THAI FOREST BULL., BOT. 48(2): 142–144. 2020.
DOI https://doi.org/10.20531/tfb.2020.48.2.07

Notes on the typification of five names in Lauraceae

ANAND KUMAR[1]

ABSTRACT

This article deals with inadvertent lectotypifications of five names in the Lauraceae, *Cryptocarya densiflora*, *Cryptocarya impressa*, *Cylicodaphne infectoria*, *Laurus cubeba* and *Litsea castanea*, that have been previously overlooked.

KEYWORDS: *Cryptocarya*, lectotype, *Litsea*, Shenzhen Code.

Accepted for publication: 4 August 2020. Published online: 22 August 2020

INTRODUCTION

The Lauraceae is a pantropical family with a few temperate members and comprises between 2,500 and 3,500 species (Rohwer, 1993). The five names, *Cryptocarya densiflora* Blume, *Cryptocarya impressa* Miq., *Cylicodaphne infectoria* Blume (basionym of *Cryptocarya infectoria* (Blume) Miq. and synonym of *Cryptocarya griffithiana* Wight), *Litsea castanea* Hook.f. and *Laurus cubeba* Lour. (basionym of *Litsea cubeba* (Lour.) Pers.), were inadvertently lectotypified by a number of authors (Kostermans, 1970; Allen, 1938; Hyland, 1989) under Art. 7.11 of the *Shenzhen Code* (Turland *et al.*, 2018; hereafter '*Code*'). Later authors (Ngernsaengsaruay *et al.*, 2005; de Kok, 2015; Singh, 2017), presumably unaware of these inadvertent typifications, either published new and superfluous lectotypifications, or, in three cases, effectively published second-step lectotypifications.

Type specimen images of all names have been studied from online resources. The curator of BO was also consulted for a type image of *Cryptocarya densiflora*. Details of the inadvertent lectotypifications are given below to ensure the correct future citation of the earliest designated lectotypes.

1. Cryptocarya densiflora Blume, Bijdr. Fl. Ned. Ind.: 556. 1826. Type: [Indonesia] Java, Mount Salak, *Blume s.n.* (lectotype **BO** [BO-1267423] photo seen, designated by Hyland, 1989: 180; isolectotypes **L** [L0036103, L0036104, L0036105, L0036106, L0036107, L0036111, L0036112] photos seen, **U** [U0002692] photo seen, **NY** [00355062, 00355063, 00355064] photos seen).

Notes.— Blume (1826) cited "in sylvis obscurioribus montis Salak" in the protologue. According to de Kok (2015: 323), the species was described based on two gatherings, *Blume s.n.* and *Reinwardt s.n.* I have been able to trace three specimens (L0036108, L0036109, L0036110) of *Reinwardt s.n.* at **L** which were collected from Gedokan, Java and not from montis Salak. These three specimens are not original material. There is one specimen at **BO** and it bears a label with the annotation '*Cryptocarya densiflora* Bl' on the bottom right side and an additional label also at the bottom with the name "Kiteja" and "S" [Salak], all in Blume's own handwriting. Hyland (1989: 180) cited "*Type: C. Blume*, Mount Salak, Java (BO)" and the citation of 'type' should be accepted as an inadvertent lectotypification under Art. 7.11 of the *Code*. Later, de Kok (2015: 320) overlooked the lectotypification by Hyland (1989) and designated the specimen L0036111 as lectotype. Therefore, the lectotypification by de Kok (2015) is superfluous.

2. Cryptocarya griffithiana Wight, Icon. Pl. Ind. Orient. 5: t. 1830. 1852.

[1] Central National Herbarium, Botanical Survey of India, P.O. Botanic Garden, Howrah – 711 103, West Bengal, India. Email: anand_kum234@rediffmail.com

— *Cylicodaphne infectoria* Blume, Mus. Bot. 2: 11. 1856.— *Cryptocarya infectoria* (Blume) Miq., Fl. Ned. Ind. 1: 924. 1858. Type: [Indonesia] Archipelago Indico, *Waitz s.n.* (lectotype **L** [first-step], designated by Kostermans, 1970: 312; lectotype [second-step] **L** [L0036159] photo seen, designated by de Kok, 2015: 323; isolectotypes **L** [L0036157, L0036158] photos seen).

Notes.— *Cylicodaphne infectoria* Blume is a heterotypic synonym of *Cryptocarya griffithiana* Wight. For *Cylicodaphne infectoria*, Blume (1856) cited "In Archipelago Indico" in the protologue. Kostermans (1970: 312) cited "Typus: Arch. Ind., Herb. Waitz, fl., fr. (L, 3 sheets)" which is an inadvertent lectotypification under Art. 7.11 of the *Code*. As there are three sheets at **L**, it can be taken as a first-step lectotypification under Art. 9.17 of the *Code*. Later, de Kok (2015: 323) overlooked the lectotypification by Kostermans (1970) and designated *Waitz s.n.* (L0036159) as lectotype which is an effective second-step lectotypification under Art. 9.10.

3. Cryptocarya impressa Miq., Fl. Ned. Ind. 1: 923. 1858. Type: [Indonesia] Sumatra, 'Paja Kombo', 'Mohdang apie apie', *Teysmann 1005* (lectotype **U** [U0002696] photo seen, designated by Kostermans, 1970: 311; isolectotype **BO**, n.v.).

Notes.— Miquel (1858) cited "Sumatra, bij Paja Kombo (TEYSM.). – Madang api api *mal.*" in the protologue. Kostermans (1970: 311) cited "Typus: sine coll. *1005*, Payakombo, "Mohdang apie apie", fr. (U)" which is an effective lectotypification under Art. 7.11 of the *Code*. Later, de Kok (2015: 333) overlooked the lectotypification by Kostermans (1970) and designated the specimen U0002696 as lectotype. The lectotypification by de Kok (2015) is superfluous.

