United States Department of Agriculture

Plant Identification

Common plants in your field office area and how to identify them.

Common Names and Scientific Names

All plants have one scientific name, but can have several common names, even in the same geographic location. Botanists typically use the scientific name as it is unmistakable about which plant one is talking about.

For example, *Calamagrostis canadensis* is a common grass throughout Alaska but can also be called red top, bluejoint grass, bluejoint reed grass, marsh reed grass, Canada bluejoint, feather reed grass, and Canadian reed grass, to name a few.

Common Names and Scientific Names

Binomial nomenclature

A scientific species name is made up of two parts. They include the genus (Calamagrostis) and the specific epithet (canadensis).

Together they make up what we call the species. Scientific names are often underlined and italicized, with the genus being capitalized and the specific epithet remaining lower case.

Plant growth forms

Trees:

Perennial, woody, grow from the tips and buds of branches.

Grow taller than 30’

Shrubs:

Perennial, woody, grow from tips and buds of branches.

Grow under 30’ in height, may be very small

Grasses:

Annual or perennial, herbaceous, round, hollow stem with narrow, linear leaves

Forbs:

Annual or perennial, herbaceous, grow up from the ground every year. They typically have wide leaves (not grass-like)

Herbaceous vs Woody

When we call a plant “herbaceous” it means that the plant grows from its roots in the spring (perennial) or from a seed (annual).

Their growth is soft and fleshy and the above ground growth dies back each fall.

Herbaceous vs **Woody**

A woody plant is one that builds on the growth from the previous year and puts on additional growth in its branches. A woody plant grows from buds on its stems that it sets each fall.

Annual and Perennial

If a plant grows from a seed every year and lives only one season (it does not regrow from the roots of the previous year), it is said to be an “annual” plant.

Annual plants typically put all their effort into flowers and making seeds. They usually make a high number of seeds.

By Jan Kops - www.BioLib.de, Public Domain

This is *Bromus tectorum*, or cheatgrass, an annual grass.

Annual and **Perennial**

If a plant grows from its previous year's growth (from roots in the case of herbaceous plants or from buds on stems in the case of shrubs and trees) it is said to be a perennial plant.

Perennial plants typically put growth efforts into roots and current year's vegetative growth as well as flowers and seeds.

Angelica lucida or wild celery is an herbaceous perennial plant common in coastal Alaska. It has thick, deep roots.

Flowers

All plants have flowers and they are important for proper identification.

Generally the non-botanist will start with learning plants based on their appearance and won't be dissecting the flowers to make an identification.

Grasses

- Round stem
- Linear leaf venation
- Hollow stem
- Conspicuous but atypical “flower”

Forbs:

