



Fungal Planet 708 – 20 December 2017

## *Verhulstia* Hern.-Rest., *gen. nov.*

*Etymology.* Named for the family name Verhulst, whose members collected the soil sample from which the fungus was isolated. This species was discovered during a Citizen Science project in the Netherlands, 'Wereldfaam, een schimmel met je eigen naam', describing novel fungal species isolated from Dutch soils.

*Classification* — *Chaetosphaeriaceae*, *Chaetosphaeriales*, *Sordariomycetes*.

*Description on OA.* *Conidiomata* sporodochial, scattered to gregarious, superficial, hyaline becoming brown with age, globose, setose with a central white conidial mass, basal stroma of *textura angularis*. *Setae* arising from outer elements of the

stroma, abundant, subulate to subcylindrical, basal cell pale brown, other cells brown to dark brown, apex paler, rounded, verrucose to warty, straight to flexuous, multiseptate. *Conidiophores* arising from the stroma in dense layers, unbranched, cylindrical, septate, hyaline to pale brown toward the apex. *Conidiogenous cells* integrated, terminal, lageniform to subcylindrical, phialidic with a collarete, hyaline to pale brown. *Conidia* cylindrical to ellipsoidal, or obovoid, curved at the apex, aseptate, hyaline, smooth.

*Type species.* *Verhulstia trisororum* Hern.-Rest.  
Mycobank MB823032.

## *Verhulstia trisororum* Hern.-Rest., *sp. nov.*

*Etymology.* From the Latin *tri-* three, and *sorum-* sisters. Named for the three sisters Jikke, Anoeck and Elke Verhulst, who collected the soil sample from which the fungus was isolated.

*Description on OA.* *Conidiomata* sporodochial, scattered to gregarious, superficial, hyaline becoming brown with age, globose, setose with a central white conidial mass on OA (and PNA), basal stroma of *textura angularis*. *Setae* arising from outer elements of the stroma, abundant, basal cell pale brown, other cells brown to dark brown, subulate to subcylindrical, apex rounded, verrucose to warty, straight to flexuous, multiseptate, 133–163 µm long, 3.5–5.5 µm wide base, 1–2 µm wide at apex. *Conidiophores* arising from the stroma in a dense layer, unbranched, cylindrical, septate, hyaline to pale brown toward the apex, 30–72 × 2–2.5 µm. *Conidiogenous cells* integrated, terminal, lageniform to subcylindrical, phialidic with a collarete, hyaline to pale brown, 7.5–15.5 µm long, 2–3 µm wide at base, 1 µm wide at apex. *Conidia* cylindrical to ellipsoidal, 5–7 × 1–2 µm, or obovoid, 5–8 × 2–3 µm, curved at the apex, aseptate, smooth.

*Culture characteristics* — Colonies on OA after 1 wk at 25 °C reaching 10 mm diam, flat, spreading, with sparse aerial mycelium. Sporulation appears first in the centre of the colony, later present over the whole colony.

*Typus.* THE NETHERLANDS, Amersfoort, isolated from soil, Mar. 2017, J., A. & E. Verhulst (holotype CBS H-23230, culture ex-type CBS 143234; ITS and LSU sequences GenBank MG022181 and MG022160, MycoBank MB823033).

*Colour illustrations.* Garden where the soil sample was collected; conidiomata overview on OA, setose conidiomata, conidiogenous cells, setae and conidia. Scale bars = 10 µm.

*Notes* — This new genus is similar to *Dinemasporium*, *Brunneodinemasporium*, *Pseudolachnea* (Crous et al. 2012) and *Vermiculariopsiella* (Seifert et al. 2011) in producing setose conidiomata with phialidic conidiogenous cells. However, *Verhulstia* is distinguished from all of them in having hyaline, lageniform conidiogenous cells that eventually become brown with age, with a conspicuous collarete and conidia without setulae. Furthermore, the strain CBS 143234 was phylogenetically placed in *Chaetosphaeriaceae*, in a separate branch close to species of *Chaetosphaeria* with low support.