Outlineoffungi.org - Note 947 *Trapejamesia*

Web-links: Index Fungorum, Facesoffungi, MycoBank, GenBank

Trapejamesia S. Y. Kondr.

Kondratyuk et al. (2022) introduced this genus to accommodate two species, *Trapelia corticola* and *Placynthiella hurii*. Both were recovered as sister species in a phylogeny based on a combination of ITS, LSU and SSU sequences, although for *P. hurii* only ITS sequences (not available in the Gen Bank) were used. *Trapejamesia* was typified by *T. corticola* S.Y. Kondr. The relationships between this clade and the rest of *Trapeliacae* remain unresolved. The two species differ considerably, whereas *T. corticola* is an epiphytic, usually sterile, sorediate crustose species occurring in temperate and boreal forests in both hemispheres (Coppins & James 1984), *P. hurii* was described as sterile composed of more or less bullated squamules occurring on soil in crevices or more rarely on rock in South Korea, rarely producing soredia (although the diagnosis states that it lacks such a reproductive strategy) (Kondratyuk et al. 2017). Both species have lecanoric and gyrophoric acids as secondary metabolites, and in addition, *T. corticola* also has 5-O-methylhiascic acid. The diagnosis of the genus seems to be based only on *T. corticola*, as the generic diagnostic features were the presence of bark or wood, small ascospores, and paraphyses with swollen apices, all characters not shared by *P. hurii*. Both ascospore size and paraphyses shape are characters that vary in *Trapelia* (Orange 2018), so apart from the substrate there are no solid features to separate this clade from *Trapelia* and further studies with additional molecular markers should be carried out before accepting this genus. The taxonomic placement of *Trapejamesia* is in *Trapeliaceae, Baeomycetales, Ostropomycetidae, Lecanoromycetes, Pezizomycotina,* and *Ascomycota.*

References

Coppins BJ, James PW. 1984 – New or Interesting British Lichens V. Lichenologist 16(3), 241–264. https://doi.org/10.1017/S0024282984000451

Kondratyuk SY, Lőkös L, Halda JP, Roux C, Upreti DK, Schumm F, Mishra GK, Nayaka S, Farkas E, Park JS, Lee BG, Liu D, Woo J-J, Hur J-S. 2017 – New and noteworthy lichen-forming and lichenicolous fungi 6. Acta Botanica Hungarica 59(1-2), 137–260. https://akjournals.com/view/journals/034/64/3-4/article-p337.xml

Kondratyuk SY, Lőkös L, Kondratiuk AS, Kärnefelt I, Thell A, Farkas E, Hur JS 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://akjournals.com/view/journals/034/64/1-2/article-p97.xml

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. http://dx.doi.org/10.1017/S0024282917000639

Entry by

Sergio Pérez-Ortega, Departamento de Biología Ambiental, Museo Nacional de Ciencias Naturales (CSIC), C/Serrano 115-dpdo, Madrid, Spain

(Edited by **Vinodhini Thiyagaraja & Kevin D. Hyde &Maryam Tavakol Noorabadi**)

Published online 2 April 2024