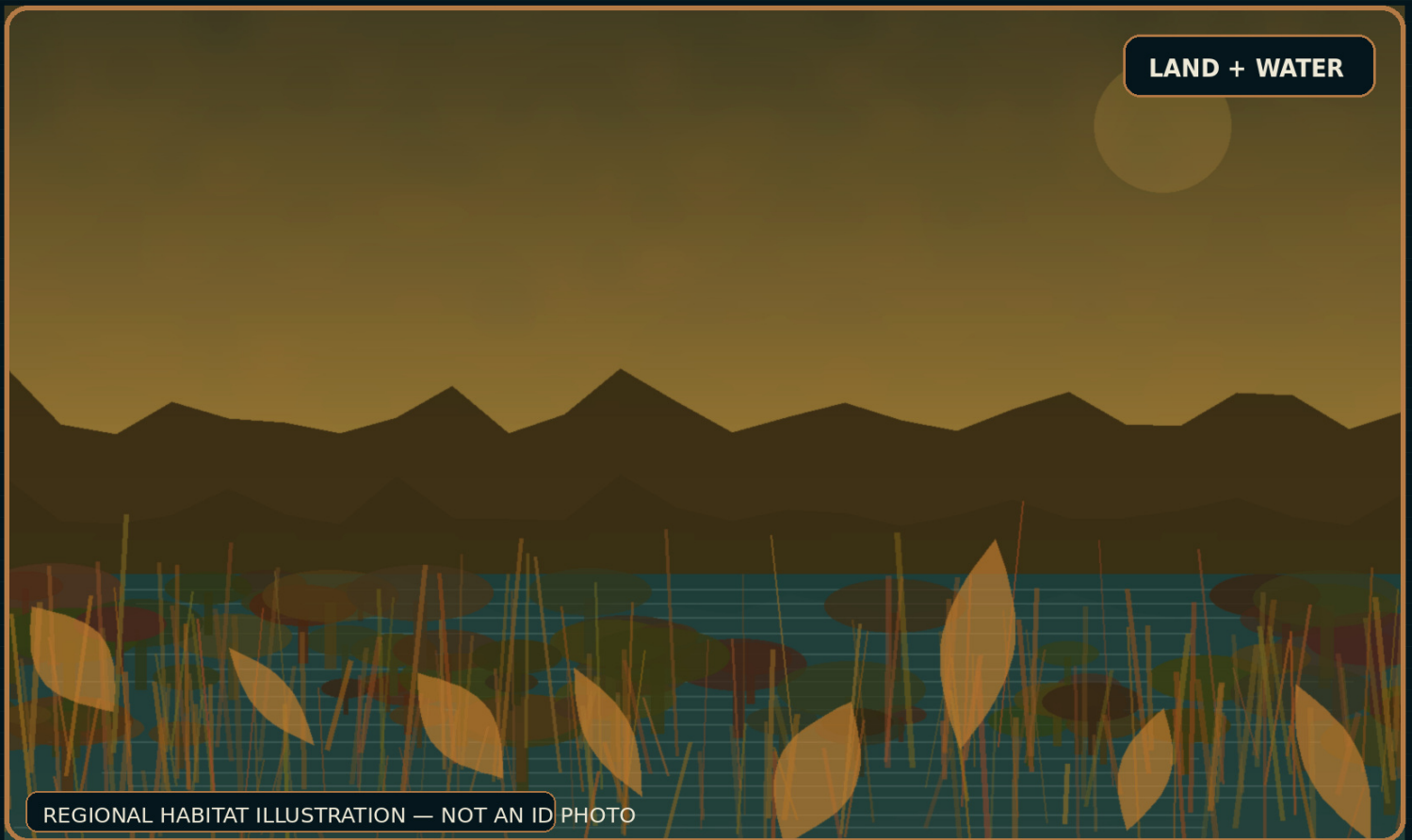


GUIANA SHIELD & LLANOS SAVANNA PLANT SURVIVAL GUIDE

South America • USDA-EQUIVALENT ZONES 10-13 • KÖPPEN Aw / Am



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: South America USDA-equivalent hardiness: 10-13 Köppen: Aw / Am

