

WEST AFRICAN TROPICAL RAINFOREST PLANT SURVIVAL GUIDE

Africa • USDA-EQUIVALENT ZONES 11-13 • KÖPPEN Af / Am

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: Africa USDA-equivalent hardiness: 11-13 Köppen: Af / Am

Regional habitat: Lowland rainforest, secondary forest, swamp and river margin

Zone warning: hardiness describes winter minimum temperature only; rainfall, heat, soils, fire, elevation and seasonality still control the flora.

FIELD PRIORITIES

- In species-rich forest, require flower, fruit or several vegetative traits; leaf shape alone is almost never enough.
- 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

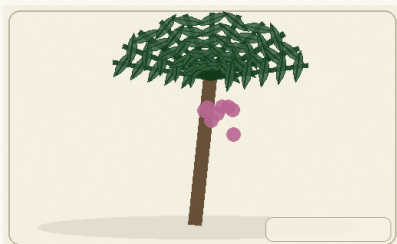
1. Deadfall and shed bark.
2. Abundant annual greens and fruit.
3. Pruned shoots and leaves.
4. Small stems from common thickets.
5. Roots, bark and whole plants only with permission and no safer substitute.

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

RAFFIA PALMS

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Raphia spp.

IDENTIFY: Very large feather leaves, often the longest of any plant; stout trunks; scaly fruits.

HABITAT / SEASON: African swamp forest, river valleys and moist lowlands. Season: Fiber and leaves year-round; sap/fruit seasonal.

SURVIVAL USE: Leaf fiber makes cordage, baskets and thatch; petioles make floats and light frames; sap and fruit have documented regional uses.

CAUTION: Harvest is skilled and can damage the palm. Swamps conceal deep water and animals.

LOOK-ALIKES: Oil palm has smaller leaves and orange fruit clusters.

TASKS: cordage, basketry, thatch, float

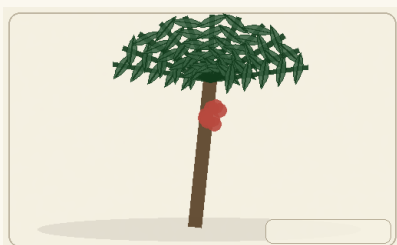
Verified images: POWO

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AFRICAN OIL PALM

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Elaeis guineensis

IDENTIFY: Single trunk with pinnate leaves and dense clusters of orange-red oily fruits close to the crown.

HABITAT / SEASON: West and Central African rainforest, swamp margins and plantations. Season: Fruit year-round to seasonal.

SURVIVAL USE: Processed fruit pulp and kernels yield calorie-dense oils; leaves and petioles provide thatch and basket material.

CAUTION: Harvest from tall palms is dangerous; plantation ownership and chemicals matter. Oil processing requires clean equipment.

LOOK-ALIKES: Raffia palms have enormous leaves and different fruit scales.

TASKS: food oil, thatch, basketry

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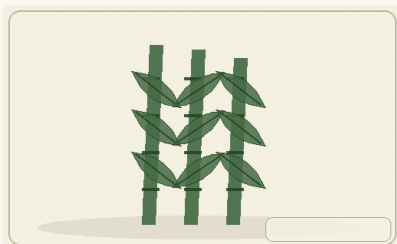
2

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

AFRICAN HIGHLAND BAMBOO

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Oldeania alpina / Oxytenanthera spp.

IDENTIFY: Tall segmented culms in dense stands; narrow grass leaves; branching at nodes.

HABITAT / SEASON: African highlands or dry tropical woodland depending species. Season: Culms year-round; shoots seasonal.

SURVIVAL USE: Shelter, containers, arrow shafts, bows, traps, friction-fire sets and cooked shoots of known species.

CAUTION: Shoots may contain cyanogenic compounds and require boiling; stands hide wildlife and unstable slopes.

LOOK-ALIKES: Reeds are thinner and wetland-rooted.

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

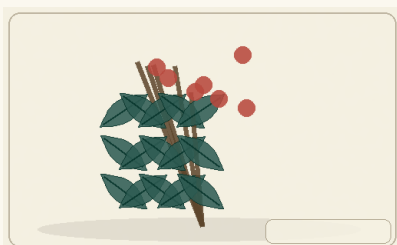
Verified images: POWO

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3

WILD RAISINS / GREWIA

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Grewia spp.

IDENTIFY: Rough toothed leaves; small star-like flowers; lobed orange, red or brown drupes.

