

## Nomenclatural Note and Lectotypification of the Synonyms of *Dioscorea bulbifera* and Varieties in *D. pentaphylla* (*Dioscoreaceae*)

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Lectotypes have been designated for the associated synonyms of *Dioscorea bulbifera* L. (*Dioscoreaceae*), namely *D. tamifolia* Salisb., *D. heterophylla* Roxb., *D. crispata* Roxb., *D. pulchella* Roxb., *D. tenuiflora* Schldt., *D. latifolia* Benth. and *D. perrieri* R.Knuth. Furthermore, the lectotypes for the varietal names of *D. pentaphylla* L. namely var. *linnaei* Prain & Burkill, var. *malaica* Prain & Burkill, and var. *thwaitesii* Prain & Burkill have been designated.

**Key words:** *Dioscorea*, lectotype, nomenclature, original material.

*Dioscorea bulbifera* L. (*Dioscoreaceae*) is widely distributed throughout the tropical regions of the world. This species exhibits high morphological variability due to its wide distribution, and the variations have been recognized by earlier workers as many distinct species or varieties. However, they are now considered as conspecific and relegated to the synonyms of *D. bulbifera* (Govaerts et al. 2007, POWO 2019).

Prain and Burkill (1914) recognized eleven varieties under *Dioscorea pentaphylla* L. Burkill (1924) described four varieties and Knuth (1924) described one variety. In the protologues of most of the varietal names, the places of occurrence were given but the types were not mentioned. Karthikeyan et al. (1989) listed ten varieties in their *Florae Indicae Enumeratio: Monocotyledonae*. Amongst these, two varieties are endemic to Northeast India (Nayar 1996).

However, all the varietal names are considered as heterotypic synonyms of *D. pentaphylla* (POWO 2019).

In 1983, A.H.M. Jayasuriya in his doctoral thesis had designated lectotype for the names of the Indian species of *Dioscorea* but his thesis was not effectively published. Hence, those lectotypifications have been reconsidered in present investigation. Hoque (2002) published a list of type specimens of *Dioscorea* in the Indian herbaria, but his type citations cannot be accepted as lectotypification, because he did not express ‘type designated here’ or its equivalent, the phrase required for the typification on or after 1 January 2001 (Art. 7.11, 9.23 of Shenzhen Code; Turland et al. 2018).

As part of the study on the phylogenomics and biogeography of Indian *Dioscoreas*, attempts have been made to resolve the nomenclatural problems associated with synonyms of

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R.S.Pagare<sup>a</sup>, W.Arisdason<sup>b</sup>: *Dioscorea bulbifera* のシノニムと *D. pentaphylla* の変種のレクトタイプ選定 (ヤマノイモ科)

*Dioscorea bulbifera* L. カシュウイモ (ニガカシュウ) は熱帯地域で広く栽培され、また各地で野生化しており、外部形態上の変異が多く、異名も多い。また、*D. pentaphylla* L. アケビドコロは熱帯アジア原産でかつては広く栽培されていて、いくつかの変種が記載された。次の種名は *D. bulbifera* のシノニムと考えられ、これらのレクトタイプを選定した。 *D. tamifolia* Salisb. (Fig. 1A), *D. heterophylla* Roxb. (Fig. 1B), *D. crispata* Roxb. (Fig. 2), *D. pulchella* Roxb. (Fig. 3A), *D. tenuiflora* Schldl.

(Fig.3B), *D. latifolia* Benth. (Fig.4A), *D. perrieri* R.Knuth (Fig. 4B)。また、*D. pentaphylla* L. の変種 var. *linnaei* Prain & Burkill (Fig. 5A), var. *malaica* Prain & Burkill (Fig. 5B), var. *thwaitesii* Prain & Burkill (Fig. 6) のレクトタイプを選定した。

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