



Note

Re-epitypification of *Neofusicoccum laricinum*

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ABSTRACT

The lectotype and epitype of *Neofusicoccum laricinum* proposed in previous studies failed to meet the requirements of the International Code of Nomenclature for Algae, Fungi, and Plants. Here, we propose a valid lectotype and epitype for this species that meet the requirements of the Code.

Keywords: *Botryosphaeriaceae*, *Botryosphaeriales*, epitype, taxonomy

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Neofusicoccum laricinum (Sawada) Hattori & C. Nakash. inhabits Far East Asia and is the cause of shoot blight of larch (EPPO datasheets on pests recommended for regulation, <https://gd.eppo.int/>; Sep 2023). This species was established in 1950 by Sawada as *Physalospora laricina* Sawada. Although Sawada (1950) described only the sexual state, subsequent research on shoot blight revealed that the asexual state of this species, identified as *Macrophoma* sp., causes the disease, and elucidated its life history (Uozumi, 1961; Yokota, 1962, 1963). Yamamoto (1961) proposed that the causal fungus *P. laricina* should be treated as the genus *Guignardia* based on the morphological characteristics of its asexual state, and a new combination should be proposed as *Guignardia laricina* (Sawada) W. Yamam. & Kaz. Itô. Subsequently, Shang (1987) transferred *G. laricina* to the genus *Botryosphaeria* based on the morphological characteristics of its sexual state noted by Luttrell (1973). Hattori et al. (2021) reexamined the specimens of *G. laricina*, including the syntype specimens of *P. laricina* (IUM-FS515, IUM-FS516, IUM-FS517, IUM-FS518, IUM-FS519, and IUM-FS520). In their study, a multi-locus molecular phylogenetic analysis using ITS, rpb2, tef1- α , and tub2 sequences was conducted with newly isolated strains of *G. laricina* to resolve taxonomic problems associated with this species. According to the results of phylogenetic analysis, *B. laricina* was transferred to the genus *Neofusicoccum*, and epitypification for the species was proposed based on their newly materials. However, the treatment failed to meet the requirements of the International Code of Nomenclature for Algae, Fungi, and Plants (Shenzhen Code; the identifier was not given (Art. F.5.4), and designation of an epitype is not effected unless the lectotype that the epitype supports is explicitly cited (Art. 9.9)). Recently, Zhao et al. (2021) proposed a lectotype based on the illustrations in Sawada

(1950) despite the existence of a syntype. Due to the presence of the syntype, this proposal was also not compliant with the Code (Art. 9.12). Therefore, we propose a lectotype and an epitype compliant with the requirements of the Code.

Taxonomy

Neofusicoccum laricinum (Sawada) Y. Hattori & C. Nakash., Mycoscience 62: 252, 2021. MycoBank no.: MB 837720.

≡ *Physalospora laricina* Sawada, Bull. Gov. Forest Exp. Sta. 46: 126, 1950.

≡ *Guignardia laricina* (Sawada) W. Yamam. & Kaz. Itô, Sci. Rep. Hyogo Univ. Agric. 5: 9, 1961.

≡ *Botryosphaeria laricina* (Sawada) Y.Z. Shang, Acta Microbiol. Sin. 6: 249, 1987.

Lectotype: JAPAN, Aomori, Sanbongi, Fukamochi, on *Larix kaempferi*, 27 Sep 1949, collected by K. Sawada, Syntype of *Physalospora laricina*, IUM-FS515, designated here as lectotype (MBT 10015084).

Epitype: JAPAN, Ibaraki, Mito, on *Larix decidua*, 14 Jun 1973, collected by H. Kondo, TFM: FPH-4038, designated here (MBT 10015083), ex-epitype culture FFPRI 411215 = MUCC 2662.

Disclosure

The authors declare no conflict of interest. All the experiments undertaken as part of this study comply with the current laws of the country in which they were performed.

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