



Ecuador Dragon Fruit, Yellow Dragon Fruit, Pitahaya, and Pitaya Fruit Admissible to Continental United States

Table 1 lists the scientific names, common names, CITES designations, and synonyms of dragon fruit, yellow dragon fruit, pitahaya, or pitaya fruit.

Table 1 Dragon Fruit, Yellow Dragon Fruit, Pitahaya, or Pitaya Fruit

Scientific names:	Common name:	CITES:	Synonym(s)/alternate nomenclature:
<i>Acanthocereus tetragonus</i>	pitahaya/pitaya	CITES II ¹	<i>Acanthocereus occidentalis</i> , <i>A. baxaniensis</i> , <i>A. colombianus</i> , <i>A. horridus</i> , <i>A. pentagonus</i> , <i>A. pitajaya</i> , <i>A. subinermis</i> , <i>Cactus pentagonus</i> , <i>C. pitajaya</i> , <i>C. tetragonus</i> , <i>Cereus pentagonus</i> , <i>C. pitajaya</i>
<i>Cereus hildmannianus</i>	pitahaya/pitaya	CITES II ¹	<i>Cactus peruvianus</i> , <i>Cereus uruguayanus</i>
<i>Echinocereus ferreirianus</i> spp. <i>lindsayi</i>	pitahaya/pitaya	CITES I ²	<i>Echinocereus lindsayorum</i> , <i>E. ferreirianus</i>
<i>Echinocereus schmollii</i>	pitahaya/pitaya	CITES I ²	<i>Cereus schmollii</i>
<i>Echinocereus stramineus</i>	pitahaya/pitaya	CITES II ¹	<i>Cereus conglomeratus</i> , <i>C. stramineus</i> , <i>Echinocereus conglomeratus</i> , <i>E. enneacanthus</i> var. <i>stramineus</i>
<i>Escontria chiotilla</i>	pitahaya/pitaya	CITES II ¹	<i>Cereus chiotilla</i>
<i>Myrtillocactus geometrizans</i>	pitahaya/pitaya	CITES II ¹	<i>Cereus geometrizans</i>
<i>Selenicereus (Hylocereus) costaricensis</i>	dragon fruit	CITES Annotation #4d exemption ³	<i>Cereus trigonus</i> var. <i>costaricensis</i>
<i>Selenicereus (Hylocereus) guatemalensis</i>	dragon fruit	CITES Annotation #4d exemption ³	<i>Cereus trigonus</i> var. <i>guatemalensis</i>
<i>Selenicereus (Hylocereus) megalanthus</i>	yellow dragon fruit	CITES Annotation #4d exemption ³	<i>Cereus megalanthus</i>
<i>Selenicereus (Hylocereus) monacanthus</i>	dragon fruit	CITES Annotation #4d exemption ³	<i>Cereus monacanthus</i> , <i>Hylocereus polyrhizus</i> , <i>Hylocereus lamairei</i>
<i>Selenicereus (Hylocereus) ocamponis</i>	dragon fruit	CITES Annotation #4d exemption ³	<i>Cereus ocamponis</i>
<i>Selenicereus (Hylocereus) undatus</i>	dragon fruit	CITES Annotation #4d exemption ³	<i>Cereus undatus</i> , <i>Hylocereus undatus</i>
<i>Stenocereus griseus</i>	pitahaya/pitaya	CITES II ¹	<i>Cereus griseus</i>
<i>Stenocereus gummosus</i>	pitahaya/pitaya	CITES II ¹	<i>Cereus gummosus</i>
<i>Stenocereus queretaroensis</i>	pitahaya/pitaya	CITES II ¹	<i>Cereus queretaroensis</i>
<i>Stenocereus stellatus</i>	pitahaya/pitaya	CITES II ¹	<i>Cereus stellatus</i>
<i>Stenocereus thurberi</i>	pitahaya/pitaya	CITES II ¹	<i>Cereus thurberi</i> , <i>Lemaurocereus thurberi</i> , <i>Marshallocereus thurberi</i> , <i>Pachycereus thurberi</i>

- 1 CITES II—all species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.
- 2 CITES I—all parts and derivatives, including fruit, must adhere to CITES convention rules for importation.
Appendix I plants, all parts or derivatives, are always regulated and cannot be exempted
Echinocereus ferreirianus subsp. *lindsayi*, and *E. schmollii* are protected under CITES Appendix I
- 3 CITES Annotation #4d exemption:
 - ◆ No CITES permit is required. For any questions regarding CITES exemptions, CBP officers should consult with their port botany identifier

Dragon fruit nomenclature has been unsettled partly due to its morphological similarities resulting in numerous synonyms and frequent misidentifications of the commodity. Molecular genomics have recently shown that dragon fruit, traditionally named in genus *Hylocereus*, actually belong to the closely related genus *Selenicereus*. Therefore, the generic name changes to *Selenicereus* and *Hylocereus* becomes its synonym. In the Eastern Hemisphere, the commercially produced fruit is typically known as “dragon fruit,” and in the Western Hemisphere, the fruit is typically known as “pitahaya,” “yellow pitahaya,” or “pitaya.”

The accepted nomenclature for commercial types of dragon fruit has been recognized and is viewable at the Germplasm Resource Information Network (GRIN) online database (*Selenicereus megalanthus* (K. Schum. ex Vaupel) Moran GRIN-Global (ars-grin.gov)).

At least six species are known to have been used in the development of varying forms of commercial dragon fruit: 1) *Selenicereus costaricensis*; 2) *S. guatemalensis*; 3) *S. megalanthus*; 4) *S. monacanthus*; 5) *S. ocamponis*; and 6) *S. undatus*. Hybrids and cultivars developed from these species for commercial production have been, and continue to be, selected for their long shelf lives allowing for international trade. Most importantly, *Selenicereus* (*Hylocereus*) spp. fruit are **exempt** from the Convention on International Trade in Endangered Species (CITES) as per annotation #4d.

In the Western Hemisphere, the following regionally produced fruit are traditionally called pitahaya or pitaya: *Acanthocereus* spp., *Cereus* spp., *Echinocereus* spp., *Escontria* sp., *Myrtillocactus* sp., and *Stenocereus* spp. Such fruit does not have the same commercial qualities as the cultivated *Selenicereus* (*Hylocereus*) spp. known as dragon fruit.