

## A new record of *Hoya* (Asclepiadaceae) from Northern Thailand

MANIT KIDYOO\* AND OBCHANT THAITHONG

Department of Botany, Faculty of Science, Chulalongkorn University, Phythai Road,  
Bangkok 10330, Thailand

**ABSTRACT.**– *Hoya pandurata* Tsiang is recorded in Northern Thailand, a first recording for Thailand. The species is described and illustrated in this paper which increases the knowledge of Thai Hoyas.

**KEY WORDS:** Asclepiadaceae, new record, *Hoya*, Thailand, Southeast Asia

### INTRODUCTION

*Hoya* R.Br. is a genus of the Milkweed family, Asclepiadaceae, found in Asia and Australia (Australasian region). The Genus consists of some 70 Indo-Malayan species (Mabberly, 1997). It is easily recognized from other climbing epiphytes with opposite leaves in having milky sap in all parts with rather thick and fleshy leaves, flowers in umbelliform, and with a star-shaped corona. Previously, Thaithong (1995) reported 32 species and 4 unknown species of *Hoya* in Thailand. Herein, one of these unknown morphotypes is confirmed to be *Hoya pandurata* Tsiang which is as a new record from northern Thailand.

### MATERIALS AND METHODS

---

\*Corresponding author:

Tel: (662) 218 5507

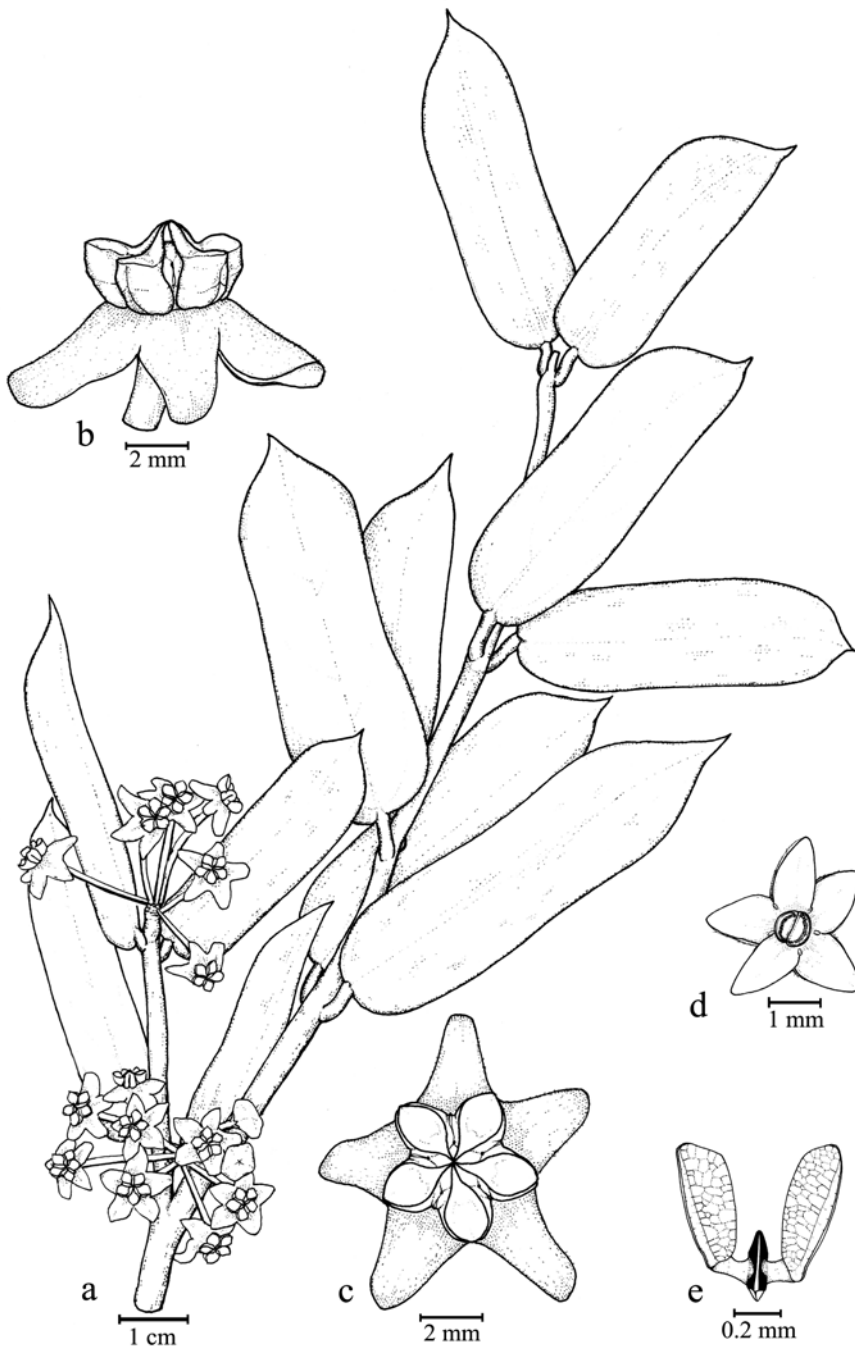
Fax: (662) 218-5502

E-mail: kidyoo\_m@yahoo.co.th

Herbarium specimens of Hoyas' collected from Khunkorn waterfall forest park, Chiang Rai Province (T. Boonkerd et al. 857, BCU), and Doi Pha Hom Pok, Chaing Mai Province (Suksathan 3463, BCU), Northern Thailand were determined using keys to species in Rintz (1978), Li et al. (1995), Hooker (1883), Constantin (1912) and Kerr (1951). For comparisons, we examined herbarium specimens deposited at the following herbarium: BCU, K, L, P, BM, and BKF.

