

ALPS & CARPATHIANS MONTANE-ALPINE PLANT SURVIVAL GUIDE

Europe • USDA-EQUIVALENT ZONES 3-7 • KÖPPEN Dfb / Dfc / ET

LAND + WATER

REGIONAL HABITAT ILLUSTRATION — NOT AN ID PHOTO

USEFUL

EDIBLE

MEDICINAL

POISONOUS

IDENTIFY • EAT • BUILD • HEAL • AVOID

Illustrations show habitat and form; verify every plant with current regional photographs and expert sources.

REGION AT A GLANCE

A continental bioclimatic region, not a destination or a promise that every listed plant occurs at every site.



Continent: Europe USDA-equivalent hardiness: 3-7 Köppen: Dfb / Dfc / ET
Regional habitat: Montane forest, subalpine meadow, scree and alpine snowbed
Zone warning: hardiness describes winter minimum temperature only; rainfall, heat, soils, fire, elevation and seasonality still control the flora.

FIELD PRIORITIES

- Use the continent, climate band and habitat as filters — never as proof of identity.
- Match at least three independent traits and rule out every dangerous look-alike before harvest.
- Treat water plants as both botanical and water-quality decisions; parasites, sewage and algal toxins can defeat correct identification.
- Alpine and tundra plants recover slowly; avoid roots and cushion plants and harvest only common, replaceable material.
- Medicinal notes document traditional use only; the guide gives no dosing and does not replace medical care.

SURVIVAL STANDARD

A correct plant name is only the beginning. Also verify plant part, maturity, preparation, dose, contamination, legal access and local cultural protocol. When any one of those is uncertain, do not consume or medicate.

POSITIVE IDENTIFICATION AND PRACTICAL USE

The illustrations are form diagrams. The linked POWO and iNaturalist pages provide current photographs and taxonomic context.

- 1. PLACE**
Confirm continent, elevation, water regime, soil and disturbance.
- 2. FORM**
Tree, shrub, vine, herb, grass, sedge, palm, fern, succulent or aquatic.
- 3. LEAF**
Arrangement, veins, edge, hairs, glands, sap, odor and underside.
- 4. STEM / BARK**
Thorns, pith, nodes, buds, lenticels, fibers, latex and branching.
- 5. FLOWER / FRUIT**
Petal count, inflorescence, fruit attachment, seed and maturity.
- 6. EXCLUDE**
Name every dangerous look-alike and explain why it is different.
- 7. VERIFY**
Use current regional flora, qualified local knowledge and several photos.

AUTOMATIC STOP LIST

No tasting to identify.
No unknown roots, bulbs or white umbels.
No unknown milky sap.
No raw wetland foods.
No medicinal dose experiments.
No smoke from unknown toxic wood.

USEFUL-PLANT HIERARCHY

1. Deadfall and shed bark.
2. Abundant annual greens and fruit.
3. Pruned shoots and leaves.
4. Small stems from common thickets.
5. Roots, bark and whole plants only with permission and no safer substitute.

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

Wood, fiber, tinder, bow-and-arrow components, friction fire, containers and construction.

SIBERIAN SPRUCE

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Picea obovata

IDENTIFY: Sharp four-sided needles on woody pegs; narrow crown; long hanging cones.

HABITAT / SEASON: Moist Siberian taiga, valleys and north-facing slopes. Season: Year-round.

SURVIVAL USE: Straight poles, roots for careful lashing, dry lower branches and resinous fuel.

CAUTION: Needles are sharp; root harvest damages living trees.

LOOK-ALIKES: Larch has soft clustered needles and drops them in autumn.

TASKS: poles, fuel, tinder, cordage

Verified images: POWO

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LARCHES

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Larix spp.

IDENTIFY: Soft needles in clusters on short spur shoots; small upright cones; foliage turns yellow and falls.

HABITAT / SEASON: Boreal wetlands, continental taiga and cold mountain forest. Season: Wood year-round; needles growing season.

