

## USEFUL PLANTS AND POISONOUS PLANTS

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## WILD EDIBLE PLANTS

### Words of Caution

At least some parts of literally thousands of native and naturalized plants have been used for food and other purposes by Native Americans. Many were also used by the immigrants who came later from other areas of the world. A representative compilation of wild edible plants is shown in [Table 4](#). This list has been compiled from a variety of sources; the author has had opportunities to sample only a fraction of these plants himself and cannot confirm the edibility of all of the plants listed.

The reader is cautioned to be certain of the identity of a plant before consuming any part of it. For example, cow parsnip (*Heracleum lanatum*) and water hemlocks (*Cicuta* spp.) resemble each other in general appearance, but although cooked roots of cow parsnip have been used for food for perhaps many centuries, those of water hemlocks are very poisonous and have caused many human fatalities.

As indicated in Chapter 21 of Stern, Bidlack & Jansky: *Introductory Plant Biology*, 9th ed., many species of organisms are now on rare and endangered species lists, and a number of them will become extinct within the next few years. Although the wild edible plants discussed here may not presently be included in such lists, it might not take much indiscriminate gathering to endanger their existence as well. Because of this, one should exercise the following rule of thumb: Never reduce a population of wild plants by more than 10% when collecting them for any purpose! If the population consists of less than ten plants, do not disturb it.

### TABLE 4

## Wild Edible Plants

<i>Plant</i>	<i>Scientific Name</i>	<i>Uses</i>
Amaranth	<i>Amaranthus</i> spp.	Young leaves used like spinach; seeds ground with others for flour
Arrow grass	<i>Triglochin maritima</i>	Seeds parched or roasted ( <b>Caution:</b> All other plant parts are poisonous.)
Arrowhead	<i>Sagittaria latifolia</i>	Tubers used similarly to potatoes
Balsamroot	<i>Balsamorhiza</i> spp.	Whole plant edible, especially when young, either raw or cooked
Basswood	<i>Tilia</i> spp.	Fruits and flowers ground together to make a paste that can serve as a chocolate substitute; winter buds edible raw; dried flowers used for tea
Bearberry (Kinnikinnik)	<i>Arctostaphylos uva-ursi</i>	Berries are edible but much more palatable when cooked
Bedstraw (Cleavers)	<i>Galium aparine</i>	Roasted and ground seeds make good coffee substitute
Beechnuts	<i>Fagus grandifolia</i>	Seeds used as nuts; oil extracted from seeds for table use
Biscuit root	<i>Lomatium</i> spp.	Roots eaten raw or dried and ground into flour; seeds edible raw or roasted
Bitterroot	<i>Lewisia rediviva</i>	Outer coat of the bulbs should be removed to eliminate the bitter principle; bulbs are then boiled or roasted
Blackberry (wild)	<i>Rubus</i> spp.	Fruits edible raw, in pies, jams, and jellies
Black walnut	<i>Juglans nigra</i>	Nutmeats edible
Bladder campion	<i>Silene cucubalus</i>	Young shoots (less than 5 cm tall) cooked as a vegetable
Blueberry	<i>Vaccinium</i> spp.	Fruits edible raw, frozen, and in pies, jams, and jellies
Bracken fern	<i>Pteridium aquilinum</i>	Young uncoiling leaves ("fiddleheads") cooked like asparagus; rhizomes also edible but usually tough. ( <b>Caution:</b> Evidence indicates that frequent consumption of bracken fern can cause cancer of the intestinal tract.)
Broomrape	<i>Orobanche</i> spp.	Entire plant eaten raw or roasted
Bulrush (Tule)	<i>Scirpus</i> spp.	Roots and young shoot tips edible raw or cooked; pollen and seeds also edible
Butternut	<i>Juglans cinerea</i>	Nutmeats edible

