

# Physalis

For the software framework, see [Physalis \(software\)](#).  
“Ground cherry” redirects here. For the European shrub also called “ground cherry”, see [Prunus fruticosa](#).

*Physalis* (/ˈfaɪsəlɪs/, sometimes /faɪˈseɪlɪs/)<sup>[2]</sup> is a genus of flowering plants in the nightshade family (Solanaceae), which grow in warm temperate and subtropical regions of the world. Most of the species, of which there may be 75–90, are indigenous to the New World with one notable exception (*P. alkekengi*). Cultivated species and weedy annuals have been introduced worldwide. A notable feature is the formation of a large papery husk derived from the calyx, which partly or fully encloses the fruit.<sup>[3]</sup> The fruit is small and orange, similar in size, shape and structure to a small tomato.

At least 46 species are endemic to the country of Mexico.<sup>[4]</sup>

Many *Physalis* species are called **groundcherries**.<sup>[5]</sup> One name for *Physalis peruviana* is **Cape gooseberry**, not to be confused with the true gooseberries, which are of the genus *Ribes* in the family Grossulariaceae. Another name used to refer to the fruit is simply **golden berries**.<sup>[6]</sup>

## 1 Description

*Physalis* are herbaceous plants growing to 0.4 to 3 m tall, similar to the common tomato, a plant of the same family, but usually with a stiffer, more upright stem. They can be either annual or perennial. Most require full sun and fairly warm to hot temperatures. Some species are sensitive to frost, but others, such as the Chinese lantern, *P. alkekengi*, tolerate severe cold when dormant in winter.

## 2 Cultivation and uses

These plants grow in most soil types and do very well in poor soils and in pots. They require moisture until fruiting. Plants are susceptible to many of the common tomato diseases and pests, and other pests such as aphids, whiteflies, spider mites, and the false potato beetle (*Leptinotarsa juncta*) also attack them. Propagation is by seed. Some species are self-incompatible and require pollen from other plants to bear fruit.

Not all *Physalis* species bear edible fruit. Select species are cultivated for their edible fruit, however; the typical *Physalis* fruit is similar to a firm tomato in texture,



*Physalis* sp. fruit with husk

and like strawberries or pineapple in flavor, with a mild acidity. Some species, such as the Cape gooseberry and tomatillo have been bred into many cultivars with varying flavors, from tart to sweet to savory. *Physalis* fruit are rich in cryptoxanthin. The fruit can be used like the tomato. Once extracted from its husk, it can be eaten raw and used in salads. Some varieties are added to desserts, used as flavoring, made into fruit preserves, or dried and used like raisins. They contain pectin and can be used in pie filling.

The Cape gooseberry is native to the Americas, but is common in many subtropical areas. Its use in South Africa near the Cape of Good Hope inspired its common name. Other species of commercial importance include the tomatillo (*P. philadelphica*). Some nations, such as Colombia, have a significant economic trade in *Physalis* fruit.

Some species are grown as ornamental plants. For example, the hardy *Physalis alkekengi* is popular for its large, bright orange to red husks.

In Chinese medicine, *Physalis* species are used as remedies for such conditions as abscesses, coughs, fevers, and sore throat.<sup>[7]</sup> Smooth groundcherry (*P. subglabrata*) is classified as a hallucinogenic plant, and its cultivation for other than ornamental purposes is outlawed in the US state of Louisiana under State Act 159.

The extinct Dacian language has left few traces, but in *De Materia Medica* by Pedanius Dioscorides, a plant called *Strychnos alikakabos* (Στρήχνης ἀλικακάβος) is discussed, which was called *kykolis* (or *cycolis*) by the Dacians. Some have considered this plant to be *Physalis alkekengi*, but the name more likely refers to ashwagandha (*Withania somnifera*).<sup>[8]</sup>

### 3 Diversity



yellow nightshade groundcherry (*Physalis crassifolia*)