SURVIVAL USE: Rot-resistant poles, roots, stakes and durable fuel. Dead interior twigs are often protected from rain.

CAUTION: Small bog or treeline trees may be very old. Wet larch is hard to ignite.

LOOK-ALIKES: Spruce retains sharp single needles in winter.

TASKS: poles, fuel, stakes, cordage

Verified images: POWO

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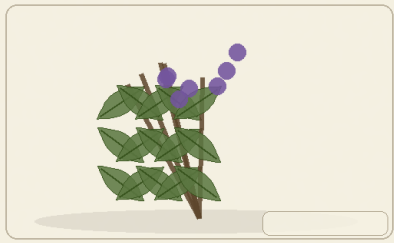
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USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

Wood, fiber, tinder, bow-and-arrow components, friction fire, containers and construction.

HAZELS

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Corylus spp.

IDENTIFY: Round to oval doubly toothed leaves; male catkins; nuts enclosed by leafy husks.

HABITAT / SEASON: Temperate woodland edge, hedgerow and mountain thicket. Season: Nuts late summer-fall; rods year-round.

SURVIVAL USE: Nuts are high-energy food; straight flexible rods make arrow shafts, basket frames and light wattle.

CAUTION: Nut allergies apply. Rods split if forced when dry.

LOOK-ALIKES: Alders have woody cone-like catkins and favor wetter ground.

TASKS: food nut, arrow shaft, basketry, wattle

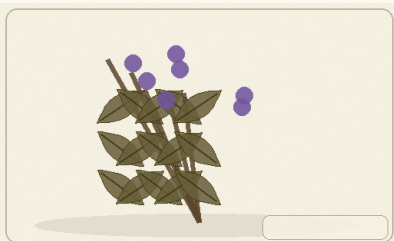
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WILLOWS

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Salix spp.

IDENTIFY: Alternate narrow to oval leaves; flexible twigs; catkins; many species root along wet ground.

HABITAT / SEASON: Riverbanks, lake margins, floodplains, tundra valleys and moist forest. Season: Twigs year-round; leaves and catkins in the growing season.

SURVIVAL USE: Flexible rods for baskets, fish traps, wattle, arrow shafts and repair splints. Dry punky willow and softer species can serve bow-drill hearth boards; denser pieces make spindles. Bark has documented salicylate-related traditional use.

CAUTION: Species identification is difficult. Do not self-dose bark with aspirin allergy, bleeding risk, kidney disease, pregnancy, or in children with viral illness.

LOOK-ALIKES: Alders have cone-like female catkins; some dogwoods have opposite leaves.

TASKS: arrow shaft, bow drill board, basketry, cordage, medicine

Verified images: POWO

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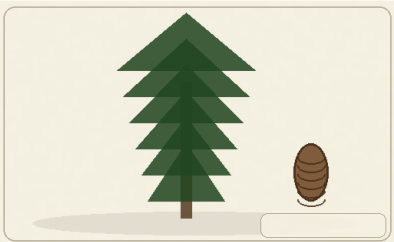
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USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

Wood, fiber, tinder, bow-and-arrow components, friction fire, containers and construction.

YEWS

USEFUL MATERIAL



Taxus spp.

IDENTIFY: Flat dark needles; thin reddish bark; single red cup-like aril surrounding a hard seed.

HABITAT / SEASON: Shaded temperate and montane forest. Season: Year-round.

SURVIVAL USE: Dense elastic wood is historically important for self bows, wedges and tools.
CAUTION: Needles, bark and seeds contain dangerous taxines. Never burn in a cooking fire; the red aril does not make the seed safe.
LOOK-ALIKES: Hemlock and fir have cones and pale bands beneath needles.
TASKS: bow wood, wedges, tools

Verified images: POWO

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MATERIAL SELECTION SCREEN

Before cutting, test straightness, grain, dryness, hidden rot, sap or smoke toxicity, and whether the species is protected. Match the material to the load: springy bow wood, straight shaft wood, soft dry hearth board, harder spindle, fibrous cordage, or resin-free cooking fuel.