Camas	<i>Camassia quamash</i>	Roasted bulbs considered a delicacy
Caraway	<i>Carum carvi</i>	Young leaves in salads; seeds for flavoring baked goods and cheeses
Cattail	<i>Typha</i> spp.	Copious pollen produced by flowers in early summer is rich in vitamins and can be gathered and mixed with flour for baking; rhizomes can be cooked and eaten like potatoes
Chicory	<i>Cichorium intybus</i>	Leaves eaten raw or cooked; dried, ground roots (roasted) make good coffee substitute
Chokecherry	<i>Prunus virginiana</i>	Fruits make excellent jelly or can be cooked with sugar for pies and cobblers
"Coffee" (wild)	<i>Triosteum</i> spp.	Berries dried and roasted make good coffee substitute
Common chickweed	<i>Stellaria media</i>	Plants cooked as a vegetable
Corn lily	<i>Clintonia borealis</i>	Youngest leaves can be used as a cooked vegetable
Clover	<i>Trifolium</i> spp	Roots edible
Cow parsnip	<i>Heracleum lanatum</i>	Roots and young stems cooked. ( <b>Caution:</b> Be certain of identity; some other members of the family similar in appearance to cow parsnip are highly toxic.)
Cowpea	<i>Vigna sinensis</i>	"Peas" and young pods cooked as a vegetable (plant "naturalized" in southern U.S.)
Crab apple	<i>Pyrus</i> spp.	Jelly made from fruits
Cranberry (wild, bog)	<i>Vaccinium</i> spp.	Berries edible cooked, preserved, or in drinks; adding a small amount of salt while cooking significantly reduces amount of sugar needed to counteract acidity
Crowberry	<i>Empetrum nigrum</i>	Fruits should first be frozen then cooked with sugar
Dandelion	<i>Taraxacum officinale</i>	Leaves rich in vitamin A; dried roots make good coffee substitute; wine made from young flowers
Dock	<i>Rumex</i> spp.	Leaves cooked like spinach; tartness of leaves varies from species to species and sometimes from plant to plant—tart forms should be cooked in two or three changes of water
Douglas fir	<i>Pseudotsuga menziesii</i>	Cambium and young phloem edible; tea made from fresh leaves
Elderberry	<i>Sambucus</i> spp.	Fresh flowers used to flavor batters; fruits used in pies, jellies,

wine. (**Caution:** Other parts of the plant are poisonous.)

Evening primrose	<i>Oenothera hookeri</i> , <i>O. biennis</i> , and others	Young roots cooked
Fairy bells	<i>Disporum trachycarpum</i>	Berries can be eaten raw
Fennel	<i>Foeniculum vulgare</i>	Leaf petioles eaten raw or cooked
Ferns	Most (but not all) spp.	Young coiled fronds (fiddleheads) may be cooked as a vegetable
Fireweed	<i>Epilobium angustifolium</i>	Young shoots and leaves boiled as a vegetable
Fritillary	<i>Fritillaria</i> spp.	Cooked bulbs are edible
Ginger (wild)	<i>Asarum</i> spp.	Rhizomes can be used as substitute for true ginger
Gooseberry	<i>Ribes</i> spp.	Berries eaten cooked, dried, or raw; make excellent jelly
Grape (wild)	<i>Vitis</i> spp.	Berries usually tart but can be eaten raw; make good jams and jellies
Grass	Many genera and species	Seeds of most can be made into flour; rhizomes of many perennial species can be dried and ground for flour
Greenbrier	<i>Smilax</i> spp.	Roots dried and ground; refreshing drink made with ground roots, sugar, and water
Groundnut	<i>Apios americana</i>	Tubers cooked like potatoes
Hawthorn	<i>Crataegus</i> spp.	Fruits edible raw and in jams and jellies
Hazelnut	<i>Corylus</i> spp.	Nuts eaten raw or roasted
Hickory	<i>Carya</i> spp.	Nuts edible
Highbush cranberry	<i>Viburnum trilobum</i>	Fruits make excellent jellies and jams
Huckleberry	<i>Vaccinium</i> spp.	Berries eaten raw or in jams and jellies
Indian paintbrush	<i>Castilleja</i> spp.	Flowers of many species edible. ( <b>Caution:</b> On certain soils, plants absorb toxic quantities of selenium.)
Indian pipe	<i>Monotropa</i> spp.	Whole plant edible raw or cooked
June berries	<i>Amelanchier</i> spp.	Fruit edible fresh, dried, or preserved
Juniper	<i>Juniperus</i> spp.	"Berries" dried, ground, and made into cakes
Labrador tea	<i>Ledum</i> spp.	Tea made from young leaves

