



## *Curcuma woodii* (Zingiberaceae), a new species from Thailand

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### Abstract

*Curcuma woodii*, a new species of *Curcuma* subgen. *Ecomata* (Zingiberaceae) from Thailand is described and illustrated here. It differs from *C. rhomba* by the leaf blades abaxially pubescent, the bracts whitish green, the labellum white with orange bands at the center, the lateral staminodes white with orange dots at the apex, and the ovary nearly glabrous.

**Key words:** *Curcuma*, Thailand, new taxa, *Ecomata*, molecular diagnosis, DNA barcode

### Introduction

*Curcuma* L. (1753: 2) is one of the largest genera in the Zingiberaceae which comprises of approximately 120 species, distributed in the tropics of Asia from India to South China, Southeast Asia, Papua New Guinea and Northern Australia (Wu & Larsen 2000). Tropical Asia and South Asia are the diversity hotspots of the genus. Recently, several new species of *Curcuma* from Asia were described: *C. bella* Maknoi, K. Larsen & Sirirugsa (2011: 121), *C. arracanensis* W. J. Kress & V. Gowda (2012: 10), *C. leonidii* Škorničk. & Lur (2013: 37), *C. newmanii* Škorničk. and *C. xanthella* Škorničk. (2013: 170, 172), *C. gulinqinensis* N. H. Xia & J. Chen (2013: 714), *C. pygmaea* Škorničk. & Šída f. (2014: 639), *C. peramoena* Souvann. & Maknoi (2014: 125), *C. arida* Škorničk. & N. S. Lý and *C. sahuynhensis* Škorničk. & N. S. Lý (2015: 182, 185). According to the recent study on the phylogeny of the genus *Curcuma*, three subgenera (subgen. *Curcuma*, subgen. *Hitcheniopsis*, and subgen. *Ecomata*) were proposed (Záveská *et al.* 2012). Five out of nine new species above (*C. newmanii*, *C. xanthella*, *C. peramoena*, *C. arida* and *C. sahuynhensis*) belong to subgen. *Ecomata*. Thailand, as one of *Curcuma* diversity centers, has nearly 40 *Curcuma* species (Sirirugsa *et al.* 2007). Among them, six species are also from subgen. *Ecomata*, e.g. *C. ecomata* Craib (1912: 401), and *C. bicolor* J. Mood & K. Larsen (2001: 208).

When many plants from Thailand were introduced by Tom Wood (ginger curator from US) to South China Botanical Garden, the *Curcuma* species “Band of Gold” (which is named for its distinctive bicolored flowers of orange and white) attracted our attention. Early in 1992, the second author bought them from the local wild plant market in Sae Kaeow and planted them at Nong Nooch Tropical Botanical Garden. Tom Wood imported them from Nong Nooch Tropical Botanical Garden to South China Botanical Garden in 2010. Under cultivation at South China Botanical Garden in Guangzhou, the vegetative growth started in May, maturing to about 60 cm tall in late August. The first inflorescence emerging from the base of the pseudostems as in *C. bicolor* consists of white floral bracts. The flowers are one of the showiest in the genus *Curcuma*. Further studies confirmed that this plant represented a new species which is described and illustrated below.

### Taxonomy

*Curcuma woodii* N. H. Xia & J. Chen, *sp. nov.*

Similar to *Curcuma rhomba* J. Mood & K. Larsen (subgen. *Ecomata*) in several characters but differs in the leaf blades ab-