LAND-BASED EDIBLE PLANTS

Documented foods on dry or seasonally dry ground. Preparation and contamination still matter.

BILBERRY / BOG BLUEBERRY GROUP

LAND FOOD



Stylized form diagram — not an identification photograph

Vaccinium myrtillus / *V. uliginosum*

IDENTIFY: Low woody shrub; blue to blue-black berries with a crown; leaves alternate and small.

HABITAT / SEASON: Boreal, montane and tundra heath. Season: Mid- to late summer.

SURVIVAL USE: Ripe berries are documented food and can be dried or cooked.

CAUTION: Color alone is not enough; confirm woody stem and *Vaccinium* fruit crown.

LOOK-ALIKES: Black-berried herbs lack woody stems; crowberry has needle-like leaves.

TASKS: food fruit

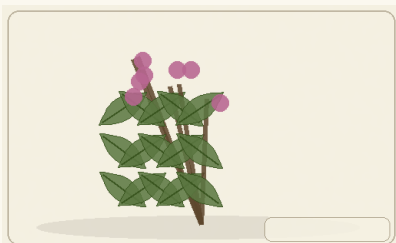
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WILD ROSES

LAND FOOD



Stylized form diagram — not an identification photograph

Rosa spp.

IDENTIFY: Prickly stems; compound toothed leaves; five-petaled flowers; red to orange hips.

HABITAT / SEASON: Open woods, thickets, prairie, dunes and mountain slopes. Season: Hips late summer through winter.

SURVIVAL USE: Fleshy hip walls are documented food after the irritating hairs and seeds are removed; good for simmering or drying.

CAUTION: Internal hairs irritate skin and mouth. Avoid sprayed or moldy fruit.

LOOK-ALIKES: Hawthorn has simple lobed leaves and woody thorns.

TASKS: food fruit, cordage

Verified images: POWO

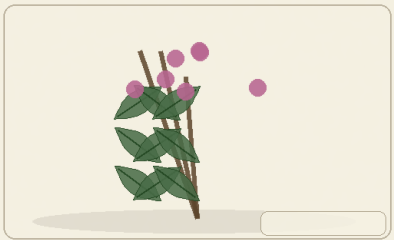
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LAND-BASED EDIBLE PLANTS

Documented foods on dry or seasonally dry ground. Preparation and contamination still matter.

WILD ONIONS AND GARLIC
LAND FOOD



Allium spp.

IDENTIFY: Narrow leaves or hollow stems; spherical flower heads; clear onion or garlic odor in leaf and bulb.

HABITAT / SEASON: Meadows, rocky slopes, open woodland and stream terraces. Season: Spring through fall.

SURVIVAL USE: Leaves, flowers and bulbs of positively identified Allium are documented food and seasoning.
 CAUTION: Every sampled part must smell of onion, but odor is not the only test. Avoid unknown bulbs.
 LOOK-ALIKES: Death camas lacks onion odor and can be fatal.
 TASKS: food green, food bulb

Verified images: POWO
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STINGING NETTLE
LAND FOOD



Urtica dioica

IDENTIFY: Opposite sharply toothed leaves; fibrous stems; translucent stinging hairs; green flower clusters.

HABITAT / SEASON: Rich disturbed soil, river terraces, old camps and forest openings. Season: Young tops spring; fiber later.

SURVIVAL USE: Young tops are documented food after thorough cooking or drying; mature stems yield strong bast fiber.
 CAUTION: Wear gloves; do not eat raw. Internal use can affect medicines and kidney conditions.
 LOOK-ALIKES: Dead-nettles do not sting and have showier mint-family flowers.
 TASKS: food green, cordage, fiber

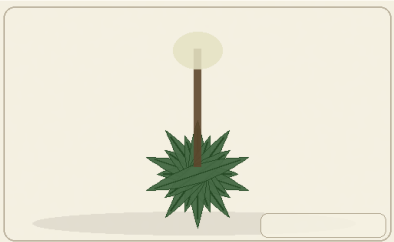
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LAND-BASED EDIBLE PLANTS

Documented foods on dry or seasonally dry ground. Preparation and contamination still matter.

