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***PHANEROCHAETE ANDREAE* SP. NOV. (APHYLLOPHORALES, BASIDIOMYCOTINA), FROM THE CANARY ISLANDS**

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ABSTRACT

A new species, *Phanerochaete andreae*, found in the Canary Islands, is described. The species is characterized by broad, mostly encrusted, subicular hyphae, a subhymenium with textura intricata-porrecta, large basidia, and absence of cystidia.

Key words: Fungi, *Phanerochaete andreae* sp. nov., Aphyllophorales, Canary Islands.

INTRODUCTION

In studies of Aphyllophorales of the Canary Islands, a new species of *Phanerochaete* was discovered. It is described below.

MATERIALS AND METHODS

An Olympus BH-2 microscope was used for microscopic observations. The illustrations were made with the aid of a drawing tube. The reagents used were Melzer's, KOH (10%), and distilled water. The color of the basidiome is indicated using Kelly and Judd (1976).

Phanerochaete andreae Burdsall, E. Beltran-Tejera & J.L. Rodriguez-Armas sp. nov. (Fig. 1)

Etymology: *Andreae alterius auctorum* (J.L. Rodriguez-Armas) *filio oblata*.

Basidioma effuso, usque ad 500 (-600) µm crassum, pallido-ochra, laeve in hymeniali superficie; hyphis subiculi 7-8 (-12) µm diam, genera liter incrustatis, sine fibulis; cystidiis absentibus, basidiis 43-53.7 longis X 4.8- 7,2 µm laris; basidiosporis 7.8-9.3 µm longis X 4.5-6.2 µm latis.

Holotypus: *habitat in lignosis reliquiis Cisti monspeliensis (Fayo-Ericion arboreae), in Loco Cherelepin, circa Llanos de Crisp in, Parque National de Garajonay, ad 1200 m supra mare, in Iunonia Minore (Insula Gomeradicta), Isles Canarias; lecta ab E. Beltran-Tejera, 5. XII. 1987. In Herbario TFC Mic. no. 5761 conservatus (Isotypus in Herbario CFMR).*

Basidiocarp broadly effuse, not cracked, 500 (600) µm thick, smooth, crustaceous, orange-yellow or yellowish brown (73. p. OY); margin not differentiated from fertile area, or fibrillose and light yellow.

Hyphal system monomitic. **Subiculum** a *textura intricata*, hyphae 7-9 (-12) µm diam, with wall thickening (1.2-1.8 µm), hyaline, frequently branched, usually nearly right angles, simple septate, or with single or verticillate clamps; near subhymenium hyphae arranged in a loose *texura intricata*, encrusted with fine granules; near substrate tightly agglutinated. **Subhymenium** a compact *texura intricata-porrecta*, hyphae (4-) 5.7-6.7 µm diam, thin walled, hyaline, smooth, rarely encrusted. **Cystidia** lacking. **Basidia** cylindrical-clavate, simple septate at base, 4-sterigmate, 43-54 X 5-7 µm, sterigmata up to 6.5 µm long. Basidiospores ellipsoid to broadly ellipsoid, slightly depressed on one side, thin walled, smooth, hyaline, 7.5-9.5 X 4.5-6 µm, negative in Melzer's reagent.

Habitat: On decayed wood of *Cistus monspeliensis*, in fayal-breza forest (*Fayo-Ericion arboreae*); very humid, with abundant lichen and bryophyte epiphytes, at 1200 m.

Distribution: Known only from the Canary Islands. Gomera: Garajonay National Park (loc. Cherelepin).

Specimen examined: Holotype, cited above.

