Notes on Polyalthia (Annonaceae)

PASAKORN BUNCHALEE* & PRANOM CHANTARANOTHAI**

ABSTRACT. Polyalthia corticosa (Pierre) Finet & Gagnep., newly recorded from Thailand, is described. Two lectotypes are selected here.

During the preparation of a revision of the genus *Polyalthia* for the Flora of Thailand we came across specimens from the North of Thailand which were not assignable to any species known to occur in the country. After careful examination, we found that these specimens belonged to *P. corticosa* (Pierre) Finet & Gagnep. which, therefore, is newly recorded for Thailand. Two species were found to be in need of lectotypification and that is undertaken herein.

Polyalthia corticosa (Pierre) Finet & Gagnep. in Bull. Soc. Bot. Fr. 53 96. 1907 & in H. Lecomte, Fl. Indo-Chine. 1: 75. 1907; Ast, Suppl. Fl. Indo-Chine. 1: 79. 1938; Ban, Fl. Vietn. 1: 104. 2000. Type: Vietnam, Bien Hoa, Song Be, *Pierre* 1752 (lectotype **P**; isolectotypes **A**, **K**!). Fig. 1.

Tree 10–20 m high. Young twigs rusty-brown pubescent, glabrescent, with numerous lenticels. Leaves chartaceous, narrowly elliptic to elliptic-lanceolate, 8-22 by 2-5.5 cm, apex acute, base cuneate or rounded, margin entire; glabrous on both surfaces except on the midrib and secondary veins below, midrib and secondary veins slightly prominent above, prominent below, secondary veins in 12-14 pairs, interarching 15-30 mm; tertiary veins reticulate; petioles 1–2 mm long (i.e. leaves subsessile). Flowers 1–2(–3) from the axils of fallen leaves; peduncles 1–1.5 cm long, pubescent, with small bract at base, ovate, 2–2.5 by 1-1.5 mm. Sepals chartaceous, ovate, 4-5 by 3-4 mm, apex acute, slightly puberulous outside, glabrous inside. Petals thinly coriaceous, yellowish, outer petal slightly shorter and narrower than the inner one, weakly pubescent outside, glabrous inside; outer petal ovate, 6-8 by 3-4 mm, apex acute, inner petal elliptic, 6-8 by 3-4 mm, apex acute. Torus cushion-shaped, 0.8–1 mm. thick, glabrous. Stamens cuneate, 0.8–1.2 mm; anthers 1–1.3 mm long; connective truncate, hiding the anther cell. Carpels numerous, elliptic, 0.8–1.1 mm long, pubescent; style subsessile; stigma ± rounded, above connective, pubescent; ovules 2 per carpel, placentation marginal. Fruit a cluster of separate, stipitate, dehiscent monocarps, the stipe 1–1.4 cm long, the monocarp oblong, 1–1.6 by 1.2–1.4 cm, glabrous; fruit stalks 1.5–2.5 cm long.

^{*} Department of Biology, Faculty of Science, Mahasarakham University, Kantarawichai District, Mahasarakham 44150, Thailand.

^{**} Applied Taxonomic Research Center, Department of Biology, Faculty of Science, Khon Kaen, Khon Kaen 40002, Thailand.

Thailand.— NORTHERN: Phrae (Huai Hom, Ban Nam Krai, Huai Yuak), Uttaradit. Distribution.— Laos, Vietnam.

Ecology.—Along streams in dry evergreen forest, 500–800 m. Flowering Feb.–May, fruiting March–July.

Vernacular. Sa ban nga pa (สบันงาป่า).

Specimens examined.— A. Chanthamuk 43 (BKF); C. Phengklai 50 (BKF); T. Smitinand & A. Cheke 10805 (BKF).

Notes.— *Polyalthia corticosa* differs from *P. evecta* (Pierre) Phamh. (characters in brackets) in being a medium-sized (shrubby tree) tree, with rough (smooth) twigs, with the outer and inner petals more or less the same size (inner petals larger) and with two (one) ovules per carpel The Thai specimens extend the range of *P. corticosa* from Vietnam and Laos westward to northern Thailand.



Figure 1. Polyalthia corticosa (Pierre) Finet & Gagnep. Photo from T. Smitinand & A. Cheke 10805 (BKF). A. habit; B. flower.

Polyalthia angustissima Ridl., J. Straits Branch Roy. Asiat. Soc.. 54: 11. 1910. Type: Singapore, Bukit Timah, *Ridley* 8050 (lectotype **SING**!; isolectotype **K**!, selected here).

The original description mentioned unnumbered collections of Ridley and Lake & Kesall. The former was collected by Ridley at the Garden Jungle, Bukit Timah, Singapore. The latter was collected by Lake & Kesall from Kwala Sembrong, Johore. We have examined these specimens and found that they are *Ridley* 8050 (**SING!**, **K!**) and *Lake* & *Kesall* 4047 (**SING!**). The *Ridley* material is well preserved with duplicates in two institutes. Therefore, we have chosen the specimen at SING as the lectotype and the one at K as the isolectotype.

Polyalthia dumosa King in Mat. Fl. Malay Penins. 1: 52. 1892. Type: Malaysia, Perak, Maxwell's Hill, *Wray* 2628 (lectotype **SING**!; isolectotype **CAL**!).

In the protologue, King mentioned unnumbered and unknown locality collections of Wray and Scortechini. When Sinclair (1955) revised the Annonaceae for the Malay Peninsula, he cited three syntypes, *Wray* 2628 (CAL, SING) and 2978 (SING, K) and *Scortechini* 601 (CAL, SING). *Wray* 2628 was collected from "Maxwell's hill, Perak" in September 1888. The specimen deposited at SING is the best preserved specimen. Hence, it is chosen as the lectotype and specimen at CAL as the isolectotype.

ACKNOWLEDGEMENTS

We are grateful to Drs D.A. Simpson and R. Johns for help at K. We would like also to thank the curators and staff of BK, BKF, BM, K and SING for access to their collections and information necessary for this study. The first author was assisted by grants from the Faculty of Science, Maha Sarakharm University and the TRF/BIOTEC Special Program for Biodiversity Research and Training Program (BRT-541090), which enabled him to visit the Royal Botanic Gardens, Kew, the British Museum (Natural History) and The Linnean Society of London during 2002.

REFERENCES

- Ban, N.T. (2000). Flora of Vietnam 1: 74–116. Science & Technics Publishing House, Hà Nôi.
- King, G. (1892). *Polyalthia*. In: Materials towards a Flora of the Malay Peninsula 1(4): 49–67.
- Lecomte, M.T. (1907–1908). Flore Gânerale de l' Indo-Chine 1: 65–76. Masson et Cie, Editeurs, Paris.
- Ridley, H.N. (1922). *Polyalthia*. In: Flora of the Malay Peninsula 1: 49–61. L. Reeve & Co. Ashford, Great Britain.
- Sinclair, J. (1955). A Revision of the Malayan Annonaceae. Gardens Bulletin Singapore 14: 149–516.