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12-6-2019

# Vascular Plant Families of the United States Grouped by Diagnostic Features

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### Recommended Citation

Smith, James P. Jr, "Vascular Plant Families of the United States Grouped by Diagnostic Features" (2019). *Botanical Studies*. 96.

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# FLOWERING PLANT FAMILIES OF THE UNITED STATES GROUPED BY DIAGNOSTIC FEATURES

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Second edition — 6 December 2019

The focus is on families of plants found in the conterminous United States, including ornamentals. The listing of a family is not meant to imply that every species has that feature. I am using a few family names, such as Liliaceae, Plantaginaceae, and Scrophulariaceae, in the traditional sense, because their limits remain unsettled.

HABITAT			
<p><b>Aquatic (free-floating)</b> Araceae Lemnaceae Pontederiaceae</p> <p><b>Aquatic (fully submerged)</b> Ceratophyllaceae Elatinaceae Potamogetonaceae Ruppiaceae Zosteraceae</p> <p><b>Marine waters</b> Avicenniaceae Cymodoceaceae Hydrocharitaceae Rhizophoraceae Ruppiaceae Zosteraceae</p> <p><b>Freshwater</b> Acoraceae Alismataceae Aponogetonaceae Callitrichaceae Elatinaceae Haloragaceae Hippuridaceae Nelumbonaceae Potamogetonaceae Scheuchzeriaceae</p> <p><b>Epiphytes</b> Araceae Bromeliaceae Orchidaceae</p>	<p><b>Parasitic on branches</b> Apodanthaceae Santalaceae</p>	<p><b>GENERAL APPEARANCE</b></p> <p><b>Grass-like</b> Cyperaceae Gramineae Juncaceae</p> <p><b>Moss-like</b> Mayacaceae</p> <p><b>Palm-like</b> Asparagaceae Palmae</p> <p><b>Achlorophyllous</b> Convolvulaceae Ericaceae Montiaceae Orchidaceae Orobanchaceae Portulacaceae Santalaceae Scrophulariaceae</p> <p><b>Epiphytes</b> Bromeliaceae Cactaceae Moraceae Orchidaceae</p> <p><b>Vine</b> Araliaceae Aristolochiaceae Basellaceae Bignoniaceae Convolvulaceae Cucurbitaceae</p>	<p>Dioscoreaceae Lardizabalaceae Leguminosae Menispermaceae Passifloraceae Rhamnaceae Smilacaceae Vitaceae</p> <p><b>Tendrill-bearing</b> Bignoniaceae Cucurbitaceae Leguminosae Passifloraceae Rhamnaceae Vitaceae</p> <p><b>Bulbous</b> Amaryllidaceae Dioscoreaceae Oxalidaceae Portulacaceae</p> <p><b>Trees (cone-like structures)</b> Betulaceae Casuarinaceae Magnoliaceae</p> <p><b>Woody (compound leaves)</b> Aceraceae Anacardiaceae Capparaceae Cleomaceae Juglandaceae Leguminosae Meliaceae Oleaceae Palmae Rosaceae Rutaceae Sapindaceae</p>
			STEMS
			<p>Simaroubaceae Staphyleaceae Zygophyllaceae</p> <p><b>Ribbon-like</b> Asparagaceae Polygonaceae</p> <p><b>Jointed</b> Begoniaceae Caryophyllaceae Commelinaceae Gramineae Piperaceae Polygonaceae Santalaceae Vitaceae Zygophyllaceae</p> <p><b>3-sided</b> Cyperaceae</p> <p><b>4-sided</b> Labiatae Scrophulariaceae Verbenaceae</p> <p><b>5-sided</b> Cucurbitaceae</p> <p><b>Succulent</b> Aizoaceae Cactaceae Euphorbiaceae Liliaceae s. l.</p>

**LEAVES**

**Conifer-like**  
Casuarinaceae  
Ericaceae  
Tamaricaceae

**Equitant**  
Iridaceae

**Spiny**  
Aquifoliaceae  
Berberidaceae  
Compositae  
Papaveraceae  
Rhamnaceae

**Gland-dotted**  
Guttiferae  
Lauraceae  
Myrsinaceae  
Myrtaceae  
Oleaceae  
Plumbaginaceae  
Rhizophoraceae  
Rutaceae  
Vitaceae