### RESULTS

The morphological characters of the *Hoya* specimens (T. Boonkerd et al. 857; Suksathan 3463) fitted well with the key to species and description of *H. pandurata* Tsiang in Li et al. (1995). It also matched well with the herbarium and type specimens deposited at Kew herbarium. Accordingly, *H. pandurata* Tsiang is newly recorded for Thailand. A description based on these Thai samples is given below.



**FIGURE 1.** *Hoya pandurata* Tsiang. a. flowering branch, b-c. flower, d. calyx, e. pollinarium. Drawn by Manit Kidyoo from Suksathan 3463 (BCU).

*Hoya pandurata* Tsiang

## DISCUSSION

Sunyatsenia. 4: 125, 1939; Flora of China 16: 235, 1995. Fig. 1.

Epiphytic plant. Stem not twinning, glabrous, pendent and sparsely branched. Leaves yellowish to grayish green, thick or succulent coriaceous, glabrous, pandurate or oblong with obtuse to rounded base, apex acuminate; 4.4-8.9 cm long, 1.4-2.1 cm wide; veins obscure; petiole 3-5 mm long, 1.5-2.5 mm wide. Inflorescence axillary or terminal, 8-17 flowered, peduncle small, 0.3-0.6 cm long. Pedicel glabrous, 1.4-1.6 cm long. Sepals ovate-oblong, 1.3-1.5 mm long, 0.9-1.1 mm wide, outside covered with scattered hairs, inside with 5 minute glands alternate with lobes. Corolla creamy to pale yellow, glabrous outside, puberulent inside, 0.9-1 cm in diam., tube 1.95-2.1 mm; lobes ovate, 4.1- 4.3 mm long, 3.3-3.5 mm wide, apex acute. Corona yellowish orange, scale obovate, 2.7-2.9 mm long, 1.4-1.6 mm wide, the outer angle obtuse, inner angle produced into an erect, slender tooth higher than anthers. Pollinia obliquely oblong, 0.64-0.68 mm long, 0.24-0.26 mm wide; translator short; corpusculum ovate-oblong, 0.33-0.34 mm long, 0.1-0.11 mm wide. Fruit not seen.

**Thailand.**- Northern Thailand: Chiang Rai [Muang, T. Boonkerd et al. 857 (BCU)], and Chaing Mai [Phang, Suksathan 3463 (BCU)].

**Distribution.**- China [A. Henry 12258 (holotype NYBG !, isotype K !)].

**Ecology.**- Epiphytic plant on tree in hill evergreen forest at 1350-1500 m altitude.

*Hoya pandurata* Tsiang was first described from specimens collected by Henry in Yunnan, China in 1939. In this study, the specimens were collected from plants growing on trees in hill evergreen forest in northern Thailand. *Hoya pandurata* Tsiang is closely related to *H. lobii* Hook.f., but differ in both the form and size of the leaves as well as the form of the flower. *Hoya pandurata* has pandurate leaves with an obtuse to rounded base and an obscured midrib on both surfaces, whilst *H. lobii* has an elliptic-oblong with narrowly cordate base, and a distinct midrib on the lower surface. As for the flower, *H. pandurata* has a smaller flower with a yellow corolla and yellowish orange corona, but the flower of *H. lobii* is much larger with a red corolla and dark red corona.

## ACKNOWLEDGEMENTS

We would like to express our thanks to Assoc. Prof. Dr. Thaweesakdi Boonkerd for his criticism of the manuscript. We thank Dr. Piyakaset Suksathan for providing specimens of this species and also to Chanin Torat for providing us with some references. This work was supported by Chulalongkorn University through 'Plants of Thailand Research Unit' and 'Grants for Development of New Faculty Staff'.

## LITERATURE CITED

- Constantin, J. 1912. *Hoya* Br. In: M. H. Lecomte (Ed), Fl. Gen. Indo-Chine. Vol. 4, pp.125-139. Paris: Masson.

- Hooker, J.D. 1883. *Hoya* Br. In: J.D. Hooker (Ed.). Flora of British India, Vol. IV, pp. 52-63. London: Reeve & Co.
- Kerr, A.F.G. 1951. *Hoya* R. Br. In: W.G. Craib and A.F.G. Kerr (Eds.). *Florae Siamensis Enumeratio*, Vol. III, part 1, pp. 35-42. Bangkok: Siam Society.
- Li, P.T, Gilbert, M.G. and Stevens, W.D. 1995. *Asclepiadaceae*. In Z.Y. Wu and P.H. Raven (Eds.). *Flora of China*, Vol. 16, pp. 189-270. Science Press & Missouri Botanical Garden.
- Mabberly, D.J. 1997. *The Plant-Book*. Cambridge: Cambridge University Press.
- Rintz, R. 1978. The peninsular malaysian species of *Hoya* (Asclepiadaceae). *Malayan Nature Journal*, 30: 467-522.
- Thaithong, O. 1995. The Genus *Hoya* in Thailand. In: R. Kiew (Ed.). *The Taxonomy and Phytochemistry of the Asclepiadaceae in Tropical Asia*, pp. 83-94. Universiti Pertanian, Malaysia.
- 

*Received: 22 November 2006*

*Accepted: 10 April 2007*