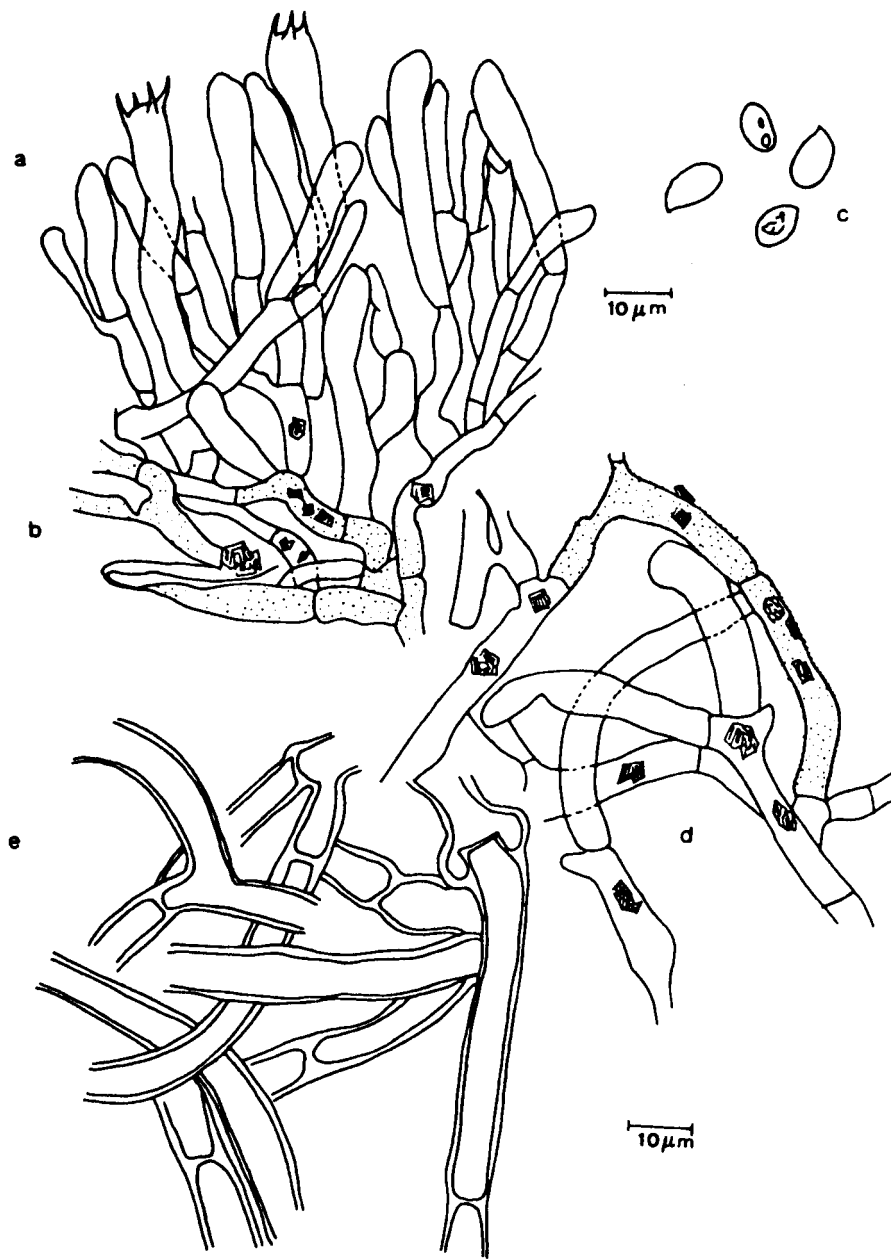


Fig. 1. -*Phanerochaete andreae*

l. Section through hymenium; b. subhymenium; c. spores; d. subicular hyphae near subhymenium; e. subicular hyphae near substrate.

REMARKS: Because it lacks cystidia, *P. andreae* belongs in subgenus *Phanericium* Parm. of *Phanerochaete*. It is distinguished by its broad subicular hyphae, mostly encrusted, subhymenium of a textura intricata-porrecta and large basidia. It is closely related to *Phanerochaete bubalina* Burdsall, also known only from the Canary Islands (Tenerife), and *P. aurata* (Bourd. & Galzin) Burdsall, from France and South Africa.

Phanerochaete bubalina differs from *P. andreae* in its thinner, grayish yellow basidiome, its smooth subicular hyphae mostly less than 6 µm diam, with slight wall thickening; by subhymenium with textura porrecta of short celled narrow hyphae (2.5-3.5 µm); and in smaller basidia (30-42 X 7-9 µm). The hymenial surface of *P. bubalina* also differs in its nearly smooth hymenial surface with scattered small tufts of *Hyphodontia*- like teeth.

Phanerochaete aurata possesses non agglutinated subicular hyphae near the substrate; a subhymenium of textura porrecta, short celled, narrow hyphae (4-5 µm); and smaller basidia (25-40 X 6-8.5 µm), with sterigmata 3-4 µm long. The basidiome is frequently less than 300 µm thick,

However, the basidiospores of the three species are nearly similar in shape and size, though in *P. bubalina* they tend to be slightly larger (8.5-9.5 [-12] X 5.5-6.5 [-7] µm),

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