4. Litsea castanea Hook.f., Fl. Brit. Ind. 5: 171. 1886. Type: [Malaysia], Malacca, *Maingay 1269* (lectotype **K** [first-step], designated by Kostermans, 1970: 89; lectotype [second-step] **K** [K000797100] photo seen, designated by Ngernsaengsaruay *et al.*, 2005: 81; isolectotype **K** [K000797101] photo seen).

Notes.— Hooker (1886) cited "MALACCA, Maingay (Kew Distrib. 1269)" in the protologue. Kostermans (1970: 89) cited "Typus: *Maingay*, *Kew Distr. 1269* (K)" which is an inadvertent lectotypification under Art. 7.11 of the *Code*. There are two specimens at **K** but these were not distinguished into a lectotype and isolectotype so Kostermans (1970) can be taken as a first-step lectotypification. Later, Ngernsaengsaruay *et al.* (2005) overlooked the lectotypification by Kostermans (1970) and designated *Maingay 1269* (**K**) as lectotype. The specimen K000797100 bears the annotation "Lectotype of *Litsea castanea* Hook.f. selected by David Middleton in 2005". Therefore, the lectotypification by Ngernsaengsaruay *et al.* (2005) is accepted here as a second-step lectotypification under Art. 9.10 as David Middleton is one of the coauthors of the paper.

5. Litsea cubeba (Lour.) Pers., Syn. Pl. 2: 4. 1806. — *Laurus cubeba* Lour., Fl. Cochinch.: 252. 1790. Type: Vietnam, Cochinchina, *Loureiro s.n.* (lectotype **BM** [first-step], designated by Allen, 1938: 369; lectotype [second-step] **BM** [BM000793687] photo seen, designated by Singh, 2017: 1; isolectotype **BM** [BM000848503] photo seen).

Notes.— Loureiro (1790) cited "Habitat culta, nec rara in agris, & hortis Cochinchinae: puto, quod etiam in Chinâ" in the protologue. Allen (1938: 369) cited "FRENCH INDO-CHINA. TONKIN: *J. Loureiro* (type not seen, Brit. Mus.)" which is an inadvertent lectotypification under Art. 7.11 of the *Code*. There are two specimens at BM but these are not distinguished into a lectotype and isolectotype so Allen (1938) can be taken as a first-step lectotypification. Later, Singh (2017) overlooked the lectotypification by Allen (1938) and designated *Loureiro s.n.* (BM000793687) as lectotype. Therefore, the lectotypification by Singh (2017) is accepted here as second-step lectotypification under Art. 9.10.

ACKNOWLEDGEMENTS

The author is grateful to Dr A.A. Mao, Director, Botanical Survey of India, Kolkata and Dr V.P. Prasad, Head of Office, Central National Herbarium, Howrah, India for facilities. I am also thankful to all the curators of BM, K, L and NY for putting the images online; Dr Subir Bandyopadhyay, Former Scientist (CAL) for his valuable suggestion. Dr Atik Retnowati (BO) and Dr Deby Arifiani (BO) are also

thanked for sending the type image of *Cryptocarya densiflora.* Thanks to Dr David Middleton (SING) and two anonymous reviewers for improving the quality of the manuscript.

REFERENCES

Allen, C.K. (1938). Studies in the Lauraceae I: Chinese and Indo-Chinese species of *Litsea*, *Neolitsea* and *Actinodaphne*. Annals of the Missouri Botanical Garden 25: 361–434.

Blume, C.L. (1826). Bijdragen tot de Flora van Nederlandsch Indie 11. Ter Lands Drukkerij, Batavia, pp. 529–577.

_____. (1856). Museum Botanicum Lugduno-Batavum, vol. 2. E.J. Brill, Leiden, 256 pp.

de Kok, R.P.J. (2015). A revision of *Cryptocarya* R.Br. (Lauraceae) of Thailand and Indo-China. Garden's Bulletin Singapore 67: 309–350.

Hooker, J.D. (1886). *Litsea* Lamk. In: Hooker, J.D. (ed.), The Flora of British India, vol. 5, pp. 155–180. L. Reeves & Co., London.

Hyland, B.P.M. (1989). A revision of Lauraceae in Australia (excluding Cassytha). Australian Systematic Botany 2: 135–367.

Kostermans, A.J.G.H. (1970). Materials for a revision of Lauraceae III. Reinwardtia 8: 21–196.

Loureiro, J. de (1790). Flora Cochinchinensis, vol. 1. Ulyssipone: Typis, et expensis academicis, 353 pp.

Miquel, F.A.W. (1858). Flora van Nederlandsch Indië, vol. 1, part 1, fasc. 6. C.G. van der Post, Amsterdam; C. van der Post Jr., Utrecht; bij Fried. Fleischer, Leipzig, pp. 865–1040.

Ngernsaengsaruay, C., Middleton, D.J. & Chayamarit, K. (2005). Five new records of *Litsea* (Lauraceae) for Thailand. Thai Forest Bulletin (Botany) 33: 81–93.

Rohwer, J.G. (1993). Lauraceae. In: Kubitzki, K., Rohwer, J.G. & Bittrich, V. (eds) The families and genera of vascular plants, vol. 2, pp. 366–391. Springer, Berlin.

Singh, R.K. (2017). Nomenclatural novelties and lectotypifications in *Litsea* (Lauraceae). Kew Bulletin 72: 20.

Turland, N.J., Wiersema, J.H., Barrie, F.R., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T.W., McNeill, J., Monro, A.M., Prado, J., Price, M.J. & Smith, G.F. (eds) (2018). 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, 254 pp.