DANDELION
LAND FOOD



Taraxacum officinale aggregate

IDENTIFY: Basal toothed leaves; hollow leafless stems with one yellow flower; milky sap; parachute seed head.

HABITAT / SEASON: Disturbed temperate ground, meadow and camp edge. Season: Spring through fall.

SURVIVAL USE: Young leaves, flower heads and roasted roots have documented food use where uncontaminated.
 CAUTION: Avoid sprayed lawns, roadsides and animal latrines; latex can irritate.
 LOOK-ALIKES: Catsear has hairy leaves and branched flower stalks.
 TASKS: food green, food root, tinder

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FOOD HARVEST SCREEN

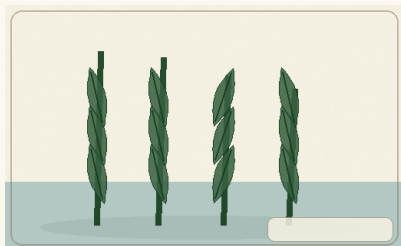
Confirm species, plant part and maturity. Check whether cooking, leaching, peeling, fermenting or repeated water changes are required. Reject mold, animal contamination, roadside plants, chemically treated ground and any food whose safe preparation cannot be completed with current water and fuel.

WATER AND WETLAND EDIBLE PLANTS

Freshwater, marsh, tidal and marine foods. Correct ID does not make dirty water safe.

WATERCRESS

AQUATIC FOOD



Nasturtium officinale

IDENTIFY: Creeping hollow stems; pinnate leaves with a larger rounded terminal leaflet; small white four-petaled flowers.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Cold flowing springs and streams, often where nutrient-rich. Season: Cool seasons.

SURVIVAL USE: Tender tops are documented food and are usually cooked in survival settings.

CAUTION: Raw watercress can carry liver flukes and sewage pathogens. Avoid downstream of livestock, roads or settlements.

LOOK-ALIKES: Water hemlock has divided leaves and umbrella flowers; never rely on habitat alone.

TASKS: food green

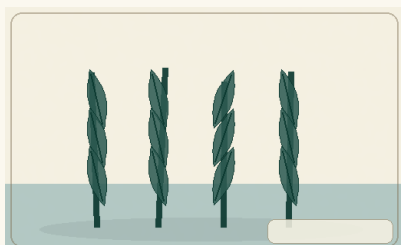
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BROAD PONDWEEDS

AQUATIC FOOD



Potamogeton spp.

IDENTIFY: Submerged or floating leaves with parallel veins; small flower spikes rise above water; flexible stems.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Lakes, ponds and slow rivers across temperate and cold regions. Season: Growing season.

SURVIVAL USE: Tubers, young shoots or seeds of some species have documented food use; beds shelter fish and invertebrates.

CAUTION: Species identification and water quality are essential. Avoid stagnant, cyanobacteria-rich or polluted water.

LOOK-ALIKES: Water smartweed has jointed stems and pink flower spikes.

TASKS: food aquatic

Verified images: POWO

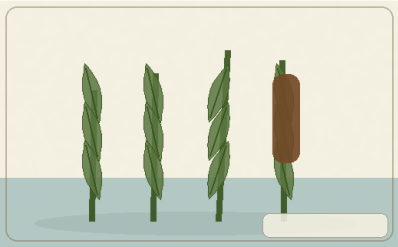
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WATER AND WETLAND EDIBLE PLANTS

Freshwater, marsh, tidal and marine foods. Correct ID does not make dirty water safe.

CATTAILS
AQUATIC FOOD



Typha spp.

