

*S. purpurea* Dissing.

When we studied the type of *Smardaea*, *S. amethystina* (Phill.) Svrček, we found that the spore ornamentations of the type specimen are different from those illustrated by Svrček when he published the genus (Svrček, 1969). One of the Svrček's specimens (PR 666709) has been borrowed and examined. Our observations indicate that the spore markings of the type of *Smardaea* are identical to what Brummelen (1969) and Dissing (1985) illustrated in their papers. Svrček's material is congeneric with *S. amethystina*, but not conspecific. A specimen of *S. purpurea* sent us by Dr. Dissing was also compared. PR 666709 differs from *S. purpurea* in the much shorter asci, the longer ascospores which lack de Bary bubbles, the variable, angular, and mostly discrete spore markings, and the wider paraphyses. A new taxon has to be established based on PR 666709 (see below).

The distinctions between *Greletia* and *Smardaea* remain questionable. We did not see much difference in the excipular structure between the two genera. We do notice that purple pigments are present in the apothecia of both. The type species of *Greletia* has smooth-walled, spherical ascospores (Donadini, 1980), while those of the type species of *Smardaea* are verrucose and ellipsoid. Donadini (1980) included both spherical- and ellipsoid-spored as well as verrucose-spored species in his original generic concept of *Greletia*.

The new species is described as follows:

*Smardaea protea* Zhuang & Korf, sp. nov. (Fig. 32)

*Ab S. amethystina et S. purpurea ascosporarum ornamentibus variabilibus irregularibus vel angularibus, ascosporis longioribus, et paraphysibus latiusculis differans.*

**Apothecium** cupulate to discoid, sessile, ca. 5 mm in diam when dry, hymenium very dark purple when dry, receptacle concolorous with hymenium, surface with small pustules. **Ectal excipulum** of textura angularis to textura globulosa, 35-50  $\mu\text{m}$  thick excluding pustules, cells subspherical to ovoid, axes of cells perpendicular to the outer surface, with purple contents; pustules 24-40  $\mu\text{m}$  high, cells of pustules subspherical to ovoid, 9-18  $\mu\text{m}$  in diam, with purple contents. **Medullary excipulum** of textura intricata, 60-75  $\mu\text{m}$  thick, light purple, hyphae tightly interwoven. **Subhymenium** of textura angularis to textura epidermoidea, 20-30  $\mu\text{m}$  thick, light purple. **Asci** 8-spored, cylindrical, J- in Melzer's Reagent, ca. 200-230 X 13-15  $\mu\text{m}$  (195-210 X 16-18  $\mu\text{m}$  according to Svrček). **Ascospores** uniseriate, ellipsoid, biguttulate, 19.0-25.8(-30.0) X 9.0-12.4(-13.2)  $\mu\text{m}$ ; spore markings angular to irregular in shape, varying in size, mostly less than 0.7  $\mu\text{m}$  high. **Paraphyses** filiform, slightly enlarged at apex, up to 6.5  $\mu\text{m}$  wide.

On sandy soil with duff.

Holotype: Roblín, na lesní cestě směrem k Solopískům, ve staré smrčíně na vlhčí písčitohlinité zemi řídky pokryté smrkovým jehličím, Čechy, Czechoslovakia, M. Svrček, 25. VII. 1948, PR 666709.

2. *Jafneadelphus foliicola* (P. Henn.) Spooner in Reid et al., Kew Bull. 35: 854, fig. 2, 1981.

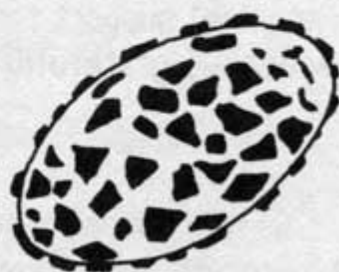
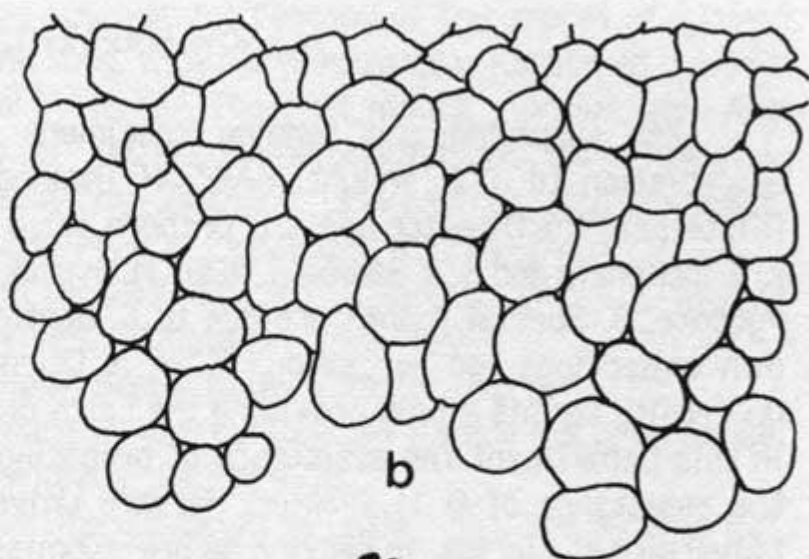
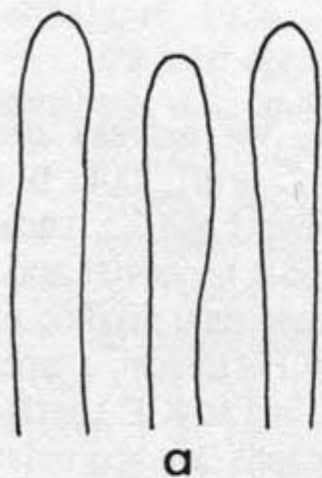
= *Humaria foliicola* P. Henn., Hedwigia 41:29, 1902.

