

Plant Identification Series

Plant Families: Comparing *Pinaceae* and *Cupressaceae* 10/12

	<i>Pinaceae</i>	<i>Cupressaceae</i>
Common genera	<i>Abies</i> (Fir), <i>Cedrus</i> (True cedars), <i>Larix</i> (Larch), <i>Picea</i> (Spruce), <i>Pinus</i> (Pine), <i>Pseudolarix</i> (Golden Larch), <i>Pseudotsuga</i> (Douglasfir), <i>Tsuga</i> (Hemlock)	<i>Chamaecyparis</i> (False cypress), <i>Cupressus</i> (Cypress), <i>Juniperus</i> (Juniper), <i>Metasequoia</i> (Dawn Redwood), <i>Sequoia</i> (Redwood), <i>Sequoiadendron</i> (Giant Sequoia), <i>Taxodium</i> (Baldcypress), <i>Thuja</i> and <i>Platycladus</i> (Arborvitae)
Flowering structures (cones)	Imperfect; male pollen cones and female seed cones, both large and fairly obvious; plants monoecious	Imperfect; male pollen cones and female seed cones, both relatively small; plants monoecious (except juniper)
Fruiting cone	Has spirally arranged imbricate scales	Scales may be imbricate or valvate ; often peltate
Foliage	<ol style="list-style-type: none"> 1. Always needle-like 2. Evergreen except in <i>Larix</i> and <i>Pseudolarix</i> 3. held singly or in groups (fascicles) that will abscise from branchlets with age 	<ol style="list-style-type: none"> 1. May be needle-like or scale-like 2. Evergreen, except in <i>Metasequoia</i> and <i>Taxodium</i> 3. individual needles persist on branchlets; branchlets abscise with age

FIRS, SPRUCES AND PINES: WHO'S WHO?

Fir (*Abies*)

1. resinous buds
2. flat needles (look like tiny butter knives)
3. smooth stems
4. cones stand upright

Spruce (*Picea*)

1. needles 4-sided in cross section
2. stems rough
3. needles on woody pegs
4. cones mostly hanging

Pine (*Pinus*)

1. cones point in different directions (may vary by species)
2. needles borne in bundles called fascicles. Depending on the species, the fascicle will hold 2, 3 or 5 needles. This can be used to help identify different species of pine. Some examples:

2 needles per fascicle: *P. nigra*, *P. resinosa*, *P. sylvestris*

3 needles per fascicle: *P. bungeana*

5 needles per fascicle: *P. cembra*, *P. flexilis*, *P. strobus*