



## A new species and two new taxon records of *Digitaria* (Poaceae: Panicoideae) for Thailand

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### Abstract

Field and herbarium studies have revealed a greater diversity of Thai *Digitaria* (Poaceae) than previously known. A new species, *Digitaria thailandica*, and two new taxon records, *D. setigera* var. *calliblepharata* and *D. thyrsoides*, are described and illustrated.

### Introduction

*Digitaria* Haller (1768: 244) mainly occurs in tropical and warm temperate regions of the world. It is found in a range of habitats but seems to be most diverse in open areas or grasslands. Clayton *et al.* (2012) enumerated 263 species of *Digitaria* and approximately 26 species are known in Thailand (Bor 1962, 1965, Nanakorn & Norsaengsri 2001).

We made new collections during expeditions to the Phu Ruea and Nam Nao National Parks in the Loei and Phetchabun provinces, respectively, and studied specimens from Thai and international herbaria. We found a new species from Thailand, which we name *D. thailandica* B. Boonsuk, Chantar. & Hodk., on the basis of marked differences in its lower and upper glumes and lower lemma morphology which are intermediate between *D. junghuhniana* (Nees ex Steudel 1855: 63) Henrard (1930: 11) from Java and *D. thyrsoides* Balansa (1890: 138) from Indo-China. All three species belong to the section *Remotae* Henrard (1950: 856) (sensu Veldkamp 1973: 15). In addition, Clayton & Renvoize (1986) presented an infrageneric classification of the genus which places the species above in the section *Digitaria*. Two taxa, *D. setigera* Roth ex Roemer & Schultes (1817: 474) var. *calliblepharata* (Henrard 1950: 452) Veldkamp (1973: 40) and *D. thyrsoides*, are also reported as new records for Thailand.

### Material & Methods

Specimens were collected during fieldwork undertaken throughout Thailand. Herbarium specimens were consulted from the following herbaria: BK, BKF, BO, K, KKU, L, P and QBG (Thiers 2013). Measurements and character determinations were carried out using both stereo (Nikon SMZ-445; Nikon Instruments Inc., USA) and scanning electron microscopy (LEO 1450 VP SEM; Cambridge, UK). The terminology is based on Stearn (1992), Harris & Harris (2001) and Beentje (2010). The collected specimens were deposited mainly at KKU, BK, BKF and QBG.

### Taxonomic Treatment

#### *Digitaria thailandica* B. Boonsuk, Chantar. & Hodk., sp. nov. (Fig. 1)

*D. thailandica* is similar to *D. junghuhniana* and *D. thyrsoides* in having many racemes with a long common axis and brown upper florets but differs in its perennial habit, long setae on racemes, triangular lower glume, lanceolate, truncate and 3-nerved upper glume and inequidistant nerves on lower lemma (Fig. 2, A–C; Table 1).

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