# Diplostephium tovari Cuatrecasas, a new synonym for Parastrephia lucida (Meyen) Cabrera (Compositae-Astereae)

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## **Abstract**

The identity of *Diplostephium tovari* Cuatrecasas, a supposedly Peruvian endemic, is discussed. The species is anomalous within the genus as currently circumscribed and is clearly referable to *Parastrephia* Nutt. The name is to be regarded as a synonym of *Parastrephia lucida* (Meyen) Cabrera, a well-recognized South American species.

## Discussion

Diplostephium H.B.K. (Astereae-Asterinae sensu Bremer 1994) is a genus of about 90 species (Grau 1977, Bremer 1994), characterized inter alia by arborescent or shrubby habit, coriaceous or subcoriaceous leaves, radiate and heterochromous heads, and female ray flowers with lamina distinctly exserted, i.e. surpassing the inner phyllaries, exceptionally very short, but then the tube not capillary as in the Colombian series *Huertasina* Cuatr., *Anactinota* Cuatr., and *Saxatilia* Cuatr. (Cuatrecasas 1969). The genus has its centre of maximum diversity in the Andean region, particularly in the paramo and the high montane moist forest.

In 1975, Cuatrecasas founded *Diplostephium tovari* on the basis of materials collected by the Peruvian agrostologist O. Tovar in the puna region of Southern Peru (Department of Ayacucho). The author placed the new entity into the series *Lavandulifolium* Blake and pointed out that it could be differentiated from its allies by "the glabrous and glandular-glutinose branchlets, by the shiny-glutinose, glabrous and smooth adaxial side of the leaves and by the almost glabrous involucre which phyllaries are almost equal in length". Moreover, Cuatrecasas stated (1975, p. 320) that "the most outstanding characteristic of *D. tovari*, unique in the series *Lavandulifolium*, lies in the ray flowers which corollas are much shorter than the style, the pappus and the involucre; they are

tubular, only the upper part being open adaxially making like a short inrolled abaxial lamina 0.6–1 mm long." Curiously, until the publication of *D. tovari* Cuatr., the series *Lavandulifolium* Blake comprised only plants with solitary, terminal and conspicuously radiate capitula (Blake 1928, Cuatrecasas 1975). Therefore, Cuatrecasas clearly over-expanded the generic boundaries of *Diplostephium* H. B. K.; he did not realize that the disciform and homochromous nature of the heads, as well as the concurrence of the rest of the characteristics which he had mentioned for *D. tovari*, not only kept this anomalous species apart from *Diplostephium* H.B.K., but they approach it closely to *Parastrephia* Nutt., another constituent member of the "*Chiliotrichium* Cass. Group" (Bremer 1994), that occurs in the puna region of Bolivia and the neighboring areas of Peru, Chile, and Argentina (Nesom 1993).

Careful examinations of the general collections of *D. tovari* Cuatr. at USM, including an isotype (Tovar 6274) and an isoparatype (Tovar 6795), led me to believe that these specimens were better placed in the genus *Parastrephia* Nutt. Subsequent comparisons of the original description of Cuatrecasas' species with the keys and descriptions provided for *Parastrephia* by Cabrera (1945, 1954, 1978) and Nesom (1993), drove me to conclude that the morphological features of the species in question were congruent with those of *Parastrephia lucida* (Meyen) Cabrera. Recently, my conclusions have been confirmed by Dr. Guy Nesom (Nesom, *in litt.*), who has reviewed the taxonomy of *Parastrephia* Nutt. and studied the holotype of *D. tovari* Cuatr. He has also observed the normal occurrence of peripheral flowers with 5-lobed corollas in *P. lucida* (Meyen) Cabr., one character never seen in *Diplostephium* H. B. K. (Nesom 1993).

Quite clearly, *Diplostephium tovari* Cuatrecasas is synonymous with *Parastrephia lucida* (Meyen) Cabrera.

**Parastrephia lucida** (MEYEN) CABRERA, Not. Mus. La Plata 17:57. 1954. Syn.: *Diplostephium tovari* Cuatrecasas, Phytologia 31(4): 319. 1975. (For additional synonyms, see Nesom 1993).

# Material examined

PERU. Dpto. Arequipa: Vincocaya, en el ferrocarril de Arequipa a Puno, 4300–4400 m., Weberbauer 1371 (MOL); Pampa de Arrieros, entre Puno y Arequipa, 4000 m, 15 Dec. 1961, Tovar 3540 (USM).

Dpto. Huancavelica, Castrovirreyna: Choclococha, 4700 m, 3 May 1958, Tovar 2864 (USM).

Dpto. Puno, Chucuito: entre Mazo Cruz y Pasto Grande, 4100 m, 22 Jul. 1965, Tovar 5107 (USM); entre Ilave y Mazo Cruz, 3850–3900 m, 9 Mar. 1966, Tovar 5297 (USM); cerca de Juli, 3800 m, Jun. 1954, Monhein 164 (USM).

Dpto. Ayacucho, Lucanas: Pampa Galeras, entre Nazca y Lucanas, 4100 m, 23 Oct. 1969, Tovar 6274 (USM, isotype of *D. tovari* Cuatr.); Pampa Galeras, 4000–4100 m, 2 Dec. 1970, Tovar 6795 (USM, isoparatype of *D. tovari* Cuatr.); Pampa Galeras, vallecito de Jachanga, 4000–4100 m, 3 May 1971, Tovar 6813 (USM); Pampa Galeras, vallecito de Jachanga, 4100 m, 3 May 1971, Tovar 6829 (USM).

Dpto. Tacna, Tarata: ca. 10 km. S of Tarata, N and W facing slopes, 3500–4000 m, 19 Jun. 1986, Warnock 5070 (USM); road Candarave to Mazo Cruz near volcan Tutupaca (184 km. W of Ilave), ca. 4300 m, 9 Oct. 1997, Weigend & Forther 97/787 (USM).

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