



## The identity of *Calamagrostis emodensis* var. *breviseta* (Poaceae, Agrostidinae)

BEATA PASZKO

Department of Vascular Plant Systematics and Phytogeography, W. Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, 31-512 Kraków, Poland. Email: [b.paszko@botany.pl](mailto:b.paszko@botany.pl)

### Abstract

This paper presents a re-evaluation of the taxonomic and morphological relationships of *Calamagrostis emodensis* var. *breviseta*. Examination of morphological characters has shown that *Calamagrostis emodensis* var. *breviseta* was incorrectly linked with *C. emodensis* at the time of description, and indicates that it is conspecific with *C. macrolepis*. It is here reduced to a synonym of the latter species.

**Key words:** *Calamagrostis macrolepis*, Central and South Asia, new synonym, Tajikistan, taxonomy

### Introduction

The genus *Calamagrostis* Adanson (1763: 530) (Poaceae: Agrostidinae) is one of the taxonomically most challenging genera in the Poaceae. It includes closely related species complexes and numerous hybrids (Howard *et al.* 2009, Paszko & Nobis 2010, Paszko 2011, Paszko & Ma 2011, Paszko 2012a, 2012b, Paszko & Pendry 2013, Paszko & Soreng 2013). The Eurasian *Calamagrostis pseudophragmites* (Haller 1797: 11) Koeler (1802: 106) complex is one of the biggest and its size depends on whether or not several closely related species are included. Taxa that have been included in the complex are *C. pseudophragmites*, *C. pseudophragmites* subsp. *tartarica* (Hooker 1896: 261) Tzvelev (1965: 42), *C. hedinii* Pilg. in Ostenfeld & Paulsen (1922: 93), *C. nepalensis* Nees ex Steudel (1854: 193), *C. onoei* Franchet & Savatier (1879: 598), *C. dubia* Bunge (1852: 348), and *C. persica* Boissier (1846: 120). During revision of this complex the taxonomic position of *C. emodensis* var. *breviseta* Hack. ex Paulsen (1903: 167) has been questioned.

Roshevitz (1934) accepted *Calamagrostis emodensis* var. *breviseta* and recorded it from the Pamir-Alai Mountains, Himalayas and Kashmir. Stewart (1945) also included this variety in a list of 14 taxa of *Calamagrostis* reported from the Western Himalayas. However, Dickoré (1995), in his Flora of Karakorum, noted under *C. emodensis* Grisebach (1868: 80) that records of *C. emodensis* var. *breviseta* from the Karakorum are certainly misidentifications, as *C. emodensis* does not grow there. Tzvelev (1965, 1976) placed *C. emodensis* var. *breviseta* and *C. hedinii* in synonymy under *C. pseudophragmites* subsp. *tartarica*. In the Plants of Central Asia Tzvelev (1968) and later Czerepanov (1981) synonymized *C. emodensis* var. *breviseta* and *C. pseudophragmites* subsp. *tartarica* with *C. hedinii*.

In this study the relationships among *Calamagrostis emodensis* var. *breviseta* and its close relatives are re-evaluated in order to determine its correct taxonomic placement. Selected specimens of *C. emodensis*, *C. epigeios* (Linnaeus 1753: 81) Roth (1788: 31), *C. macrolepis* Litvinov (1921: 125), and members of the *C. pseudophragmites* complex from N India, Nepal, Pakistan and Afghanistan were studied to characterize relationships among *C. emodensis* var. *breviseta* and its allies.