Regional habitat: Seasonal savanna, gallery forest, tepui foothill and wetland

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.
- Take material from deadfall or abundant growth first. Roots, bark and whole plants are the most destructive harvests.
- 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 **1. PLACE**
Confirm continent, elevation, water regime, soil and disturbance.
- 2 **2. FORM**
Tree, shrub, vine, herb, grass, sedge, palm, fern, succulent or aquatic.
- 3 **3. LEAF**
Arrangement, veins, edge, hairs, glands, sap, odor and underside.
- 4 **4. STEM / BARK**
Thorns, pith, nodes, buds, lenticels, fibers, latex and branching.
- 5 **5. FLOWER / FRUIT**
Petal count, inflorescence, fruit attachment, seed and maturity.
- 6 **6. EXCLUDE**
Name every dangerous look-alike and explain why it is different.
- 7 **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

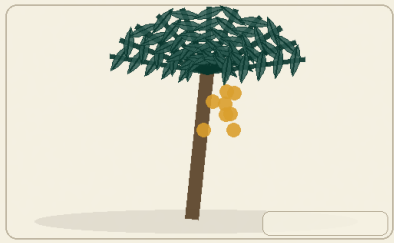
1. Deadfall and shed bark.
2. Abundant annual greens and fruit.
3. Pruned shoots and leaves.
4. Small stems from common thickets.
5. Roots, bark and whole plants only with permission and no safer substitute.

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

BURITI / MORICHE PALM

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Mauritia flexuosa

IDENTIFY: Large fan palm; brown scaly oval fruits; commonly forms swamp groves.

HABITAT / SEASON: Amazon, Orinoco and Guiana savanna wetlands. Season: Fruit seasonal; leaves year-round.

SURVIVAL USE: Fruit pulp is documented food; leaves provide thatch, cordage, baskets and floats.

CAUTION: Wet palm groves can conceal deep mud, caimans and contaminated water.

LOOK-ALIKES: Carnauba has fan leaves but drier habitat and different fruit.

TASKS: food fruit, thatch, cordage, basketry

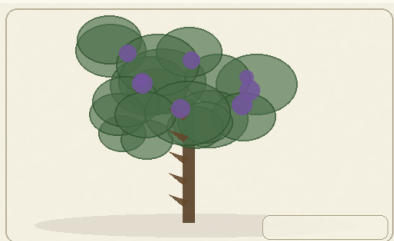
Verified images: POWO

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1

ARID ACACIAS

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Vachellia / Senegalia spp.

IDENTIFY: Feathery compound leaves; paired or hooked thorns; yellow or white puffball flowers; pods.

HABITAT / SEASON: African, Arabian and Australian savannas, dry rivers and deserts. Season: Wood year-round; gum and pods seasonal.

SURVIVAL USE: Dense wood for bows, handles, stakes and hot coals; gums of selected species have documented food or adhesive use.

CAUTION: Species vary in cyanogenic chemistry and pod edibility. Thorns cause deep punctures.

LOOK-ALIKES: Prosopis/mesquite and other mimosoid legumes require pod and thorn comparison.

TASKS: bow wood, handles, fuel, adhesive

Verified images: POWO

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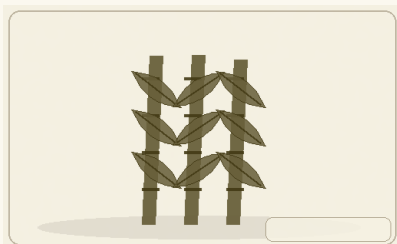
2

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

GUADUA BAMBOO

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Guadua angustifolia and related spp.

