

(2290) Proposal to conserve the name *Verrucaria subcerasi* (*Arthopyrenia subcerasi*) against *Arthopyrenia subalbicans* (lichenized *Ascomycota*: *Arthopyreniaceae*)

Sonia Ravera

Università degli Studi del Molise, Dipartimento di Bioscienze e Territorio, C. da Fonte Lappone, 86090 Pesche (IS), Italy; sonia.ravera@unimol.it

DOI <http://dx.doi.org/10.12705/633.21>

- (2290) *Verrucaria subcerasi* Vain. in Meddeland. Soc. Fauna Fl. Fenn. 10: 189. 1883, nom. cons. prop.
 Typus: Finland. LI, Inari, Veskonieni, 1878, *Vainio* (TUR-V No. 32454!)
- (=) *Arthopyrenia subalbicans* Bagl. & Carestia in Atti Soc. Crittog. Ital. 2: 341. 1881, nom. rej. prop.
Lectotypus (hic designatus): Italy. Piemonte, Riva-Valsesia, on *Abies alba* (sub *A. pectinata*), 1877, *Carestia* (RO Herb. Gen. No F. 20 24.III.3!; isolectotypi: F, FI!, MOD, RO!, SIENA!)

Examination of historical samples of *Arthopyrenia subalbicans* Bagl. & Carestia during a visit to the lichen herbarium at the Royal Botanic Garden Edinburgh, showed that it falls within the current concept of the epiphytic *Arthopyrenia subcerasi* (Vain.) Zahlbr. (Cat. Lich. Univ. 1: 298. 1921), a name lectotypified by Coppins (in Lichenologist 20: 322. 1988) as detailed above.

Arthopyrenia subalbicans was originally published by Baglietto & Carestia (l.c.) as: “*Arthopyrenia subalbicans* Bagl. e Carest. in

Erb. Critt. It. II. 722. – Thallus leproso-arachnoideus, cinereo-albicans, effusus, nonnunquam in orbem dispositus. Apothecia exigua hemispærico-conoidea, discreta, leviter e furfure thalli suffusa, ostiolo nudo vix umbilicato, perithecio dimidiato denique collabente. Asci late lanceolati, 8-spori: paraphyses rudimentales. Sporae fusiformes in utroque apice obtusiusculæ, 4-loculares, hyalinæ, 0,022–0,029 mm. longæ, 0,005–7 mm. crassæ”. They also added the drawing of the triseptate spores (“Tav. V. fig. 77”).

Abbot Antonio Carestia collected several samples in Valsesia (Piedmont, Italy) on *Abies alba* Mill. Samples dated 1877 have been distributed in the exsiccate E.C.I. II as no. 722, under the name “*Arthopyrenia subalbicans* Sp. n. ad interim Bagl. ed Carest.” with a note to the protologue postulating the similarity to *Didymella persoonii* (A. Massal.) H. Magn. and noting difference from *Pyrenula punctiformis* Hepp: “Le si avvicina l’Arthop. Persooni Mass. ma ha le spore ristrette nel centro e la nostra no. Anche la *Pyrenula punctiformis* Hepp è diversa pel numero dei dissepimenti” (It looks like *A. persoonii* Mass. but has spores restricted in the middle and ours does not. Even *Pyrenula punctiformis* Hepp is different considering the number of septa).

Since that time, *A. subalbicans* has been almost completely neglected: it was reported by Jatta (Syll. Lich. Ital.: 532. 1900; Fl. Ital. Crypt., pars III Lich.: 877. 1911) and Zahlbruckner (l.c.), then as a dubious synonym of *Mycoporum antecellens* (Nyl.) R.C. Harris (as *Arthopyrenia antecellans* (Nyl.) Arnold) in the first Italian checklist of lichens (Nimis in Monograf. Mus. Regionale Sci. Nat. Torino 12: 87. 1993) but *Mycoporum antecellens* differs particularly in the ascospores (27–40 × 8–13 µm), 1(–3)-septate and brownish at maturity. The spores of *A. subcerasi* (= *A. subalbicans*) are smaller (22–29 × 5–11 µm), soon 3-septate and very rarely brownish. *Arthopyrenia subalbicans* is therefore not included in the relevant recent literature.

