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ALEURODISCUS ILEXICOLA BERN. & RYV. SP.NOV. FROM SARDINIA

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Summary: A recent find of Aleurodiscus ilexicola is reported from Sardinia. This new species is related to A. aurantius but the microscopical characters are so distinct that it should be described as new.

Riassunto: gli autori riferiscono di un ritrovamento - avvenuto in Sardegna, nella Foresta di Badde Salighes (= Valle dei Salici) in provincia di Nuoro, a circa m 1000 di altezza - di Aleurodiscus ilexicola, specie nuova che, per alcune caratteristiche, si avvicina a A. aurantius.

Zusammenfassung: Im Wald von Badde Salighes (Nuoro, Sardinien) wurde Aleurodiscus ilexicola gefunden. Diese neue Art steht A. aurantius nahe, unterscheidet sich aber klar durch einige mikro-

skopische Merkmale.

Résumé: Les auteurs signalent une récente découverte de Aleurodiscus ilexicola dans la forêt de Badde Salighes (=vallée des saules), prov. de Nuoro, Sardaigne. Cette nouvelle espèce est proche de A. aurantius; elle en diffère cependant clairement par quelques caractères microscopiques.

Recently, one of us (A.B.) has collected extensively in Sardinia and included in the many collections there was an Aleurodiscus species on Ilex aquifolium L.. A microscopical examination revealed that it is undoubtedly related to A. aurantius (Fr.) Schroet. (for a description and an illustration of this species, see Eriksson & Ryvarden 1973:65), agreeing in the simple septate hyphae and large, ellipsoid, ornamented, amyloid spores. Dendrohyphidia are abundant in both species, but the cystidia are different. In A. aurantius they are slender paraphysoid to more oblong and in almost all cases with a more or less papillate to moniliform apex. The cystidia are, in many cases, hyphoid, thin-walled and smooth.

In the collection from Sardinia, the cystidia are bulbous, with a distinctly thickened wall and many were partially covered with angular crystals towards the apex. Aleurodiscus aurantius is mostly found on hosts of the Rosaceae and Ericaceae, more rarely on Taxus. It has never been found on Ilex. Further, the collection from the latter host is white and thin, while A. aurantius is more pale orange to ochraceous and adnate. A search in Jülich (1984), Lemke (1964) and Boidin et al. (1985), gave no clue to the identity of the Sardinian collection. Thus it is so

distinct microscopically that it should be described as new, even though there is only a single collection.

Aleurodiscus ilexicola Bern. & Ryv., sp.nov. Fig. 1

Fructificatio resupinata, tenuis, albida; hyphae tenuitunicatae sine fibulis, cystidia abundantia, globosa, dendrohyphidia frequentia, sporae ellipsoideae, verruculosae, amyloideae, 16-20 x 10-11 µm.
Typus: Italia, Sardinia, Badde Salighes (Nuoro), nov. 13.o 1983, ad Ilex aquifolium, legit A. Bernicchia, 1939.
Holotypus in Herb.Univ.Bononiensis, isotypus in herb. O.

Fruitbody annual, resupinate, adnate, thin and white. Single young fruitbodies rarely more than 5 mm in diam., but reaching 2.5 cm diam. at maturity. Hyphal system monomitic, generative hyphae with simple septa; basidia clavate, 4-sterigmate, 35-40 x 10-15 µm, with a simple septum at the base, dendrohyphidia abundant and richly branched at the apex, non-amyloid; cystidia globose, hyaline, slightly thick-walled, smooth or with scattered crystals, non-amyloid, 25-45 x 10-17 µm. Spores ellipsoid to lacrynoid, verrucose and strongly amyloid, 16-20 x 10-11 µm.

