

Ismael Hernández Torres and Stephen D. Koch

Centro de Botánica, Colegio de Postgraduados, 56230 Chapingo, Edo.
de México, MEXICO

Abstract

Recent research on the generic delimitation of *Peyrischia* and the Mexican and Central American species of *Trisetum* and *Deschampsia* is summarized and found to support the union of *Peyrirtschia* and *Trisetum*, which is proposed. The correct names under *Trisetum* are *Trisetum altijugum* (Fourn.) Scribn. (= *P. koelerioides* (Peyr.) Fourn.) and *T. kochianum* I. Hdz. T., *nom. nov.* (= *P. pringlei* (Scribn.) S.D. Koch).

Peyrirtschia Fourn., a small genus of Mexican and Central American grasses, and the Mexican and Central America species of *Deschampsia* Beauv. and *Trisetum* Pers. form a group in which genera are difficult to delimit because of a lack of correlation among characters (McVaugh 1983, p. 393-394). This group has recently been subjected to detailed study in the hope that the use of a larger number of characters, including several not previously used at the generic level in the tribe Aveneae, would clarify the situation. The results are briefly summarized here and the necessary name changes are presented so that the new names can be used in current floristic projects. More detailed versions have been published elsewhere or are in preparation (see Literature Cited).

On the basis of 12 morphological characters and chromosome number, Koch (1979) showed that the Mexican and Central American species of *Trisetum* and *Deschampsia* constitute discrete groups, and that *Peyrirtschia* differs from *Trisetum* only in minor characters. Subsequent studies (Hernández T. 1986) of species for which material was previously unavailable or incomplete have shown that three species of *Trisetum* are like *Deschampsia* with respect to one character (solid vs. liquid endosperm) thought by Koch (1979) to be reliable. However, the distinction between *Deschampsia* on one hand, and *Trisetum* and *Peyrirtschia* on the other, is still clear when all characters are considered.

Despite the lack of important differences between *Peyritschia* and *Trisetum*, Koch (1979) did not unite them, principally because leaf blade anatomy had not yet been studied. This has now been done (Hernández T. 1986). No important differences were found between these genera, but there were consistent differences between these two and *Deschampsia*.

It is therefore proposed that *Trisetum* and *Peyritschia* be united under the older name, *Trisetum*. A consequence of this is that the currently used specific epithets of both *Peyritschia* species must be changed as presented below:

Trisetum altijugum (Fourn.) Scribn., *Rhodora* 8:89. 1906. *Grapphorum altijugum* Fourn., *Mex. Pl.* 2: 111. 1886. TYPE: Mexico, Veracruz, in Monte Orizabensi, 12-14,000', *Liebmann 603* (holotype: P; isotype: US!).

Aira koelerioides Peyr., *Linnaea* 30: 5. 1859. *Deschampsia koelerioides* (Peyr.) Benth., *J. Linn. Soc., Bot.*, 19: 96. 1881. *Peyritschia koelerioides* (Peyr.) Fourn., *Mex. Pl.* 2:110. 1886. TYPE: Mexico, Estado de Mexico, Toluca, 8800 ft., *Heller 311*. *Non Trisetum koelerioides* Bornm. & Hack. 1898.

Trisetum kochianum I. Hernández T., *nomen novum*. *Deschampsia pringlei* Scribn., *Proc. Acad. Nat. Sci. Philadelphia* 1891:300. 1891. *Peyritschia pringlei* (Scribn.) S.D. Koch, *Taxon* 28: 233. 1979. TYPE: Mexico, Chihuahua, 7 Oct 1887, *Pringle 1429* (holotype: US!; isotype: MEXU!). *Non Trisetum pringlei* (Scribn.) Hitchc. 1927.

ACKNOWLEDGEMENT

The support of the Consejo Nacional de Ciencia y Tecnología (CONACyT) to the first author is gratefully acknowledged.

LITERATURE CITED

Hernández T., I. 1986. Revisión taxonómica y anatómica del género *Trisetum* (Gramineae: Pooideae) en México y comparación anatómica con *Deschampsia*. M.S. thesis, Colegio de Postgraduados, Chapingo, México, México.

_____ and E.M. Engleman. In prep. Anatomía de la lámina foliar del género *Trisetum* (Gramineae: Pooideae) en México.

Hernández T., I. and S.D. Koch. In prep. Anatomía de la lámina foliar de *Trisetum*, *Deschampsia* y *Peyritschia* (Gramineae: Pooideae) y sus implicaciones taxonómicas.

_____ and S.D. Koch. In prep. Revisión taxonómica de *Trisetum* (Gramineae: Pooideae) en México.

Koch, S.D. 1979. The relationships of three Mexican Aveneae and some new characters for distinguishing *Deschampsia* and *Trisetum* (Gramineae). *Taxon* 28: 225-235.

McVaugh, R. 1983. *Flora Novo-Galiciana* 14. Gramineae. *Ann Arbor: University of Michigan Press.*