

AGARICUS RUFOTEGULIS NAUTA IN PORTUGAL

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ABSTRACT. *Agaricus rufotegulis* Nauta in Portugal. A find of *Agaricus rufotegulis* from Portugal is documented macro- and microscopically. A colour photo is given of this recently described species for the first time.

Key words: *Agaricales*, *Agaricus*, *A. rufotegulis*, mycoflora of Portugal.

RESUMEN. *Agaricus rufotegulis* Nauta en Portugal. Una recolección de *Agaricus rufotegulis* de Portugal se presenta con datos macro y microscópicos y se ilustra, por primera vez, con una foto en color.

RESUM. *Agaricus rufotegulis* Nauta a Portugal. Una troballa d'*Agaricus rufotegulis* feta a Portugal es presenta, juntament amb dades macro i microscòpiques, i s'il·lustra per primer cop amb una fotografia en color.

ZUSAMMENFASSUNG. *Agaricus rufotegulis* Nauta aus Portugal. Ein Fund von *Agaricus rufotegulis* aus Portugal wir makro- und mikroskopisch dokumentiert. Diese erst vor kurzem beschriebene Art wird erstmals farbig abgebildet.

INTRODUCTION

HAUSKNECHT & REINWALD (2001) recently presented a mycofloristic study, which was the result of two excursions to the south of Portugal. During a third journey in fall 2001 again a number of interesting species have been found, among others several representatives of the genus *Agaricus*. One species, *A. rufotegulis* Nauta, is macro- and microscopically described and illustrated in colour in the following.

Agaricus rufotegulis Nauta, *Persoonia* 17: 230 (1999)

Fig. 1-4

Pileus 40-120 mm broad, flat convex with small, broad umbo, later applanate and old with depressed centre; young nearly uniformly brown, reddish brown, agate (KORNERUP & WANSCHER, 1975: 7EF8, 7EF7, 7E8, 7E7), soon appressed scaly, later scales pallescent, from dull brown, orange-greypbrownish, sahara (7D4, 6-7C4, 6-7C3) up to finally pale café-au-lait (6C3); between the scales paler, almost cream-coloured to white. Lamellae free, dense, slightly ventricose, first whitish, then flesh-coloured with a greyish tinge, old chocolate-brown, with concolourous, almost smooth lamellar edge. Stipe 35-100 mm long, 10-20 (base up to 37) mm thick, almost cylindrical to distinctly enlarged towards the base, but not distinctly bulbous, with few white rhizomorphs; white to whitish, with slightly mealy-granular surface. Ring pendent, very broad, thin, upper side white, lower side with white to brownish, granular scales, ring margin denticulately fringed. Context white, smell faintly of bitter almonds; slightly turning brownish-pink to reddish-brown when cut, but here and there also strongly yellowing (in pileus as well as in stipe and stipe base).

Spores 5.2-6.4 × 4.0-4.6 µm, mean 5.6 × 4.2 µm, Q = 1.25-1.5, broad ellipsoidal, no germ-pore. Cheilocystidia mostly consisting of chains of spherical to elongate-clavate elements (up to 45 × 14 µm, single elements up to 20 × 14 µm); lamellar edge sterile. Stipe covering: below the ring covered by such spherical to cylindrical elements often arranged in chains. Veil elements at pileus margin 15-50 × 8-15 µm, spherical, cylindrical to slightly clavate, in places also as chains, never formed of narrow hyphae.

