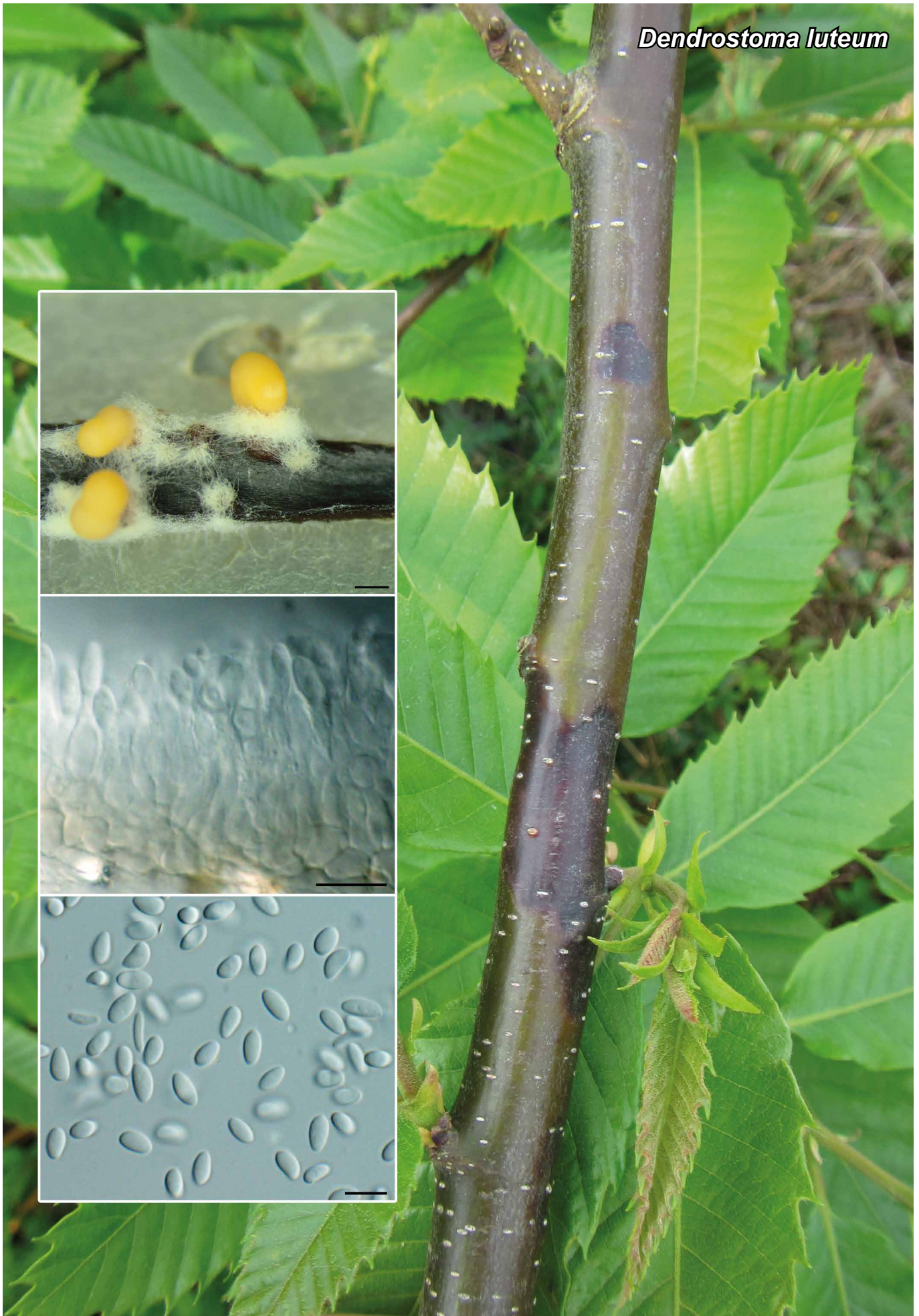


*Dendrostoma luteum*



Fungal Planet 1075 – 29 June 2020

***Dendrostoma luteum*** L.A. Shuttlew., A.J. Lewis, C. Gorton, & Pérez-Sierra, *sp. nov.*

*Etymology.* Name refers to the colour of conidial masses produced by conidiomata in culture.