Vainio collected samples of the lichen *A. subcerasi* one year later (1878) than Carestia, as the syntypes 32457, 32456, 32454, 32455 of the Vainio lichen herbarium (TUR-V) attest (Alava, Edvard August Vainio's Types in TUR-V and Other Herbaria: 495. 1988). The species was described by Vainio (l.c.) as *Verrucaria subcerasi* two years later than *A. subalbicans*, as follows: "*V. subcerasi* n. sp. *V. grisea* Auctt. pr. p. Thallus nullus visibilis vel macula pallida indicatus. Apothecia minuta, circ. 0,2–0,25 millim. lata, sat dense evoluta, convexa, fusconigrificata vel nigricantia, macula obscura minuta vel indistincta circumdata. Amphithecium in lamina tenui olivaceo-vel sordide violaceo-fuscescens vel fuscescens. Pyrenium basi pallidum. Paraphyses obsoletæ. Sporæ incolores, ovoideo-oblongæ, demum distincte 3-septatæ, longitudine 0,022–0,026 millim., crassitudine 0,008–0,011 millim. Gelatina hymenialis jodo lutescens vel fulvescens, contentum ascorum sæpe vinose rubens." The species was attributed to the genus *Arthopyrenia* A. Massal. (Ric. Auton. Lich. Crost.: 165. 1852) by Zahlbruckner (l.c.).

In the present work I have examined the material collected by A. Carestia, both distributed in the exsiccate E.C.I. (deposited in FI, MOD, RO, and SIENA) and in Carestia herbarium stored in the University of Turin, Italy. The specimens were studied microscopically, and identified by their anatomical, morphological and chemical

characters. I have especially compared the Italian samples with the collection of *Arthopyrenia* spp. included in Coppin's (l.c.) publication and in herb. E. The subsequent analysis of the lectotype of *A. subcerasi* from TUR, confirmed the identity between the two species. This lichen species can be recognized easily by its multiseptate spores, obpyriform asci, and ascoma wall not turning greenish in KOH.

Currently, this species is known as *A. subcerasi* in Finland (Vainio, l.c.; Alava, l.c.); Norway (UPS-BOT No. L 193349); Sweden (Eriksson, Non-lichen. Pyrenomycetes Sweden: 19. 1992; UPS-BOT No. L 193347 and L 193348); United Kingdom (E Nos. 3120!, 11326! and 423918!), where it mostly occurs on *Betula* in old woodlands, but is rare (Coppins & Orange in Smith & al. (eds.), Lich. Great Britain Ireland: 176. 2009), and "near threatened" (Woods & Coppins in Conservation Eval. Brit. Lichens Lichenicol. Fungi: 73. 2012); from two Austrian stands on *Betula* sp. and *Sorbus aucuparia* (Berger & Türk, Linzer Biol. Beitr. 25: 171. 1993 & 27: 180. 1995); and Galizia, Spain on *Betula* spp. (Paz Bermudez & al. in Cryptog. Bryol. Lichénol. 16: 67. 1995; SANT-Lich No. 8705-A). In addition, a single collection of the species in South Africa is known (M Nos. M-0038563, M-166575, M-109037).

Although *Arthopyrenia subalbicans* has priority over *A. subcerasi* according to Art. 11.4 of the *Melbourne Code* (McNeill & al. in Regnum Veg. 154. 2011), considering the distribution area of the species is mainly north-European and because *A. subcerasi* is well known, widely used in botanical scientific and in non-taxonomic literature (e.g., lists of species of principal importance for biodiversity conservation), it should be conserved against its earlier synonym to avoid further confusion by retaining a consistent use.

Acknowledgements

I wish to thank Dr. Brian Coppins and Duilio Iamónico for their valuable comments. I am indebted with my colleagues Deborah Isocrono, Stefano Loppi, Renato Benesperi and to the curators of the herbaria TUR and RO for loan of samples used in this study.