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Typification of three accepted names in Indian Alseodaphne and Alseodaphnopsis (Lauraceae)

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Abstract

Three names, Alseodaphne khasyana (Meisn.) Kosterm., A. owdenii R.Parker and Alseodaphnosis andersonii (King ex Hook.f.) H.W.Li & J.Li have been lectotypified for their unambiguous use.

Keywords

Taxonomy, lectotypification, India, unambiguous use

Introduction

The genus Alsoedaphne Nees comprises about 50 species, distributed in tropical Asia (1). In India, the genus is represented by 4 species (2). The genus Alseodaphnopsis H.W.Li & J.Li has been recently established, segregated from Alseodaphne based on molecular studies (1). It includes 9 species, mainly distributed in the southwestern China, but extending also to NE. India, Laos, Myanmar, Thailand and Vietnam (1). Of these, two species are occurring in India (2). During the preparation of a revised treatment of the family Lauraceae (in part) for the Flora of India, we noticed that three Indian names in these genera require lectotypification for their unambiguous use. The present studies are based on the study of the relevant literature including the protologues, type specimens and their digital images deposited in various herbaria.

Lectotypification

Alseodaphne khasyana (Meisn.) Kosterm. in Reinwardtia 7: 292. 1968. - Machilus khasyana Meisn. in DC., Prodr. 15(1): 42. 1864.

Lectotype (first-step designated by Kostermans [3, p. 292]; second-step designated here): India, Meghalaya, Khasi hills, 1844, Griffith 125 (K000778930, image!, Fig. 1; isolectotypes K000778929, K000778931, MEL2386504, images!). Additional syntypes: India, Meghalaya, Khasi hills, *Griffith s.n.* in Kew Distrib. No. 4264 [10 of J.D. Hooker & T. Thomson] (C10013493, image!, CAL0000021912!, S-G-3875, U0002601, images!). India, Meghalaya, Khasi hills, s.d., Griffith s.n. in Kew Distrib. No. 4264 (M0147204, P00732214, P00732215, P00732216, ZT00010060, images!).

Notes: Two collections of Griffith, namely 10 and 125 from the Khasi hills, Meghalaya, India were cited in the protologue of *Machilus khasyana* Meisn. (4), the basionym of Alseodaphne khasyana (Meisn.) Kosterm. It may be noted that Griffith's collections of *M. khasyana* were distributed from Kew to various herbaria under the Kew Distribution number 4264. Some of these sheets bore a number 10 of J.D. Hooker and T. Thomson but they do not have the field number 125 of Griffith. Kostermans (3) cited the type as: "Typus: Griffith 125 (= U26U KD.)



Figure 1. Lectotype of Machilus khasyana Meisn. (K000778930) (©The Board of Trustees of the RBG, Kew).

Khasya (K)." The "U26U" is possibly a typographic error for 4264. As there are three specimens at K bearing the number *Griffith* 125, the designation by Kostermans (3) may be taken as a first-step lectotyification of the name as per Art. 9.17 (5). Of these, two specimens belong to Hooker's herbarium while the third specimen belongs to Bentham's herbarium. As Meisner (4) referred to the "herb. Hook.", the better specimen from this herbarium at Kew is designated here as the second-step lectotype of the name.

Alseodaphne owdenii R. Parker in Indian Forester 50: 365. 1924.

Lectotype (designated here): India, Assam, Cachar dist., without locality and date, *J.S. Owden s.n.* (K000778932, image!). Additional syntypes: India, Assam, Cachar dist., without locality and date, *J.S. Owden s.n.* (K000778933, image!). India, Assam, Cachar dist., Cachar hills, *U.N.Kanjilal* 5694 - *n.v.*

Notes: Kostermans (6) cited the type as: "*Typus: Owden* 46205 (K, fragm, BO), Assam, Cachar, Loharband, July, fl." As per Art. 9.22 of the *ICN* (5), there was no requirement to specify a single herbarium before 1990, so long as the type element (the single gathering) is clearly indicated (Art. 7.11). However, the *ICN* (5) does not clarify the present situation when a single gathering is cited to be available in more than one herbarium before 1990. Hence Kostermans's designation cannot be taken as a first-step lectotypification. Furthermore, the collection *Owden* 46205 is not traceable at the Kew herbarium while the material at the Bogor herbarium is a fragment only. No field number was mentioned in the protologue of *A. owdenii* (7). There are two specimens available at K

collected by J.S Owden (none at DD), one in flowering and the other with detached fruit. Here, we have designated the good flowering material at Kew as the lectotype of the name.

