



## Discovered outdoors: typification of names of taxa described from Italy outside their native range

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### Abstract

Between the 18<sup>th</sup> and the early 20<sup>th</sup> century, a number of naturalized neophytes were described in Europe, outside their area of origin. Although most of the names of these taxa, discovered in a period without fast computer-mediated communication and world-wide electronic availability of taxonomic papers, today are treated as synonyms, their existence allows to shed light on a peculiar taxonomic phenomenon connected to the early stages of the European alien flora studies. In this paper we select two lectotypes and one neotype for three neophytes described in Italy, belonging to the critical graminoid genera *Cyperus* (*C. aristatus* var. *boeckeleri*), *Echinochloa* (*Panicum erectum*), and *Eleocharis* (*Scirpus erraticus*). The selected types are conserved at PAV-Erbario Lombardo and RO.

**Key words:** Alien species, *Cyperus*, *Echinochloa*, *Eleocharis*, nomenclature, taxonomy

### Introduction

The description of alien taxa outside their native range dates back to Linnaeus, when he described, for instance, the Asiatic *Commelina communis* Linnaeus (1753: 40), and *Cyperus glomeratus* Linnaeus (1756: 5) from “America” and “Italiae” respectively; besides botany, a number of cases are also known from the zoology field (especially entomology, see e.g. *Microus mocquerysi* Chaudoir (1876: 9), described from France but native to Sub-Saharan Africa). Many later examples of this curious taxonomic phenomenon are known from Italy, where a significant number of neophytes were described between the 18<sup>th</sup> and the early 20<sup>th</sup> century, especially from the northern regions’ rice fields, a historical and crowded scene of several introductions in the course of the centuries: *Cornelia verticillata* Arduino (1764: 9), *Panicum oryzoides* Arduino (1764: 16), *Caulinia alagnensis* Pollini (1814: 13), *Xanthium italicum* Moretti (1822: 326), *Scirpus erraticus* Rota ex De Notaris (1845: 20), *Cyperus aristatus* Rottbøll (1772: 22) var. *boeckeleri* Cavara (1899: 26), *Panicum erectum* Pollacci (1914: 228), and *Impatiens mathildae* Chiovenda (1928: 1053). Probably as a consequence of the scarce chorological and taxonomic knowledge of that period, the majority of these taxa were more or less implicitly considered as native of Italy, regardless of their natural area of origin; only the last two were clearly mentioned as “introduced” by their authors, members of an early generation of botanists more conscious of the alien invasion processes (see e.g., Cavara 1894).

The names of three aforementioned taxa (*Cyperus aristatus* var. *boeckeleri*, *Panicum erectum*, *Scirpus erraticus*) resulted not yet typified. Hence, we proceeded with the designation of their nomenclatural types, which may be useful for preventing misinterpretations of their taxonomy, as they currently belong to critical genera such as *Cyperus* Linnaeus (1753: 44), *Echinochloa* Palisot de Beauvois (1812: 53), and *Eleocharis* Brown (1810: 224) (see e.g., Costea & Tardif 2002, Verloove 2010, 2014).