Outlineoffungi.org - Note 1090 *Nothopucciniastraceae*

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Nothopucciniastraceae P. Zhao & L. Cai in Zhao, et al.

Nothopucciniastraceae was introduced in Zhao et al. (2022) to accommodate the new genus *Nothopucciniastrum*. This monotypic family comprises ten species, all previously included in the genus *Pucciniastrum*. The ten species of rust fungi were all described from Japan on a variety of host plants. *Nothopucciniastrum* is autoecious and known to produce spermogonia, aecia, uredinia and telia on a broad range of host plants within families *Actinidiaceae*, *Clethraceae*, *Cornaceae*, *Fagaceae*, *Malvaceae*, *Sapindaceae*, *Styracaceae*, *Theaceae*, *Urticaceae* and *Viburnaceae*. The genus is characterized by group 1 (type 2 and 3) spermogonia, peridermium-type or milesia-type aecia, milesia-type uredinia with well-developed ostiolar cells, and subepidermal telia that are one spore deep and consist of laterally adherent, aseptate or multiseptate teliospores. As previously understood, the traditional delimitation of *Pucciniastraceae* (Cummins & Hiratsuka 1983, 2003) is highly polyphyletic (Aime et al. 2018, Aime & McTaggart 2020, Zhao et al. 2021), and several genera have been moved to other families (Aime & McTaggart 2021, Zhao et al. 2022). Based on analysis of ITS and LSU sequence data, Zhao et al. (2022) showed that *Nothopucciniastrum* lies in a well-supported clade, containing ten species, which was defined as the new family. Unfortunately, because Zhao et al. (2022) failed to give registration numbers issued by a recognized repository for the genus *Nothopucciniastrum* and the new combinations made into this genus, all the new names are invalid (Turland et al. 2018).

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