IDENTIFY: Large hollow segmented culms; branch thorns in some species; broad grass leaves.

HABITAT / SEASON: Tropical American riverbanks, foothills and disturbed forest. Season: Culms year-round; shoots rainy season.

SURVIVAL USE: Exceptional material for shelter, containers, water tubes, traps, arrow shafts, bows in laminated designs and friction-fire sets; young shoots of selected species require boiling.

CAUTION: Fresh culms can split explosively in fire. Species and shoot cyanide levels vary.

LOOK-ALIKES: Woody reeds are smaller and lack robust branching culms.

TASKS: construction, container, arrow shaft, bow drill, food shoot

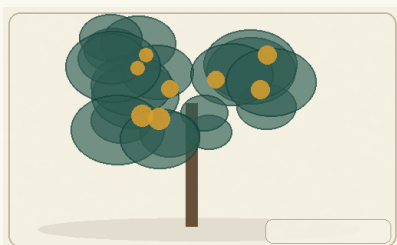
Verified images: POWO

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3

KAPOK / CEIBA

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Ceiba pentandra

IDENTIFY: Massive buttressed trunk; palmate leaves; large pods releasing silky floss.

HABITAT / SEASON: Tropical American and African lowland forest and river margins. Season: Floss and pods seasonal; wood year-round.

SURVIVAL USE: Floss bulks tinder and insulation; light wood is easy to carve for floats, containers and bow-drill hearths.

CAUTION: Floss ignites quickly but also spreads sparks. Large trees may be culturally protected.

LOOK-ALIKES: Balsa has simple heart-shaped leaves and no palmate leaflets.

TASKS: tinder, insulation, float, bow drill board

Verified images: POWO

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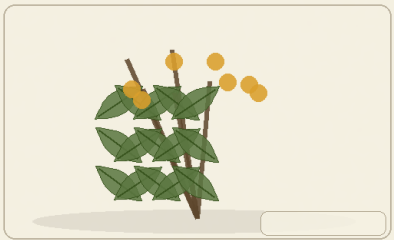
4

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

DOGWOOD

USEFUL MATERIAL



Cornus spp.

IDENTIFY: Usually opposite branching; arcuate leaf veins curve toward the tip; clustered flowers and drupes.

HABITAT / SEASON: Forest edge, riparian thicket and mountain slope. Season: Stems year-round; fruit varies by species.

SURVIVAL USE: Dense straight shoots make excellent arrow shafts, skewers and pegs.
 CAUTION: Fruit edibility varies greatly; some species cause stomach upset. Use as material unless species is confirmed.
 LOOK-ALIKES: Viburnums may have opposite leaves but different veins and buds.
 TASKS: arrow shaft, pegs, skewers

Verified images: POWO

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5

MATERIAL SELECTION SCREEN

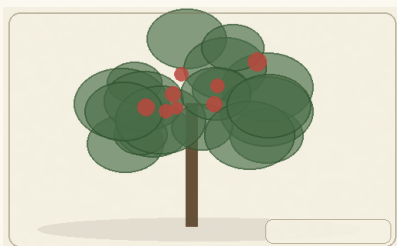
Before cutting, test straightness, grain, dryness, hidden rot, sap or smoke toxicity, and whether the species is protected. Match the material to the load: springy bow wood, straight shaft wood, soft dry hearth board, harder spindle, fibrous cordage, or resin-free cooking fuel.

LAND-BASED EDIBLE PLANTS

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

GUAVA

LAND FOOD



Stylized form diagram — not an identification photograph

Psidium guajava

IDENTIFY: Opposite oval leaves with strong parallel side veins; smooth peeling bark; white brush flowers; aromatic fruit.

HABITAT / SEASON: Tropical and subtropical disturbed ground, forest edge and river terraces. Season: Fruit varies by climate; wood year-round.

SURVIVAL USE: Ripe fruit is documented food; hard close-grained wood makes pegs, handles and friction-fire spindles.

