Nomenclature and taxonomy of *Phyllogloea* P.C.Silva (*Chaetopeltidaceae*, *Chlorophyceae*)

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In January 2012, a green alga identified as *Hormotilopsis gelatinosa* Trainor & Bold, 1953 was found in serpentine soils collected near Kaapschehoop (Mpumalanga Province, South Africa). This is the first record of *H. gelatinosa* in Africa. It was reported previously from the USA, Ukraine, Russian Federation, Spain, UK, Bulgaria, Iran, Japan and Brazil (Stoyneva 2000; Bicudo 2012; Kirjakov & Velichkova 2017; Guiry & Guiry 2023).

Aleksandr Arkadievich Korshikov (1889–1945) described *Gloeophyllum fimbriatum* Korshikov (Korshikov1953: 77, fig. 19) from the leaves of *Typha latifolia* Linnaeus in the Kharkiv District, Ukraine. In the same year, *Hormotilopsis gelatinosa* Trainor & Bold was described by Trainor & Bold (1953: 758, figs 1–19) from soil collected from a cornfield in Stockbridge, Massachusetts, USA. These species have identical morphologies and life cycles, despite the different habitats, and we have concluded that they represent the same species. The Trainor & Bold article was published in December 1953, whilst the Korshikov monograph was signed off for printing on 15 December 1952 ("Підписано до друку15/XII 1952 г." on the last un-numbered page), and released to the public at the beginning of 1953. Thus *Gloeophyllum fimbriatum* Korshikov has nomenclatural priority and is the name that should be adopted for both species.

Gloeophyllum fimbriatum was referred to the genus *Phyllogloea* P.C.Silva as *Phyllogloea fimbriata* (Korshikov) P.C. Silva by Silva (1959) because of the prior existence of *Gloeophyllum* P.A.Karsten, 1882, *nom. et orth. cons.* (*Fungi*, *Gloeophyllaceae*). *Phyllogloea* B.Lowry (*Fungi*, *Platygloeaceae*; Lowry 1961: 840) is an illegitimate later homonym. To date, only one species of *Phyllogloea* P.C.Silva has been described.

In 1958, Arce & Bold (1958: 491, figs 1–8, 91) described from soil from a corn field at Venta de Casanova, Oriente, Cuba soils *Hormotilopsis tetravacuolaris* Arce & Bold. While a type was not specifically indicated, the name is valid as it was based on a single gathering (ICN Arts 40.1, 40.2, Turland & al. 2018). This species, to judge from the information in Arce & Bold (1958), is referable to the genus *Phyllogloea* and we here propose a new combination for it.

Phyllogloea fimbriata (Korshikov) P.C.Silva, 1959
Basionym: *Gloeophyllum fimbriatum* Korshikov 1953, *Vyznachnyk Prisnovodnykh Vodorostei URSR. V. Protococcineae:* 77, fig. 19.
Lectotype (here designated, icon!): Korshikov 1953: fig. 19.
Registration: http://phycobank.org/104176
Synonym: *Hormotilopsis gelatinosa* Trainor & Bold 1953, *American Journal of Botany* 40: 758, fig. 1-19, 59.
Note: Korshikov's types have not been rediscovered and were probably destroyed in the course of WWII.

Phyllogloea tetravacuolaris (Arce & H.C.Bold) Levanets & Guiry, *comb. nov*.

Basionym: *Hormotilopsis tetravacuolaris* Arce & H.C.Bold *American Journal of Botany* 45: 492, figs 1–8, 91, 1953.
Registration: http://phycobank.org/104173
Description: Arce & Bold (1958: 492).
Holotype: Arce & Bold (1958: 503) specified that "… herbarium specimens have been sent to the Chicago Natural History Museum" [now the Field Museum]. Algal material in the Field Museum was transferred to the New York Botanical Garden (**NY**) and the type of *Hormotilopsis tetravacuolaris* Arce & Bold is preserved as **NY** 03685087. The material is a dried specimen from an agar plate.
Type locality: Venta de Casanova, Oriente Province, Cuba, in the soil of corn field (*Zea mays* Linnaeus), leg. Mr Julian Acuña, October, 1953.

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