**Succulent**  
Aizoaceae  
Amaranthaceae  
Bataceae  
Crassulaceae  
Montiaceae  
Nyctaginaceae  
Portulacaceae

**Tubular**  
Sarraceniaceae

**Sticky (insectivorous)**  
Droseraceae  
Lentibulariaceae

**PUBESCENCE**

**Stellate hairs**  
Hamamelidaceae  
Sapotaceae  
Sterculiaceae  
Tiliaceae

**Malpighiaceae hairs**  
Malpighiaceae  
Sapotaceae

**Scales**  
Amaranthaceae  
Elaeagnaceae

**Stinging/irritating hairs**  
Euphorbiaceae

Loasaceae  
Hydrophyllaceae  
Urticaceae

**AROMATIC PLANTS**

**Herbaceous**  
Aristolochiaceae  
Compositae  
Geraniaceae  
Labiatae  
Polemoniaceae  
Rutaceae  
Saururaceae  
Umbelliferae  
Verbenaceae  
Zingiberaceae

**Woody**  
Calycanthaceae  
Canellaceae  
Cistaceae  
Illiciaceae  
Juglandaceae  
Lauraceae  
Meliaceae  
Myricaceae  
Myrtaceae  
Pittosporaceae  
Rutaceae  
Schisandraceae  
Simaroubaceae

**LATEX BEARING**

**Woody**  
Caricaceae  
Euphorbiaceae  
Moraceae  
Sapotaceae

**Herbaceous**  
Alismataceae  
Apocynaceae  
Aponogetonaceae  
Araceae  
Aristolochiaceae  
Bixaceae  
Campanulaceae  
Compositae  
Convolvulaceae  
Euphorbiaceae  
Haemodoraceae  
Nymphaeaceae  
Papaveraceae

**MUCILAGINOUS PLANTS**

Commelinaceae  
Malvaceae

Musaceae  
Sterculiaceae

**INSECTIVOROUS**

Droseraceae  
Lentibulariaceae  
Sarraceniaceae

**INFLORESCENCES**

**Trees with catkins**  
Betulaceae  
Fagaceae  
Juglandaceae  
Garryaceae  
Moraceae  
Salicaceae

**Umbel**  
Amaryllidaceae  
Araliaceae  
Smilacaceae

**Compound umbel**  
Umbelliferae

**Spikelets**  
Cyperaceae  
Gramineae  
Rafflesiaceae

**Thickened spike**  
Araceae  
Bataceae  
Amaranthaceae  
Piperaceae  
Saururaceae

**FLOWERS**

**Perianth 0**  
Callitrichaceae  
Casuarinaceae  
Euphorbiaceae  
Hippuridaceae  
Lemnaceae  
Myricaceae  
Potamogetonaceae  
Ruppiaceae  
Saururaceae  
Sarcobataceae  
Typhaceae

**2-merous**  
Liliaceae  
Stemonaceae

**3-merous (but a dicot)**  
Aristolochiaceae

Berberidaceae  
Cabombaceae  
Limnanthaceae  
Polygonaceae  
Lardizabalaceae  
Menispermaceae

**4-merous (trees)**  
Oleaceae  
Platanaceae

**4-merous (herbs)**  
Cruciferae  
Liliaceae  
Onagraceae  
Plantaginaceae  
Potamogetonaceae

**Spirally-inserted parts**  
Illiciaceae  
Magnoliaceae  
Ranunculaceae

**Conspicuously bracteate**  
Acanthaceae  
Bromeliaceae  
Heliconiaceae  
Marantaceae  
Musaceae  
Nyctaginaceae  
Scrophulariaceae  
Strelitziaceae  
Theaceae

**Corona**  
Apocynaceae  
Liliaceae  
Passifloraceae

**Hypanthium**  
Cactaceae  
Calycanthaceae  
Hydrangeaceae  
Leguminosae  
Lythraceae  
Melastomaceae  
Myrtaceae  
Onagraceae  
Rhamnaceae  
Santalaceae  
Rosaceae  
Thymelaeaceae  
Turneraceae

