

Lichens of Great Britain & Ireland edn 3

Draft genus account version 1.1, January 2018

Prepared by Paul Cannon, based on the LGBI2 account as *Mycoblastus* by James & Watson (2009)

VIOLELLA

Thallus crustose, areolate to rimose, prothallus not differentiated. **Photobiont** chlorococcoid. **Ascomata** apothecia, black, thin and plate-like. **Thalline exciple** absent, but ascomata formed on a rudimentary thalline cushion composed of tightly intertwined hyphae, forming a ring around young ascomata but becoming excluded. **Proper exciple** reduced, composed of hyphae similar to the paraphyses. **Epithecium** not differentiated as a distinct layer. **Hymenium** interspersed with violet granules ('Fucatus-violet') that react N+ dark pinkish red, K+ peacock blue. **Hamathecium** of broad straight or slightly curved paraphyses with thinner cross-bridges. **Asci** *Biatora*-type, moderately amyloid in Lugol's reagent with the contents remaining visible, usually 2-spored. **Ascospores** aseptate, initially with a single wall, eventually becoming laminar with a differentiated internal wall that turns brown. **Conidiomata** pycnidia, apparently rare, colourless or with light brown pigment around the ostiole, sunken in thallus areoles. **Conidiophores** *Parmelia*-type. **Conidia** bacilliform. **Chemistry**: with atranorin, a depsidone and a fatty acid. **Ecology**: on smooth acid to neutral bark, also on worked wood. **Distribution**: two species, Europe, temperate N. America and Asia, Himalayas.

Similar to *Mycoblastus* but with a hymenium containing violet granules, ascospores with brownish inner walls and distinct chemistry. Spribille *et al.* (2011) discovered a closer phylogenetic relationship with *Tephromela* rather than *Mycoblastus*, which has a similar apothecial anatomy.

Literature:

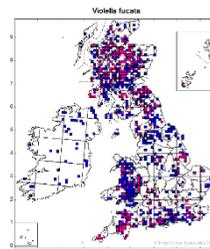
Spribille, T., Goffinet, B., Klug, B., Muggia, L., Obermayer, W. & Mayrhofer, H. (2011a). Molecular support for the recognition of the *Mycoblastus fucatus* group as the new genus *Viorella* (Tephromelataceae, Lecanorales). *Lichenologist* **43**: 445-466.

Viorella fucata (Stirt.) T. Sprib. (2011)

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Mycoblastus fucatus (Stirt.) Zahlbr. (1926)

Thallus effuse, immarginate, pale slate or dark grey, occasionally with a blueish tinge, rather thin, partly or ± continuously faintly rimose, surface smooth or partly uneven with low spreading warts, 0.1-0.3 mm diam., which often erode and become sorediate; soralia ± diffuse, sometimes well-defined, round or oval, to 1.5 mm diam., or irregular, excavate; soredia pale yellowish green to deep blue-grey, granular, often forming a ± continuous, thick, patchy, granular-sorediate crust. Apothecia 0.5-1.5 mm diam., not common, often few, scattered, black, shiny, thin and plate-like, closely appressed, flat or slightly concave; true exciple thin, often excluded at maturity; epithecium, hymenium and upper part of hypothecium ± densely interspersed with numerous, minute, vivid purple-violet granules which dissolve in K to a bright aeruginose-blue, lower part of hypothecium pale violet or colourless, rarely spotted red-brown in part, (intensifying in K). Asci (1-) 2- (to 3) spored. Ascospores (25-) 30-48 (-52) × 15-21 µm, ellipsoid; wall 2.5-4 µm thick, laminar and with the inner part becoming brownish at maturity. Thallus C-, K+/- brownish, KC+ dull brown, Pd+ rust-red, UV- (fumarprotocetraric acid, atranorin, chloratranorin). **BLS 908**.



On smooth, acid to neutral bark of young trees, or the flat surfaces of rough bark, especially *Betula* and *Alnus*, as well as *Fraxinus* in SO₂-polluted sites, in wayside and woodland habitats, on wood and fence posts where it is most likely to be fertile, possibly also on rocks; locally frequent. Throughout the British Isles. Europe, N. America.

Fertile specimens may be ± devoid of soralia but are recognized by the large, simple ascospores and vivid purple colouring in the hymenium, which is K⁺ bright peacock-blue. Sterile specimens can resemble *Buellia griseovirens*, *Megalania pulverea*, *Mycoblastus caesius*, *Pertusaria pupillaris* and *Xylographa vitiligo*, all of which also occur on wood. *Mycoblastus caesius* is Pd⁻, UV⁺ white, *B. griseovirens* is K⁺ yellow or yellow→red (crystals), *X. vitiligo* is Pd⁻ and has a ± immersed thallus. *P. pupillaris*, like *M. fucatus*, contains fumarprotocetraric acid, but in the former the soralia are rather scattered, punctiform and evenly distributed. *M. fucatus* superficially resembles *Buellia griseovirens* and *Fuscidea lightfootii* but differs in the Pd⁺ rust-red reaction of the soralia.

The thallus is often host to two lichenicolous fungi, *Tremella lichenicola* Diederich (1986) and *Skyttea gregaria* Sherwood, D. Hawksw. & Coppins (1981).

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