

Alexander B. DOWELD: *Abies praefirma* and *Abiespollenites ananovae* (*Abietaceae*),
New Replacement Names

The International Fossil Plant Names Index, National Institute of Carpology (Gaertnerian Institution),
21 Konenkowa Street, RUS-127560, Moscow, RUSSIAN FEDERATION
E-mail: sekretariat@doweld.pro

Summary: Junior homonyms of fossil species, *Abies profirma* Tanai 1961 (non Zaklinskaja 1957) and *Abies minor* Ananova 1974 (non Velenovský 1885), are replaced with new names respectively, *A. praefirma* Doweld and *Abiespollenites ananovae* Doweld. The validity of the fossil species *A. minor* Velenovský 1885 is no more affected by the devalidated species name *A. minor* Gilibert 1792, which is in the works now suppressed by *The International Code of Nomenclature for Algae, Fungi, and Plants* (*Opera utique oppressa*).

The homonymy of some fossil species of *Abies* from the Japanese Archipelago, Central Asia and Siberia was found during the editorial works for *The International Fossil Plant Names Index* (IFPNI), which plans to list all fossil plant species from 1820 (IFPNI 2014–). Since homonymic fossil species names of *Abies* (see below) are in current use and have no synonyms, 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.

Abies praefirma Doweld, **nom. nov.** ≡ *Abies profirma* Tanai in J. Fac. Sci. Hokkaido Univ., Ser. 4, Geol. 11: 295 (1961), **nom. illeg.** non *A. profirma* Zaklinskaja in Trudy Geol. Inst. Akad. Nauk SSSR 6: 75 (1957)

≡ *Abiespollenites profirmus* (Zaklinskaja) Krutzsch, Atlas Mitt. Jungtert. Disper. Spor. Pollen Mitteleur. 6: 20 (1971).

Holotype: [fossil seed scale] JAPAN. Okayama Pref., Tomata-gun, Kamisaibarasan, Onbara; Pliocene (GSJ-4059, Geological Survey of Japan); figured in Tanai in J. Fac. Sci. Hokkaido Univ., Ser. 4, Geol. 11: pl. 1, fig. 10 (1961).

Etymology: From extant *Abies firma* Siebold & Zucc.

IFPNI: 2C436F0C-257F-48F2-9525-4A6B85401E1B.

The fossil species *Abies profirma* was described by Tanai (1961) on the basis of seed scale remains from the Pliocene sediments of Okayama Prefecture, Japan (Japanese Archipelago). However, it is a junior homonym of another fossil species of *Abies*, *A. profirma* Zaklinskaja (1957), based on fossil pollen from the Eocene sediments of Central Asia (Northern Cis-Aralia, Kazakhstan). Although *A. profirma* Zaklinskaja was later recombined into a specialized fossil pollen genus *Abiespollenites* Thiergart ex Raatz (1938), a modern repository of all fossil species based on pollen in accord with current concepts of fossil plant classification, *Abies profirma* Tanai as a later homonym should be replaced by a new species name (*Abies praefirma* Doweld). The new name originates from the similarity of the separate seed scales, on which the Japanese fossil species was based, to the seed scales of extant cones of *Abies firma* Siebold & Zucc.

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- Tanai T. 1961. Neogene floral change in Japan. *J. Fac. Sci. Hokkaido Univ., Ser. 4, Geol.* **11**: 119–398.
- Velenovský J. 1885. Die Gymnospermen der böhmischen Kreideformation. Ed. Grégr (Commission bei F. Řivnác), Praha [Prag].
- Zaklinskaja E. D. 1957. Stratigraphic significance of the pollen of gymnosperms of Cainozoic sediments of Pavlodarian Cis-Irtyshia and Northern Cis-Aralia. *Trudy Geol. Inst. Akad. Nauk SSSR* **6**: 1–220 (in Russian).

A. B. Doweld: モミ科モミ属の新置換名, *Abies praefirma* と *Abiespollenites ananovae*

日本列島, 中央アジア, そしてシベリアのモミ属の化石種の学名については *The International Fossil Plant Names Index* (IFPNI) にまとめられているが, *The International Code of Nomenclature for Algae, Fungi, and Plants* (メルボルン規約: McNeill et al. 2012) との整合性を図った。この流れの中で, *Abies protofirma*

Tanai などについては *Abies praefirma* Doweld, *Abies minor* Ananova などについては *Abiespollenites ananovae* Doweld の新置換名を提唱した。

(ロシア・National Institute of Carpology
[Gaertnerian Institution],
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