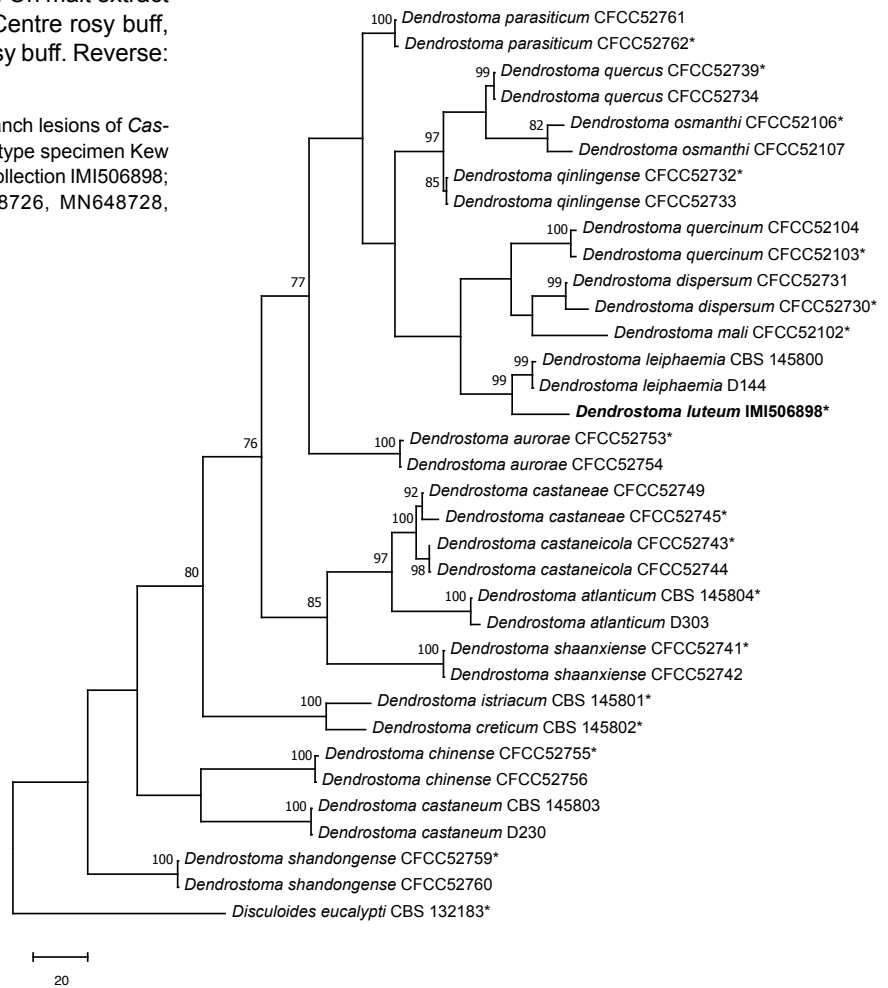
*Classification* — *Erythrogloeaceae*, *Diaporthales*, *Sordariomycetidae*, *Sordariomycetes*.

*Conidiomata* after 6 wk 14/10 h l/d cycles on *C. sativa* bark strips, pycnidial, separate, globose to subglobose, (407–)727(–965) × (368–)719(–869) µm with central ostiole, exuding a luteous, pale luteous to hyaline conidial mass. *Conidiophores* reduced to conidiogenous cells, ampulliform to doliiform with prominent taper towards narrow cylindrical apex, enteroblastic, (10–)11(–12) × (3–)4(–5) µm wide. *Conidia* aseptate, hyaline, smooth, ellipsoid, straight to curved, apex obtuse, smooth, thin-walled, guttules of varying sizes sometimes visible, (7–)9(–12) × (2–)4(–6) µm.

*Culture characteristics* — After 1 mo in the dark at 20 °C. Colours determined from Rayner (1970). Ex-type culture on potato dextrose agar 27.5 × 25.5 mm diam. Surface undulating, woolly to velvety in texture. Centre vinaceous buff, followed by dark mouse grey, hazel, fawn with an irregular pale vinaceous margin. Reverse: Centre sepia, extending to a 3 mm ring of fuscous black, extending to brick to dark brick. On malt extract agar 38 × 40 mm diam. Surface flat, woolly. Centre rosy buff, extending to buff, rosy buff, vinaceous, and rosy buff. Reverse: centre chestnut extending to flesh coloured.

*Typus.* UK, England, Hampshire, Fareham, from branch lesions of *Castanea sativa* (*Fagaceae*), 21 Aug. 2017, *H. Carter* (holotype specimen Kew Fungarium K(M)263346. Culture ex-type CABI culture collection IMI506898; ITS, LSU, and *tef1-a* sequences GenBank MN648726, MN648728, MN812768, MycoBank MB832934).

*Notes* — The genus *Dendrostoma* (*Erythrogloeaceae*, *Diaporthales*) was introduced by Fan et al. (2018) as a highly supported clade in the *Diaporthales* found on the host species *Quercus acutissima*, *Malus spectabilis*, and *Osmanthus fragrans* in China. Recently, Jaklitsch & Voglmayr (2019) described four new species of *Dendrostoma* from Europe, and also updated the description of *D. leiphaemia*. On the concatenated LSU, ITS, *tef1-a* tree, *D. luteum* was a strongly supported species (maximum parsimony bootstrap support 99 %), sister to *D. leiphaemia*. Morphologically, conidiomata of *D. luteum* are longer and wider than *D. leiphaemia*. *Dendrostoma luteum* was consistently associated with branch lesions, but pathogenicity testing on detached *C. sativa* branches (3 cm diam, 20 cm length, n = 12) did not produce lesions significantly longer than the control. Therefore *D. luteum* is currently considered as an endophyte of *C. sativa*.



*Colour illustrations.* *Castanea sativa* branch showing lesion from which *D. luteum* was isolated. Conidioma sporulating on *C. sativa* bark strips; conidiogenous cells and conidia. Scale bars = 500 µm (conidioma), 10 µm (others).

The concatenated phylogenetic tree was inferred using maximum parsimony. \* indicates ex-type cultures, with taxonomic novelty in bold. Branch supports were determined using 1000 maximum parsimony bootstrap replicates. Branch support values < 70 % were excluded. Scale bar on tree indicates number of changes.