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NEOTYPIFICATION OF SPARASSIS CRISPA

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Fungal taxonomy and nomenclature are constantly plagued by the lack of type specimens for purportedly well-known species described by starting point or prestarting point authors. The genus Sparassis Fries is a case in point. According to Burdsall and Miller (1988) it is composed of two species, S. spathulata Schw. and S. crispa Wulf. :Fr. A lectotype was recently designated for S. spathulata by Burdsall and Miller (1988). However, no nomenclatural type exists for S. crispa, the generic-type species. Even though the concept of S. crispa is well understood, it is not possible to relate the presently used biosystematic characteristics of micromorphology, chemotaxonomy, and other taxonomic methods yet to be developed to the words and pictures that now serve as its nomenclatural type. Thus, the purpose of our study was to designate a tangible and appropriate specimen as neotype. This removes the final elements of doubt as to what the name S. crispa represents.

¹Maintained in Madison, WI, in cooperation with the University of Wisconsin.

Elvella ramosa Schaeffer (Schaeffer 1772; p. 106, t. 163; typified by description and illustration) is apparently the earliest name for the taxon called S. crispa. Wölfen described it as Clavaria crispa Wölf. in Jacquin (Jacquin 1781, p. 100, t. 14, f. 1), and this was the name sanctioned by Fries (1821, p. 465). Unfortunately, there is no known extant material from either of these mycologists. Because Fries (1821) sanctioned the name proposed by Wölfen, a specimen from Carinthia would be the most appropriate to serve as neotype. However, because both Jacquin's and Schaeffer's concepts were included by citation in Fries' work, it is reasonable and allowable to designate a specimen from the locality where Schaeffer collected to serve as a neotype.

Dr. Andreas Bresinsky has made two such specimens available for this purpose. They were collected near Regensburg, Germany, and conform to what we believe was the concept of all three authors and what represents the present concept of C. crispa. We have chosen the specimen with the more well-developed radicating base to be neotype.

DESCRIPTION OF NEOTYPE

Sparassis crispa Wölfen: Fr., Syst. Mycol. 1:465. 1821.
 = Clavaria crispa Wölfen in Jacquin. Misc. Austriaca
 2: p. 100. 1781.
 = Elvella ramosa Schaeffer, Fung. Bavaria et
 Palatinatu. p. 106. 1772.

Neotype: [GERMANY], Etterzhausen, am Fusse von Pinus silv., 20.9.76. , leg. Besl, Nr. 23 (REG).

Macroscopic Characters: Basidiocarp 6-10 cm broad, 6-10 cm tall, composed of several broad flattened layers of tissue extending from just above ground level and forming broad flabellae that are much dissected and contorted, the ends of the flabellae becoming even more dissected, undulating, and contorted, the apices being 0.5-1 cm wide, abhymenial surface pale creamy yellow, hymenial surface brownish yellow, both surfaces with irregularly oriented veins and ridges; epigeous portion borne on a hypogeous radicating base, composed of soil particles and interwoven hyphae.

Microscopic Characters: Flabellae approximately 1-1.25 mm thick; cutis approximately 20 μ m thick with hyphae hyaline, thin-walled, interwoven, 2-4 μ m diam, with clamp connections, tips protruding just above the surface; context 800-1,000 μ m thick with hyphae extremely variable in shape, (1) hypha-like cells 4-10 μ m diam, possessing clamp connections, (2) pseudoparenchymatous cells up to 40 μ m diam, both more or less thick-walled; refractive hyphae interspersed among these cells, staining strongly in phloxine and in Melzer's reagent, hyaline, thin-walled, with clamp connections; subhymenium up to 20 μ m thick, hyphae densely interwoven, 3-6 μ m diam, hyaline, thin-walled, with clamp connections; basidia 50-70 \times 5-7 μ m, clavate, hyaline, thin-walled, four-sterigmate, with a clamp connection at the base; hyphidia 30-60 \times 2-4 μ m, apex cylindrical or swollen up to 4 μ m diam, hyaline, thin-walled, smooth, clamped at the base; basidiospores broadly ovoid, 5-6(-6.5) \times 4-5 μ m, hyaline, thin-walled, smooth, not reacting with Melzer's reagent, with a small apiculum.

As indicated by Martin and Gilbertson (1976, p. 637), the fungus called S. radicata in the United States is actually S. crispa. What was known as S. crispa in the southeastern United States is now known to be S. spathulata. Both species cause a brown rot of roots and heartwood of living trees.

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