IDENTIFY: Tall flat strap leaves; dense brown cylindrical female flower spike below a narrower male section.

HABITAT / SEASON: Marshes, pond edges, slow channels and wet ditches. Season: Shoots spring; pollen early summer; rhizomes year-round where lawful.

SURVIVAL USE: Documented food parts include young inner shoots, pollen and processed rhizome starch. Leaves make mats, baskets and thatch; seed down can bulk tinder.

CAUTION: Water can concentrate sewage, metals and parasites. Raw rhizome requires correct processing; avoid contaminated marshes.

LOOK-ALIKES: Yellow flag iris has sword leaves and showy flowers but no brown cattail head.

TASKS: food shoot, food starch, basketry, thatch, tinder

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AQUATIC HARVEST SCREEN

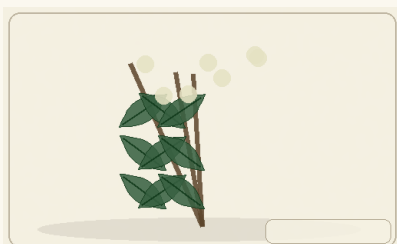
Check five separate questions: Is the species correct? Is the plant part edible? Is the water free of sewage, mining or farm runoff? Are parasites or harmful algal blooms plausible? Is entry and exit from the water safe? A “yes” to the plant and a “no” to the water still means do not eat.

MEDICINAL AND TRADITIONAL-USE PLANTS

Traditional and historical uses only — no dosing, diagnosis or treatment claims.

YARROW

TRADITIONAL-USE



Achillea millefolium

IDENTIFY: Aromatic finely divided leaves; flat clusters of small white to pink flower heads.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Dry openings, trails, grassland, shore gravel and disturbed soil. Season: Summer through fall.

SURVIVAL USE: Documented traditional external uses include washes and aromatic preparations; dry flower heads make light tinder.

CAUTION: Possible allergy, pregnancy and anticoagulant concerns. Not a substitute for wound cleaning or medical care.

LOOK-ALIKES: Poison hemlock is much taller with hollow purple-spotted stems and true umbels.

TASKS: medicine, tinder

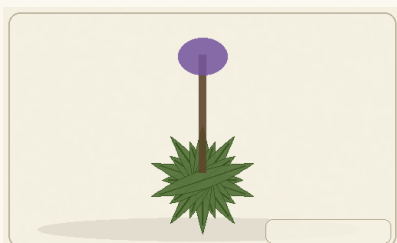
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GOLDEN ROOT

TRADITIONAL-USE



Rhodiola rosea and related spp.

IDENTIFY: Fleshy blue-green leaves on upright stems, yellow flower clusters and thick aromatic rhizome.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Cold Eurasian alpine cliffs, streambanks and tundra. Season: Summer.

SURVIVAL USE: Widely documented traditional-use plant.

CAUTION: Wild populations are vulnerable to root harvest. No field dosing; may affect mood, sleep and medications.

LOOK-ALIKES: Other Rhodiola and Sedum species are similar.

TASKS: medicine

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MEDICINAL AND TRADITIONAL-USE PLANTS

Traditional and historical uses only — no dosing, diagnosis or treatment claims.

MEADOWSWEET

TRADITIONAL-USE



Filipendula ulmaria

IDENTIFY: Tall damp-ground herb with pinnate leaves, pale undersides and frothy cream flower clusters with a sweet scent.

HABITAT / SEASON: Wet meadows, streambanks and ditches of Europe and western Asia. Season: Summer.

