



Polyspora gioii (Theaceae), a new species from Vietnam

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Abstract

Polyspora gioii (Theaceae) is described and illustrated as a new species from Hòn Bà Nature Reserve, Khánh Hòa Province, southern Vietnam. A morphological comparison between the new species and its closest congener, *P. huongiana*, and a key to all known species of *Polyspora* of Vietnam are given.

Key words: Theaceae, *Polyspora*, new species, Vietnam

Introduction

Polyspora Sweet (1825: 205, cited by Sweet, 1826: 61) of the Theaceae has been traditionally placed within the genus *Gordonia* J.Ellis (1770: 520) but recent studies using molecular markers (Prince & Parks, 2001; Yang *et al.*, 2004; Prince, 2007 & Zhang *et al.*, 2014) and seed coat micromorphology (Gunathilake *et al.*, 2014) support its delimitation from the latter. *Polyspora* species are characterized within the family by having sepals indistinct from the petals, stamens basally united with the corolla, oblong-ellipsoid woody capsules loculicidally dehiscent by five valves, and apically winged seeds (Sealy, 1958; Orel *et al.*, 2013). Prior to the publication of this paper, the genus comprised about 40 species predominantly in Asia (Gagnepain, 1941; Keng, 1972; Barker, 1980; Keng, 1984; Krüssmann, 1985; Pham-hoang, 1999 [all as *Gordonia*]; Bartholomew & Ming, 2005; Yang 2005; Ming & Bartholomew, 2007; Orel *et al.*, 2012; Orel *et al.*, 2013), with nine species recorded for Vietnam namely: *P. ampla* (Orel *et al.*, 2013: 304), *P. axillaris* (Sweet, 1826: 61), *P. balansae* (Hu, 1963: 345), *P. bidoupensis* (Orel *et al.*, 2012: 50), *P. gigantiflora* (Orel *et al.*, 2012: 50), *P. huongiana* (Orel *et al.*, 2012: 48), *P. intricata* (Orel *et al.*, 2012: 50), *P. nivea* (Orel *et al.*, 2013: 301) and *P. tonkinensis* (Bartholomew & Ming, 2005: 266).

In 2010, Mr. Trần Giới informed the first author about a red-flowered *Camellia*-like species in Hòn Bà Nature Reserve in Khánh Hòa Province, southern Vietnam. Our surveys in the reserve up until December 2011 recorded only one population of the species with distinctive hairy leaves and twigs. Subsequent surveys between April 2012 and February 2015 included the observation of several individuals with flowers and mature fruits, all in the same population. The morphological attributes of the collections indicated that the species actually belonged to *Polyspora* and differed from all other known species of the genus, and it is described here as a new species.

Taxonomy

Polyspora gioii Luru, Tịch et H. Trần, *sp. nov.* (Fig. 1)

Allied to *Polyspora huongiana* in having hairy terminal buds, coriaceous leaf laminas, and red campanulate and pedicellate flowers but different in having sparsely yellow stellate and densely white to brown hairs on twigs, leaf petioles and adaxial laminas, obovate laminas, 5–7-lobed stigmas, 5–7-carpellate ovaries and larger capsules.