

The typification of the Linnaean name *Atriplex maritima* (Chenopodiaceae) revisited

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Abstract

The typification of the Linnaean name *Atriplex maritima* is revisited according to the Art. 7.8 (Ex. 10) of ICN. A specimen deposited at **BM** (barcode BM001148306), which is part of the Dale collection, is designated as the lectotype superseding the previous proposed neotypification on BM000647540 (Clifford Herbarium). The correct name for this taxon remains *A. laciniata* L. with *A. maritima* accepted as heterotypic synonym.

Keywords: *Atriplex laciniata*; lectotypification; Linnaean name; nomenclature

Introduction

Atriplex L. (Chenopodiaceae Vent.) is a genus comprising about 260 species, which are distributed in arid and semiarid regions of Eurasia, America, and Australia (Akeroyd, 1993; Sukhorukov & Danin, 2009; Kadereit *et al.*, 2010; Brignone *et al.*, 2016). According to Kadereit *et al.* (2010) this genus is monophyletic, including *Obione* Gaertn., *Teutliopsis* (Dumort.) Celak., and some other segregate genera.

As part of the ongoing studies of Linnaean names in Amaranthaceae *sensu* APGIV (2016) (see e.g., Iamónico, 2014, 2016, 2017; Iamónico & Jarvis, 2012; Iamónico *et al.*, 2012; Iamónico & Kadereit, 2013; Iamónico & Sukhorukov, 2014) one, *Atriplex maritima* L., was recently typified by Iamónico (2020). However, the proposed neotype [the specimen no. 469-*Atriplex* 3 included in the Clifford Herbarium at **BM**] is not correct, and the typification is here revised.

Material and methods

This research is based on the analysis of relevant literature (i.e. protologues of the names investigated and pre-Linnaean works therein cited, and primary Floras in which the studied names are listed) and examination of specimens preserved at **BM** (herbarium code following Thiers, 2021 [continuously updated]). The articles cited throughout the text follow the Shenzhen Code (Turland *et al.*, 2018).

Typifications

Atriplex maritima L., a name published by Linnaeus (1754: 25) in his edition of *Flora Anglica*, was validated by a mere reference to the species numbered "152-8" in the third edition of Ray's *Synopsis Methodica Stirpium Britannicarum* (1724: 152–153). Therefore, the typification of this name must be undertaken from the context of Ray's publication, not to the collection of Linnaeus, according to the Art. 7.8 of ICN (Ex. 10) which states: "A name of a new taxon validly published solely by reference to a previously and effectively published description or diagnosis ... is to be typified by an element selected from the entire context of the validating description or diagnosis, unless the validating author has definitely designated a different type ...".

Iamonico (2020), believing that no original material exists, proposed to neotypify the name *Atriplex maritima* on a specimen preserved at **BM** (barcode BM000647540; image available at <https://www.nhm.ac.uk/resources/research-curation/projects/clifford-herbarium/lqimages/BM000647540.JPG>). However, according to the Art. 7.8 of ICN (Ex 10), Iamonico's neotypification cannot be accepted since original material (Ray's context) is in existence.

First, Ray (1724: 152) reported as synonyms of his "*Atriplex maritima*" (the species no. 8 in of his treatment) the following three polynomials: "[*Atriplex*] *maritima laciniata*" (from Bauhin, 1623: 120), "[*Atriplex*] *marina*" (from Gerhard, 1597: 257), and "[*Atriplex*] *marina repens*" [from L'Obel (1591: 255) and Parkinson [1640: 748 (not "758" as reported by Ray l.c., probably a typographic error)]. Gerhard (1597), L'Obel (1591), and Parkinson (1640) provided illustrations (images available, respectively, at <https://www.biodiversitylibrary.org/item/109874#page/277/mode/1up>, <https://www.biodiversitylibrary.org/item/37876#page/262/mode/1up>, and <https://www.biodiversitylibrary.org/item/256142#page/774/mode/1up>) which can be considered for the typification of the Linnaean name *Atriplex maritima* (see Ex. 10 of the Art. 7.8 of ICN).

Furthermore, Ray (1724: 152) indicated the habitat and the provenance ("On the Sea-shore near *Little Holland* in *Essex*. Found also by *Mr. Dale* in the *Isla of Mersey*, not far from *Colchester* plentifully"). Material from Mersea is stated by Ray (1724: 152) to have been found by Samuel Dale, whose collections still survive at **BM** (C. Jarvis pers. comm., but see also HUH Index of botanists, 2013 onwards). I traced one of Dale's specimens (original material) at **BM** (barcode BM001148306) which is mounted on a sheet (left part) together with a second exsiccatum (barcode BM001148307, right part). An original label, including both a description and the locality of collection ("I have found this plant growing ... on the sandy shores of Mersey Island, near Harwich and other places of Essex") also occurs on the sheet and it is clearly linked with Dale's plant.

Among the elements found (Gerhard's, L'Obel's, and Parkinson's illustrations and **BM** specimen collected by S. Dale), according to the Art. 9.12 (Ex. 12) of ICN, specimens have precedence over illustrations in lectotype designation. As a consequence, I here designate the specimen BM001148306 as the lectotype of the name *Atriplex maritima* (Fig. 1).

Concerning the identity of the Linnaean name *Atriplex maritima*, BM001148306 is identifiable as *A. laciniata* L. according to the current species concept in the genus (see e.g., Akeroyd, 1993; Welsh, 2003). Moreover, note that the Bauhin's polynomial "maritima laciniata" (Bauhin, 1623), cited by Ray (1724: 152) in his *Synopsis*, was previously reported by Linnaeus (1753: 1053) as a synonym of *Atriplex laciniata* L. in the first edition of *Species Plantarum*, whereas in the second edition of *Species Plantarum* (Linnaeus, 1762: 1493) the Bauhin's phrase name was again listed as synonym of *A. laciniata*, but the name *A. maritima* was not included. Linnaeus (1753, 1762) therefore changed his original concept of *A. maritima* and later included it in *A. laciniata*. Stearn (1973: 64) synonymised the Linnaean *A. maritima* with *A. laciniata*, and I agree with this consideration (see also Iamonico, 2020).

Atriplex laciniata L., Sp. Pl. 2: 1053. 1753. – TYPE (lectotype designated by Taschereau, 1972: 1591) Herb. Clifford: 469, *Atriplex* 3 (**BM000647540!**). An image of the lectotype is available at <https://www.nhm.ac.uk/resources/research-curation/projects/clifford-herbarium/lqimages/BM000647540.JPG>
= *Atriplex maritima* L., Fl. Angl.: 25. 1754 – TYPE (lectotype designated here): Type: United Kingdom, England, East, Essex, Colchester, Mesrea Island, *s.d.*, Dale *s.n.* (**BM001148306!** [plant on the left], designated here; Fig. 1).

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Figure 1. Lectotype of the name *Atriplex maritima* (BM001148306!). Arrow indicates the lectotype.

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