HABITAT / SEASON: African savanna, dry woodland and scrub. Season: Fruit seasonal; stems year-round.

SURVIVAL USE: Ripe fruits of selected species are documented food; straight stems provide arrow shafts, bows, cordage bark and tool handles.

CAUTION: Species vary. Confirm fruit and leaf traits; thorny thickets can conceal snakes.

LOOK-ALIKES: Ziziphus has paired thorns and three-veined leaves.

TASKS: food fruit, arrow shaft, bow wood, cordage

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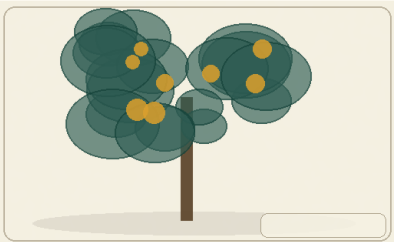
4

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

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

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MATERIAL SELECTION SCREEN

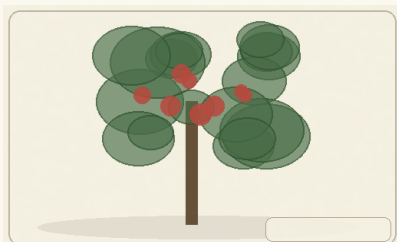
Before cutting, test straightness, grain, dryness, hidden rot, sap or smoke toxicity, and whether the species is protected. Match the material to the load: springy bow wood, straight shaft wood, soft dry hearth board, harder spindle, fibrous cordage, or resin-free cooking fuel.

LAND-BASED EDIBLE PLANTS

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

AFRICAN PEAR / SAFOU

LAND FOOD



Stylized form diagram — not an identification photograph

Dacryodes edulis

IDENTIFY: Compound leaves; small cream flowers; blue-purple oblong oily fruits with one seed.

HABITAT / SEASON: West and Central African humid forest and farms. Season: Fruit seasonal.

SURVIVAL USE: Cooked or softened fruit pulp is calorie-dense documented food; resin and wood have technical uses.

CAUTION: Fruit must be fully identified and usually heated; large seeds are not the edible portion.

LOOK-ALIKES: Other Burseraceae fruits and forest drupes vary.

TASKS: food fruit, resin, fuel

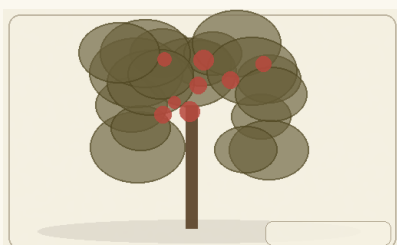
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BUSH MANGO

LAND FOOD



Stylized form diagram — not an identification photograph

Irvingia gabonensis / *I. wombolu*

IDENTIFY: Large glossy simple leaves; mango-like green-yellow fruits with a fibrous stone and edible kernel.

HABITAT / SEASON: West and Central African rainforest. Season: Fruit seasonal.

SURVIVAL USE: Fruit pulp and processed kernels are documented foods; hard wood supports tools.

CAUTION: Species differ in sweet versus bitter pulp; kernels require processing and ownership rights matter.

LOOK-ALIKES: True mango has longer narrow leaves and different seed fiber.

TASKS: food fruit, food nut, tools

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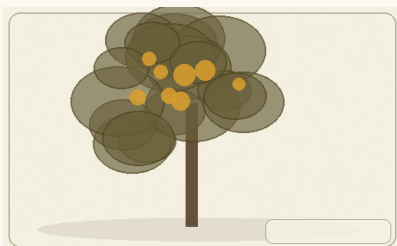
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LAND-BASED EDIBLE PLANTS

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

TAMARIND

LAND FOOD



Stylized form diagram — not an identification photograph

Tamarindus indica

IDENTIFY: Fine paired leaflets; brown brittle pods containing sticky sour pulp and hard seeds.

HABITAT / SEASON: African and Asian dry tropics, river valleys and old settlements. Season: Pods dry season; wood year-round.

SURVIVAL USE: Pod pulp is documented food and drink flavoring; dense wood makes handles and fuel.

CAUTION: Seeds are extremely hard; avoid moldy pods. Acidic pulp can worsen reflux.

LOOK-ALIKES: Cassia pods and leaves differ; tamarind pods are brittle and pulp sticky.