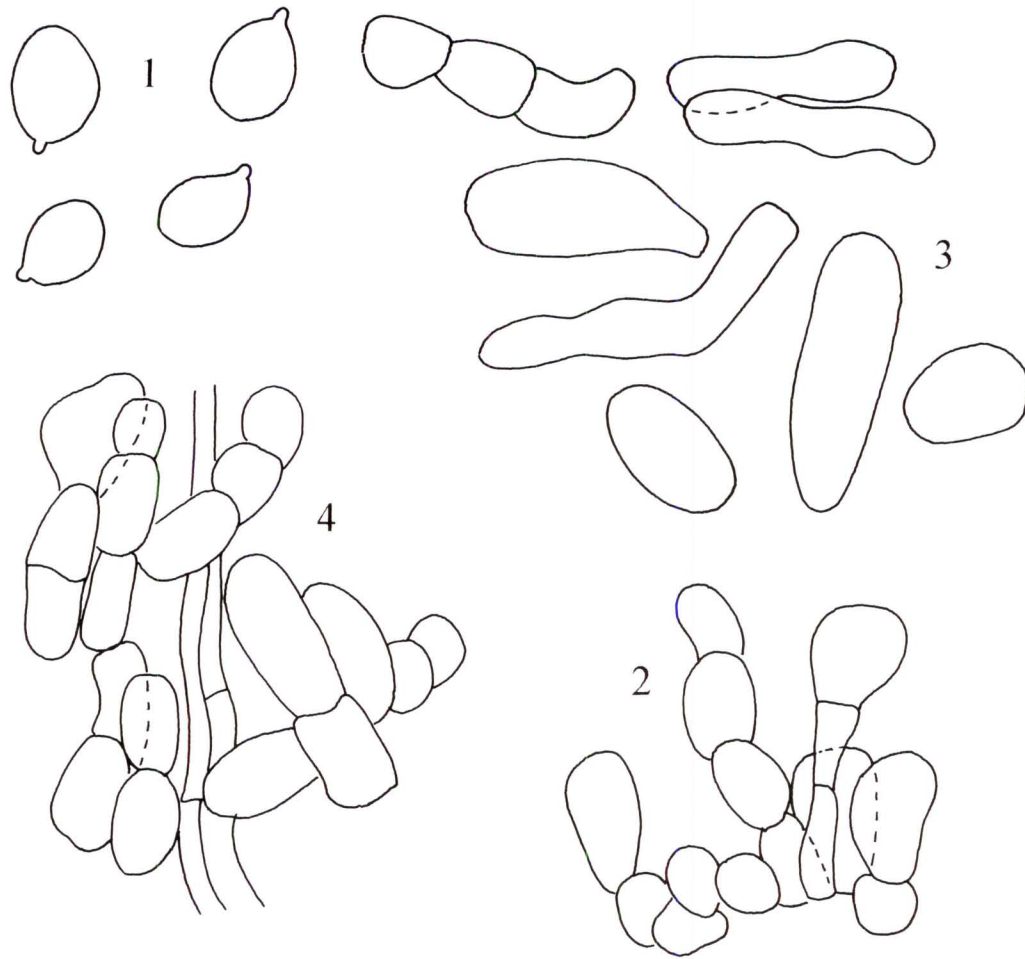


Fig. 1-4) *Agaricus rufotegulis* (WU 21737). **1)** spores, $\times 2000$; **2)** cheilocystidia, $\times 800$; **3)** elements of veil from underside of annulus, $\times 800$; **4)** stipe covering from lower part of stipe, $\times 800$.

HABITAT AND DISTRIBUTION. On stranded rests of wood and leaves of *Eucalyptus* and *Acacia* mixed with sand, associated with *Gymnopus luxurians* (Peck) Murrill, *Leucocoprinus cretatus* Lanzoni and *Psathyrella candolleana* (Fr.: Fr.) Maire. The species has been found very rarely and up to now only in the atlantic region.

COLLECTION EXAMINED. PORTUGAL: Beira Litoral, Leiria, São Pedro de Muel, 4-11-2001, leg. A. Hausknecht and F. Reinwald (WU 21737).

COMMENTS. On the basis of the veil structure, *A. rufotegulis* is placed in subgenus *Lanagaricus* Heinem. emend. A.E. Freeman, which hitherto comprised tropical species only. The species was described few years ago on the basis of specimens from Great Britain and The Netherlands (NAUTA, 1999) and is hitherto known only from two localities. The collections from Portugal is in good accordance macro- and microscopically with the description of the type, also the habitat is similar. However, the discolouring of the flesh deviates distinctly. For the type only a yellowish discolouring in the stipe base is mentioned. Perhaps the reason for this is that the fruiting bodies of the Portuguese collection could be observed in fresh condition on the place.

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Agaricus rufotegulis Nauta (phot. F. Reinwald)