- Showy Flowers
- Herbaceous
- Wide leaves with non-linear venation

Shrubs

- Woody stems
- Perennial
- Non-linear leaf venation

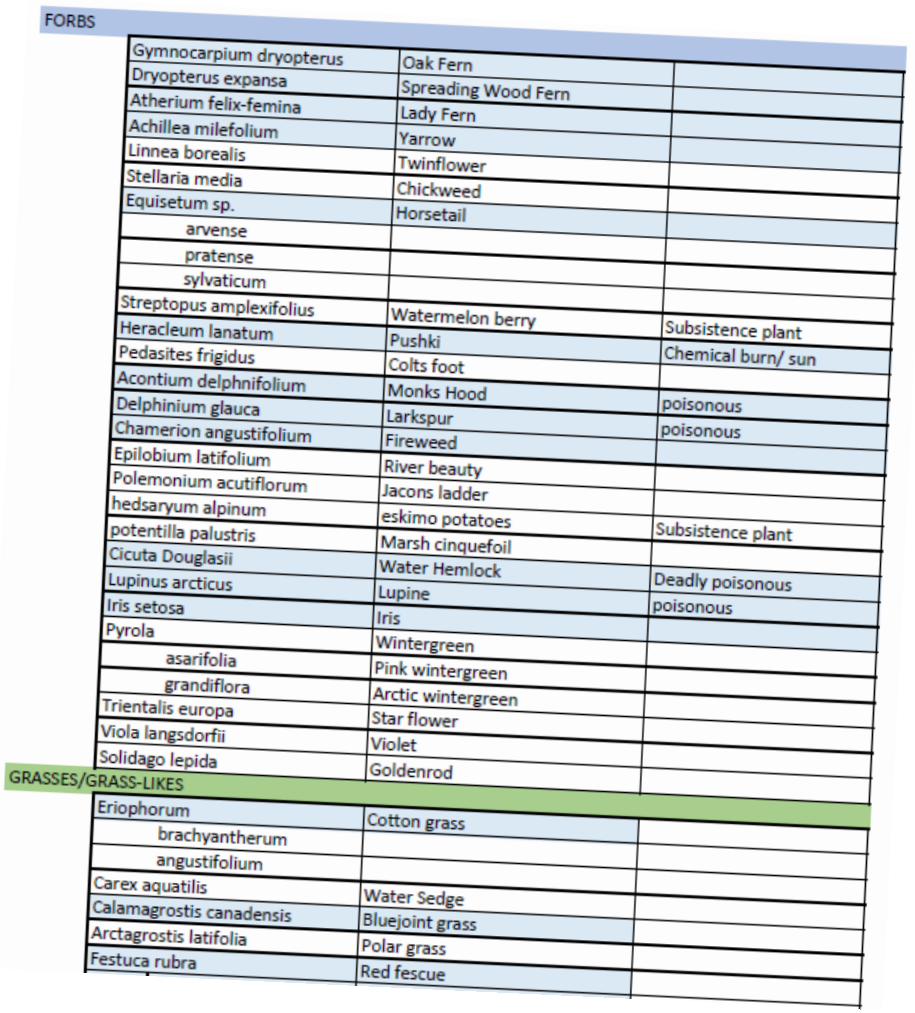
Where to Start with Plant Identification

Your Office Plant List

Your field office has a list of the most important plants to learn.

Initial species to focus on are highlighted in blue.

The list includes native species and invasive species at the bottom.



FORBS		
Gymnocarpium dryopterus	Oak Fern	
Dryopterus expansa	Spreading Wood Fern	
Atherium felix-femina	Lady Fern	
Achillea milefolium	Yarrow	
Linnea borealis	Twinflower	
Stellaria media	Chickweed	
Equisetum sp.	Horsetail	
arvense		
pratense		
sylvaticum		
Streptopus amplexifolius	Watermelon berry	Subsistence plant
Heracleum lanatum	Pushki	Chemical burn/ sun
Pedasites frigidus	Colts foot	
Acontium delphnifolium	Monks Hood	poisonous
Delphinium glauca	Larkspur	poisonous
Chamerion angustifolium	Fireweed	
Epilobium latifolium	River beauty	
Polemonium acutiflorum	Jacons ladder	
hedsaryum alpinum	eskimo potatoes	Subsistence plant
potentilla palustris	Marsh cinquefoil	
Cicuta Douglasii	Water Hemlock	Deadly poisonous
Lupinus arcticus	Lupine	poisonous
Iris setosa	Iris	
Pyrola	Wintergreen	
asarifolia	Pink wintergreen	
grandiflora	Arctic wintergreen	
Trientalis europa	Star flower	
Viola langsdorfii	Violet	
Solidago lepida	Goldenrod	
GRASSES/GRASS-LIKES		
Eriophorum	Cotton grass	
brachyantherum		
angustifolium		
Carex aquatilis	Water Sedge	
Calamagrostis canadensis	Bluejoint grass	
Arctagrostis latifolia	Polar grass	
Festuca rubra	Red fescue	

Where to Start with Plant Identification **References**:

References to help you include:

- Your co-workers
- Flora of Alaska by Eric Hulten
- Other guidebooks in your field office library
- The internet and the website plants.gov
- For invasives in Alaska:

https://accs.uaa.alaska.edu/invasive-species/non-native-plants/