

SUPPLEMENTAL CHARACTERIZATION OF GENUS PSEUDOCONYZA

(Compositae, Inuleae-Plucheinae).

J. Cuatrecasas

Department of Botany, Smithsonian Institution  
Washington, D. C. 20560

In a recent article, *Phytologia* 25(5): 281 (1973), W. G. D'Arcy pointed out that Pseudoconyza lyrata (HBK) Cuatr. must be placed in the Inuleae rather than in the original proposal of the genus Pseudoconyza. He mentions "the plump, many veined seeds, tailed anthers, pubescence along the entire dorsal surface of the style branches and the absence of deltoid appendages" as the features justifying this placement. I agree with D'Arcy's appreciation in this matter. Only superficial routine explains my having kept this taxon in the Astereae. I wrote once that Pseudoconyza was only reluctantly included in the Astereae "because of its markedly conyzoid habit" (*Webbia* 24: 5. 1969). Further thoughts on this subject convince me of the necessity of removing Pseudoconyza lyrata from the Astereae and placing it in the subtribe Plucheinae of the Inuleae. I take the opportunity of D'Arcy's correct comments to make a thoughtful assessment on the tribal position of this taxon, giving also a new corrected and amplified description added with a few illustrations.

Usually, the basal tails of the anthers are what is considered to be the defining tribal character for the Inuleae. This character was neither mentioned nor illustrated in the original publication of Pseudoconyza. However, the tailed anthers alone would not justify the inclusion of Pseudoconyza in the Inuleae, where exceptionally blunt anthers may be found. The fundamental character for the subtribe Plucheinae, the nature of the styles, which is shared by Pseudoconyza, is the deciding fact in this case. In the Plucheinae, the style of the bisexual flowers is either undivided with the upper half papillose-pubescent, or is shortly furcate with narrow, linear branches, abaxially covered with papillose pubescence extending further below the furcation point. The stigmatic tissue covers the whole adaxial surface. Also, the continued stigmatic surface of the adaxial side in the linear branches of the glabrous style in the pistillate flowers, is a prominent feature of the Plucheinae. This kind of stigmatic arrangement in both types of flowers is what separates radically the Plucheinae from the Conyzinae of the Astereae. Pseudoconyza lyrata, consequently, falls entirely into the Plucheinae, dispelling any possible suggestion of representing any intermediate link between both

tribes.

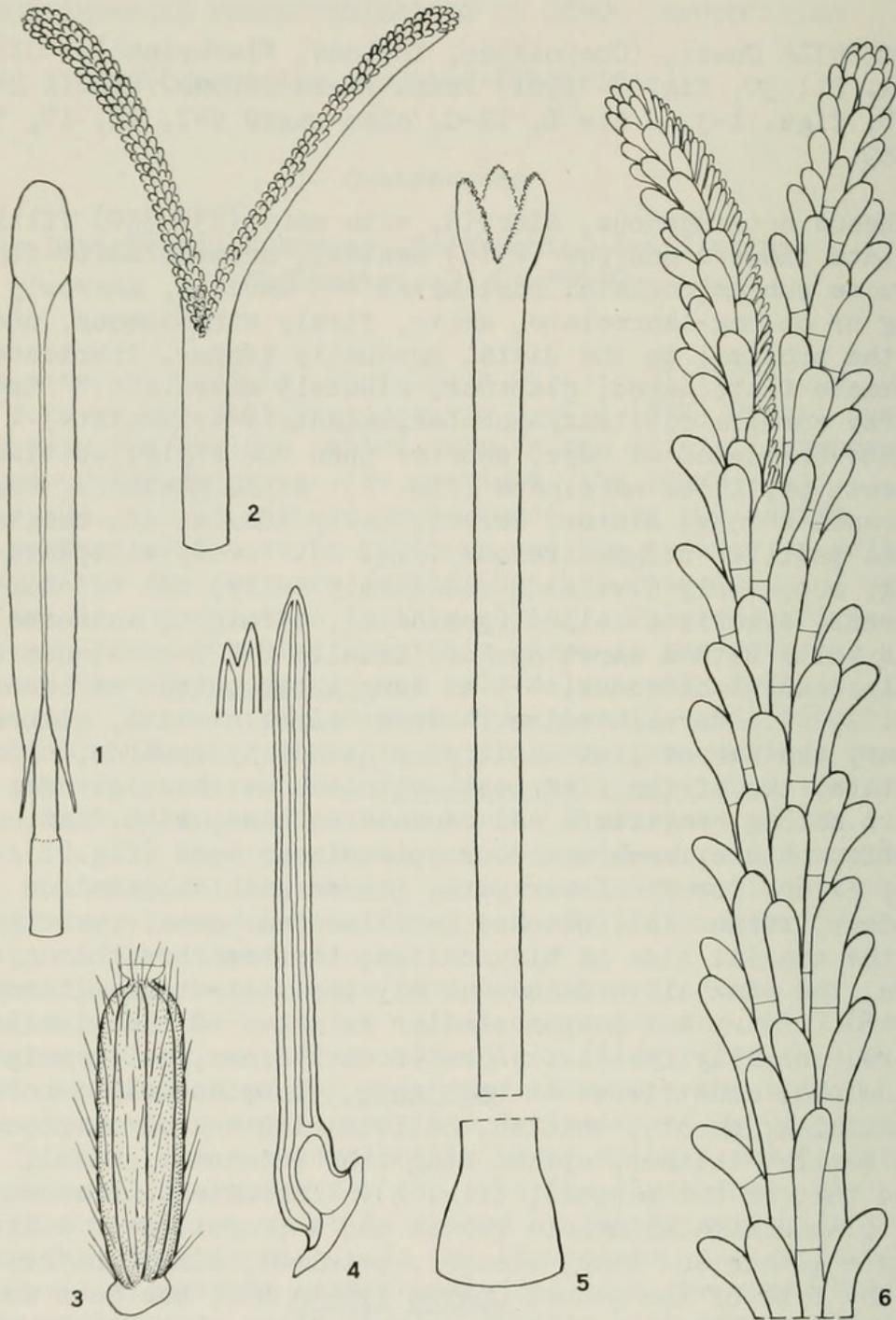
PSEUDOCONYZA Cuatr. (Compositae, Inuleae, Plucheinae). CIENCIA, Mex. 21: 30, fig. 4. 1961; Prima Flora Colomb. WEBBIA 24: 228, figs. 1-j, 2 bis L, 12-C, also pages 5-7, 10, 17, 50. 1969.

