

Nectriella atrorubra* Lechat & J. Fourn., sp. nov.*Mycobank:** MB 512637.**Anamorph:** *Acremonium* sp.**Etymology:** The epithet *atorrubra* refers to the colour of the ascomata, turning dark red upon drying, with a blackish ostiolar region.

Latin diagnosis: Ascomata immersa vel erumpentia, gregaria, subpyriformia, 200–250 µm diam, 250–300 µm alt, a pallide luteis ad rubroaurantiaca, immutabilia in 3 % KOH vel acido lactico. Paries perithecorum 25–40 µm lata. Asci a cylindricis ad clavatos 85–100 × 8–12 µm, ascosporis uniseriatis. Ascospores ab ellipsoideis ad ovoideas 12–15 × 5–7.5 µm, uniseptatae, hyalinae, striatae.

Description: Ascomata loosely to densely clustered, first immersed with only papilla protruding, becoming erumpent with base slightly immersed, strongly adherent to substratum by basal hyphae, 2–3 µm diam, orange-yellow, sparsely septate; ascomata obpyriform, 250–300 µm high, 200–250 µm diam, pale yellow to reddish orange, smooth to finely roughened, not changing colour in 3 % KOH or lactic acid, turning dark red upon drying, not collapsing. *Papilla* truncate, smooth, dark red to blackish red, formed of cylindrical to clavate cells with rounded tips, that are continuous below with cells of inner region of ascomatal wall. *Ascomatal wall* 25–40 µm thick, comprised of two regions: outer region 10–25 µm thick, of ellipsoid or angular thick-walled cells, 3–4 × 4–6 µm, with cell walls yellow to orange, 1–2 µm thick; inner region 5–25 µm thick, of flattened, hyaline, thin-walled cells. *Asci* cylindrical to clavate, 85–100 × 8–12 µm, shortly stipitate, with an apical ring, with eight uniseriate ascospores, at times biseriata in middle of ascus. *Ascospores* ellipsoid to ovoid, 12–15 × 5–7.5 µm, 1-septate, septum usually submedian, not constricted at septum, hyaline, pale orange *en masse*, with conspicuous longitudinal striae when mature, visible in water, best seen in cotton blue or Waterman Blue-Black ink. *Acremonium* anamorph on 2 % potato-dextrose agar (PDA): *Conidiophores* mononematous, monophialidic, 35–70 µm long, 2–3(–4) µm wide at base, arising from septate, 2–3 µm wide hyphae, straight, with 1–2(–3) septa toward the base, hyaline, appearing finely spinulose in water. *Conidia* ellipsoidal to cylindrical, 5–9 × 2–3.5(–4) µm, hyaline, unicellular, without basal scar.

Cultural characteristics: Colonies 2–2.5 cm diam after 8 d at 25 °C on PDA containing 5mg/L Streptomycin, white to pale yellowish.

Typus: France, Ariège, Rimont, Las Muros, 470 m elevation (42°55'57.46"N, 1°26'36.49"O), on a decorticated twig of *Cornus sanguinea*, 25 February 2005, collected by J. Fournier, deposited at Faculté de Pharmacie de Lille, France (LIP) JF05026, **holotypus**, culture ex-type CBS 123502.

Additional specimens examined: France, Pyrénées Atlantiques, Ile de Sauveterre de Béarn, on wood of *Populus nigra*, 15 December 1996, collected by F. Candoussau, FC472; Ariège, Rimont, Peyrau, on decorticated branch of *Corylus avellana*, 11 February 2001, collected by J. Fournier, JF 01017; Morbihan, Locmariaquer, Breniguy, on twig of *Baccharis halimifolia*, 3 November 2002, collected by J.P. Priou, JPP22112; Haute Garonne, Palaminy, on a decorticated branch of *Populus* sp. hanging above a brook, 14 January 2007, collected by J. Fournier, JF 07003; Côte d'Or, Bèze on a branch of *Castanea sativa*, 14 December 2007, collected by A. Gardiennet, AG07DE5; Saône et Loire, Sampigny-lès-Maranges on branch of *Castanea sativa*, 12 February 2008, collected by A. Gardiennet, AG08FR4.

Notes: The present fungus fits well in the genus *Nectriella* Nitschke as defined by Lowen¹ and Rossman *et al.*² in having partly immersed, small, KOH- ascomata with a two-layered wall and *Acremonium* anamorph. It is distinctive in its lignicolous habitat, dark-red wall and relatively large, striate ascospores. It is reminiscent of *Nectriella rubricapitula* Lowen by its dark-red papillae but deviates from it by much larger ascomata and larger ornamented ascospores. Possible affinities of the present taxon with *N. fuckelii* Nitschke, the type species, were considered because it has likewise been recorded on wood of *Populus*. The type of *N. fuckelii* was thoroughly described by Rossman *et al.*², as having a pale yellow ascomatal wall, which might match a somewhat immature state of our new taxon. However, *N. atrorubra* deviates from *N. fuckelii* mainly in having a thicker ascomatal wall (25–40 µm vs 21–28 µm), and shorter ascospores (12–15 × 5–7.5 µm vs 16–19 × 6–7 µm) that are striate instead of spinulose.

Judging from the fairly numerous collections of this inconspicuous ascomycete, *N. atrorubra* is not uncommon, occurring on a large range of woody substrates, preferably in riparian vegetation. It should be noted that all collections were made in winter, from November to late February, and that the type collection was made under 5 cm of snow!

Colour illustrations: Forest of poplar trees; ascomata on host substratum; vertical section through ascomatal wall; ascospores (C. Lechat). Scale bars = 10 µm.

References: ¹Lowen R (1991). *A monograph of the genera Nectriella Nitschke and Pronectria Clements with reference to Charonectria, Cryptonectriella, Hydronectria and Pseudonectria*. Ph.D. Dissertation, City University of New York. ²Rossman AY, Samuels GJ, Rogerson CT, Lowen R (1999). Genera of *Bionectriaceae*, *Hypocreaceae* and *Nectriaceae* (*Hypocreales*, *Ascomycetes*). *Studies in Mycology* **42**: 1–248.

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