



Argemone mexicana L.

PAPAVERACEAE

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Synonyms

Argemone mexicana L.: *Argemone leiocarpa* Greene; *Argemone mexicana* fo. *leiocarpa* (Greene) G.B. Ownbey; *Argemone mexicana* var. *lutea* Krause; *Argemone mexicana* var. *ochroleuca* (Sweet) Lindl.; *Argemone mexicana* var. *parviflora* Kuntze; *Argemone mexicana* var. *typica* Prain; *Argemone mucronata* Dum. Cours. ex Steud.; *Argemone ochroleuca* Sweet; *Argemone sexvalis* Stokes; *Argemone spinosa* Moench; *Argemone subfusiformis* G.B. Owenby; *Argemone versicolor* Salisb.; *Argemone vulgaris* Spach.; *Echtrus mexicanus* (L.) Nieuwl.; *Echtrus mexicanus* Nieuwl.; *Echtrus trivialis* Lour.

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Local Names

Ecuador: Cardo santo, Anís, Huevo de perro (Spanish) (de La Torre et al. 2008);

Peru: Cardo santo (Spanish); **English:** Mexican poppy, Prickly poppy

Botany and Ecology

Erect, branched, annual herb up to 50(–100) cm tall, glabrous, containing yellow latex; taproot firm; stem with scattered prickles. Lower leaves in a rosette and with short petiole, stem leaves alternate, sessile, auricled, obovate in outline, 5–22 cm × 3–7 cm, margin wavy to more or less deeply lobed, sharply toothed, lobes curled upwards, white variegated along the main veins, bluish green elsewhere, prickles scattered along the margin and on the veins below. Flowers solitary, regular, trimerous; bracts 3, leafy; sepals vaulted, terete, with few prickles, horn just below apex, caducous; petals 6, obovate, 1.5–3 cm long, pale to bright yellow; stamens many, 7–12 mm long, free; ovary superior, ovoid, 8–10 mm long, with long soft bristles, style very short, stigma 3–6-lobed, dark red. Fruit an ellipsoid, 3–6-lobed capsule 2.5–4 cm long, valves 3–6, dehiscent from the apex to about 1/3, covered with sharp prickles, many-seeded. Seeds globular, 1.5–2 mm in diameter, finely net-veined, black-brown, hilum prominent, pale. Seedling with epigeal germination; cotyledons linear, up to 2 cm long. *Argemone mexicana* is native to Mexico and the West Indies but has become pantropical after introduction as an ornamental (Macbride and Weberbauer 1936–1995) (Figs. 1, 2, and 3).

Local Medicinal Uses

Bolivia: The plant is used for skin diseases and respiratory problems (Quiroga et al. 2012). **Colombia.** The milky-yellowish exudate of the stems has calming, sedative, and hypnotic properties similar to those of opium. The poultices made with this plant are applied to skin ulcers and syphilitic ulcers to dissolve and relieve them. The extract of the plant is used to treat melancholy and hypochondria. The leaves have soothing and desinflammatory effects in small doses and in high doses, they are narcotic. The dried leaves smoked as it is made with tobacco are used to treat asthma. The tisanes made with flowers are used for discomfort of the chest, as a promoter of sweating, and as painkillers. The green fruits are used in diseases of the nervous system, cough, and to calm the night pains suffered by patients with syphilis. Roasted and pulverized seeds in small quantities are considered a good purgative. In general, the cardosanto is calming of the bronchial inflammations, and therefore, it is advised for the treatment of the cough, the convulsions, and the spasmodic affections (García Barriga 1974; Pérez Arbeláez 1996). **Ecuador:** The whole fresh plant is used to treat sore eyes, lungs, fright/susto, stomach pain, and stomach inflammation (Béjar et al. 2002; Bussmann and Sharon 2006a, 2007a).

Fig. 1 *Argemone mexicana* (Papaveraceae), Cusco, Peru. (Photo R.W. Bussmann and N.U. Paniagua-Zambrana)



Fig. 2 *Argemone mexicana* (Papaveraceae), Cusco, Peru. (Photo R.W. Bussmann and N.U. Paniagua-Zambrana)



The fruit, in decoction, is used to treat conditions of the nerves (Mestizo-Pichincha). The infusion of the flower and fruit is drunk to treat the flu and cough (Mestizo-Pichincha; unspecified ethnic group – Imbabura, Chimborazo). The infusion of the plant is used to treat liver, kidney, and prostate problems (Mestizo-Pichincha; unspecified ethnic group – Imbabura, Chimborazo, Loja). The plant treats postpartum conditions (Kichwa de la Sierra-Imbabura). The sap is effective in

Fig. 3 *Argemone mexicana* (Papaveraceae), Cusco, Peru. (Photo R.W. Bussmann and N.U. Paniagua-Zambrana)



removing warts, skin blemishes, and heated it is applied to treat acne (Kichwa de la Sierra-Tungurahua; Mestizo-Pichincha) (de La Torre et al. 2008). **Peru:** Fresh flowers, leaves, and stems are used to treat stomachache and inflammation (general) (Bussmann and Sharon 2006b, 2007b, 2015a, b). It shows antibacterial activity and low toxicity (Bussmann et al. 2011a, b). The plant can be found in local markets (Bussmann et al. 2007) and mostly used in mixture with other species (Bussmann et al. 2010).

The species has been introduced widely, and in **India**, the plant has a large number of medicinal uses, e.g., to treat boils, ulcers, arthritis, asthma, caries, cough, dog bite, dropsy, eye complaints, gum trouble, headache, indigestion, inflammation, jaundice, leprosy, as mouthwash, piles, ringworm, scabies, skin diseases, syphilis, toothache, and whooping cough (Verma et al. 2007).

Local Food Uses

Ecuador: The infusion of the entire plant is taken as fresh water (unspecified ethnic group – Chimborazo) (de la Torre et al. 2008). In **Peru**, the plant is used spiritually for “*seguro de casa*,” “*seguro de chacra*,” and for protecting the house.

Local Handicraft and Other Uses

Ecuador: The seeds are bird food (unspecified ethnic group – Chimborazo) (from La Torre et al. 2008). The leaves and flowers are used to prevent hair from being bracketed (unspecified ethnicity – Azuay) (de La Torre et al. 2008). The plant is sown as live fence in crops. It is used as fertilizer for the land (unspecified ethnic group – Chimborazo) (de La Torre et al. 2008).

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