CAUTION: Fruit can host insects and feral plants may be sprayed. Leaves are not a substitute for medical care.

LOOK-ALIKES: Other Myrtaceae share opposite leaves; fruit odor and flower structure help confirm.

TASKS: food fruit, handles, bow drill spindle

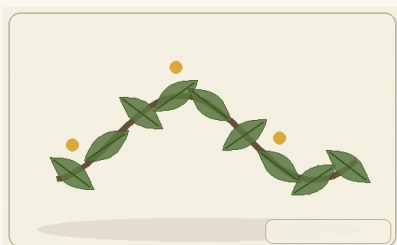
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6

WILD PASSIONFRUITS

LAND FOOD



Stylized form diagram — not an identification photograph

Passiflora spp.

IDENTIFY: Tendrilled vine; distinctive radial flowers; round to oval fruits; leaves often lobed.

HABITAT / SEASON: Tropical and subtropical forest edge, thicket and riverbank. Season: Fruit seasonal.

SURVIVAL USE: Fully ripe fruit of confirmed edible species is documented food; vines can provide temporary lashings.

CAUTION: Many species have cyanogenic leaves or unpalatable fruit. Eat only known ripe fruit, not unknown foliage.

LOOK-ALIKES: Cucurbit vines have separate flower structure and rough stems.

TASKS: food fruit, lashing

Verified images: POWO

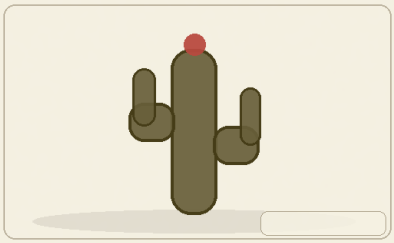
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LAND-BASED EDIBLE PLANTS

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

PRICKLY PEARS
LAND FOOD



Opuntia spp.

IDENTIFY: Flattened pads with clusters of fine glochids and often spines; showy flowers; fleshy fruits.

HABITAT / SEASON: Dry Americas, disturbed warm regions and some Mediterranean/African landscapes. Season: Fruit summer-fall; young pads seasonal.

SURVIVAL USE: Ripe fruit and properly de-spined young pads of confirmed species are documented foods; dry woody joints can support fuel.

CAUTION: Invisible glochids embed in skin, eyes and mouth. Some fruits are insipid or seedy; avoid sprayed invasive stands.

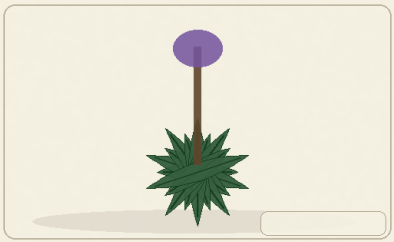
LOOK-ALIKES: Chollas have cylindrical joints.

TASKS: food fruit, food pad, fuel

Verified images: POWO
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8

COMMON PURSLANE
LAND FOOD



Portulaca oleracea

IDENTIFY: Low reddish succulent stems; smooth fleshy leaves; tiny yellow flowers; clear sap.

HABITAT / SEASON: Disturbed warm ground, gardens, river deposits and camp edges worldwide. Season: Warm growing season.

SURVIVAL USE: Young leaves and stems are documented food and water-rich greens.

CAUTION: High oxalate content; avoid large amounts with kidney disease and avoid contaminated ground.

LOOK-ALIKES: Spurge often exude milky sap and are unsafe.

TASKS: food green

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 ROSES
LAND FOOD



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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FOOD HARVEST SCREEN

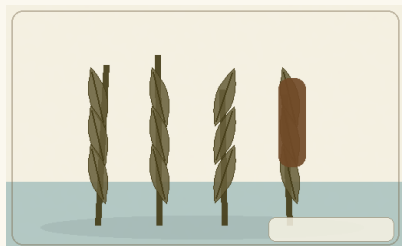
Confirm species, plant part and maturity. Check whether cooking, leaching, peeling, fermenting or repeated water changes are required. Reject mold, animal contamination, roadside plants, chemically treated ground and any food whose safe preparation cannot be completed with current water and fuel.

