(2360) Proposal to reject the name Chenopodium caudatum (Amaranthaceae/ Chenopodiaceae)

Duilio Iamonico, Alexander P. Sukhorukov & James L. Reveal

1 Laboratory of Phytogeography and Applied Geobotany, Department PDTA, Section Environment and Landscape, University of Rome Sapienza, 00196 Rome, Italy
2 Department of Higher Plants, Lomonosov State University, Vorobyovy Gory, 119234 Moscow, Russia
3 School of Integrative Plant Science, Section of Plant Biology, 412 Mann Building, Cornell University, Ithaca, New York 14853-4301, U.S.A.

Author for correspondence: Duilio Iamonico, d.iamonico@yahoo.it

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Chenopodium caudatum was validly published by Jacquin (l.c.) by the presentation of an illustration (depicting an entire plant in two parts and the detail of a flower, see http://bibdigital.rihb.csic.es/ing/Libro.php?Libro=6201) that is part of the original material (Art. 9.3 of ICN; McNeill & al. in Regnum Veg. 154. 2012). Jacquin later provided a description of this species (in Collectanea 2: 325. Apr 1789; dated fide StaFleu & Cowan in Regnum Veg. 98: 412. 1979), where he also indicated the provenance (“Guinea Africae”).

A specimen at BM (barcode BM000795089) bears a single plant, and the inscriptions “Herm. Vindob. Jacquin” (on the top-left of the sheet, probably by Jonas Carlsson Dryander, who was a librarian to Sir Joseph Banks from 1782; J. Wajer, pers. comm.), and “Amaranthus viridis L. Chenopodium caudatum Jacq. in vol. 2” (on the bottom-center, but it is not possible to know who added it; J. Wajer, pers. comm.). Unfortunately, the date of collection is lacking and cannot be deduced (J. Wajer, pers. comm.), so the specimen could be a post-1789 addition to the collection, not part of the original material, and not eligible for selection as lectotype. Furthermore, despite a general resemblance to Amaranthus viridis L. concerning the leaf shape and the inflorescence structure (see discussion below about this Linnaean name), the surface of the fruits are smooth or slightly rugose. This latter feature characterizes the members of the A. blitum aggregate, while A. viridis shows fruits with surface strongly wrinkled (see, e.g., Mosyakin & Robertson, Fl. N. Amer. 4: 410–435. 2003; Das & Iamonico in Phytotaxa 181: 293–300. 2014; Iamonico in Phytotaxa 199: 1–84. 2015).

All things stated, Jacquin’s coloured iconography appears to be the only verifiable extant original material, and it is here designated as the lectotype of the name Chenopodium caudatum.


On the basis of the general morphological configuration (habit, leaves, inflorescence structure), Jacquin’s plant might possibly be identified as Chenopodium acuminatum Willd. s.l. (in Neue Schriften Ges. Naturf. Freunde Berlin 2: 124, t. 5, fig. 2. 1799; see Iamonico, in prep.). However, the stamens are in an alternate position relative to the perianth segments and this characteristic is not found in any member of Chenopodiaceae (Endlicher, Gen. Pl. 292: 1836; Flores-Olvera & al. in Ann. Bot. (Oxford) 108: 847–865. 2011). Moreover, the provenance of
C. caudatum (“Guinea Africae”) does not fit the current distribution of C. acuminatum s.l. (Asia—see, e.g., Zhu & al. in Fl. China 5: 380. 2003; Sukhorukov, Carpology Chenopodiaceae: 226–227. 2014). All things stated, C. caudatum not only cannot be referred to C. acuminatum, but it cannot be assigned to any known species in Chenopodium.


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