TASKS: food pod, handles, fuel

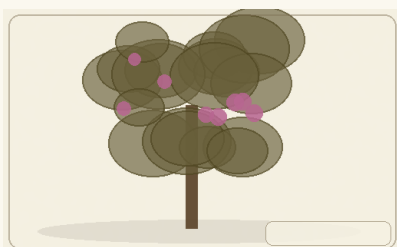
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PAPAYA

LAND FOOD



Stylized form diagram — not an identification photograph

Carica papaya

IDENTIFY: Soft unbranched hollow trunk; crown of deeply lobed leaves; large fruits attached near the trunk.

HABITAT / SEASON: Tropical clearings, river terraces and abandoned cultivation. Season: Fruit year-round in warm climates.

SURVIVAL USE: Fully ripe fruit is documented food; black seeds are peppery but used sparingly. Green fruit is cooked in established cuisines.

CAUTION: Milky latex can irritate skin and may affect pregnancy or medications. Avoid wild fruit contaminated by animals.

LOOK-ALIKES: Cecropia has woody branching stems and finger-like fruits.

TASKS: food fruit, food green

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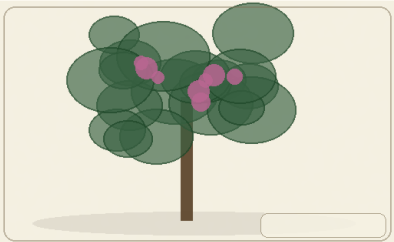
9

LAND-BASED EDIBLE PLANTS

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

AFRICAN LOCUST BEAN

LAND FOOD



Parkia biglobosa

IDENTIFY: Large twice-compound leaves, hanging ball-shaped red flower heads and long dark pods.

HABITAT / SEASON: West African savanna and parkland. Season: Pods late dry season; wood year-round.

SURVIVAL USE: Yellow pod pulp is documented food; fermented seeds are a major seasoning; wood and bark have technical uses.

CAUTION: Fermentation is skilled and hygiene-dependent. Do not assume all Parkia seeds are processed the same.

LOOK-ALIKES: Albizia has flatter pods and brush-like flowers.

TASKS: food pod, food seed, fuel

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FOOD HARVEST SCREEN

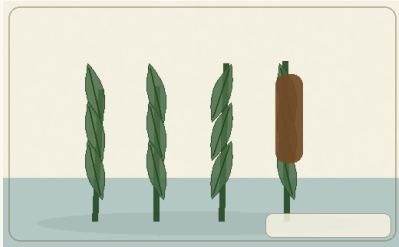
Confirm species, plant part and maturity. Check whether cooking, leaching, peeling, fermenting or repeated water changes are required. Reject mold, animal contamination, roadside plants, chemically treated ground and any food whose safe preparation cannot be completed with current water and fuel.

WATER AND WETLAND EDIBLE PLANTS

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

PAPYRUS

AQUATIC FOOD



Stylized form diagram — not an identification photograph

Cyperus papyrus

IDENTIFY: Tall triangular stems topped by a large umbrella of fine rays; leafless lower stem.

HABITAT / SEASON: African tropical swamps, lake margins and slow rivers. Season: Stems year-round; young pith seasonal.

SURVIVAL USE: Stems make mats, floats, boats, cordage and shelter panels; tender pith has documented food use.

CAUTION: Water quality, crocodiles and deep mud are major risks. Other sedges are difficult to identify.

LOOK-ALIKES: Bulrush flower clusters are compact rather than a large umbrella.

TASKS: float, boat, basketry, cordage, food shoot

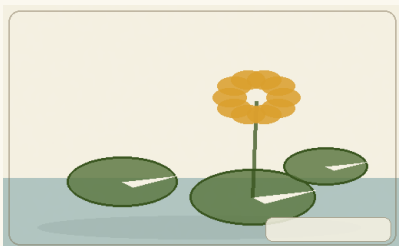
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AFRICAN WATER LILIES

AQUATIC FOOD



Stylized form diagram — not an identification photograph

Nymphaea lotus / *N. nouchali* group

IDENTIFY: Round floating leaves with a slit; showy white, blue or pink flowers; seeds and rhizomes.

HABITAT / SEASON: Warm African lakes, floodplains and slow rivers. Season: Flowers and seeds seasonal; rhizomes year-round.

SURVIVAL USE: Seeds and rhizomes of selected species have documented food use after processing.

CAUTION: Raw tissues can be bitter or irritating; avoid polluted or crocodile habitat.

LOOK-ALIKES: Aquatic aroids have arrow leaves and a spadix.

