



A new species of *Eriobotrya* (Rosaceae) from Con Dao National Park, southern Vietnam

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Abstract

We describe a distinctive new species of *Eriobotrya condaoensis* (Rosaceae) from Con Dao National Park, Ba Ria-Vung Tau Province, southern Vietnam, based on both morphological and molecular evidences. The new species is characterized by leaf blade oblong-oblongate, 8–12 × 4–6 cm, leaf margins crenate, both surface glabrous, secondary veins 6–7 pairs, bracts apically dentate and persistent, flowers sessile and yellowish, hypanthium funnel-shaped and brown tomentose, petals elliptic and 6–7 × 4–5 mm long, styles 2, free at base and 5–6 mm long, and ovary glabrous. Morphological characters and phylogenetic analysis based on nrDNA ITS sequences confirmed the distinctiveness of this new species in the genus.

Key words: new taxon, phylogenetic analysis, Pyreae, Vietnam

Introduction

Eriobotrya Lindley (1821: 96, 102) is a genus belongs to the tribe Pyreae (subtribe Pyrinae, subfamily Spiracoideae) of the family Rosaceae (Campbell *et al.* 2007, Potter *et al.* 2007). This genus includes more than 30 taxa, of which 21 species and varieties were record in China (Lin *et al.* 2004, Yang *et al.* 2005), and southeast Yunnan is both the secondary evolution center and main centre of diversity (Yang *et al.* 2005, Li *et al.* 2011). Other distribution centers include the Himalaya (Bhutan, Nepal and Sikkim), southern Japan, Taiwan, China and Southeast Asia (mainly Cambodia, Indonesia, Laos, Myanmar, Thailand and Vietnam) (Vidal 1965, 1968, Pham 2000, Yang *et al.* 2005, Wong & van der Ent 2014).

The taxonomy and phylogeny of *Eriobotrya* have been reviewed and many new species have been described recently (Yang & Lin 2007, Li *et al.* 2012, Wong & van der Ent 2014). During the revision of *Eriobotrya*, an undescribed species was found from Con Dao National Park, southern Vietnam that was not possible to assign to any known species of *Eriobotrya*. To confirm the affinity of this new species within the genus, morphological and phylogenetics analysis based on nuclear internal transcribed spacer (ITS) regions were carried out. Hereafter, we describe this new species as *E. condaoensis*.

Materials and Methods

Morphological studies:—The studied specimens are deposited in the herbarium of Chengdu Institute of Biology, Chinese Academy of Science (CDBI) and Vietnam National Museum of Nature (VNMN). The macromorphological features were studied based on the specimen sheets and notes in the field, micromorphological observations were analysed and photographed using an optical microscope (Stemi DV4, LEICA S8 AP0). The morphological characters of studied specimens were compared with previously described species and were reviewed on the basis of specialized literature and herbarium specimens deposited in relevant herbaria (CDBI, CENT, IBSC, KUN, P and PE).