

# IPOMOEA EDWARDSENSIS (CONVOLVULACEAE) AT SPECIFIC RANK

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## ABSTRACT

*Ipomoea costellata* var. *edwardsensis* is distinct in morphology, phenology, and geography from typical *I. costellata* and is treated here at specific rank, as ***Ipomoea edwardsensis*** (O'Kennon & Nesom) O'Kennon, comb. et stat. nov.

## RESUMEN

*Ipomoea costellata* var. *edwardsensis* es distinta en morfología, fenología, y geografía de la típica *I. costellata* y se trata aquí a nivel específico como ***Ipomoea edwardsensis*** (O'Kennon & Nesom) O'Kennon, comb. et stat. nov.

Plants of a small-flowered, pedatisect-leaved morning glory from the Edwards Plateau region of Texas were earlier described at varietal rank within *Ipomoea costellata* Torrey (O'Kennon & Nesom 2002). Further observations support a hypothesis of their genetic discontinuity from typical *I. costellata* and the Edwards Plateau plants are here recognized as a distinct species.

***Ipomoea edwardsensis*** (O'Kennon & Nesom) O'Kennon, **comb. et stat. nov.** *Ipomoea costellata* var. *edwardsensis* O'Kennon & Nesom, Sida 20:39. 2002. TYPE: U.S.A. TEXAS. Travis Co.: Colorado River, Montopolis Bridge, 8 Nov 1934, B.C. Tharp s.n. (HOLOTYPE: TEX).

*Ipomoea edwardsensis* is known from six counties of the Edwards Plateau region of Texas (Fig. 1), where it grows on limestone ledges and crevices and thin soil of weather pits in bedrock of limestone and granite (Taylor & O'Kennon 2016: 286). It is distinct from *I. costellata* elsewhere in its range by its combination of shorter peduncles and bright white, nearly rotate flowers with fewer and deeper lobes (Fig. 2). *Ipomoea edwardsensis* is consistent in morphology and there is no evidence of intergradation with any other species.

1. Peduncles 3–22(–30) mm long, peduncle plus pedicel mostly shorter than or equal to subtending leaf, ca. equal the petiole length; corollas bright white, with five, oblong-ovate lobes; flowering Jun–Nov. \_\_\_\_\_ ***Ipomoea edwardsensis***
1. Peduncles (15–)27–70 mm long, peduncle plus pedicel mostly 1.5–3 times longer than subtending leaf; corollas pink, purple, bluish, white, or yellow, with ten, shallowly rounded lobes; flowering (Jun–)Jul–Oct. \_\_\_\_\_ ***Ipomoea costellata***

Specimens examined: **TEXAS. Bexar Co.:** Government Canyon State Natural Area, along trail that skirts base of hills in SE quadrant of GCSNA, elev. 1,070 ft, brushy slopes with Juniper-Oak woodland, associates include *Quercus fisiformis*, *Juniperus ashei*, *Ulmus crassifolia*, *Rhus* spp., *Sophora secundiflora*, *Smilax*, *Opuntia*, *Celtis laevigata*, *Rubus*, *Ungnadia*, *Forestiera pubescens*, twiner amongst herbs along trail, flowers white with pale throat, open at 11:30 am, 5 Aug 2003, Lott 4456 with Moore, Green (TENN). **Burnet Co.:** RM Road 1431, 1.8 road mi WNW of US Rte 281, Marble Falls, area of exposed granite, N side of road access from large quarry, 23 Oct 2001, Nesom FW99 and O'Kennon (BRIT, TEX). Flat, shallow depression on top of granite dome, soil wet, unshaded, 18 Aug 1988, Lynch 7819 with Kutac, Carr (LSU). **Gillespie Co.:** Onion Creek Bluff, 400 m E of FM 783 in NW Gillespie Co, scarce in limestone crevices 10 m above Onion Creek, 19 Oct 1990, O'Kennon 8125 (BRIT). **Llano Co.:** Enchanted Rock State Natural Area, FM 965 ca 16.8 mi N of Main St, Fredericksburg 30.4979, -98.82544, 27 Jun 2014, Taylor 2732 and O'Kennon (BRIT). **Travis Co.:** Frequent, locally abundant in thin soil in weather pits on exposed calcareous bedrock, ca. 100 to 300 ft S of Onion Creek at mouth of Williamson Creek, McKinney Falls State Park, Montopolis Quadrangle, 19 Oct 1985, Carr 7027 and Kutac (BRIT); 29 Oct 1985, Carr 7050 (BRIT).

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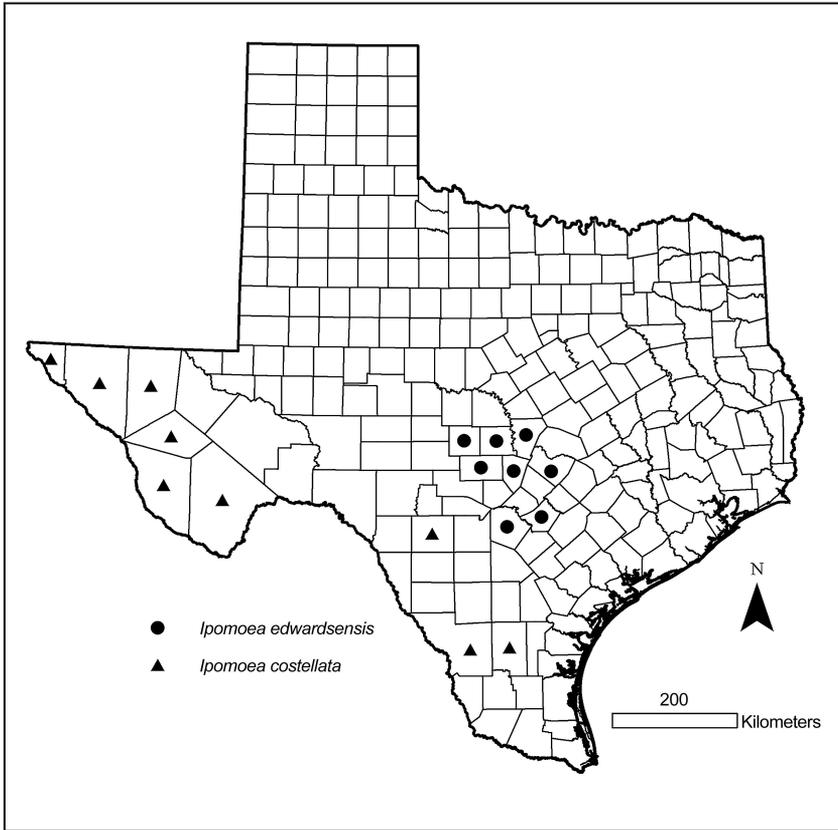


FIG. 1. Known distribution of *Ipomoea edwardsensis* and *Ipomoea costellata* in Texas. The range of *I. costellata* continues westward to Arizona and southward to Guatemala. Records are from ASU, BRIT-SMU, F, HPC, LSU, MO, NY, SRSC, TENN, TLU, TTC, UNM, UTEP.



FIG. 2. Photographs of *Ipomoea edwardsensis* flower (left from Nesom FW99 and O'Kennon).

REFERENCES

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