

**“*Quercirhiza flavocystidiata*”**

+ *Quercus suber* L.

ANABELA MARISA AZUL\*, Department of Botany, University of Coimbra, 3000 Coimbra, Portugal. REINHARD AGERER Department Biology I, Biodiversity Research: Mycology, Universität München, Menzinger Straße 67, D-80638 München, Germany. MARÍA P. MARTÍN, Real Jardín Botánico, C.S.I.C., Plaza de Murillo 2, 28014 Madrid, Spain. HELENA FREITAS, Department of Botany, University of Coimbra, 3000 Coimbra, Portugal.

\* Author for correspondence; e-mail: amjrazul@ci.uc.pt

**Short description**

This ectomycorrhiza shows, a cover of bright yellow cystidia (appearing fluorescent in surface light), causing a short-spiny surface, on a dark brown mantle. Mantle plectenchymatous in all layers, outer and middle layers star-like, inner layers plectenchymatous with sinuous hyphae. Cystidia similar to normal hyphae, but fusiform and clamped at the base. Rhizomorphs frequent, slightly differentiated, occurring on mycorrhizal systems and in the soil, brown to dark brown, ramified at restricted points, conical-young side branches present, cystidia on rhizomorphs lacking. Sclerotia lacking.

**Morphological characters** (Fig. 1): Mycorrhizal systems monopodial-pyramidal, up to 18 mm long, 0–2 orders of ramification, usually dense, with ca. 42–50 side-branches per 10 mm, sometimes covered with few soil particles. – Main axes 0.35–0.5(0.6) mm diam. – Unramified ends almost straight, infrequently bent, cylindrical, not infl.



48

Azul, A.M., R. Agerer, M.P. Martín & H. Freitas. 2006. "Quercirhiza auraterocystidiata" + *Quercus suber* L. In Agerer, R., R. M Danielson, S. Egli, K. Ingleby, D. Luoma & R. Treu (eds). ***Descriptions of ectomycorrhiza 9/10: 81-86 (A)***.

49

Azul, A.M., R. Agerer, M.P. Martín & H. Freitas. 2006. "Quercirhiza flavocystidiata" + *Quercus suber* L. In Agerer, R., R. M Danielson, S. Egli, K. Ingleby, D. Luoma & R. Treu (eds). ***Descriptions of ectomycorrhiza 9/10: 93-97 (A)***.

50

Azul AM, Agerer R, Martín MP, & Freitas H. 2006. "Quercirrhiza summatriangularis" + *Quercus suber* L. . In Agerer, R., R. M Danielson, S. Egli, K. Ingleby, D. Luoma & R. Treu (eds). ***Descriptions of ectomycorrhiza 9/10: 111-114 (A)***.

51

Azul, A.M., R. Agerer, M.P. Martín & H. Freitas. 2006. "Quercirhiza tomentellofuniculosa" + *Quercus suber* L. In Agerer, R., R. M Danielson, S. Egli, K. Ingleby, D. Luoma & R. Treu (eds). ***Descriptions of ectomycorrhiza 9/10: 127-134 (A)***.