Lamb's quarters	<i>Chenopodium album</i>	Leaves and young stems used as cooked vegetable
Licorice	<i>Glycyrrhiza lepidota</i> ; <i>G. glabra</i>	Roots edible raw or cooked
Mallow	<i>Malva</i> spp.	Leaves and young stems used as vegetable (use only small amounts at one time)
Manzanita	<i>Arctostaphylos</i> spp.	Berries eaten raw, in jellies or pies, or made into "cider." <b>(Caution:</b> Raw berries can be somewhat indigestible.)
Maple	<i>Acer</i> spp.	Sugar maples ( <i>Acer saccharum</i> ) well known for the sugar content of the early spring sap; other species (e.g., box elder— <i>A. negundo</i> , bigleaf maple— <i>A. macrophyllum</i> ) also contain usable sugars in their early spring sap
Mariposa lily	<i>Calochortus</i> spp.	Bulbs edible raw or cooked
Mayapple	<i>Podophyllum peltatum</i>	Fruit good raw or cooked. <b>(Caution:</b> Other parts of the plant are poisonous.)
Maypops	<i>Passiflora incarnata</i>	Fruits edible raw or cooked
Miner's lettuce	<i>Claytonia perfoliata</i>	Leaves eaten raw as a salad green
Mint	<i>Mentha arvensis</i> and others	Leaves of several mints used for teas
Mormon tea	<i>Ephedra</i> spp.	Tea from fresh or dried leaves (add sugar to offset bitterness); seeds for bitter meal
Mulberry	<i>Morus</i> spp.	Fruits of the red mulberry ( <i>M. rubra</i> ) are used raw and in pies and jellies; fruits of white mulberry ( <i>M. alba</i> ) edible but insipid
Mushrooms	Many genera and species	<b>Utmost caution should be exercised in identifying mushrooms before consuming them.</b> Although poisonous species are in the minority, they are common enough. Edible forms that are relatively easy to identify include morels ( <i>Morchella esculenta</i> ), most puffballs ( <i>Lycoperdon</i> spp.), and inky cap mushrooms ( <i>Coprinus</i> spp.).
Mustard	<i>Brassica</i> spp.	Leaves used as vegetable; condiment made from ground seeds
Nettles	<i>Urtica</i> spp.	Leaves and young stems cooked like spinach
New Jersey tea	<i>Ceanothus americanus</i>	Tea from leaves
Nutgrass	<i>Cyperus esculentus</i> and others	Tubers can be eaten raw
Oak	<i>Quercus</i> spp.	Acorns were ground for flour and widely used by native North Americans; all contain bitter tannins that must be leached out

		before use
Onion (wild)	<i>Allium</i> spp.	Bulbs edible raw or cooked
Orach	<i>Atriplex patula</i> and others	Leaves and young stems cooked as a vegetable
Oregon grape	<i>Berberis aquifolia</i> ; <i>B. nervosa</i>	Berries edible raw or preserved
Ostrich fern	<i>Matteuccia struthiopteris</i>	Young coiled fronds cooked as a vegetable
Pawpaw	<i>Asimina triloba</i>	Fruit edible raw or cooked
Pennycress	<i>Thlaspi arvense</i>	Young leaves are edible raw
Peppergrass	<i>Lepidium</i> spp.	Immature fruits add zest to salads; seeds spice up meat dressings
Persimmon	<i>Diospyros virginiana</i>	Fully ripened fruits can be eaten raw or cooked
Pickereel weed	<i>Pontederia cordata</i>	Fruits edible raw or dried
Pigweed (see Amaranth)		
Pines	<i>Pinus</i> spp.	Cambium, young phloem and seeds edible; tea from fresh needles rich in vitamin C
Pipsissewa	<i>Chimaphila umbellata</i>	Drink made from boiled roots and leaves (cool after boiling)
Plantain	<i>Plantago</i> spp.	Young leaves eaten in salads or as cooked vegetable
Poke	<i>Phytolacca americana</i>	Fresh young shoots boiled like asparagus. ( <b>Caution:</b> Older parts of plants are poisonous.)
Prairie turnip	<i>Psoralea esculenta</i>	Turniplike roots cooked like potatoes
Prickly pear	<i>Opuntia</i> spp.	Fruits and young stems peeled and eaten raw or cooked
Psyllium	<i>Plantago ovata</i>	Seed husks widely used as a bulking laxative
Purple avens	<i>Geum rivale</i>	Liquid from boiled root has chocolate-like flavor
Purslane	<i>Portulaca oleracea</i>	Leaves and stems cooked like spinach
Quackgrass	<i>Elytrigia repens</i>	Noxious weed whose rhizomes can be used as emergency food
Raspberry (wild)	<i>Rubus</i> spp.	Fruits edible raw or in pies, jams, and jellies
Redbud	<i>Cercis</i> spp.	Flowers used in salads; cooked young pods edible
River-beauty	<i>Epilobium latifolium</i>	Young shoots and fleshy leaves can be cooked as a vegetable

