Stegopeziza dumeti (Sacc. & Spcg.) comb.nov. (Fig. 32)

Stegia dumeti Sacc. & Speg., Michelia 1: 420 (1877).

Apothecia scattered to gregarious, sessile, erumpent, developing beneath the epidermis and covered initially by a raised circular patch which is later shed as a scale to expose the disk. Disk circular to elliptic, $0.4-0.6 \ \mu m$ diam, planoconcave, amber-brown, surrounded by a broad, slightly raised margin. Receptacle saucer-shaped, broadly attached, covered by a whitish pruina. Asci 42-50 × 3.5-4 μm , narrowly cylindricclavate, apex rounded, minute pore stained blue by Melzer's reagent, 8-spored. Ascospores $4.7-5.8 \times$ $1.2-1.4 \mu$ m, clavate, hyaline, non-septate, biseriate. Paraphyses lanceolate, pointed, 1- or 2-septate, $3.5-4 \mu$ m wide, exceeding the asci by $12-15 \mu$ m. Ectal excipulum composed of thin-walled, pale brown angular cells $8-10 \times 4-5 \mu$ m in the lower part, arranged on the flanks in parallel, radiating rows, forming free hair-like extensions up to $30 \times 5 \mu$ m on the flanks and margin, encrusted by scattered lumps of irregular resinous or crystalline matter.

Specimens examined: On dead stems of Rubus fruticosus, Coughton Park, Warwickshire, 28 Mar.



Fig. 33. Stegopeziza quercea (W. D. Graddon 3528). (A) Habit × 12; (B) hairs × 1200; (C) ascospores × 1200; (D) asci and paraphysis × 1200.

1979, M. C. Clark 2193; Bannams Wood, Warwicks., 4 May 1979, M. C. Clark; Austwick, Yorkshire, 11 May 1979, M. C. Clark & W. D. Graddon; Dent Dale, Yorks., 13 May 1979, W. D. Graddon 3504; Bellano. Italy, Oct. 1878, Spegazzini.

Stegopeziza is characterized by subepidermal development of the ascocarp, granularly roughened hairs, lanceolate paraphyses and tiny clavate ascospores, and has hitherto been considered monotypic. Sutton & Pirozynski (1963) have provided a useful description and illustration of *S. lauri* (Caldesi) Hohn., from which it is obvious that the present and following species are remarkably similar and clearly congeneric. Stegopeziza dumeti differs in possessing longer, narrower asci, shorter, narrower paraphyses, and in type of crystal development on the hairs.

Stegopeziza quercea (Fautrey & Lambotte) comb.nov. (Fig. 33)

Stegia quercea Fautrey & Lambotte, Rev. Myc. 1896: 144 (1896).

Apothecia scattered to gregarious, sessile, subepidermal in development, exposed by shedding of a circular epidermal scale. Disk 0.8-1.2 mm diam, plano-concave, dark. Margin broad, slightly raised, matted tomentose, dark brown. Asci 50-60 $\times 4 \,\mu$ m, narrowly cylindric-clavate, apex rounded, pore blued by Melzer's reagent, 8-spored. Ascospores 4.5-7 \times 1-1.8 μ m, clavate, hyaline, nonseptate, biseriate. Paraphyses broadly lanceolate, pointed, septate, $4.5-7 \ \mu m$ diam, exceeding the asci by about 40 μ m. Ectal excipulum parenchymatous, rows of cells running out at the surface to produce clavate, pale brown hairs up to 50×15 μ m, encrusted apically by irregular crystalline masses.

Specimen examined: On suckers of Quercus, Gregynog Woods, near Newtown, Mont., 25 May 1979, W. D. Graddon 3528.

Although the type, which I have not seen, was on leaves of *Quercus rubra*, the original description is useful, mentioning the epidermal scale shed at maturity, pointed paraphyses which surpass the asci, and spores of exactly the same size. It seems unlikely that two such similar species could occur on *Quercus*, and I do not hesitate in referring the Welsh collection there.

The three species are unquestionably similar, but it would appear that S. quercea is distinct from S. lauri in larger asci and broadly inflated hairs and from S. dumeti in larger, broader paraphyses and inflated hairs.

Svrcekomyces pallidus sp.nov. (Fig. 34)

Apothecia solitaria, in solo humido subsessilja. Discus plano-convexus, medio depresso, usque 2 cm diam, statu vivo albidus, siccitate sordide albus brunneo-maculatus. Receptaculum ita reflexum ut margo ad substratum altinget, concolor, hyphis laxis stabilisantibus obtectum, stipite brevi, crasso, medifixo, usque 2.5 × 3.4 mm, plerumque in solo immerso. Asci 280–315 × 14–16 μ m, cylindrico-clavati, muris tenuibus, superne rotundati, iodo non caerulescentes, octospori. Ascospori 17–21 x 8·5–9·5 µm, ellipsoidei, hyalini, biguttulati, verruculis costisque valde cyanophilis irregularibus, 0.5-3 μ m diam, 1-2 μ m altis, polaribus, majoribus, ornati. Paraphyses simplices, 2.5 μ m diam, apicales usque 4-5 μ m. Excipulum ectale e strato exteriore 30-50 µm crasso ex hyphis undulatis, hyalinis, muris tenuibus, 3–4 μ m diam, sistente in zonam parenchymaticam usque 200 μ m altam e cellulis magnis subglobosis, muris tenuibus, usque 40 µm diam, superposita sistens. Caro ex hyphis hyalinis intertextis 3–4 μ m diam sistens, subhymenio 50– 60 μ m alto e cellulis 8–20 μ m diam sistens subjacens.

Apothecia solitary, growing on wet soil, subsessile. Disk plano-convex, centrally depressed, up to 2 cm diam, white or whitish when fresh, fading to dirty white with brownish patches on drying, smooth. Receptacle somewhat reflexed so that the margin touches the soil surface, concolorous, somewhat tomentose with loose anchoring hyphae, and centrally scated on a short stout stipe in the soil. Asci 280-315 \times 14-16 μ m, cylindric-clavate, thin-walled, rounded above, not staining blue in Melzer's reagent, 8-spored. Ascospores 17-21 x 8.5-9.5 μ m, ellipsoid, hyaline, biguttulate, ornamented with strongly cyanophilic irregular warts and ridges 0.5-3 μ m wide, 1-2 μ m high, always larger and more conspicuous at the poles. Paraphyses simple, septate, 2.5 μ m diam, enlarged to 4.5-5.5 µm at the apex. Ectal excipulum composed of an outermost layer $30-50\,\mu m$ deep, of undulating thin-walled hyaline hyphae $3-4 \ \mu m$ diam, overlaying a parenchymatous zone up to 200 μ m deep of large, thin-walled hyaline, subglobose cells up to 40 μ m diam. Medullary excipulum 300-350 μ m deep, of interwoven hyaline hyphae $3-4 \mu m$ diam, underlying a subhymenial layer 50-60 μ m deep of cells 8-20 μ m diam. Hymenium 300 μ m deep.

Specimen examined: On very wet bare soil amongst hepatics, under Alnus, Hodders Combe, Quantocks, Somerset, Oct. 1976, K, holotype.

The genus Surcekomyces was established by Moravec (1976) for a single species, S. guldeniae (Svrček) J. Moravec, and is characterized by large, fleshy apothecia which lack carotenoids, hyaline, ellipsoid ascospores which bear a strong cyanophilic ornament, iodine-negative asci and a dis-

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