TASKS: food seed, food starch

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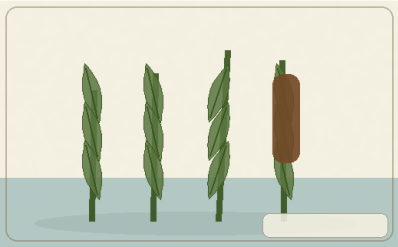
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WATER AND WETLAND EDIBLE PLANTS

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

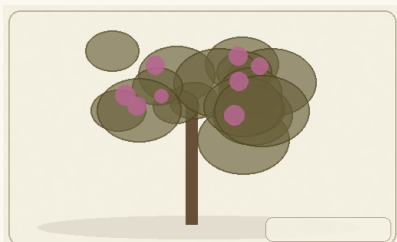
Check five separate questions: Is the species correct? Is the plant part edible? Is the water free of sewage, mining or farm runoff? Are parasites or harmful algal blooms plausible? Is entry and exit from the water safe? A “yes” to the plant and a “no” to the water still means do not eat.

MEDICINAL AND TRADITIONAL-USE PLANTS

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

MORINGA

TRADITIONAL-USE



Moringa oleifera

IDENTIFY: Triply compound leaves; white fragrant flowers; long slender three-angled pods; soft pale wood.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Tropical dry regions, villages and disturbed ground. Season: Leaves much of year; pods seasonal.

SURVIVAL USE: Young leaves and pods are documented foods after cooking; seeds have limited water-clarification use in controlled settings.
CAUTION: Seeds do not disinfect water and can add organic matter. Roots and concentrated medicinal use are unsafe.
LOOK-ALIKES: Senna and other compound-leaved trees lack the long three-angled pods.
TASKS: food green, food pod, water clarification

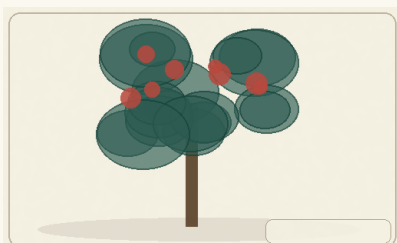
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PEPPER-BARK TREE

TRADITIONAL-USE



Warburgia salutaris

IDENTIFY: Aromatic glossy leaves with pale undersides; rough bark; small green flowers and berries.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Southern and East African forest margins. Season: Leaves year-round.

SURVIVAL USE: Documented traditional medicinal plant and useful aromatic wood.
CAUTION: Critically overharvested in parts of its range. Do not strip bark or self-dose.
LOOK-ALIKES: Other aromatic trees require flower and bark confirmation.
TASKS: medicine, tools

Verified images: POWO

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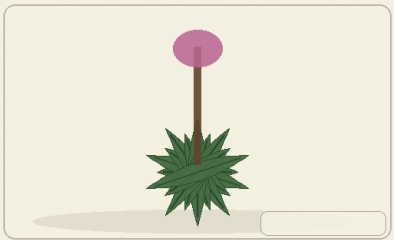
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MEDICINAL AND TRADITIONAL-USE PLANTS

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

AFRICAN ALOES

TRADITIONAL-USE



Aloe spp.

IDENTIFY: Fleshy rosette leaves with toothed margins and spikes of tubular red, orange or yellow flowers.

HABITAT / SEASON: African drylands, rocky slopes and fynbos. Season: Leaves year-round; flowers seasonal.

SURVIVAL USE: Clear inner gel of a few correctly identified species has documented external soothing use; dry stalks are tinder.

CAUTION: Yellow latex under the rind is a strong laxative and can be dangerous. Species vary; do not eat aloe in the field.

LOOK-ALIKES: Agaves are New World plants with fibrous leaves and different flowers.

TASKS: medicine, tinder

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MEDICINAL RESTRAINT

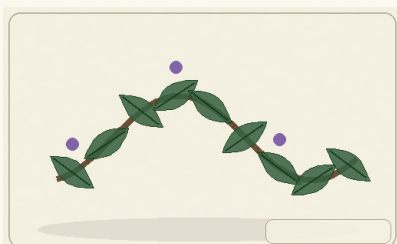
A plant can be culturally important and pharmacologically active yet still be the wrong survival choice. Unknown concentration, dehydration, pregnancy, allergies, chronic illness and medicine interactions can turn a traditional remedy into a second emergency.

POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

STROPHANTHUS

POISON — AVOID



Stylized form diagram — not an identification photograph

Strophanthus spp.