Rose (wild)	<i>Rosa</i> spp.	Fruits (hips) exceptionally rich in vitamin C; hips can be eaten raw, pureed, or candied
Salal	<i>Gaultheria procumbens</i> , <i>G. shallon</i>	Ripe berries edible raw, dried, or preserved
Salmonberry	<i>Rubus spectabilis</i>	Fruits edible raw, dried, or cooked
Salsify	<i>Tragopogon</i> spp.	Roots edible raw or cooked
Saltbush	<i>Atriplex</i> spp.	Seeds nutritious. ( <b>Caution:</b> On certain soils, plants can absorb toxic amounts of selenium.)
Sassafras	<i>Sassafras albidum</i>	Tea from roots. ( <b>Caution:</b> Large quantities have narcotic Effect; leaves and pith used for Louisiana file.)
Serviceberry	<i>Amelanchier</i> spp.	All fruits edible (mostly bland)
Sheep sorrel	<i>Rumex acetosella</i>	Raw leaves have a pleasant sour taste; leaves can be used as seasoning in other dishes
Shepherd's purse	<i>Capsella bursa-pastoris</i>	Leaves cooked as vegetable; seeds eaten parched or ground for flour
Showy milkweed	<i>Asclepias speciosa</i>	Flowers eaten raw or cooked; young shoots cooked
Silverweed	<i>Potentilla anserina</i>	Cooked roots edible
Soap plant	<i>Chlorogalum pomeridianum</i>	Bulbs slow-baked and eaten like potatoes after fibrous outer coats are removed
Solomon's seal	<i>Polygonatum</i> spp.	Rootstocks dried and ground for bread flour
Sorrel	<i>Oxalis</i> spp.	Leaves mixed in salads
Spatterdock	<i>Nuphar polysepalum</i>	Seeds placed on hot stove burst like popcorn and are edible as such; peeled tubers eaten boiled or roasted
Speedwell	<i>Veronica americana</i> and others	Leaves and stems used in salads
Spring beauty	<i>Claytonia</i> spp.	Bulbs edible raw or roasted
Strawberry (wild)	<i>Fragaria</i> spp.	Fruits superior in flavor to cultivated varieties
Sunflower	<i>Helianthus annuus</i>	Seeds eaten raw or roasted; seeds yield cooking oil
Sweet cicely	<i>Osmorhiza</i> spp.	Roots have aniselike flavor
Sweet flag	<i>Acorus calamus</i>	Young shoots used in salads; roots candied
Thimbleberry	<i>Rubus parviflorus</i>	Fruits edible raw, cooked, dried, or preserved; dried leaves used

		for tea
Thistle	<i>Cirsium</i> spp.	Peeled stems edible; roots edible raw or roasted
Vetch	<i>Vicia</i> spp.	Tender green pods edible baked or boiled
Watercress	<i>Nasturtium officinale</i>	Leaves edible raw in salads or cooked as a vegetable
Waterleaf	<i>Hydrophyllum</i> spp.	Young shoots raw in salads; shoots and roots cooked as vegetable
Water plantain	<i>Alisma</i> spp.	The bulblike base of the plant is dried and then cooked
Water shield	<i>Brasenia schreberi</i>	Tuberlike roots are peeled and then dried to be ground for flour or boiled
Winter cress	<i>Barbarea</i> spp.	Leaves and young stem edible as cooked vegetable
Yarrow	<i>Achillea lanulosa</i>	Plant dried and made into broth. ( <b>Caution:</b> The closely related and widespread European yarrow— <i>A. millefolium</i> —is somewhat poisonous.)
Yellow pond lily (see Spatterdock)		
Yew	<i>Taxus</i> spp.	Bright red pulpy part of berries edible. ( <b>Caution:</b> Seeds and leaves are poisonous.)

## POISONOUS PLANTS

Literally thousands of plants contain varying amounts of poisonous substances. In many instances, the poisons are not present in sufficient quantities to cause adverse effects in humans when only moderate contact or consumption is involved, and cooking may destroy or dissipate the substance. Some plants have substances that produce toxic effects in some organisms but not in others. For example, ordinary onions (*Allium cepa*) occasionally poison horses or cattle, yet are widely used for human food, and poison ivy (*Toxicodendron radicans*) or poison oak (*Toxicodendron diversilobum*) produce dermatitis in some individuals but not in others. [Table 5](#) and [Table 6](#) include plants that are native to, or cultivated in, the United States and Canada.

**TABLE 5**  
**Plants Known to Have Caused Human Fatalities**

<i>Plant</i>	<i>Scientific Name</i>	<i>Poisonous Parts</i>
Angel's trumpet	<i>Datura suaveolens</i>	All parts, especially seeds and leaves
Azalea	<i>Rhododendron</i> spp.	Leaves and flowers (however, poisoning is rare)
Baneberry	<i>Actaea</i> spp.	Berries and roots
Belladonna	<i>Atropa belladonna</i>	All parts, especially fruits and roots