

(2495) Proposal to conserve the name *Avena sterilis* (Poaceae) with a conserved type

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(2495) *Avena sterilis* L., Sp. Pl., ed. 2: 118. Sep 1762 [*Angiosp.: Gram.*], nom. cons. prop.

Typus: Spain, Cádiz, near Vejer de la Frontera, laguna de La Janda (36°13'45" N, 5°52'48" W), 1 Mai 1981, *Romero C75/81* (SEV No. 79889; isotypus: MA), typ. cons. prop.

Avena sterilis L. is a widely distributed grass native to southern Europe, northern Africa and southwestern Asia (its native status in eastern Africa is unclear). It has been introduced into central and northern Europe, North and South America, southern Africa and Australasia.

It is a hexaploid ($2n = 42$) annual herb characterized by the following characters (Romero-Zarco in Lagasalia 17: 293. 1994): spikelets (30)33–48 mm long with 2–4(5) florets; lemmas bidentate or shortly bisubulate, densely hairy under the insertion point of the awn; rachilla disarticulating at maturity above glumes only, releasing 2–3 fruited disseminules, hence only lowest floret with basal scar; glumes longer than florets, subequal. *Avena sterilis* usually grows in grassland, although outside its native area it can be found in field-crops and disturbed habitats.

Avena sterilis has consistently been accepted and widely used in the taxonomic literature from its initial publication. It is currently used in all important modern Floras, e.g., Rocha Afonso in Tutin & al. (Fl. Europ. 5: 208. 1980), Pignatti (Fl. Italia 3: 545. 1982), Doğan in Davis (Fl. Turkey 9: 306. 1985), Bolòs & Vigo (Fl. Països Catalans 4: 455. 2001), Boulos (Fl. Egypt 4: 160. 2005), Baum in Barkworth & al. (Fl. N. Amer. 24: 739. 2007), Romero-Zarco in Blanca & al. (Fl. Andalucía Orient. 1: 322. 2009), Stace (Fl. Brit. Isles, ed. 3: 865. 2010), Tattou in Fennane & al. (Fl. Pract. Maroc 3: 566. 2014) and Tison & Foucault (Fl. Gallica: 213. 2014), covering a total of about 51 countries around the world, of which in 30 it is native (<http://e-monocot.org/taxon/urn:kew.org:wcs:taxon:476697>, accessed Nov 2016).

Linnaeus (Sp. Pl., ed. 2: 118. 1762) described *Avena sterilis* on the basis of material collected by Alströmer in Spain, as “*Avena paniculata*, calycibus quinquefloris: exterioribus flosculis aristisque basi pilosis, interioribus muticis”. He also cited some diagnostic characters in order to discriminate it from *A. fatua* L. “*Simillimus A. fatuae, ut forte sola varietas, sed triplo omnibus partibus major & cultura constans*”. However, Linnaeus’s original diagnosis is not sufficient to distinguish between *A. sterilis* and other closely related hexaploid taxa belonging to the *A. sterilis* group, mainly *A. ludoviciana* Durieu (in Actes Soc. Linn. Bordeaux 20: 41. 1855) and *A. trichophylla* C. Koch (in Linnaea 21: 393. 1848), which have been recognized as subspecies within *A. sterilis* by several authors (Malcev in Trudy Prikl. Bot. 20: 143. 1929; Gillet & Magne, Nouv. Fl. Franç., ed. 3: 352. 1873; Romero-Zarco, l.c. 2009) or have been included in its synonymy (Scholz in Willdenowia 20: 106. 1991, for *A. trichophylla*; Stace, l.c., for *A. ludoviciana*).

Hubbard (in Milne-Redhead & Polhill, Fl. Trop. E. Africa, Gramineae 1: 84. 1970) indicated an Alströmer specimen at LINN annotated by Linnaeus (No. 95.12) as the holotype (correctable to “lectotype” under Art. 9.9, McNeill & al. in Regnum Veg. 154. 2012) of *A. sterilis*, but this specimen does not belong to the taxon long known under this name. Its features (despite the absence of floral characters) correspond to the species long called *Stipa gigantea* Link (in J. Bot. (Schrader) 2: 313. 1799) (\equiv *Celtica gigantea* (Link) F.M. Vázquez & Barkworth in Bot. J. Linn. Soc. 144: 491. 2004) (Baum, Oats Wild & Cult.: 344. 1977; Vázquez & al. in Anales Jard. Bot. Madrid 52: 185–186. 1995).

Consequently, Baum (l.c.) designated another specimen (LINN No. 95.11) as lectotype that probably belongs to the species understood as *Avena sterilis*, but it was received by Linnaeus from David van Royen after 1762 and therefore cannot be original material for this name (Jarvis in The Linnaean Plant Name Typification Project;

available online at: <http://www.nhm.ac.uk/our-science/data/linnaean-typification/index.html>, updated 13 Jan 2006). There are no other original elements for the name that can be used to propose a new type.

As there are no grounds for rejecting Hubbard's original choice, the specimen LINN 95.12 is thus the lectotype of *Avena sterilis*, which becomes the correct name for the species currently known as *Stipa gigantea* (\equiv *Celtica gigantea*). *Avena sterilis* therefore fulfils the requirements of Art. 57.1 and is eligible for conservation under Art. 14.1 as suggested by Jarvis (l.c.). Therefore, in order to preserve nomenclatural stability in accordance with Art. 14.1, we propose to conserve *A. sterilis* with a new conserved type. Since a specific locality was not provided by Linnaeus in the protologue, no preference can

be assigned to a particular location in proposing a type for conservation. The Spanish specimen here proposed as conserved type possesses all the diagnostic characters and, secondly, it was confirmed as a hexaploid plant ($2n = 42$, Romero-Zarco in Lagasalia 12: 293. 1984).

Rejection of the present proposal would have two undesirable consequences. (1) The name *Avena sterilis* would be replaced by *A. atherantha* C. Presl (Cyper. Gram. Sicul.: 30. 1820), a later heterotypic synonym of *A. sterilis* (Romero-Zarco, l.c. 1994: 292). (2) *Avena sterilis* would become the correct name for the species currently known as *Celtica gigantea*, which would require a combination within the genus *Stipa* L. (Sp. Pl.: 78. 1753) or *Celtica* F.M. Vázquez & Barkworth (l.c.).