SURVIVAL USE: Documented flavoring and traditional use related to salicylate-containing tissues.
 CAUTION: Avoid with aspirin allergy, anticoagulants, ulcers or in children with viral illness.
 LOOK-ALIKES: Water dropworts have umbrella flower clusters and different leaves.
 TASKS: medicine, flavoring

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MEDICINAL RESTRAINT

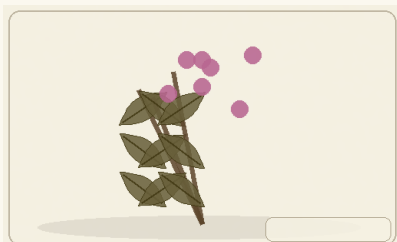
A plant can be culturally important and pharmacologically active yet still be the wrong survival choice. Unknown concentration, dehydration, pregnancy, allergies, chronic illness and medicine interactions can turn a traditional remedy into a second emergency.

POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

MONKSHOODS

POISON — AVOID



Stylized form diagram — not an identification photograph

Aconitum spp.

IDENTIFY: Deeply divided palmate leaves; blue, purple, yellow or white hood-shaped flowers.

HABITAT / SEASON: Moist mountain meadows, streambanks and cool forest. Season: Summer.

SURVIVAL USE: No food or field medicinal use.

CAUTION: All parts contain potent aconitine-type alkaloids; ingestion can cause fatal heart and nerve effects.

LOOK-ALIKES: Larkspurs have a rear spur and are also toxic.

TASKS: poison

Verified images: POWO

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FALSE HELLEBORES

POISON — AVOID



Stylized form diagram — not an identification photograph

Veratrum spp.

IDENTIFY: Tall herb with broad strongly pleated leaves around a stout stem and branched greenish flower clusters.

HABITAT / SEASON: Wet meadows, seeps and stream margins in temperate and montane regions. Season: Spring through summer.

SURVIVAL USE: No food use.

CAUTION: All parts are poisonous and may cause vomiting, slow heart rate, low blood pressure and collapse.

LOOK-ALIKES: Young shoots can resemble wild leek but lack onion odor and have broad pleated leaves.

TASKS: poison

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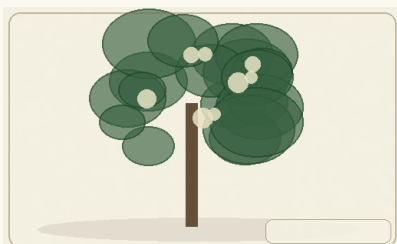
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POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

YEW TOXICITY PROFILE

POISON — AVOID



Stylized form diagram — not an identification photograph

Taxus spp.

IDENTIFY: Flat evergreen needles, reddish bark and red cup-like arils around hard seeds.

HABITAT / SEASON: Temperate and montane forest. Season: Year-round.

SURVIVAL USE: Material use only by experts; no food or medicine use.

CAUTION: Needles, bark and seeds contain dangerous taxines. Never burn in a cooking fire.

LOOK-ALIKES: Hemlocks and firs have cones and pale bands beneath needles.

TASKS: poison

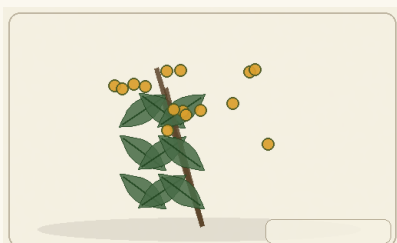
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DEADLY NIGHTSHADE

POISON — AVOID



Stylized form diagram — not an identification photograph

Atropa belladonna

IDENTIFY: Branching herb with dull oval leaves, purple-brown bell flowers and glossy black berries in a persistent green calyx.

HABITAT / SEASON: European and western Asian woodland edges, ruins and disturbed calcareous ground. Season: Summer through fall.

SURVIVAL USE: No use.

CAUTION: All parts are highly poisonous; berries may be attractive to children.

LOOK-ALIKES: Bilberries grow on low woody shrubs and have a crown at the fruit tip.

TASKS: poison

Verified images: POWO

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SURVIVAL TASK MATRIX

Choose the least destructive plant that meets the job. A material that works poorly but is abundant may beat the perfect rare species.

