

Alexander B. DOWELD: *Styrax mikii* and *Styrax plionipponicus* (*Styracaceae*), New Names of Pliocene Plants from Japanese Archipelago

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Summary: Junior homonyms of extant species, fossil *Styrax laevigatus* Miki 1941 (*Styracaceae*; non Aiton 1789) and fossil *Styrax rugosus* Miki 1941 (non Kurz 1871), are replaced with new names respectively, *S. mikii* Doweld and *S. plionipponicus* Doweld. Lectotype specimens (based on fruits) for *S. mikii* Doweld and neotype (based on seeds) for *S. plionipponicus* Doweld are designated for the first time for fossil species.

Two fossil species of *Styrax* were described by Miki (1941) on the basis of associated leaf, fruit and seed remains from the Lower Pliocene sediments of Gifu Prefecture (Japan), *Styrax laevigatus* Miki and *S. rugosus* Miki. Both names are junior homonyms of extant species of *Styrax*, *S. laevigatus* Aiton (1789) and *S. rugosus* Kurz (1871) (Plant List 2013–). The homonymy of fossil species emerged during the creation of *The International Fossil Plant Names Index* (IFPNI), which is planned to list all fossil plant species described on the Earth from 1820 (IFPNI 2014–). Since the above mentioned fossil species of *Styrax* are in current use and have no synonyms (Ozaki 1991, Tsukagoshi et al. 1995), new replacement names are proposed in accordance with the *International Code of Nomenclature for algae, fungi, and plants* (Melbourne Code: McNeill et al. 2012).

New nomenclatural acts (*nomina nova*) were registered through a pilot registration version in the *International Fossil Plant Names Index* (IFPNI 2014–), with unique persistent registration bar codes (LSIDs) listed under each newly proposed fossil plant taxon.

Styrax mikii Doweld, **nom. nov.**

≡ *Styrax laevigatus* Miki in Jap. J. Bot. 11: 295 (1941), non Aiton [in Hort. Kew. 2: 75, 1789], ut “*laevigata*”, nom. illeg.

Lectotype (here designated): [fossil fruit] **JAPAN.** Honshu. Gifu Prefecture, Osusawa; Pliocene (OSA F16600); figured in Miki in Jap. J. Bot. 11: fig. 20, Da (1941).

Etymology: Species is named in honor of Shigeru Miki (1901–1974).

IFPNI: 34FC2994-AA50-4F70-8F44-E62789D0E172.

Note: Among Miki’s original figured syntypes (1941) of fruits, seeds and associated leaves just a single specimen of fossil fruit is found in his collections of fossil plants housed now in Osaka Museum of Natural History, a lectotype is designated here.

Styrax plionipponicus Doweld, **nom. nov.**

≡ *Styrax rugosus* Miki in Jap. J. Bot. 11: 295 (1941), non Kurz [in J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 40(1): 61, 1871], ut “*rugosa*”, nom. illeg.

Neotype (here designated): [fossil seed] **JAPAN.** Honshu. Gifu Prefecture, Nakatsugawa, Itabashi; Pliocene (OSA-QB 684); figured in Tsukagoshi & al. in Bull. Osaka Mus. Nat. Hist. 49: pl. 3, figs. 5–8 (1995).

IFPNI: 40BE7660-7190-41B7-84A8-E3C7F4B63ED8.

Note: Since original syntypes of Miki (1941) were not found in Miki’s collections of fossil plants housed in Osaka Museum of Natural History, a neotype is designated here on the basis

of fossil seeds collected in the same Pliocene sediments of Gifu Prefecture.

The author is grateful to Dr. Minoru Tsukagoshi (Osaka Museum of Natural History) for providing information on Miki's originals. Special thanks go to two anonymous reviewers for helpful suggestions.

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A. B. Doweld : 日本産鮮新世化石植物の新学名, *Styrax mikii* と *Styrax plionipponicus* (エゴノキ科)

日本の鮮新世から得られた, エゴノキ属 *Styrax* (エゴノキ科) の化石植物 2 種の学名の新学名を提唱した. *Styrax laevigatus* Miki (1941) は *Styrax laevigatus* Aiton (1789) の後続同名であるので, *Styrax mikii* Doweld とし, レクトタイプを選定した. 一方, *Styrax rugosus* Miki

(1941) は *Styrax rugosus* Kurz (1871) の後続同名のため, 新学名を *Styrax plionipponicus* Doweld とし, ネオタイプを選定した.

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