Notes: This is not a species of *Aleurina* Masee. It differs from *Aleurina* in apothecial tissues being slightly gelatinous, cells of ectal excipulum isodiametric, globose to angular, but not elongate polygonal-shaped, cell walls thin, hyaline and not rigid, pigmented particles present in the cytoplasm of ectal excipular cells and paraphyses, and the young asci dextrinoid in Melzer's Reagent. The other close genera are *Greletia* and *Smardaea*. It is similar to these genera in the presence of purple pigments in the tissues when fresh, and the structure of the ectal excipulum. But it differs from them in the tissues being slightly gelatinous, paraphyses with swollen apices, pigmented particles present in the cytoplasm of both ectal excipular cells and paraphyses, losing the purple tint in dry specimens, and the young asci dextrinoid in Melzer's Reagent. A common characteristic of the species of *Greletia* and *Smardaea* is the presence of purple color in the apothecial tissues when sections of a dry apothecium are observed in water mounts. This species shows a brown color instead. Since this species can hardly fit in any one of these three genera, a new genus is proposed and described.

## EOALEURINA Korf & Zhuang, gen. nov.

*Ab Aurina* Masee *cellulis excipuli ectalis isodiametricis, globosis vel angularibus, et non polygonaliter elongatis, parietibus cellularum exilibus et hyalinis, non rigidis et pigmentiferis differens. Ab Greletia* Donadini *et Smardaea* Svrček *contentu cellularum excipularium brunneo, non purpureo, in speciminibus siccatis in aqua ad examinationem paratis, et apicibus paraphysium tumidis differens. Ab his generibus trebus omnibus texturis apothecialibus parum gelatinosis, et excipulo meduloso ex permixtione texturæ angularis et exturæ intricatæ potius quam tantum ex textura intricata non gelatina consistente differens.*

**Apothecium** discoid to subturbinate, sessile to subsessile, hymenium smooth, receptacle pustulate. **Excipular tissues** slightly gelatinous; ectal excipulum of *textura globulosa* to *textura angularis*, cells hyaline, thin-walled, pigmentation if present only in the cytoplasm; medullary excipulum of *textura angularis* mixed with *textura intricata*. **Subhymenium** indistinguishable. **Asci** operculate, 8-spored, subcylindrical, J- in Melzer's Reagent. **Ascospores** ellipsoid, biguttulate, with ornamentations on the surface.



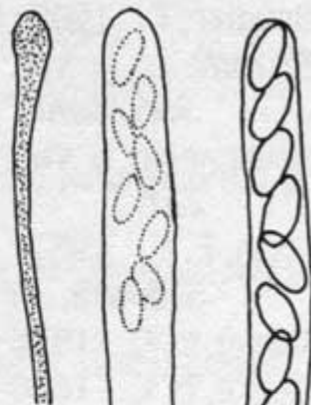
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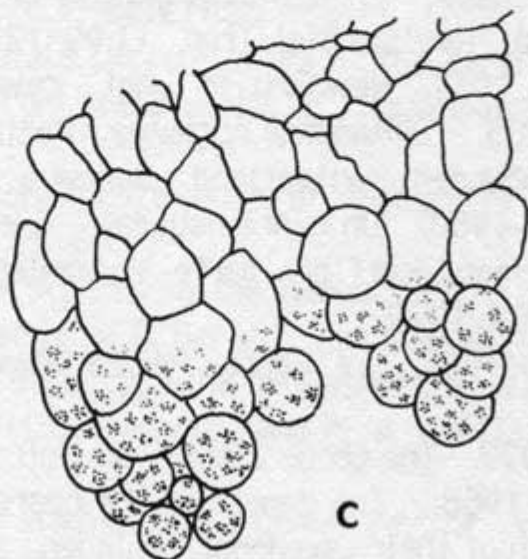
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a



b



c

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