WATER AND WETLAND EDIBLE PLANTS

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

TROPICAL ARROWHEADS

AQUATIC FOOD



Stylized form diagram — not an identification photograph

Sagittaria guayanensis and related spp.

IDENTIFY: Arrow to oval leaves rising from shallow water; three-petaled white flowers; some produce tubers.

HABITAT / SEASON: Floodplains, marshes and slow tropical water. Season: Tubers seasonal.

SURVIVAL USE: Tubers of confirmed edible species are documented food after cooking.

CAUTION: Species vary in tuber production; wetlands may contain parasites and toxic aroids.

LOOK-ALIKES: Arrow arum and other aroids have spadix-and-spathe flowers.

TASKS: food tuber

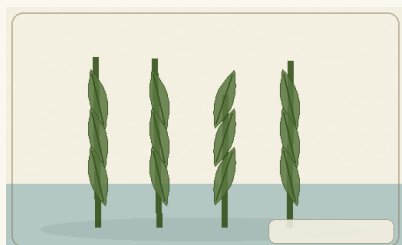
Verified images: POWO

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11

WATER SPINACH

AQUATIC FOOD



Stylized form diagram — not an identification photograph

Ipomoea aquatica

IDENTIFY: Hollow creeping stems; arrow to lance leaves; pale morning-glory flowers.

HABITAT / SEASON: Warm freshwater ditches, ponds and slow rivers; native or invasive. Season: Warm season.

SURVIVAL USE: Tender shoots are a documented cooked green.

CAUTION: Raw plants can carry parasites and sewage pathogens; avoid polluted water and check invasive-species law.

LOOK-ALIKES: Water hemlock has divided leaves and umbels, not morning-glory flowers.

TASKS: food green

Verified images: POWO

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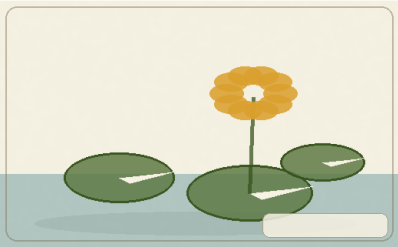
12

WATER AND WETLAND EDIBLE PLANTS

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

AMAZON WATER LILIES

AQUATIC FOOD



Victoria amazonica / Nymphaea spp.

IDENTIFY: Large floating leaves; showy flowers; seeds and thick underwater structures depending genus.

HABITAT / SEASON: Warm floodplain lakes and slow tropical rivers. Season: Seeds and flowers seasonal.

SURVIVAL USE: Seeds and selected rhizomes have documented food use after local species-specific preparation.
 CAUTION: Large leaves hide deep water and animals. Raw tissues and unknown Nymphaeaceae should not be eaten.
 LOOK-ALIKES: Aquatic aroids may have arrow-shaped leaves and irritating sap.
 TASKS: food seed, food starch

Verified images: POWO

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AQUATIC HARVEST SCREEN

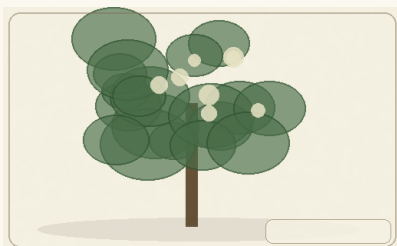
Check five separate questions: Is the species correct? Is the plant part edible? Is the water free of sewage, mining or farm runoff? Are parasites or harmful algal blooms plausible? Is entry and exit from the water safe? A “yes” to the plant and a “no” to the water still means do not eat.

MEDICINAL AND TRADITIONAL-USE PLANTS

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

COPAIBA TREES

TRADITIONAL-USE



Stylized form diagram — not an identification photograph

Copaifera spp.