As of 2005, about 75 to 90 species were in the genus.<sup>[3]</sup>

Species include:<sup>[5][9]</sup>

- *Physalis acutifolia* (Miers) Sandw. – sharp-leaved groundcherry, Wright groundcherry
- *Physalis alkekengi* L. – Chinese lantern, Japanese lantern, bladder-cherry, winter-cherry, *hōzuki* (Japanese)
- *Physalis angulata* L. – cut-leaved groundcherry, lance-leaved groundcherry, *camapu*
- *Physalis angustifolia* Nutt. – coastal groundcherry
- *Physalis arenicola* Kearney – cypress-headed groundcherry
- *Physalis carpenteri* Riddell ex Rydb. – Carpenter's groundcherry
- *Physalis caudella* Standl. – southwestern groundcherry
- *Physalis cinerascens* (Dunal) A.S. Hitchc. – small-flowered groundcherry
- *Physalis clarionensis*
- *Physalis cordata* Mill. – heart-leaved groundcherry
- *Physalis coztomatli* Moc. & Sessé ex Dunal
- *Physalis crassifolia* Benth. – thick-leaved groundcherry, yellow nightshade groundcherry
- *Physalis foetens* Poir. – tropical groundcherry
- *Physalis grisea* (Waterfall) Martínez – strawberry-tomato
- *Physalis hederifolia* A.Gray – ivy-leaved groundcherry
- *Physalis heterophylla* Nees – clammy groundcherry
- *Physalis hispida* (Waterfall) Cronq. – prairie groundcherry
- *Physalis latiphysa* Waterfall – broad-leaved groundcherry
- *Physalis longifolia* Nutt. – common groundcherry, long-leaved groundcherry
- *Physalis longiloba*<sup>[4]</sup>
- *Physalis mimulus*
- *Physalis minima* L. – pygmy groundcherry, native gooseberry (Australia)
- *Physalis missouriensis* Mackenzie & Bush – Missouri groundcherry
- *Physalis mollis* Nutt. – field groundcherry
- *Physalis noronhae*
- *Physalis peruviana* L. – cape gooseberry, Peruvian groundcherry, Inca berry, *uchuva* (Colombia), *poha*
- *Physalis philadelphica* Lam. (syn. *P. ixocarpa*) – tomatillo, Mexican groundcherry, jamberry, Mexican tomato, *tomate de cáscara*, *tomate de fresadilla*, *tomate milpero*, *tomate verde*



strawberry groundcherry (*Physalis pruinosa*)

- *Physalis pruinosa* L. – strawberry groundcherry
- *Physalis pubescens* L. – golden strawberry, Chinese lantern
- *Physalis pumila* Nutt. – dwarf groundcherry
- *Physalis subulata* Rydb. – Chihuahuan groundcherry
- *Physalis tamayoi*<sup>[4]</sup>

- *Physalis turbinata* Medik. – thicket groundcherry
- *Physalis virginiana* Mill. – Virginia groundcherry
- *Physalis viscosa* L. – grape groundcherry, star-haired groundcherry
- *Physalis walteri* Nutt. – Walter’s groundcherry

### 3.1 Formerly placed here

- *Deprea orinocensis* (Kunth) Raf. (as *P. orinocensis* Kunth)
- *Leucophysalis grandiflora* (Hook.) Rydb. (as *P. grandiflora* Hook.)
- *Quincula lobata* (Torr.) Raf. (as *P. lobata* Torr.)<sup>[9]</sup>
- *Salpichroa origanifolia* (Lam.) Baill. (as *P. origanifolia* Lam.)
- *Withania somnifera* (L.) Dunal (as *P. somnifera* L.)<sup>[9]</sup>

## 4 References

- [1] “Genus: *Physalis* L.”. *Germplasm Resources Information Network*. United States Department of Agriculture. 2009-09-01. Retrieved 2010-04-14.
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- [9] “GRIN Species Records of *Physalis*”. *Germplasm Resources Information Network*. United States Department of Agriculture. Retrieved 2011-05-21.

## 5 External links

- “Groundcherries, (cape-gooseberries or poha), raw”. *Nutrition Facts*. Self Nutrition Data.
- Sorting *Physalis* names
- Plants for a Future

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