



***Brugmansia candida* Pers.**
***Brugmanisa sanguinea* (Ruiz & Pav.) D. Don.**
SOLANACEAE

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Synonyms

***Brugmansia candida* Pers.:** *Brugmansia arborea* (L.) Lagerh.; *Brugmanisa aurea* Lagerh.; *Datura affinis* Saff.; *Datura arborea* L.; *Datura arborea* Ruiz & Pav.; *Datura candida* (Pers.) Pasq.; *Datura candida* (Pers.) Saff.; *Datura candida* (Pers.) Voigt.; *Datura pittieri* Saff.

***Brugmanisa sanguinea* (Ruiz & Pav.) D. Don.:** *Brugmanisa bicolor* Pers.; *Datura rosei* Saff.; *Datura rubella* Saff.; *Datura sanguinea* Ruiz & Pav.; *Datura sanguinea* var. *flava* Dunal

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Fig. 1 *Brugmansia candida* (Solanaceae), Hunachaco, Peru. (Photo R.W. Bussmann and N.Y. Paniagua-Zambrana)



Local Names

***Brugmansia candida*: Colombia:** Amarón borrachero, Biangan borrachero, Borrachero, Borrachero blanco, Buiesh-borrachero, Cacao sabanero, Culebra borrachera, Floripondio, Gumsian borrachero, Kinde borrachero, Munchira, Muscay borrachero, Muscuai borrachera, Ngntian-borrachero, Quinde borrachera, Salamán borrachero, Salvaje borrachera

***Brugmansia sanguinea*: Colombia:** Borrachero colorado, Campanilla encarnada, Floripondio, Floripondio encarnado, Guamuca, Huamuca, Tonga

Botany and Ecology

***Brugmansia candida*:** A shrub or small tree; leaves softly pubescent; calyx spathe-like, deciduous in fruit; corolla white, 15–18 cm long, with distinct sinuses or notches between the lobes; peduncle velvety-pubescent; calyx caducous, often 6–25 cm long; fruit ovoid. Often cultivated (Macbride and Weberbauer 1936–1995) (Fig. 1).

***Brugmansia sanguinea*:** The only known species with dark red flowers shading into a yellow tube; leaves entire or repand, puberulent; peduncle slender; calyx about half the length of the corolla or less, with two (later more) acuminate teeth; corolla 2 dm. long, lightly pubescent, the limb about 7 cm wide; filaments pubescent below; anthers 1.5 cm long; fruit often in persisting calyx, smooth, seeds verruculose. A small tree growing at 3000–4000 m above sea level (Macbride and Weberbauer 1936–1995) (Figs. 2, 3, 4, 5, and 6).



Fig. 2 *Brugmansia sanguinea* (Solanaceae), ceremonial planting around large *Podocarpus* tree and altar, Cajas, Ecuador. (Photo R.W. Bussmann and N.Y. Paniagua-Zambrana)

Fig. 3 *Brugmansia sanguinea* (Solanaceae), Cajas, Ecuador. (Photo R.W. Bussmann and N.Y. Paniagua-Zambrana)



Fig. 4 *Brugmansia sanguinea* (Solanaceae), Cajas, Ecuador. (Photo R.W. Bussmann and N.Y. Paniagua-Zambrana)



Fig. 5 *Brugmansia sanguinea* (Solanaceae), Cajas, Ecuador. (Photo R.W. Bussmann and N.Y. Paniagua-Zambrana)



Fig. 6 *Brugmansia sanguinea* (Solanaceae), Cajas, Ecuador. (Photo R.W. Bussmann and N.Y. Paniagua-Zambrana)



Local Medicinal Uses

***Brugmansia candida*:** It is a plant with toxic and hallucinogenic properties. The juice is a strong hallucinogen, and is highly toxic. In poultices they are used to relieve rheumatic pain. To relieve fatigue and as a stimulant, in **Colombia** the leaves are used in decoction. Externally, it is used in the treatment of rheumatism and in arthritic conditions (García Barriga 1975; Pérez Arbeláez 1996). In Madagascar, the species is used to treat epilepsy and paraplegia (Randriamiharisoa et al. 2015).

***Brugmansia sanguinea*:** The whole plant, but especially the fruits, are very poisonous and narcotic and have hallucinogenic and narcotic properties. In **Colombia** a decoction of the leaves is used in the form of baths to relieve the inflammations produced by the retention of liquids in the body (García Barriga 1975; Pérez Arbeláez 1996).

Some antibacterial properties have been reported (Bussmann et al. 2011a), but the high toxicity of the species (Bussmann et al. 2011b) prevents application for medicinal use.

Local Handicraft and Other Uses

All species of the genus are widely used for ceremonial purposes (Bussmann 2016).

In **Ecuador** both species are used in curing ceremonies for enhancing visions and topically to treat wounds and cysts caused by sorcery (Bussmann and Sharon 2006a, 2007a).

In **Peru**, it is used to treat bad air (*mal aire*), as protection from sorcery, to remedy nervous system tensions, fright caused by spirits (*susto por espíritos*), and as hallucinogen (Bussmann and Sharon 2006b, 2007b, 2015a, b; Monigatti et al. 2013). The plants are sold in markets (Bussmann et al. 2007, 2010; Bussmann and Sharon 2010), although they have mostly disappeared in Bolivia (Bussmann et al. 2016).

***Brugmansia candida*: Colombia:** The Indians of Sibundoy in the Putumayo use it as hallucinogen and consume it by mixing it with brandy (García Barriga 1975; Pérez Arbeláez 1996).

***Brugmansia sanguinea*: Colombia:** The indigenous Sionas and the Inganos consume a drink made with the juice of the leaves or seeds in order to establish communication with the spirits of ancestors and in traditional spiritual and magical rituals (Bussmann et al. 2018; García Barriga 1975; Pérez Arbeláez 1996).

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