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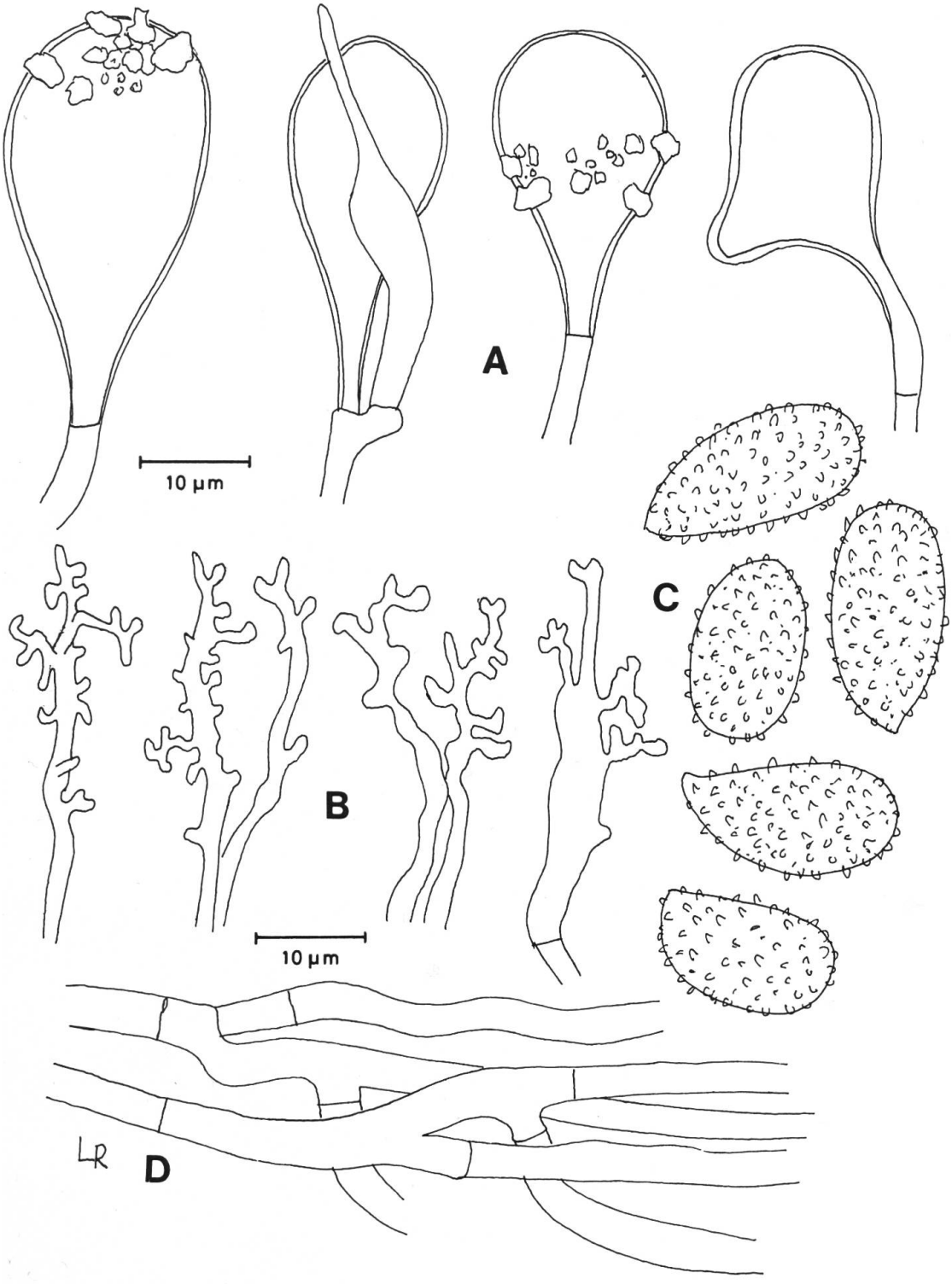
Captions

Fig. 1. Aleurodiscus ilexicola. A) Cystidia, B) Dendrohyphidia, C) Spores, D) Hyphae from the subiculum. From the holotype.


A
10 µm
B
10 µm
C
D
LR