**Epicalyx**  
Caryophyllaceae  
Dipsacaceae  
Lythraceae  
Malvaceae  
Tiliaceae

**Bilabiate corolla**  
Acanthaceae

Bignoniaceae  
Labiatae  
Lentibulariaceae  
Verbenaceae

**Spurred**  
Balsaminaceae  
Orchidaceae  
Ranunculaceae  
Scrophulariaceae  
Tropaeolaceae  
Valerianaceae  
Violaceae

**Petals hairy**  
Rhizophoraceae

**Petals clawed**  
Caryophyllaceae  
Cruciferae  
Zygophyllaceae

**Flowers unisexual  
(herbs)**

Acoraceae  
Apodanthaceae  
Araceae  
Bataceae  
Callitrichaceae  
Cannabaceae  
Ceratophyllaceae  
Cucurbitaceae  
Elatinaceae  
Eriocaulaceae  
Euphorbiaceae  
Haloragaceae  
Lemnaceae  
Smilacaceae  
Typhaceae  
Urticaceae  
Zannichelliaceae  
Zosteraceae

**Flowers unisexual  
(woody plants)**

Betulaceae  
Buddlejaceae  
Burseraceae  
Ebenaceae  
Fagaceae  
Garryaceae  
Juglandaceae  
Moraceae  
Myricaceae  
Platanaceae  
Salicaceae  
Sarcobataceae  
Simaroubaceae  
Sterculiaceae

**Stamens  
(hairy)**  
Commelinaceae

**Stamens Numerous  
(woody plants)**

Cactaceae  
Cistaceae  
Guttiferae  
Hydrangeaceae  
Leguminosae  
Loasaceae  
Magnoliaceae  
Malvaceae  
Myrtaceae  
Theaceae  
Tiliaceae

**Stamens numerous  
(herbs)**

Cactaceae  
Guttiferae  
Loasaceae  
Malvaceae  
Montiaceae  
Nelumbonaceae  
Nymphaeaceae  
Paeoniaceae  
Phytolaccaceae  
Portulacaceae  
Ranunculaceae  
Resedaceae

**Stamens  
(in bundles)**  
Guttiferae  
Myrtaceae  
Theaceae  
Tiliaceae

**Stamens  
(didynamous)**  
Gesneriaceae  
Labiatae  
Bignoniaceae  
Verbenaceae

**Stamens  
(tetradynamous)**  
Cruciferae

**Stamens  
(appendaged)**  
Ericaceae  
Melastomataceae  
Meliaceae

**Staminoids**  
Acanthaceae  
Araceae

Bignoniaceae  
Cannaceae  
Geraniaceae  
Gesneriaceae  
Guttiferae  
Hamamelidaceae  
Lauraceae  
Linaceae  
Marantaceae  
Onagraceae  
Primulaceae  
Ranunculaceae  
Scrophulariaceae  
Zingiberaceae

**Ovary  
(stipitate)**  
Capparaceae  
Cleomaceae

**Stamens & Carpels  
(fused)**

Apocynaceae  
Orchidaceae

## FRUITS

**Winged**  
Aceraceae  
Celastraceae  
Compositae  
Juglandaceae  
Magnoliaceae  
Oleaceae  
Sapindaceae  
Ulmaceae  
Umbelliferae

**Spiny/hooks**  
Altingiaceae  
Compositae  
Fagaceae  
Krameriaceae  
Pedaliaceae  
Umbelliferae

**Caryopsis**  
Gramineae

**Follicle(s)**  
Apocynaceae  
Magnoliaceae  
Paeoniaceae  
Ranunculaceae  
Rosaceae

**Legume**  
Leguminosae

**Nut**  
Amaranthaceae  
Betulaceae  
Juglandaceae  
Onagraceae  
Polygalaceae  
Polygonaceae  
Rhamnaceae

**Nutlet**  
Boraginaceae  
Labiatae

**Pepo**  
Cucurbitaceae

**Pome**  
Rosaceae

**Schizocarp(s)**  
Geraniaceae  
Malvaceae  
Oleaceae  
Rutaceae  
Sapindaceae  
Umbelliferae

**Warty/faceted**  
Araceae  
Cyclanthaceae  
Moraceae  
Pandanaeae  
Platanaceae

## SEEDS

**Arils**  
Celastraceae  
Leguminosae  
Marantaceae  
Passifloraceae  
Polygalaceae  
Thymelaeaceae

**Caruncles/Elaiosomes**  
Buxaceae  
Euphorbiaceae  
Primulaceae  
Ranunculaceae  
Resedaceae  
Violaceae

**Apical tuft of hairs**  
Apocynaceae  
Compositae

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