

## Outlineoffungi.org - Note 659 *Gallowayiopsis*

Web-links: [Index Fungorum](#), [Facesoffungi](#), [MycoBank](#)

*Gallowayiopsis* S.Y. Kondr.

The genus was established for four species formerly included in *Trapelia* M. Choisy (three species) and *Placopsis* (Nyl.) Linds. (one species) ([Kondratyuk et al. 2022](#)). The species are: *Gallowayiopsis collaris* (Orange) S.Y. Kondr. (syn. *Trapelia collaris* Orange), *G. glebulosa* (Sm.) S.Y. Kondr. (syn. *T. glebulosa* (Sm.) J.R. Laundon), the type species *G. obtegens* (Th. Fr.) S.Y. Kondr. (syn. *T. obtegens* (Th. Fr.) Hertel) and *G. roseonigra* (Brodo) S.Y. Kondr. (syn. *Placopsis roseonigra* Brodo). The taxonomic placement is in *Trapeliaceae* (*Trapeliales*, *Lecanoromycetes*). All taxa included in the genus are lichenized fungi growing on rocks, forming areolate thalli with apothecia and in case of one species sometimes also with vegetative lichenized diaspores (soredia), simple ascospores and *Trapelia*-type asci (Brodo 1995, [Orange 2018](#)). [Kondratyuk et al. \(2022\)](#) in the diagnosis stated also, that they contain varying amount of gyrophoric and 5-*O*-methylhiassic acids, however this character is hardly diagnostic as all species placed in *Trapelia* s.str. also contain the same substances. The species form monophyletic group based on separate nuITS and nuLSU phylogenies (trees not shown in [Kondratyuk et al. 2022](#), only discussion provided), but includes also *T. involuta* (Taylor) Hertel. However, the latter taxon is placed in *Trapelia* in combined mtSSU, nuLSU and nuITS phylogeny and *Gallowayiopsis*, as circumscribed by [Kondratyuk et al. \(2022\)](#), in the combined three markers analysis forms two separate clades (one with *G. collaris*, *G. obtegens* and *G. glebulosa*, and the other one with *G. roseonigra* and '*Trapelia*' aff. *coarctata*) in a larger clade with several polytomies, which includes *Trapelia* s.str. and other segregates proposed by [Kondratyuk et al. \(2022\)](#). Since *Gallowayiopsis* is very similar in morphology and secondary chemistry to *Trapelia* s.str. and other related genera established by [Kondratyuk et al. \(2022\)](#), and also there are incongruencies in species placement and low supports in the phylogenetic trees as shown by these authors, the generic segregations seem to be premature and unjustified, and should await sequencing of additional markers, preferably protein coding genes. The relationships in this clade presented by [Orange \(2018\)](#) are also not fully supported.

### References

- Brodo IM. 1995 - Notes on the lichen genus *Placopsis* (*Ascomycotina*, *Trapeliaceae*) in North America. *Bibliotheca Lichenologica* 57, 59-70.
- Kondratyuk SY, Lökös L, Kondratiuk AS, Kärnefelt I, Thell A, Farkas E, Hur J-S. 2022 - Contributions to molecular phylogeny of lichens 3. New monophyletic branches of the *Trapeliaceae* and *Xylariaceae*. *Acta Botanica Hungarica* 64( 1- 2) , 97- 135. <https://doi.org/10.1556/034.64.2022.1-2.6>
- Orange A. 2018 - A new species-level taxonomy for *Trapelia* (*Trapeliaceae*, *Ostropomycetidae*) with special reference to Great Britain and the Falkland Islands. *Lichenologist* 50(1), 3-42. <https://doi.org/10.1017/S0024282917000639>

### Entry by

**Martin Kukwa**, Department of Plant Taxonomy and Nature Conservation, Faculty of Biology,

University of Gdańsk, Wita Stwosza 59, PL-80-308 Gdańsk, Poland

(Edited by **Vinodhini Thiyagaraja and Kevin D. Hyde**)

Published online 7 December 2022