



## Notes on *Hedyotis* L. (Rubiaceae) from Thailand<sup>#</sup>

KHANIT WANGWASIT<sup>1,2</sup> & PRANOM CHANTARANOTHAI<sup>1,\*</sup>

<sup>1</sup>Applied Taxonomic Research Center, Department of Biology, Faculty of Science, Khon Kaen University, Khon Kaen 40002, Thailand;  
E-mail: chantaranothai@gmail.com

<sup>2</sup>Queen Sirikit Botanic Garden, The Botanical Garden Organization, Mae Rim, Chiang Mai 50180, Thailand

\*Author for correspondence

<sup>#</sup>In: Delprete, P.G. & Dessein, S. (Editors), Festschrift volume dedicated to Timothy Motley (1966–2013). *Phytotaxa* 206: 1–132. (2015)

### Abstract

*Hedyotis puffii* is described and illustrated based on material from Thailand. The new species differs from *H. tavoyensis* by its obtuse angled stems, usually with (0–)1–2 glands on the calyx margin and the sinus of the calyx that has no interposed subulate teeth. The conservation status of this new taxon is vulnerable (VU D2). In addition the new combination *Hedyotis laotica* is made and a lectotype is designated.

### Introduction

The genus *Hedyotis* Linnaeus (1753: 101) was described by Linnaeus (1753) with four species. Since then, the delimitation of *Hedyotis* has been confused with *Oldenlandia* Linnaeus (1753: 119) and their allies. *Hedyotis fruticosa* Linnaeus (1753: 102) was selected as the conserved type species by Jarvis (1992). The phylogenetic analyses of *Hedyotis* (Guo *et al.* 2013, Wikström *et al.* 2013) identified the *Hedyotis* s.str. clade, including the conserved type species (*H. fruticosa*). The members of *Hedyotis* s.str. are suffrutescent herbs, shrubs or small trees, the apex of the capsule does not protrude beyond the calyx lobes, the capsule shows a septicial dehiscence that is usually followed by a partial apical loculicidal dehiscence, usually resulting in two semi-spilt valves and the seed is dorsiventrally compressed with a conspicuous hilum (Wikström *et al.* 2013). Species of *Hedyotis* s.str. occur in Sri Lanka, India, SE China, Indo-China, Malesia, Papuasia and NW Pacific (Wikström *et al.* 2013).

*Hedyotis s.l.* in Thailand was investigated by Fukuoka (1970) with 56 recognized species. In the course of revising the genus *Hedyotis* for the ‘Flora of Thailand’ project, 21 species of *Hedyotis* s.str. were enumerated. Unnamed specimens from Khao Soi Dao, Trang province, southern Thailand were found by the first author in BM, K and L. These specimens resemble *H. tavoyensis* Balakrishnan (1974: 168) in being ascending or erect herbs to subshrubs with axillary inflorescences with long peduncles and the flowers arranged in compact glomerules; however, they have angled stems with obtuse edges and no glandular-tipped or interposed subulate teeth between the calyx lobes.

During the herbarium examination and field surveys, *Oldenlandia laotica* Pitard (1922: 123) was newly recorded in Thailand. It was originally reported as being distributed along the Mae Khong River in Laos, but detailed locality information was not recorded. According to Hô (1993), most of the Indo-Chinese *Oldenlandia*, especially those located in Vietnam, were transferred to *Hedyotis*, but *O. laotica* is still placed with *Oldenlandia* because the distribution of it was not in the scope of Hô’s work. The species is similar to *H. tetragularis* (Korthals 1851: 149) Walpers (1852: 769) and *H. ternata* (Pierre ex Pitard 1922: 122) Hô (1993: 112), which were clearly placed inside *Hedyotis* s.str. (Wikström *et al.* 2013). They are erect herbs with linear leaves, narrowly triangular stipules, corymbiform inflorescences, heterostylous flowers and diplophragmous capsules. The new species, *H. puffii*, and *O. laotica* should be placed with *Hedyotis* because they have septicially & loculicidally dehiscent capsules and dorsiventrally compressed seeds with a distinct hilar ridge. Therefore, a new species and a new combination are here proposed. The lectotype of *O. laotica* is also designated.