

Podophyllum peltatum L.

Mayapple

(*Anapodophyllum peltatum*, *Podophyllum callicarpum*, *Podophyllum montanum*)

Other Common Names: American Mandrake, Ground Lemon, Indian Apple, May Apple, Raccoon-Berry, Wild Jalap, Wild Lemon, Wild Mandrake.

Family: *Berberidaceae*.

Cold Hardiness: References list this species as useful in USDA hardiness zones 4 to 9, however, given the wide native range, this may be a more reliable estimate with the use of regional provenances.

Foliage: One to two peltately attached leaves are produced on long erect petioles; vegetative stems usually have a single leaf, whereas flowering stalks produce a pair of leaves originating from either side of the central flower; leaves are glabrous, circular, umbrella-shaped, with 5 to 7 (9) palmate lobes, and are 6" to 10" (12") wide with a lustrous, almost oily look, above and somewhat lighter and duller green beneath; individual lobes are obovate with a tendency to develop a secondary forked lobe at the tip of the primary lobe; margins may be nearly entire to serrated, or irregularly incised; the overall venation is palmate, but on individual lobes the secondary venation appears pinnate terminating in a Y-shaped division on the lobe; veins are impressed above and may be lighter colored than the rest of the blade, becoming whitish or light yellowish green at the petiole attachment; tertiary veins are nearly reticulate; bases of the lobes are often cuneate; veins are raised beneath; early season growth may have a reddish tint.

Flower: Perfect flowers with six, sometimes more, yellowish green to glistening white, obovate to emarginate, overlapping petals form a 1½ "to 2" diameter, broadly cup to saucer-shaped flower with a prominent central pistil surrounded by flattened, oar-shaped, yellow stamens; stamens may be individual or with pairs subtended by a fused stalk; the fragrant flowers are presented vertically to pendently beneath the foliage; bloom is in mid- to late spring; flowers are typically borne at a Y-shaped fork atop a stoutish succulent green to brown stem between a pair of palmately divided leaves that extend above the flower.

Fruit: Berries are oblong to ovoid, 1" to 2" long and progress from dark green, yellow-green, and finally yellow at maturity; lemon-shaped fruit hang on a curved green to brown peduncle; ripened fruit do not appear until later in the growing season, despite the common name of Mayapple.

Stem / Bark: Stems — Stout, rounded, succulent, glabrous stems terminate in a palmately divided leaf or sympodially branch to form two leaves with a bud between them; Buds — unseen overwintering buds are below ground on the rhizomes; Bark — not applicable.

Habit: Winter deciduous herbaceous perennial foliage arises from below ground rhizomes and thick fibrous roots to form spreading dense colonies of indeterminate size; summer foliage matures at heights of 12" to 18" (24") tall; textures are pleasingly coarse.

Cultural Requirements: Mayapple requires moist, fertile, acidic soils for vigorous growth in our region and usually is found in shady locations, or is planted there; plants tend to suffer in full sun in our region but also can develop foliar fungal infections if air movement is not good; Mayapple is not particularly drought tolerant and the foliage tends to decline in the heat of summer; growth rates can be rapid once established.

Pathological Problems: A yellow to orange fungal rust, *Allodus podophylli*, often infests the foliage.

Ornamental Assets: Lush, dark lustrous green, unusual shaped leaves, shade tolerance, and a coarse textured, colony-forming habit are its primary assets; the flowers are a secondary benefit.

Limitations & Liabilities: Although fungal rusts can be a problem, the primary limitation is the need for regular moisture and a high quality planting site for good growth; flowers are often hidden beneath the foliage where they do not make much of a show; nearly all plant parts are poisonous; plants parts, in particular the rhizomes and roots, may cause dermatitis if handled.

Landscape Utilization: Mayapple is occasionally planted for its novel foliage, subtle flowers, and as a seasonal shade groundcover under deciduous trees, but its poisonous attributes and tendency to cause dermatitis limit commercial and residential uses; *Podophyllum peltatum* may also be incorporated into naturalized woodland gardens or used in shaded transition locations between cultivated paths and wild woodlands.

Other Comments: Although fruits are reportedly edible when fully ripe, it is probably wise to avoid them as poisoning from this plant has been associated with some very undesirable side effects on internal organs and deaths from eating unripened fruit are reported; the genus name derives from the Latin words for foot and leaf, in reference to its vague duck foot shape; the specific epithet refers to the peltate leaf attachment.

Native Habitat: *Podophyllum peltatum* is native to much of central and eastern North America, including east Texas, eastern Oklahoma, Arkansas and Louisiana in our region.

Related Taxa: *Podophyllum* L. (*Dysosma*, *Sinopodophyllum*) contains a variable number of species depending upon the tendency for assorted authorities to lump and split species or to break out new genera from the original construct.

References: Ajilvsgi, 2003; Brown, 1972; Duncan and Duncan, 1999; Holloway, 2005; Loughmiller and Loughmiller, 1984; Tull, 1987; Wasowski and Wasowski, 2002.

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