

Nomenclatural notes and lectotypification in the monotypic genus *Getonia* (Combretaceae)

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Abstract: Nomenclature confusion between the names *Getonia* and *Calycopteris* is discussed and clarified. J.P. Rottler's specimen at Kew is designated here as the lectotype of the name *Getonia floribunda* Roxb.

Keywords: *Calycopteris*, *Getonia floribunda*, India, Nomenclature.

Introduction

The name *Getonia* Roxb. is currently used for the monotypic genus of Combretaceae distributed in the Indo-Malayan region (Mabberly, 2018). It is a common undergrowth of low-lying tropical evergreen forests. The plant is well known among local people, medicinal practitioners and ethnobotanists for its medicinal uses (Dey *et al.*, 2007; Pavithra *et al.*, 2013; Asma & Afidam, 2014; Glory *et al.*, 2016; Vantamuri *et al.*, 2017). *Calycopteris* Lam. is another name used for this genus which is invalid (IPNI, 2020). The name *Calycopteris* first appeared in 1793 by Lamarck whereas the name *Getonia* appeared firstly through Roxburgh in 1798. Considering the principle of priority Art. 11.3 (Turland *et al.*, 2018), *Calycopteris* is to be the preferred name over *Getonia*. While preparing notes for the Flora of Pushpagiri Wildlife Sanctuary, Karnataka, a study of historical specimens and literature revealed that the nomenclature of both names was incorrectly understood and needs to be elucidated.

Nomenclature

Lamarck (1793) published "*Calycopteris*", in tome 1, volume 2, part 2, fig. 357, which was published on 11 February 1793 (Stafleu & Cowan, 1979). The name appeared in the plate with an analysis, but not in the printed pages that would have been published at the same time. According to Art. 38.7, any name is validly published prior to 1 January 1908, if accompanied by illustration with analysis and no description; but the article is restricted only for a monotypic genus (i.e., genus name + a single species name), and not for only genus name. Since, the name *Calycopteris* was published without any species it does not satisfy the Art. 38.7, thus is invalidly published.

The name appeared with a proper diagnosis in tome 2, volume 5, part 2, page 461, which was published later, on 31 October 1819. Along with it, the name *Calycopteris floribunda* also appeared in the same book on page 485, and so was also published on the same day in 1819, thus making it a case of valid publication to be considered under Art. 38.5. Roxburgh (1798), perhaps unaware of Lamarck's publication described the same taxon as "*Getonia*" providing a detailed description of the only species within the genus i.e. *Getonia floribunda* Roxb. making it a valid publication according to the Code. However, before Lamarck (1819), Poiret (1811) validated *Calycopteris* by transferring Roxburgh's *G. floribunda* to the genus, thus providing a reference to it. Hence, based on the above discussion, the name *Calycopteris* was introduced invalidly in a plate in 1793, but the analysis and

description was published in 1819. The validation would date to 1819, except that it was validated by Poiret in 1811 and that name is thus illegitimate and superfluous because *Getonia* had been validly published earlier in 1798.

The name *Calycopteris floribunda* was accepted until late 2000 by many authors (Clarke, 1878; Birdwood, 1887; Cooke, 1903; Talbot, 1911; Gamble, 1919; Craib, 1931; Exell, 1954; Sharma *et al.*, 1984; Diwakar, 2001; Murthy & Nair, 2018). It was Mabberly (2008) who first pointed out that *Getonia* has priority over *Calycopteris*. Nevertheless, many online databases use the name *Getonia* over *Calycopteris*. This is now been followed by some recent authors (Punekar & Lakshminarasimhan, 2011; Datar & Lakshminarasimhan, 2013; Paul *et al.*, 2015; Mabberly, 2018).

Getonia floribunda Roxb., Pl. Coromandel 1(4): 61, t. 87. 1798. *Calycopteris floribunda* (Roxb.) Lam. ex Poir., Encycl. Suppl. 2: 41. 1811. *Lectotype* (designated here): *s.loc., s.d., J.P. Rottler s.n.* (K [K000786130 digital image!]).

Fig. 1

Getonia nitida Roth, Nov. Sp. Pl. 217. 1821 (type destroyed and no other original material exists).