IDENTIFY: Large forest trees with paired leaflets and resin canals; small flowers and pod fruits.

HABITAT / SEASON: Amazon and tropical South American forest. Season: Resin and wood year-round.

SURVIVAL USE: Resin has documented traditional external and technical uses; wood serves construction and fuel.

CAUTION: Tapping requires expertise and permission. Ingesting resin can cause illness and drug interactions.

LOOK-ALIKES: Many legumes have paired leaflets; bark tapping without identification is unsafe.

TASKS: resin, medicine, fuel

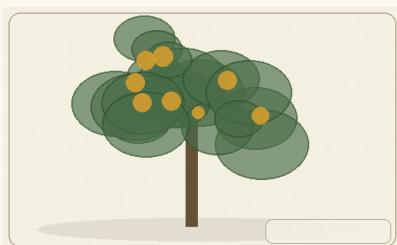
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DRAGON'S-BLOOD TREE

TRADITIONAL-USE



Stylized form diagram — not an identification photograph

Croton lechleri

IDENTIFY: Pale-barked tree; large heart-shaped leaves; red latex exudes from cuts.

HABITAT / SEASON: Amazonian forest gaps and river slopes. Season: Latex and wood year-round.

SURVIVAL USE: Red latex has documented regional external use and can seal small non-food containers.

CAUTION: Latex is not sterile and internal dosing is not advised. Croton species may have irritating or toxic sap.

LOOK-ALIKES: Other latex trees may exude white or clear sap.

TASKS: sealant, medicine

Verified images: POWO

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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.

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

Verified images: POWO

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MEDICINAL RESTRAINT

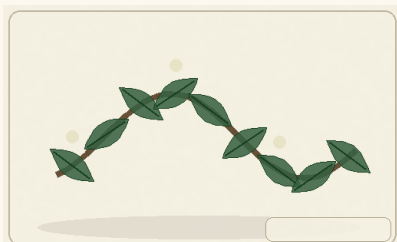
A plant can be culturally important and pharmacologically active yet still be the wrong survival choice. Unknown concentration, dehydration, pregnancy, allergies, chronic illness and medicine interactions can turn a traditional remedy into a second emergency.

POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

TOXIC STRYCHNOS VINES AND TREES

POISON — AVOID



Strychnos spp.

IDENTIFY: Opposite leaves with strong curved veins; tendrils or woody stems; round fruits vary by species.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Tropical forest and savanna. Season: Year-round.

SURVIVAL USE: No food use unless a local expert identifies a known edible species.

CAUTION: The genus includes plants with strychnine-type toxins. Fruit appearance is not enough to judge safety.

LOOK-ALIKES: Edible monkey oranges are region-specific *Strychnos* and still require expert confirmation.

TASKS: poison

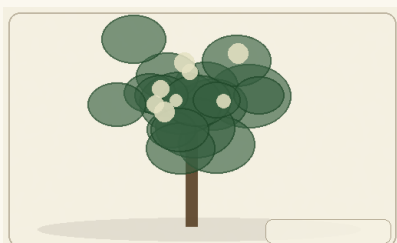
Verified images: POWO

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SANDBOX TREE

POISON — AVOID



Hura crepitans

IDENTIFY: Tall tree with dark conical trunk spines, heart-shaped leaves and pumpkin-like segmented capsules.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Tropical American lowland forest and riverbanks. Season: Year-round.

SURVIVAL USE: No food use. Wood handling is specialized.

CAUTION: Milky sap is caustic and fruit explodes forcefully, scattering poisonous seeds.

LOOK-ALIKES: Kapok has trunk spines when young but palmate leaves and floss-filled pods.

