

angularis – lighter brown with the 2nd peridial layer (from the outside) often with some hyphal elements still recognizable; perithecia 210-360 X 140-270 μm (n=12). **Asci** with moderate-length stalks, cylindrical, 4-spored with spores arranged obliquely uniseriately, with a simple apical ring; after discharge the ascus apex (ring and all) often torn to one side but still attached and with many unusual, long, vertically arranged elements obvious along the walls of the empty ascus (these elements each consisting of 2 closely associated dark, finely roughened wiggly lines with a white space between). **Paraphyses** numerous, filiform, smooth, septate, mostly simple, slightly enlarged apically. **Ascospores** at first 1-celled and hyaline, broadly ovoid apically, asymmetrically tapering and narrowly rounded basally, becoming verruculose-spinose and then gradually light brown with the pigment becoming darker over the upper 2/3's to 3/4's as the protoplasm appears to condense into the upper portion and a transverse septum separates the upper 2/3's from the lower 1/3; the upper cell becoming dark brownish black and verruculose-spinose (roughness approx 1-1.5 μm high) with a small apical germ pore, the conical lower cell remaining very lightly pigmented near ochraceous brown with the pigment slightly darker and the wall ornamentation more pronounced near the septum due to the pigmentation and verruculose-spinose nature of the late 1-celled condition (the tapered end of the light cell is nearly smooth with ornamentation becoming gradually more pronounced as the wall nears the septum with the dark upper cell), often with a few oil globules near the septum. The septum at first transverse but usually becoming convex, bulging slightly in the direction of the thinner-walled basal cell which has a tendency to collapse with time. Ascospores overall (25-)27-32(-37.5) X 12-16(-18) μm , dark cells (18-)19-22(-25) X 12-16(-18) μm , light cells 6.5-11(-13) X 9-11(-13) μm (n=25) – length ratio of dark to light cells roughly 2 to 1. Dark cells symmetrical, broadly ovoid (often with a broad umbo apically and appearing faintly triangular), widely truncate basally; light cells asymmetrical, in one view symmetrically conical and tapering from the truncation with the dark cell to a narrowly rounded base, in another view asymmetrical and flattened on one side (symmetry best seen by watching ascospores slowly roll in water mounts; overall symmetry readily apparent in the 1-celled hyaline ascospore). A very small spherical apiculum infrequently present at the extremities of the spore. **Ascospore germination**: No germination was ever seen from the apical germ pore of the fully pigmented upper cell – after treatment with 3% hydrogen peroxide or on the lid or agar surfaces of axenic cultures. On one occasion a young hyaline, 1-celled, somewhat verruculose-spinose ascospore discharged onto the lid of an axenic PCA culture was