IDENTIFY: Woody climber with opposite leaves, showy flowers with long twisted tails and paired follicles containing tufted seeds.

HABITAT / SEASON: African tropical forest and woodland. Season: Flowers and fruit seasonal.

SURVIVAL USE: No survival use. Historically used as arrow poison.

CAUTION: Cardiac glycosides can be fatal by ingestion or contamination of wounds.

LOOK-ALIKES: Other Apocynaceae vines may have milky sap and are also suspect.

TASKS: poison

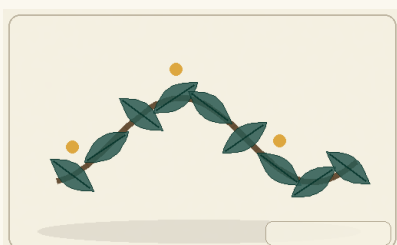
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ROSARY PEA

POISON — AVOID



Stylized form diagram — not an identification photograph

Abrus precatorius

IDENTIFY: Slender vine with many small paired leaflets, pink pea flowers and pods exposing red-black seeds.

HABITAT / SEASON: Tropical and subtropical thickets and disturbed ground worldwide. Season: Seeds seasonal.

SURVIVAL USE: No use. Seeds are sometimes used as beads but should not be drilled or handled by children.

CAUTION: Chewed or damaged seeds contain abrin and can be fatal.

LOOK-ALIKES: Other small-seeded legumes lack the distinctive red seed with black spot.

TASKS: poison

Verified images: POWO

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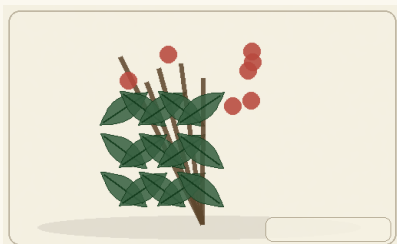
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POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

CASTOR BEAN

POISON — AVOID



Stylized form diagram — not an identification photograph

Ricinus communis

IDENTIFY: Large star-shaped palmately lobed leaves; spiny capsules; glossy mottled seeds.

HABITAT / SEASON: Warm disturbed ground, riverbanks and tropical/subtropical waste areas. Season: Growing season; seeds seasonal.

SURVIVAL USE: No survival food or medicine use. Oil extraction is industrial, not a field process.

CAUTION: Chewed seeds can release ricin and cause severe or fatal poisoning.

LOOK-ALIKES: *Jatropha* has similar lobed leaves but different fruit; it is also toxic.

TASKS: poison

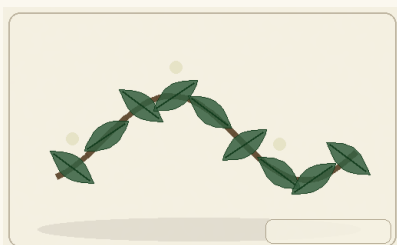
Verified images: POWO

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TOXIC STRYCHNOS VINES AND TREES

POISON — AVOID



Stylized form diagram — not an identification photograph

Strychnos spp.

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

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

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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	Wild raisins / Grewia	Use dead, shed or pruned material first.
Arrow or dart shaft	African highland bamboo, Wild raisins / Grewia	Use dead, shed or pruned material first.
Bow-drill hearth	Kapok / ceiba	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	Kapok / ceiba, Cattails, African aloes	Use dead, shed or pruned material first.
Fuel / coals	African pear / safou, Tamarind, African locust bean	Use dead, shed or pruned material first.
Cordage / fiber	Raffia palms, Wild raisins / Grewia, Papyrus	Use dead, shed or pruned material first.
Basket / mat	Raffia palms, African oil palm, Papyrus, Cattails	Use dead, shed or pruned material first.
Container / wrap	African highland bamboo	Use dead, shed or pruned material first.
Fruit food	Wild raisins / Grewia, African pear / safou, Bush mango, Papaya	Verify part, maturity and preparation.
Green food	Papaya, Moringa	Verify part, maturity and preparation.
Seed / nut	African locust bean, African water lilies	Verify part, maturity and preparation.
Root / starch	African water lilies, Cattails	Verify part, maturity and preparation.
Traditional-use	Pepper-bark tree, African aloes	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. African Plant Database

Conservatoire et Jardin botaniques de Geneve and SANBI — African taxonomy and distribution

<https://africanplantdatabase.ch/>

9. PlantZAfrica

South African National Biodiversity Institute — African species profiles and uses

<https://pza.sanbi.org/>

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.