Getonia nutans Roxb. ex DC., Prodr. 3: 15. 1828. *Calycopteris nutans* (Roxb.) Kurz J. Asiat. Soc. Bengal Pt. 2, Nat. Hist. 46: 59. 1877. *Lectotype* (designated by Gangopadhyay & Chakrabarty, 1997): Roxburgh Icon. No. 2495 (2492) (CAL!).

Typification

Roxburgh (1798) while publishing *Getonia floribunda* did not cite any specimen in the protologue. The author consulted BM, BR, E, G, LIV where the majority of Roxburgh's specimens are reportedly located. However, the search proved to be unfruitful for tracing any original material connected with Roxburgh's annotations. However, a specimen in Kew (Herbarium Rottlerianum) with barcode K000786130 (Fig. 1) shows an annotation "*Getonia floribunda* Roxb. Pl. Coromandel. Decandria. Roxburgh. Plant. Coromandel. 1, 87." which matches with Roxburgh's handwriting. J.P.

Rottler (1749–1836) a French missionary in Tranquebar, had correspondence and exchange of material with Roxburgh (Matthew, 1993). His materials now referred to as 'Herbarium Rottlerianum' were sent to King's College London by Sir H. Cleghorn and later transferred to RBG, Kew (Foulkes, 1861). The note mentioned above clearly indicates that Roxburgh was referring to his protologue [Roxburgh (1: 61, t. 87. 1798)]. It may be considered as the original material for the basis of the species description.

Gangopadhyay and Chakrabarty (1997) treated *Getonia floribunda* Roxb. as a synonym of *Calycopteris floribunda* Lam.. They cited the type as "Type: Roxburgh, Pl. Corom.: t. 87 & Icon. 140 (CAL)". According to Dr. John McNeill (pers. comm., 2020) the plate t. 87 in Roxburgh's *Plants*

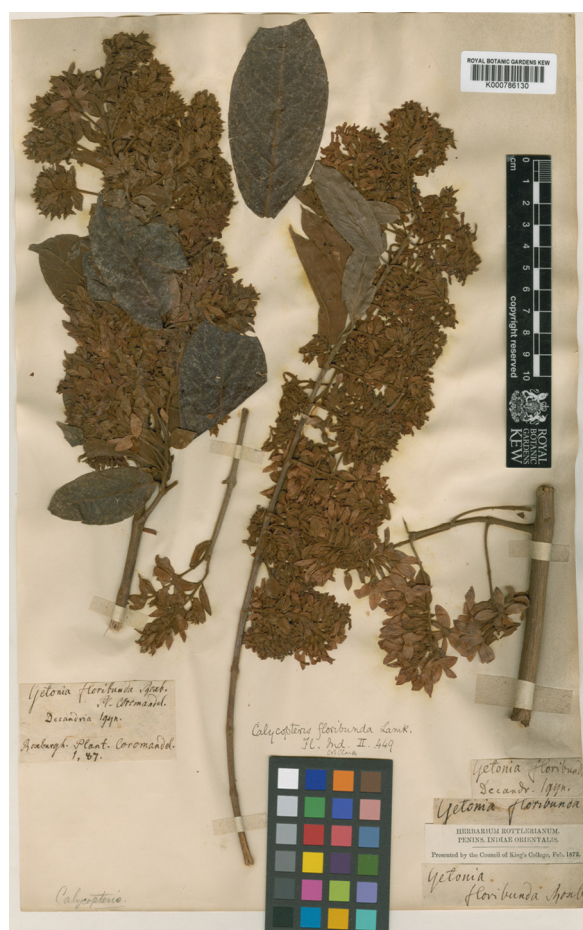


Fig. 1. Lectotype of *Getonia floribunda* (K000786130). © The Board of Trustees for the Royal Botanic Gardens, Kew. Reproduced with permission.

of the Coast of Coromandel is, although derived from the drawings numbered 140 at K and CAL, a separate element so far as typification is concerned. Therefore, the 'type' citation by Gangopadhyay and Chakrabarty (1997) cannot be accepted as an inadvertent lectotypification (see Art. 7.11; Turland *et al.*, 2018). If they had cited one of the two drawings then it would have been an effective lectotypification being before 2000 according to Art. 7.11 (Turland *et al.*, 2018). Thus, in the context of the original material referred and annotated by Roxburgh found here to exist, it is hereby designated as the lectotype following Art. 9.19 (Turland *et al.*, 2018).

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