



# The publication and typification of the name *Thalia dealbata* (Marantaceae)

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**Summary.** We confirm that *Thalia dealbata* (Marantaceae), the name that has been in use for more than two centuries for this ornamental species from the southern USA, was first validated in association with a plate published by John Fraser in 1794 which conforms to the requirements of an illustration with analysis. The name is lectotypified to the published plate.

**Key Words.** John Fraser, illustration, lectotype, James Sowerby, *Thalia dealbata*, USA.

## Introduction

*Thalia dealbata* is a name that has long been in use for one of the two species of Marantaceae native to North America, and the only endemic taxon (Kennedy 2000). The plant is commonly grown as an ornamental emergent waterplant from the tropics to high latitudes (Bailey & Bailey 1976; Ratter 2011). However, despite the species being very well known, the origins of its name remain obscure and it seems never to have been typified. Here, we attempt to clarify the status of the name.

The author generally associated with *Thalia dealbata* (literally the whitened or whitewashed *Thalia*) is John Fraser. Fraser was ‘a venturesome Scot’ (Ward 2017); being baptised in Tomnacross in Inverness-shire in 1750 and dying in London in 1811 (Boulger 2004). He became interested in botany and horticulture under the mentorship of William Forsyth while keeping a draper’s shop in Chelsea and took up a career as plant collector and nurseryman. He made many collecting trips around the world, reportedly crossing the Atlantic 17 times.

Reference to an engraved illustration made from a drawing by James Sowerby depicting *Thalia dealbata* published by Fraser has been made by various authors (Dryander 1797; Roscoe 1807; Britten 1905; Cleeveley 1974; Dorr & Nicolson 2008). The majority of these refer to a print to be found in the collections of what is now the Natural History Museum in London, originating from the library of Sir Joseph Banks. We managed to trace a copy of the illustration at the Natural History Museum and another in the collec-

tions of the Linnean Society of London. The latter is reproduced here (Fig. 1).

The illustration consists of a leaf subtending a stem section overlain by three detached inflorescences varying in degree of maturity. Along the bottom of the plate there are depicted a series of details of the flowers and fruits. The only lettering engraved on the plate is “*Thalia? dealbata*”. The Linnean Society and the Natural History Museum prints have similar handwritten annotations. Firstly, in the lower right in effusive copperplate there is ‘Discover’d growing in a Lake in North America in 1790 by John Fraser Sloane Square Chelsea’. The Natural History Museum copy has almost the same annotation (better punctuation and ‘the year’ inserted before ‘1790’) in similar style but clearly not by the same hand. Below this, on the lower edge of the print is written ‘Aug<sup>t</sup> 1. 1794 Published by J<sup>n</sup> Fraser Chelsea’ apparently in the same hand on the two copies. In the bottom left ‘J<sup>s</sup> Sowerby del<sup>t</sup>’, appears on both copies, in what appears to be the same handwriting as the lower right annotation.

These details confirm the entry in Dryander’s catalogue of Banks’s library, that in 1794 John Fraser published a coloured plate of *Thalia dealbata* made from a drawing by James Sowerby. As we can confirm the presence of two prints, probably originally purchased by or presented to London’s twin botanical luminaries of that period, Sir James Edward Smith and Sir Joseph Banks, Fraser’s plate was effectively published in the terminology of current plant nomenclature. Indeed, Roscoe (1826: sub t. 46) wrote ‘The fine

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**Fig. 1.** Photograph of the plate of *Thalia dealbata* published by John Fraser from the collections of the Linnean Society. By Permission of the Linnean Society of London.

figure of it [*Thalia dealbata*] by the late excellent artist, Mr Sowerby, delineated under the inspection of Sir J. E. Smith, first made the plant generally known.’; seemingly indicating a wider circulation of the plate than the two copies we have located.

The name on Fraser’s plate, *Thalia dealbata*, is also validly published despite being the only two words printed on it. This is because the plate can be considered as an illustration with analysis. According to Art. 38.7 of the *International Code of Nomenclature for Algae, Fungi, and Plants (Melbourne Code)* (ICN; McNeill *et al.* 2012), such an illustration can take the place of a written description or diagnosis in validating an associated name before 1 Jan. 1908). The question mark within the binomial on the plate indicates some measure of doubt by Fraser, but not enough to invalidate the name (ICN Art. 36.1).

The annotations on the lower edge of the prints appear to be an attempt to establish the ownership of copyright for the work, although the law actually required the date of publication and the copyright owner’s name to be engraved on the plate and printed on every copy (Gompel 2010), rather than written on the print. In the absence of external evidence to the contrary, the publication date of 1 Aug. 1794 should be accepted nomenclaturally, if not in terms of copyright law.

The final version of the plate is not the only material relevant to its production to be found in the Botany Library of the Natural History Museum. The collection also includes James Sowerby’s original pencil and watercolour sketch of the plant and some proof copies from the plate (interestingly without the species name). The back of Sowerby’s sketch has the annotations ‘Amomum novum // from America // M<sup>r</sup> Frazier’ in the top left and ‘July 2. 1794 // J<sup>n</sup>. Liptrap Esq. // Mile end’ in the top right. John Liptrap of Mile End was a wealthy distiller, and a fellow of both the Royal Society and the Linnean Society. He is known to have maintained a collection of exotic plants (Smith 1818). For instance, in Oct. 1794, Woodville (1794 – 1795) published an illustration of the tea plant ‘taken from the plant now in flower in the stove of John Liptrap Esq.’ Therefore, it seems likely that Sowerby obtained the specimen to draw from Liptrap rather than John Fraser.

There is a specimen of *Thalia dealbata* in the Smith Herbarium, now at the Linnean Society. It consists of a leaf and a portion on inflorescence and is annotated ‘M<sup>r</sup>. Fraser’s garden, 1794, the plant brought from South Carolina.’. The herbarium of the Natural History Museum (BM) has a specimen (single leaf) which has written on the back of the sheet ‘Hort. Fraser’ and ‘Fraser’s *Thalia dealbata*’. The Walter Herbarium, a bound folio of specimens now at BM, that Fraser brought back from Carolina in 1788, does not contain any specimen of *Thalia dealbata* (Ward 2017). Fraser did not find the plant until his next trip

to America, although it seems that the species was already known to Thomas Walter under the misapplied name *Canna glauca* (Ward 2017: 127).

Neither of the two herbarium specimens contemporary with Fraser’s plate and connected with Fraser’s nursery is of a particularly good quality or has a definite provenance in terms of the specimen illustrated by Sowerby. Therefore, the plate itself is here designated as lectotype for *Thalia dealbata* Fraser. A full synonymy is also provided.

## Typification

***Thalia dealbata* Fraser (1794).** Type: [published illustration] ‘*Thalia* ? *dealbata*’ (lectotype, selected here).

*Malacarya dealbata* Raf. (Rafinesque 1819: 190), **nom. invalid.** (ICN Art. 38.5). *Maranta dealbata* (Fraser) A. Dietr. (Dietrich 1831: 24). *Spirostylis biflora* Raf. (Rafinesque 1838: 51), **nom. illegit.** (superfl.).

*Canna glauca* auct. non L. (Walter 1788: 59).

*Peronia stricta* Redouté (1811: t. 342). Type: [published illustration] Liliac. 6: t. 342 (lectotype, selected here).

*Thalia barbata* Small (1903: 308, 1329). Type: USA, Louisiana, Opelousas, ponds, 10 July 1839, W. M. Carpenter s.n. (holotype NY [NY00320427] (ex Columbia University)).

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