



NOTE ON THE STATUS OF *Polyalthia malabarica* var. *longipedicellata* M. Alister *et al.* (ANNONACEAE)-AN ENDEMIC SPECIES OF THE SOUTHERN WESTERN GHATS

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ABSTRACT

The newly proposed endemic variety of *Polyalthia malabarica* from the southern Western Ghats, Kerala, is raised to a specific rank *viz.* *P. longipedicellata*. A note on the identity of this taxon from its closely allied species is also provided.

KEYWORDS: Western Ghats, *Polyalthia malabarica*, endemic variety.

INTRODUCTION

The genus *Polyalthia* was described by Carl Ludwig von Blume in 1830. The name *Polyalthia* derived from the Greek words 'polys' many, much and 'althaino' to heal; referring to its use in native medicine. Earlier records shows that the genus has about 160 species distributed from Africa, India, Sri Lanka, Bangladesh, Myanmar, Indo-China, Malesia, Australia and New Zeyland; but in the recent morphological, palynological and phylogenetic studies showed that the genus is polyphyletic in nature resulted the separation of each monophyletic group into separate genera (Saunders *et al.*, 2011; Xue *et al.*, 2011, 2012; Chatrou *et al.*, 2012; Chaowsku *et al.*, 2012). Presently, the genus *Polyalthia* comprises approximately 85 species and its distribution ranged to Austral-Asian region (Chaowsku *et al.*, 2012). In India, 14 species are reported and 5 of them are occurring in Kerala (Alister *et al.*, 2017). During the floristic studies on the sacred groves in Kollam district of Kerala, the senior author has collected an interesting specimen of *Polyalthia*. On critical study with relevant literature it was identified as *P. malabarica* var *longipedicellata* M. Alister *et al.* a species endemic to the southern Western Ghats. Perusal of relevant literature and type specimens of *P. malabarica* var *malabarica* and *P. malabarica* var *longipedicellata* housed at TBGT and the online herbarium catalogue from the Royal Botanic Garden, Kew (K), we found that *P. malabarica* var *longipedicellata* needs to be elevated to a specific rank. Hence, it is treated as a distinct species here.

Polyalthia longipedicellata (M. Alister, G. Rajkumar, A.Nazarudeen & Pandur.) Shailajakumari, Pathipan, Sreekala *et al.* E.S.S. Kumar, *Comb. et Stat. nov.*

P. malabarica var. *longipedicellata* M. Alister, G. Rajkumar, A. Nazarudeen & Pandur, *Taiwania* 62(3): 306. 2017.

Type: INDIA: Kerala state, Kollam district, Rosemala, ± 600m, 31 March 2015, M. Alister, G. Rajkumar & A. Nazarudeen 84194 (Holo TBGT!)

Polyalthia malabarica (Bedd.) I. M. Turner *sensu* E.S.S. Kumar *et al.*, *Int. J. Bot. Stud.* 1(4): 27. 2016. *Phaeanthus malabaricus* Bedd. *sensu* M. Mohanan in P. Daniel *et al.* (Eds) *Fl. Kerala* 161. 2005; Nayar *et al.*, *Flg Pl. Kerala* 59. 2006; Santhosh & Yeragi, *Fl. Sacred Grove Thiruvananthapuram* 65. 2012.

Type: INDIA: Kerala state, Kozhikkode district, Tambacherry Malabar, 2000ft, 1871, *Beddome s.n.* (Lectotype: accession number MH 561!)

Large shrubs or small trees, to 2.5 m tall; bark lenticellate; branchlets rusty tomentose. Leaves 10-16 × 3.5-5.5 cm, broadly elliptic to oblong, glabrous on both sides, base rounded to subcordate, abruptly acuminate at apex; secondary veins 8-12, on either side of midvein, spreading, conspicuous on both surfaces, lax, arching and looping near the margins; petiole 2-3 mm long, glabrous. Flowers usually solitary or rarely two together, axillary or extra-axillary, leaf-opposed; pedicel 1.5 cm long, sparsely strigose; bracteoles 2, ovate, at the base of pedicel, minute. Sepals 2.5-3 mm long, deltoid, acute, rusty tomentose, spreading. Petals flesh coloured, rarely slightly reddish; outer petals to 9 × 5 mm, rhomboidal, spreading, acute at apex, shorter than inner petals, fleshy, flat and spreading, outside slightly pubescent, inside glabrous; inner petals 12 × 8 mm, ovate, concave, acute at apex. Stamens many, ca. 1 mm long; connectives slightly raised at apex. Carpels many, pubescent; ovules 1 or 2 per carpel, sigma obovate, sparsely pilose at apex. Infructescence stalk to 1.5 cm long,

thick; monocarps globose, ca. 8 mm in diam., sparsely strigosely, shortly pointed. Seed 1-per monocarp.

Flowering and fruiting: December-April.

Distribution: Southern Western Ghats, endemic.

Note: *Polyalthia malabarica* was originally described by Col. Richard Henry Beddome, from Tambacherry Ghats in Kozhikkode district in Kerala as *Phaeanthus malabarica*. It is characterized by the tree habit, reaching nearly 3- 4 m tall with elliptic to ovate-lanceolate or oblong leaves with acuminate to caudate apices, pubescent petioles, flowers with 3-8 mm long stout pedicels, broadly ovate cucullate sepals, erect ovate outer and incurved inner petals, flat topped connective with sparsely ciliate apex, triangular to cylindrical stigmatic lobes with strigose apex and the

oblate fruits with glabrous tips. Whereas in *P.longipedicellata* is remarkably distinct by the shrubby habit grows upto 2.5 m tall having ovate or broadly elliptic to oblong leaves with abruptly acuminate apices, obscure later nerves, glabrous petiole, 1.2-2.5 cm long slender green pedicels, deltoid sepals, spreading rhomboid outer and straight to incurved outer petals, stamens with connective slightly raised and densely ciliate at apex, sparsely pilose obovoid stigma, and the strictly globose puberulous to pubescent fruits. Moreover, *P.longipedicellata* is distributed in south of the Palghat gap whereas *P.malabarica* is distributed in north of Palghat gap. These characters warrant *P.malabarica* var *longipedicellata* to a distinct specific rank.



Polyalthia longipedicellata: twig with a flower

ACKNOWLEDGEMENTS

The authors are thankful to the Director, JNTBGRI, Palode and to the Manonmaniam Sundaranar University, Tirunelveli for the facilities provided.

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