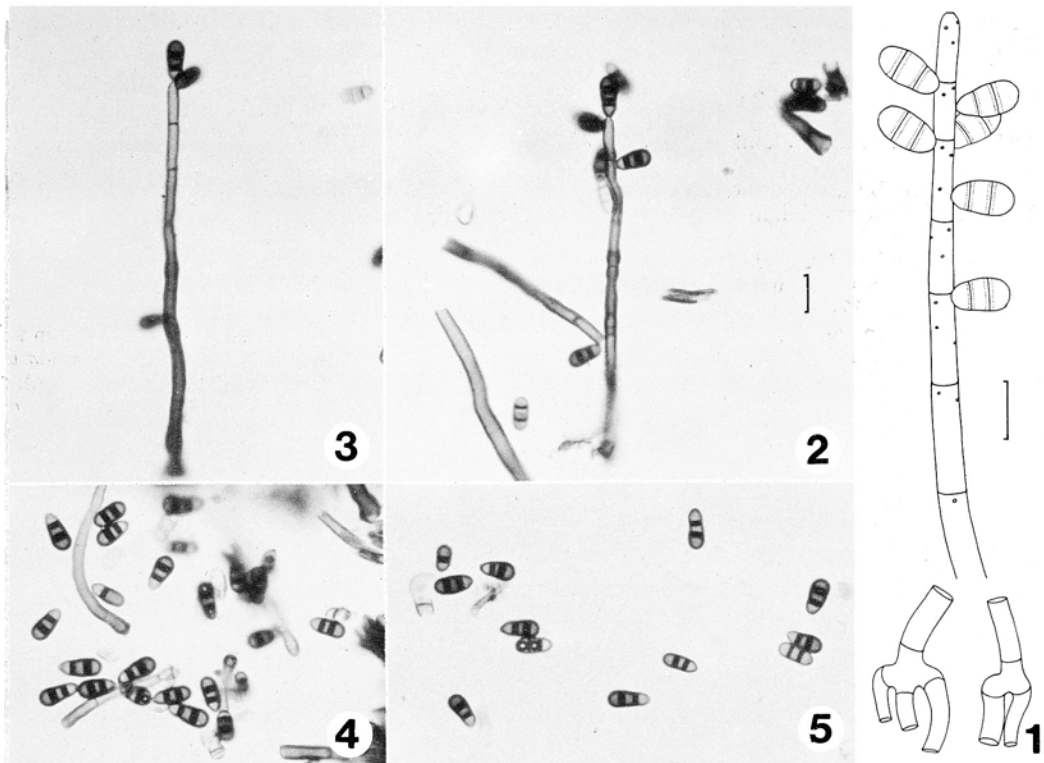


SPADICOIDES KLOTZSCHII



Conidiophores, conidia, and bases of conidiophores. 1-3, from DAOM 56398; 4, 5, from DAOM 56043. Scales = 10 μ .

Spadicoides klotzschii sp. nov.

COLONIAE atrae, velutinae, effusae. MYCELIUM immersum vel semi-immersum, ex hyphis ramosis, septatis, subhyalinis, vel brunneis, 1.5-2.8 μ crassis compositum. CONIDIOPHORA dispersa vel aggregata, simplicia, septata, recta vel curvata, plus minusve subulata, 55-220 μ long., basi 5-6 μ lat., apicem versus 2.5-3 μ lat., cellula basali furcata inflataque (ad 12 μ) praedita, crasso-tunicata, brunnea vel atrobrunnea, apicem versus pallidiore; cellulis 9-22 μ long., apicem versus breviores. Cellulae superiores conidiogenae, poris conidiferis (ad 7) dispersis vel sub septis plus minusve aggregatis, praeditae. Apex cicatrice plana praedita. CONIDIA ovoidea vel obovoidea, 2-septata, aliquando ad medias constricta, ad apicem rotundata, basi subapiculata poraque praedita, laevia, cellulis duobus apicis brunneis vel atrobrunneis, cellula basali pallidiore, vel cellulis tribus concoloribus, 10-12 \times 4-5.5 μ .

In ligno emortuo *Alno*, conifero, et ligno ignota, Canada et Europa.

Typus in Herb. DAOM (56398) praeservanda: in ligno emortuo *Alno*, Mesachie Lake, Vancouver I., B.C., 22.VIII.1957, S.J.H.

COLONIES black, velutinous, extensive. MYCELIUM immersed or semi-immersed, composed of branched, septate, subhyaline to brown hyphae, 1.5-2.8 μ wide. CONIDIOPHORES crowded or scattered, arising singly or in small tufts of up to seven, 55-220 μ long, straight or slightly curved or irregularly bent, more or less subulate, up to 12 μ wide at the swollen and forked foot cell, then 5-6 μ wide and tapering to 2.5-3 μ wide toward the apex, thick-walled, brown to dark brown below and pale brown to brown above: conidiophore cells are 9-22 μ long, generally progressively shorter toward the apex, the apical cell being sometimes very slightly swollen. About half the conidiophore may be

conidiogenous, the place of attachment of fallen lateral conidia being indicated by pores. Up to seven pores may be found in a single cell and these are scattered although some are arranged toward the apex of a cell. A flat scar indicates the place of attachment of the terminal conidium. CONIDIA are dry, delicately attached, and secede readily. They are ovoid to obovoid, 2-septate, sometimes slightly narrower in the middle, rounded at the apex and very slightly apiculate at the base: they are smooth, with the two uppermost cells brown to dark brown and the lower cell paler, or the whole conidium evenly coloured: the septa are usually obscured by a darker band of colour in the conidium wall, the distal band being wider than the other. They measure $10-12 \times 4-5.5 \mu$.

SUBSTRATE: On dead wood of *Alnus* and of unidentified hosts.

DISTRIBUTION: British Columbia.

COLLECTIONS: B.C., Mesachie Lake, Vancouver I., VIII.1957, DAOM 56398, 56403 (S.J.H.), Skagit River, Hope-Princeton Highway, X.1959, 64340 (R.J. & I.K. Bandoni).

NOTES: *Spadicoides klotzschii* closely resembles *S. obovata* (Cooke & Ellis) Hughes (Fungi canadenses No. 6) but differs in its smaller conidia. In about 20 collections of *S. obovata*, including the type, I find the conidia to be $12-16.2 \times 6-8 \mu$, mostly $13.5 \times 7 \mu$: Ellis (Mycol. Papers 93: 10.1963) described the conidia in the type as $12-15(13.4) \times 6-8.5(7.5) \mu$. *Spadicoides klotzschii* is known to me also from two european collections (1) Klotzsch, Herb. viv. Mycol. Cent. XIII. No. 1279 sub *Spondylocladium fumosum* Mart., 'In lignis putridis. Dresdas', in Herb. B and FH; (2) '*Spondylocladium fumosum* Mart. L.R. [scripsit ? Rabenhorst]' in Herb. G. On the other hand, it seems that *Spadicoides obovata* does not occur in Europe.

S.J. Hughes