, rhizomes, tubers (not lignotubers), also termed Cryptophytes	Cryptophyte: Below ground - with resting buds lying either beneath the surface of the ground as a rhizome, bulb, corm, etc.
11 Vines	Vines, lianas and creepers	
12 Hydrophyte	Aquatic plants, includes algae like seaweeds and helophytes which live in marshy ground (also called Cryptophytes)	
13 Parasite	Parasitic plants, dependent on the host	

14	Epiphyte	Plants growing on other plants, but not parasitic (includes Aerophytes e.g. Tillandsia species, staghorn ferns, etc.)	Epiphytes and Aerophytes: Plant that obtains moisture (though not through haustoria) and nutrients from the air and rain; usually grows on other plants but not parasitic on them
15	Lithophyte	Plants growing on rocks	
16	Succulent - form unknown	Succulent (leaves, stems, etc.) of any form	
17	Succulent - annual	Annual succulent	
18	Succulent - shrub	Succulent shrubs, generally <1 m (currently includes very small dwarf succulents, often 'cushion-like')	
19	Succulent - tree	Tree succulents, generally >1 m	
20	Fern	Ferns and fern-allies	
21	Cycad	Cycads	
22	Fungus	Fungi and related groups (excluding lichens)	
23	Moss	Any bryophyte including hydrophytes	
24	Lichen	Lichens	

**Notes:**

1. In coding the plant growth forms, all those that apply can be selected, for example a species may be a shrub and a tree so any combinations of options 1 to 6 can be selected, but if it is a succulent tree, it is better to use option 19
2. Types 1-10 and 20 to 24 are unique growth forms (2, 3, 5 & 6 are sub-types which may be dropped at some point in the future in favour of just 1 and 4)
3. Types 11 to 16 are in effect additional qualifiers for the unique growth forms, so if any of these are selected one or more of the unique growth forms should also be selected
4. Type 12 can be broken down further into different kinds (requires review)
5. Type 16 is broken down into different kinds (17 to 19) these might be dropped as they are essentially redundant but this requires further review as additional types might be needed, for example the dwarf cushion-like succulents
5. Types 22 to 24 are placeholders; the fungal and bryophyte groups require review to split these into more useful functional types.