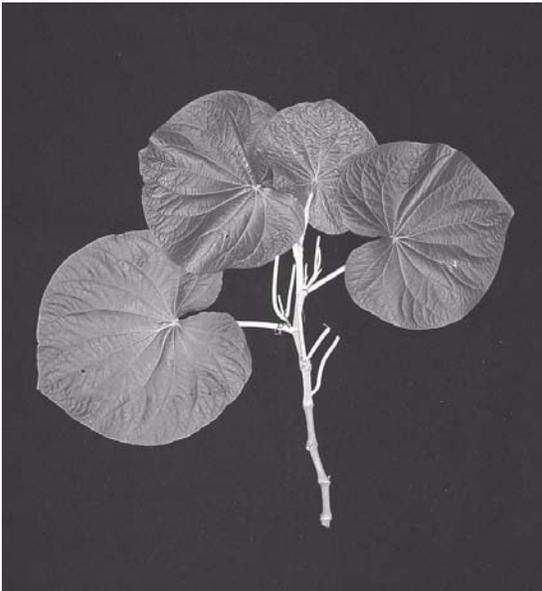


***Lepianthes peltata* (L.) Raf.**  
PIPERACEAE

monkey's hand

Synonyms: *Lepianthes umbellata* (L.) Raf.  
*Piper peltatum* L.  
*Heckeria peltata* (L.) Kunth in L.  
*Pothomorphe peltata* (L.) Miq.  
*Piper umbellatum* L.  
*Pothomorphe dussii* Trel. in Stehlé



**General Description.**—Common names for monkey's hand include cowwheel bush, cow-foot leaf, baquiña, chapeau g'leau, bois-anisette, fèy a kè, and many others. It is a weak-stemmed shrub up to 2 m in height and 3 cm in basal diameter. This plant usually has a single stem, but may produce multiple sprouts from the root collar if the top is damaged. The stems have a vertical habit with no branches until the stems reach 0.5 to 1.0 m in height and then form only second order branches. A taproot does not develop in clayey soil, but the plant develops many robust, semi-fleshy lateral roots. Adventitious roots may form at the lower nodes. The stems may be glabrous or pubescent. The leaves have petioles 8 to 20 cm long. The leaf blades may be sub-orbicular to ovoid, peltate or not, and about 15 to 35 cm long and broad. They have a cordate base and an acute tip, with 11 to 15 palmate veins. Spikes of minute flowers in small groups are born on peduncles 1 to 7 cm long. In these "fruits," after development,

have numerous 0.5 mm-long drupelets embedded (Howard 1988, Liogier 1985). The stems, leaves, and young fruits have a pine-like aromatic smell. However, overripe spikes, have a smell reminiscent of oysters or cow's breath.

**Range.**—Monkey's hand is native to Mexico, Central America, tropical South America, the Greater and Lesser Antilles, and Trinidad in the Americas, and Guinea, Sierra Leone, Ivory Coast, Ghana, and Nigeria in Africa (Burkill 1997, Howard 1988, Liogier 1985, Liogier and Martorell 2000). The species is also reported as naturalized in Florida (Langeland and Stocker 2001).

**Ecology.**—Monkey's hand grows in full sunlight and in light to moderate shade. Continually moist soil is imperative. Rainfall may vary from about 1500 to over 3000 mm of annual precipitation. The plant usually grows on loamy or clayey soils with relatively good fertility. In Puerto Rico, monkey's hand grows from near sea level to over 1,000 m in elevation. Plants may grow singly or in clumps along streams and roads, in old fields and other disturbed areas, in forest tree-fall gaps, and on nursery benches. Disturbance and bare soil are necessary for successful establishment.

**Reproduction.**—Monkey's hand shrubs bloom and fruit continuously after reaching about 0.5 m in height. A collection of fresh fruits from Puerto Rico weighed an average of  $0.95 \pm 0.11$  g. Seeds separated from these fruits weighed an average of 0.000061 g/seed or 16,400,000 seeds/kg (air-dried). For unknown reasons, germination on moist filter paper failed entirely (author's observations). Seeds are produced in large numbers and disbursed by fruit bats and birds. Apparently, only a small percent of the seeds germinate and develop, because seedlings are scattered and rarely abundant. Monkey's hand plants are easy to propagate from cuttings. A small group of stem cuttings were treated with IBA and

placed in a mist bed. After about 5 weeks, 85 percent had rooted. Because rooting takes place at the nodes, a node should be included in the buried portion of the cutting.

**Growth and Management.**—Monkey's hand plants live about 2 years but may perpetuate themselves by sprouting from the root collar. Plants also root at the nodes when nodes are buried with soil or leaf mold, or if laid prostrate. The plant is a common weed in plantations of cacao and oil palm in Africa (Burkill 1997). Monkey's hand may be controlled by hand pulling. It is important to remove the pulled material from the site to prevent it from rerooting. If hand pulling is not possible, plants may be killed by spraying with a 20 percent solution of Garlon<sup>1</sup> applied as a basal bark spray or by cutting the plants and applying a 50 percent solution to the cut stumps (Langeland and Stocker 2001).

**Benefits and Medicinal Use.**—Monkey's hand plants are browsed by cattle and other ruminants. The species is pretty enough to be used as a border or background plant in landscaping, but there are no current reports of its use in landscaping. In several parts of Africa, the leaves and stems are cooked and eaten as a vegetable with meat and fish. It is also used as a condiment and as an ingredient in sauces. The fruits and leaves are used as bait in trapping fish and small birds (Burkill 1997). In Haiti, monkey's hand leaves are used in combination with other natural products in a treatment for hypertension (The Temple of Yehwe 2001). In Africa, it is used in various ways in magical rites to promote good things and ward off the influences of evil fetishes. Leaves, root, and fruits of the plant are also used to control migraine and general pain, as an antiseptic, to control tapeworms, gonorrhea, urinary problems, and rheumatism (Burkill 1997). Monkey's hand is used in many of the same ways in the West Indies (Liogier 1990).

<sup>1</sup>Garlon is named here for identification purposes only. The Forest Service does not endorse any commercial product.

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