

FULL ACCOUNT FOR: Physalis peruviana



System: Terrestrial

| Kingdom | Phylum | Class | Order | Family |
|---------|---------------|---------------|-----------|------------|
| Plantae | Magnoliophyta | Magnoliopsida | Solanales | Solanaceae |

Common name

manini fua lalahi (Niuean), aguaymanto (Spanish, Peru), Kapstachelbeere (English), coqueret du Peru (English), tomatinho-de-capucho (Portuguese), gooseberry tomato (English), erva-noiva-do-peru (Portuguese), alquequenje (Portuguese, Brazil), groselha-do-Peru (Portuguese, Brazil), manini (Niuean), alquequenje (Spanish), bate-testa (Portuguese, Brazil), capulí (Spanish), physalis (Portuguese, Brazil), uvilla (Spanish, Ecuador), tukiyandra (Fijian), botebote yadra (Fijian), poha (Hawaiian), thol thakkali (Sinhalese), topotopo (Quechua), alquequenje amarillo (Spanish), mbotembote yandra (Fijian), maulanggua (Fijian), kospeli (Fijian), tupera (Maori, Cook Islands), goundougoundou (English), pa'ina (Hawaiian), winebusupén (English), Cape gooseberry (English), gooseberry-tomato (English), te bin (English, Kiribati), te baraki (English, Kiribati), rasabarii (Nepali), jangalii mevaa (Nepali), ishmagol (Nepali), Peruvian cherry (English), watamo (English, Nauru), ground cherry (English), Peruvian ground-cherry (English), tupere (English, Tahiti), goldenberry (English), oatamo (English, Nauru), camapú (Portuguese, Brazil), ku'usi (Tongan)

Synonym

Similar species

Summary

Physalis peruviana originates from the tropics and is cultivated in its native lands. It poses an indirect threat to agriculture when imported as it may harbour introduced plant pests.



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Species Description

Physalis peruviana is a shortlived perennial to 1 m tall, semi-woody. Leaves simple, alternate, in pairs at each node, unequal in size, margins somewhat lobed or not. Flowers solitary in leaf axils, bell-shaped, yellow with purplish brown spots at the base of the corolla. Berries pale yellow, drying to pale brown, aromatic, covered by papery calyx. Seeds numerous (Motooka et al. 2003).\n

\nSoft-wooded, short-lived shrubs up to ca. 1 m tall, straggly with age, all parts densely pubescent with erect, simple or glandular hairs up to 1 mm long. Leaves simple, alternate, usually geminate, 1 larger than the other, ovate-acuminate, often 6 cm long, 4 cm wide, margins entire or rarely with a few blunt lobes, apex acuminate, base cordate, petioles 2 to 3 cm long. Flowers perfect, actinomorphic, solitary in the leaf axils, pedicellate; calyx connate in lower, 5-lobed, veins often prominent, the lobes acumunate-triangular, ca. 1 cm long, distinct at apex; corolla yellow with well-defined purplish brown spots at base, 15 to 20 mm in diameter, the limb rotate or shallowly 10-lobed, the tube swollen into shallow nectary pouches between the filaments, densely pubescent with pale yellowish dendritic hairs below the spots and around the nectaries; style 5 to 7 mm long. Berries pale yellow, drying pale brown, aromatic, succulent, globose, 1.5 to 2 cm in diameter, enclosed in the inflated calyx 3 to 3.5 cm long. Seeds numerous, pale brown, discoid, 1.75 to 2 mm long, minutely shallowly reticulate, embryo curved, endosperm present (Wagner et al. 1999, in PIER 2002).\n

Seeds creamy white to yellowish and very small (less than 2 mm in diameter); ovoid, compressed; testa slightly pitted (PIER Undated). \n

Notes

The scientifc name *Physalis peruviana* was derived from the Greek *physa*, bladder, for the calyx covering the fruit and *peruviana* meaning of Peru (Motooka *et al.* 2003).\n

Uses

Physalis peruviana is used as an ornamental plant; consumed (fruit); berries used for making jams; used in traditional medicine (USDA-ARS 2003; Motooka *et al.* 2003).

Habitat Description

Physalis peruviana grows well in the tropics (Bailey 1949, in USDA 1997). It may be found in mesic to wet forests, subalpine woodland and disturbed sites on mountain slopes at altitudes of 450 to 2020 meters (Wagner et al. 1999, in PIER 2002; Motooka et al. 2003). In Fiji it occurs at elevations from near sea level to 900 meters; it is also found in gardens and in forests along trails and streams, in clearings and in cultivated areas (Smith 1991, in PIER 2002). It is a common weed in some plantations in Niue (Sykes 1970, in PIER 2002). It is frequently found in Tahiti in cool valleys to an altitude of 800 meters (Welsh 1998, in PIER 2002). It is an occasional plantation weed in Tonga (Yuncker 1959, in PIER 2002).

Reproduction

Fruit/seed; seed produced in a fruit capsule

General Impacts

The Global Compendium on Weeds lists *Physalis peruviana* as an agricultural weed, cultivation escape and environmental weed (GCW 2007). *P. peruviana* poses an indirect threat to US agriculture when imported as it may harbour introduced plant pests, including a wide range of arthropod (insect) pests and plant pathogenic fungi, viruses and bacteria (USDA 1997).

Management Info

<u>Chemical</u>: *Physalis peruviana* is probably susceptible to hormone-type herbicides, especially when young, and probably to tebuthiuron (Motooka *et al.* 2003).

Principal source:



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Compiler: IUCN SSC Invasive Species Specialist Group (ISSG) with support from the EU-funded South Atlantic Invasive Species project, coordinated by the Royal Society for the Protection of Birds (RSPB)

Review:

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[1] NIUE[2] PALAU[1] PORTUGAL[3] SAINT HELENA

[1] TAIWAN [1] TUVALU

[12] UNITED STATES [1] ZIMBABWE

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Summary: This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc.

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General information



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