TASK	BEST REGIONAL CANDIDATES IN THIS GUIDE	FIELD DECISION
Bow / spring wood	Yews	Use dead, shed or pruned material first.
Arrow or dart shaft	Hazels, Willows	Use dead, shed or pruned material first.
Bow-drill hearth	Willows	Use dead, shed or pruned material first.
Bow-drill spindle	No reliable candidate among the priority profiles.	Use a different technology or carried tool; do not force unsuitable plant material.
Tinder	Siberian spruce, Dandelion, Cattails, Yarrow	Use dead, shed or pruned material first.
Fuel / coals	Siberian spruce, Larches	Use dead, shed or pruned material first.
Cordage / fiber	Siberian spruce, Larches, Willows, Wild roses	Use dead, shed or pruned material first.
Basket / mat	Hazels, Willows, Cattails	Use dead, shed or pruned material first.
Container / wrap	No reliable candidate among the priority profiles.	Use a different technology or carried tool; do not force unsuitable plant material.
Fruit food	Bilberry / bog blueberry group, Wild roses	Verify part, maturity and preparation.
Green food	Wild onions and garlic, Stinging nettle, Dandelion, Watercress	Verify part, maturity and preparation.
Seed / nut	No reliable candidate among the priority profiles.	Use a different technology or carried tool; do not force unsuitable plant material.
Root / starch	Cattails	Verify part, maturity and preparation.
Traditional-use	Willows, Yarrow, Golden root, Meadowsweet	Documented use only; no field dosing.

SEASONAL OPERATING RHYTHM

PHASE	PRIMARY OPPORTUNITY	PRIMARY RISK
Early growth	Shoots, greens, flowers, sap and easy bark identification.	Toxic shoots and bulbs are hardest to separate before flowering.
Peak growth	Maximum leaf and flower information; fiber plants mature.	Heat, insects, sap and water contamination.
Fruit / seed	Highest food density; nuts, berries, pods, grains and tubers.	Mold, wildlife encounters and unripe or toxic fruit.
Dormant / dry	Wood, bark, evergreen leaves, persistent fruit and roots.	Fewer diagnostic traits; overharvest of stored underground parts.

SOURCES, IMAGE VERIFICATION AND EMERGENCY

Every profile links to current taxonomic and photograph searches. Treat community photographs as evidence to compare, not as a final authority.

- 2023 USDA Plant Hardiness Zone Map
 USDA Agricultural Research Service — hardiness-zone reference
<https://planthardiness.ars.usda.gov/>
- Plants of the World Online
 Royal Botanic Gardens, Kew — taxonomy, distribution and images
<https://powo.science.kew.org/>
- World Flora Online
 World Flora Online Consortium — global plant taxonomy
<https://www.worldfloraonline.org/>
- Global Biodiversity Information Facility
 GBIF Secretariat — occurrence records and licensed media
<https://www.gbif.org/>
- World Checklist of Useful Plant Species
 Royal Botanic Gardens, Kew — documented plant uses
<https://kew.iro.bl.uk/concern/datasets/7243d727-e28d-419d-a8f7-9ebef5b9e03e>
- Poison Control
 National Capital Poison Center — poisoning first-response guidance
<https://www.poison.org/>
- WHO Monographs on Selected Medicinal Plants
 World Health Organization — medicinal-plant safety and monographs
<https://www.who.int/publications/i/item/9241545178>
- Euro+Med PlantBase
 Botanic Garden and Botanical Museum Berlin and partners — European and Mediterranean taxonomy
<https://euromedplus.org/>
- FloraVeg.EU and European vegetation resources
 European vegetation science community — European flora and vegetation
<https://floraveg.eu/>

SUSPECTED POISONING

Stop exposure. Remove material from the mouth and rinse. Do not induce vomiting unless directed. Save a sample or clear photographs. Contact local emergency services or a poison center. Monitor airway, breathing and consciousness.

PUBLICATION LIMITS

Regional lists are representative, not exhaustive. Species ranges, names, laws and preparation practices change. Local floras, land managers, Indigenous knowledge holders, poison centers and clinicians take precedence.