TASKS: poison

Verified images: POWO

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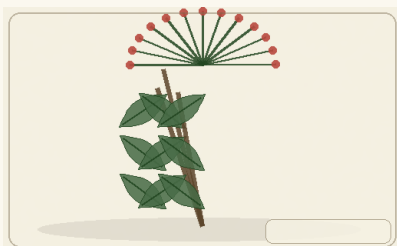
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POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

WATER HEMLOCKS

POISON — AVOID



Stylized form diagram — not an identification photograph

Cicuta spp.

IDENTIFY: Wetland perennial with divided leaves, white umbrella flower clusters and thick chambered rootstocks.

HABITAT / SEASON: Marshes, wet meadows, stream edges and ditches across the northern hemisphere. Season: Spring through fall.

SURVIVAL USE: No survival use. Make wetland root gathering a prohibited activity unless a qualified botanist is present.

CAUTION: Extremely poisonous; small amounts, especially roots, can cause violent seizures and death.

LOOK-ALIKES: Angelica, cow parsnip and other Apiaceae can look similar. Never taste to decide.

TASKS: poison

Verified images: POWO

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DATURAS / THORN APPLES

POISON — AVOID



Stylized form diagram — not an identification photograph

Datura spp.

IDENTIFY: Large foul-smelling leaves; upright trumpet flowers; spiny egg-shaped capsules.

HABITAT / SEASON: Disturbed warm ground, dry riverbeds and fields worldwide. Season: Summer-fall.

SURVIVAL USE: No use.

CAUTION: All parts contain dangerous tropane alkaloids causing delirium, overheating, seizures and death.

LOOK-ALIKES: Brugmansia has hanging trumpets on woody shrubs and is also toxic.

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	Arid acacias	Use dead, shed or pruned material first.
Arrow or dart shaft	Guadua bamboo, Dogwoods	Use dead, shed or pruned material first.
Bow-drill hearth	Kapok / ceiba	Use dead, shed or pruned material first.
Bow-drill spindle	Guava	Use dead, shed or pruned material first.
Tinder	Kapok / ceiba, Yarrow	Use dead, shed or pruned material first.
Fuel / coals	Arid acacias, Prickly pears, Copaiba trees	Use dead, shed or pruned material first.
Cordage / fiber	Buriti / moriche palm, Wild roses	Use dead, shed or pruned material first.
Basket / mat	Buriti / moriche palm	Use dead, shed or pruned material first.
Container / wrap	Guadua bamboo	Use dead, shed or pruned material first.
Fruit food	Buriti / moriche palm, Guava, Wild passionfruits, Prickly pears	Verify part, maturity and preparation.
Green food	Common purslane, Water spinach	Verify part, maturity and preparation.
Seed / nut	Amazon water lilies	Verify part, maturity and preparation.
Root / starch	Amazon water lilies	Verify part, maturity and preparation.
Traditional-use	Copaiba trees, Dragon’s-blood tree, Yarrow	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.

1. 2023 USDA Plant Hardiness Zone Map

USDA Agricultural Research Service — hardiness-zone reference

<https://planthardiness.ars.usda.gov/>

2. Plants of the World Online

Royal Botanic Gardens, Kew — taxonomy, distribution and images

<https://powo.science.kew.org/>

3. World Flora Online

World Flora Online Consortium — global plant taxonomy

<https://www.worldfloraonline.org/>

4. Global Biodiversity Information Facility

GBIF Secretariat — occurrence records and licensed media

<https://www.gbif.org/>

5. 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>

6. Poison Control

National Capital Poison Center — poisoning first-response guidance

<https://www.poison.org/>

7. WHO Monographs on Selected Medicinal Plants

World Health Organization — medicinal-plant safety and monographs

<https://www.who.int/publications/i/item/9241545178>

8. Tropicos

Missouri Botanical Garden — American and global botanical records

<https://tropicos.org/>

9. Flora e Funga do Brasil

Jardim Botânico do Rio de Janeiro — Brazilian scientific flora

<https://floradobrasil.jbrj.gov.br/>

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.