Heads heterogamous, discoid, with many (130-330) filiform, pistilate flowers and few (2-14) central, hermaphrodite flowers. Involucre subcampanulate; phyllaries 4-5-seriate, narrowly oblong or oblong-lanceolate, acute, firmly stramineous, unequal, from the proximal to the distal gradually longer, imbricate. Receptacle flat, naked, glabrous, minutely alveolate. Pistilate flowers: corolla capillary-tubular, minutely tridentate, cupulate-broadened at base, shorter than the style, whitish, the teeth papillose marginate (fig. 5); style glabrous, erect, the branches long, linear, curved, their adaxial and marginal surface papillar-stigmatiferous (fig. 2). Ovary ellipsoid-oblong, obsoletely 5-veined, moderately hairy, the trichomes sericeous, biseriate-celled (geminate), straight, antrorse; pappus white with a short number (usually 8-12) of slender, capillaceous, scabridous, 4-5 mm long setae united at base (figs. 3, 4). Hermaphrodite flowers: corolla white, glabrous, tubular, the narrow limb amplifying gradually upwards, shortly 5-dentate, two of the five teeth with two or three glands; anthers oblong, sagittate and caudate at base, with flat, elliptic, obtuse, membranaceous appendix at apex (fig. 1); style, except for the lower part, pilose with subpatulous ascendent, rather lax, obtuse, papillar trichomes, covering also the abaxial side of bifurcation, the branches oblong, obtuse, the adaxial surface minutely papillar-stigmatiferous (fig. 6). Ovary and pappus similar to those of the pistilate flowers, normally fertile. Achenes dark brown, antrorsely hispidulous, constricted at both ends, conspicuously 5-nerved, with a thick, smooth, whitish, callous ring-shaped carpopodium, and a smaller thinner, apical ring (the permanent, basal, united part of the pappus), (fig. 3). Perennial, herbaceous, erect plants with alternate leaves and a profusion of stipitate-capitate glands and long, slender, patulous, simple hairs.

The type of the genus, Conyza lyrata HBK, has been found to be conspecific with Conyza viscosa Miller by McVaugh (Rhodora 74: 500. 1972). The new combination Pseudoconyza viscosa (Miller) D'Arcy, was published in l. c., p. 281.

Revisionary work on the Old World species of the Plucheinae is necessary in order to reassess their generic status as well as the limits and validity of the generic names now in use, including Pseudoconyza.

Acknowledgment. The basic work for these notes was partially sponsored by the National Science Foundation, Washington, D. C.



Figs. 1-6 *Pseudoconyza viscosa* : 1, anther (x55); 2, style branches of pistillate flowers (x75); 3, achene (x35); 4, geminate hair of the ovary (x200); 5, upper part and base of pistillate corolla (x175); 6, proximal part of a style from bisexual flowers (x200). 1, 2, 4, 5 and 6 from H. H. Smith 2007; 3, from Pringle 5796.



Cuatrecasas, José. 1973. "Supplemental characterization of genus *Pseudoconyza* (Compositae, Inuleae-Plucheinae)." *Phytologia* 26, 410–412.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/47391>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/96756>

**Holding Institution**

New York Botanical Garden, LuEsther T. Mertz Library

**Sponsored by**

The LuEsther T Mertz Library, the New York Botanical Garden

**Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Phytologia

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.