Alseodaphnopsis andersonii (King ex Hook.f.) H.W.Li & J.Li in PLoS ONE 12(10): e0186545 (9). 2017. - *Cryptocarya andersonii* King ex Hook.f., Fl. Brit. India 5: 120. 1886. - *Alseodaphne andersonii* (King ex Hook.f.) Kosterm. in Reinwardtia 6(2): 159. 1962.

Type (lectotype, designated here): India, Assam, Without locality and date, *Jenkins s.n.* (K000778926, image!; isolectotypes BO, *n.v.*, CAL0000021575!, CAL0000021911!, E00386455, image!).

Notes: Kostermans (6) cited the type of Cryptocarya andersonii as "Typus: Assam, fl., Jenkins s.n. (BO, CAL, K)." Here again, this citation does not form an effective lectotypification, as clarified above. Hooker (8) clearly mentioned that he had described the species based on a leaf, a portion of a panicle and a drawing sent to him by George King. Now there are two sheets at CAL and one at K as cited above bearing a single leaf and a detached panicle. As a common practice at that time, many herbarium specimens of the Calcutta herbarium (CAL) used to be sent on loan to J.D. Hooker for study and therefore it is quite possible that he had examined at least one or both duplicate specimens of this herbarium (CAL) while describing the species. Both the duplicates at CAL bear the stamp: "Please return to Calcutta Herbarium" indicating that these were indeed sent on loan to Kew. Hence it is necessary to designate a lectotype of the name based on these three duplicates and we herewith designate the specimen at Kew as the lectotype because it bears pencil drawing of the flowers.

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Author's contributions

All authors have equally contributed in the planning of the research and preparation of manuscript.

Competing Interests

The authors have no competing interest.

Compliance with ethical standards

Conflict of interest: The authors declared that they have no conflict of interest.

Ethical issues: None.

References

- Mo Y-q, Li L, Li J-w, Rohwer JG, Li H-w, Li J. Alseodaphnopsis: A new genus of Lauraceae based on molecular and morphological evidence. PLoS ONE 2017; 12(10): e0186545. https:// doi.org/10.1371/journal.pone.0186545
- Gangopadhyay M, Chakrabarty T, Bhuiyna T, Singh P. Lauraceae. In: Mao AA, Dash SS, editors. Flowering plants of India, an annotated checklist (Dicotyledons), Vol. 2. Kolkata: Botanical Survey of India, Kolkata; 2020. p. 427-449.
- 3. Kostermans AJGJ. Materials for a revision of Lauraceae I. Reinwardtia 1968; 7(4): 291-356.
- 4. Meisner CF. Lauraceae. In: Candolle AP de, editor. Prodromus systematis naturalis regni vegetabilis. Vol. 15(1). Sumptibus Victoris Masson et Filii, Paris [Parisiis]; 1864; p. 1-260.
- Turland NJ, Wiersem JH, Barrie FR, Greuter W, Hawksworth DL, Herendeen PS et al., editors. International code of nomenclature for algae, fungi and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. Regnum Vegetabile 159. Glashütten: Koeltz Botanical Books; 2018. https://doi.org/10.12705/Code.2018
- Kostermans AJGJ. A synonpis of *Alseodaphne* Nees (Lauraceae). Candollea 1973; 28: 93-136. https://doi.org/10.5169/seals-880162
- 7. Parker RN. A new species of *Alseodaphne*. Indian Forester 1924; 50: 365-366.
- Hooker JD. Order CXXVIII. Laurineae. In: Hooker JD, editor. The Flora of British India, Vol. 5. London: L. Reeve & Co.; 1886. p. 116 -189.