Outlineoffungi.org - Note 803 Atrozythia

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Atrozythia J.K. Mitch., Quijada, Garrido-Ben. & Pfister

This genus was erected by Mitch et al (2021) to accommodate the new species *Atrozythia klamathica* Mitch.& Quijada Quijada, Garrido-Ben.& Pfister and a new combination *Atrozythia lignicola* (Sigler) Mitch, Garrido-Ben. & Pfister, within *Zythiaceae Sareomycetes*. *Atrozythia klamathica* which is a sexual morph was described as a type species, isolated on the resin of *Chamaecyparis lawsoniana* in California, and *Atrozythia lignicola* (= *Arthrographis lignicola* Sigler), the asexual morph, was considered a second species in this genus, isolated on the wood chips and bark of *Coniferae* in Canada. (Mitchell et al. 2021). Based on phylogenetic analyses of ITS, LSU, and SSU sequences data, *Atrozythia* forms a distinct clade and was separated from other aligned genera in *Sareomycetes* such as *Sarea* Fr and *Zythia* Fr. The sexual state, *Atrozythia klamathica*, produced apothecial ascomata which are erumpent from the resin. They have discoid to cupulate, black to dark greyish brown subsessile to short stipitate apothecia, with or without light white to light blue grey coatings. Pruina are hyaline, ectal and medullary. Excipulum delimited by a narrow dark brown pigmented layer. Asci are cylindric-clavate, arising from a perforated crozier, multi-spored, covered with an amyloid gel layer. Ascus dehiscence is rostrate, the apex is hemispherical with an apical chamber. Ascospores are intensely amyloid, globose to subglobose, hyaline with one eccentric medium grey lipid guttule. Paraphyses are embedded cylindrical in a hyaline gel layer, with tiny yellow grey lipid guttules. The uninflated to medium clavate, terminal cell is covered by a yellowish brown amorphous exudate (Mitchell et al. 2021). The asexual state is hyphomycetous which produce arthroconidia, featured by lemon-yellow to olive-green colonies with diffusing brown pigment, narrow, hyaline, and branched conidiophores, cylindrical conidia that are yellow, truncate, with smooth walls (Sigler & Carmichael 1983) This genus is similar to *Zythia* and *Sarea* morphologically, but *Zythia* differs from *Atrozythia* in having orange ascomata, orange and abundant lipid guttules in the paraphyses, and there is no brown pigmented layer between the ectal and medullary excipulum. *Sarea* differs from *Atrozythia* in having white to light blue grey pruina, branched, or anastomosing paraphyses (Mitchell et al. 2021).

References

Mitchell JK, Garrido-Benavent I, Quijada L, Pfister DH. 2021 – *Sareomycetes*: more diverse than meets the eye. IMA Fungus 12, 6. https://imafungus.biomedcentral.com/counter/pdf/10.1186/s43008-021-00056-0.pdf

Sigler L, Carmichael JW. 1983 – Redisposition of some fungi referred to *Oidium microspermum* and a review of *Arthrographis*. Mycotaxon 18(2), 495–507. http://www.cybertruffle.org.uk/cyberliber/

Entry by

Ming Zeng, Canter of Excellence in Fungal Research, Mae Fah Luang University, Chiang Rai 57100, Thailand

(Edited by **Sajeewa Maharachchimbura & Kevin D. Hyde & Maryam Tavakol Noorabadi**)

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