

TRANSFER OF *CHAUNANTHUS GRACIELAE* TO *MOSTACILLASTRUM* (BRASSICACEAE)

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Abstract. *Chaunanthus gracielae* is transferred to *Mostacillastrum* based on a critical evaluation of morphology. The two genera are readily distinguished by habit, indumentum, leaf, flower, and fruit features. As a result, the New World *Mostacillastrum* now includes 31 species, of which *M. gracielae* is easily distinguished from the remaining species by its stigmas prominently 2-lobed opposite the fruit replum.

Keywords: Brassicaceae, *Chaunanthus*, Cruciferae, *Mostacillastrum*, Mexico

Chaunanthus O. E. Schulz (Brassicaceae) was originally described as a monospecific Mexican genus (Schulz, 1924), the type of which, *C. petiolatus* (Hemsl.) O. E. Schulz, was later placed by Rollins (1942, 1993) in *Iodanthus* (Torr. & A. Gray) Stedud. along with two Mexican species, *I. acuminatus* Rollins and *I. mexicanus* Rollins. The three species were maintained in *Iodanthus* for nearly six decades until Price & Al-Shehbaz (2001) assigned them to *Chaunanthus* to include the type species above, *C. acuminatus* (Rollins) R. A. Price & Al-Shehbaz, and *C. mexicanus* (Rollins) R. A. Price & Al-Shehbaz. Two other species, *C. gracielae* M. Martínez & L. Hernández and *C. torulosus* Al-Shehbaz, have since been described by Martínez & Hernández-Sandoval (2007) and Al-Shehbaz (2014), respectively.

Chaunanthus and 26 other genera belong to the primarily New World tribe Thelypodieae (Al-Shehbaz, 2012b), and all except one of its five species remarkably resemble those of the genus *Mostacillastrum* O. E. Schulz. The exception is *C. gracielae*, a species that is more at home in *Mostacillastrum* than in *Chaunanthus*, and its transfer is proposed below.

Mostacillastrum gracielae (M. Martínez & L. Hernández) Al-Shehbaz & M. Martínez, *comb. nov.* Basionym: *Chaunanthus gracielae* M. Martínez & L. Hernández, *Acta Bot. Mexicana* 81: 2. 2007. TYPE: MÉXICO. Querétaro: municipio de Querétaro, Cerro del Azteca,

20°41.8'N, 100°22.8'W, *M. Martínez 6532* (Holotype: QMEX; Isotypes: IEB, MEXU).

As currently delimited, *Mostacillastrum* includes 31 species distributed in Mexico southward into Chile and Argentina (Al-Shehbaz, 2006, 2012a). All of its species, including *M. gracielae*, differ from those of *Chaunanthus* by being herbaceous perennials without woody stems and by having fruit valves with a prominent midvein and distinct marginal veins, as well as white to lavender petals well differentiated into limb and claw. By contrast, the four species of *Chaunanthus*, excluding *C. gracielae*, are shrubs, subshrubs, or perennial herbs woody at base and having fruit valves with only a distinct midvein and yellow (rarely creamy white) petals undifferentiated into blade and claw. Furthermore, all species of *Chaunanthus* have entire stigmas, whereas many species of *Mostacillastrum*, including *M. gracielae*, have 2-lobed stigmas, though the stigmas in this species are well developed, erect, and distinctly opposite the replum. The four species of *Chaunanthus* have uniformly denticulate leaves, whereas those of *Mostacillastrum* have leaf margins that range from entire to coarsely dentate to pinnatifid or pectinate but never uniformly denticulate. Finally, *Chaunanthus* has pubescent leaves, whereas many species of *Mostacillastrum*, including *M. gracielae*, have glabrous leaves. Therefore, the morphological evidence clearly supports the placement *C. gracielae* in *Mostacillastrum* rather than in *Chaunanthus*.

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We are grateful to the directors, curators, and collections managers of the herbaria cited for sending the loans. Partial funding of this research was supported by the National Science Foundation grant DEB-1252905 to Al-Shehbaz for which he is profoundly grateful.

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