

*Podophyllum peltatum*

[Synonyms : *Aconitifolius humilis*, *Anapodaphyllum canadense*]

**AMERICAN MANDRAKE** is a perennial. Native to eastern North America (from Quebec to Florida and Texas) it has a nauseous-smelling white or cream flower.

It is also known as Behen, Citron, *Citron sauvage* (French-Canadian), Common May-apple, Devil's apple, Duck's foot, *Fotblad* (Swedish), Ground lemon, Hog apple, Indian apple, *Maiapfel* (German), Mandrake, Mandrake pear, May apple, Maypop, Mayweed, Mug-apple, North American mayapple, Parasols, Peca, Podophyllum, Puck's foot, Raccoon berry, Umbrella leaf, Umbrella plant, Umbrella root, Vegetable calomel, Vegetable mercury, Wild duckfoot, Wild jalap, Wild lemon, Wild mandrake, and Yellow berry.

Warning – the unripe fruit are poisonous. The ripe fruit should not be eaten in quantity because of their laxative effect, and the roots are particularly virulent in the Spring. The rest of the plant is also poisonous and can only be used by qualified practitioners. The plant must not be used during pregnancy. It can be a purgative and can cause nausea, gastroenteritis, vomiting and death. Handling the plant can cause conjunctivitis, eye inflammation and/or skin ulcers. External application would also be unwise as poisoning could occur from absorption. The plant is poisonous for animals too and is normally avoided by them. In Britain it is considered to be a prescription only medicine.

*Peltatum* is derived from Greek *pelto*- (small round shield, target) component meaning 'shield-shaped' with reference to the stalk's position (towards the centre of the leaf not at the leaf edge).

American mandrake is not related to the mandrake (*Mandragora officinarum*) with which it shares several common names.

North American Indians have used the underground root of the plant for years primarily as an emetic as the Meskwaki tribe did, or as the Iroquois and Cherokee Indians did for treating tumours and warts. The Cherokee tribe also used American mandrake to treat deafness, as well as worms and rheumatism, and the Iroquois, Cherokee and Delaware Indians prescribed it as a strong laxative. In addition the Delaware took it as a tonic – and it was used in several ways by the Iroquois for treating ailments in their horses.

The Menominee however seem to have recognized few medicinal virtues in American mandrake. Instead they used a plant decoction as a pesticide to kill bugs on potato plants (*Solanum tuberosum*). Cherokee Indians also respected the roots' insecticidal qualities as they soaked corn (*Zea*) in the root juice before planting it in order to repel insects and crows. On the other hand the Iroquois respected fertilizing properties in the root as they put a root solution on their corn to make it grow.

Menominee Indians had a particular liking for the ripe, juicy, edible fruit which records show were also enjoyed by the Chippewa, Cherokee, Iroquois and Meskwaki tribes. The latter also used the fruit to make a jam, while the Iroquois dried the fruit so that it could be taken on hunting expeditions or made into sauces or added to bread mixtures. (Although the fruit act as a laxative, they used actually to be on sale in North American markets as an ingredient for jams and drinks.)

The plant is believed to have crossed the Atlantic to Europe (including Britain) in about 1664.

American mandrake grew in the area where the Erie Canal otherwise known as 'Clinton's Ditch' was built. This was a project dear to the heart of an American politician, De Witt Clinton (1769-1828). He had pressed hard for this Scheme to go ahead and opened the Canal in 1825. While this was proceeding Clinton also made every attempt to harvest and market the fruit growing in the area but was ultimately foiled in this objective because it is only edible if completely ripe (and then if eaten in quantity as already mentioned it can have this debilitating laxative effect).

An American poet still delightfully familiar to many today, the Hoosier Poet, James Whitcomb Riley(1849-1916) from Indiana celebrated American mandrake in his *Rhymes of Childhood* as follows:

And will any poet sing  
Of a lusher, richer thing  
Than a ripe May-apple, rolled  
Like a pulpy lump of gold  
Under thumb and finger-tips,  
And poured molten through the lips?

Attention was first drawn to the plant's medicinal purgative qualities by a Dr. Schopf while tending German combatants in the American War of Independence in the 1770s. In due time in 1787 it was introduced to Western medicine. It has been used in the treatment of fevers, syphilis, jaundice, liver disorders and rheumatism. Interest in the drug was generated further in the early 1800s by an American botanist, William Barton (1786-1856) and it was recognized formally by the United States in their Pharmacopoeia in 1820. The strength of the dried underground stem is illustrated by the fact that a therapeutic dose would be only 0.12 of a gram. It is still associated with the treatment of venereal warts. Today the plant receives consideration as a possible participant in the treatment of some forms of cancer.