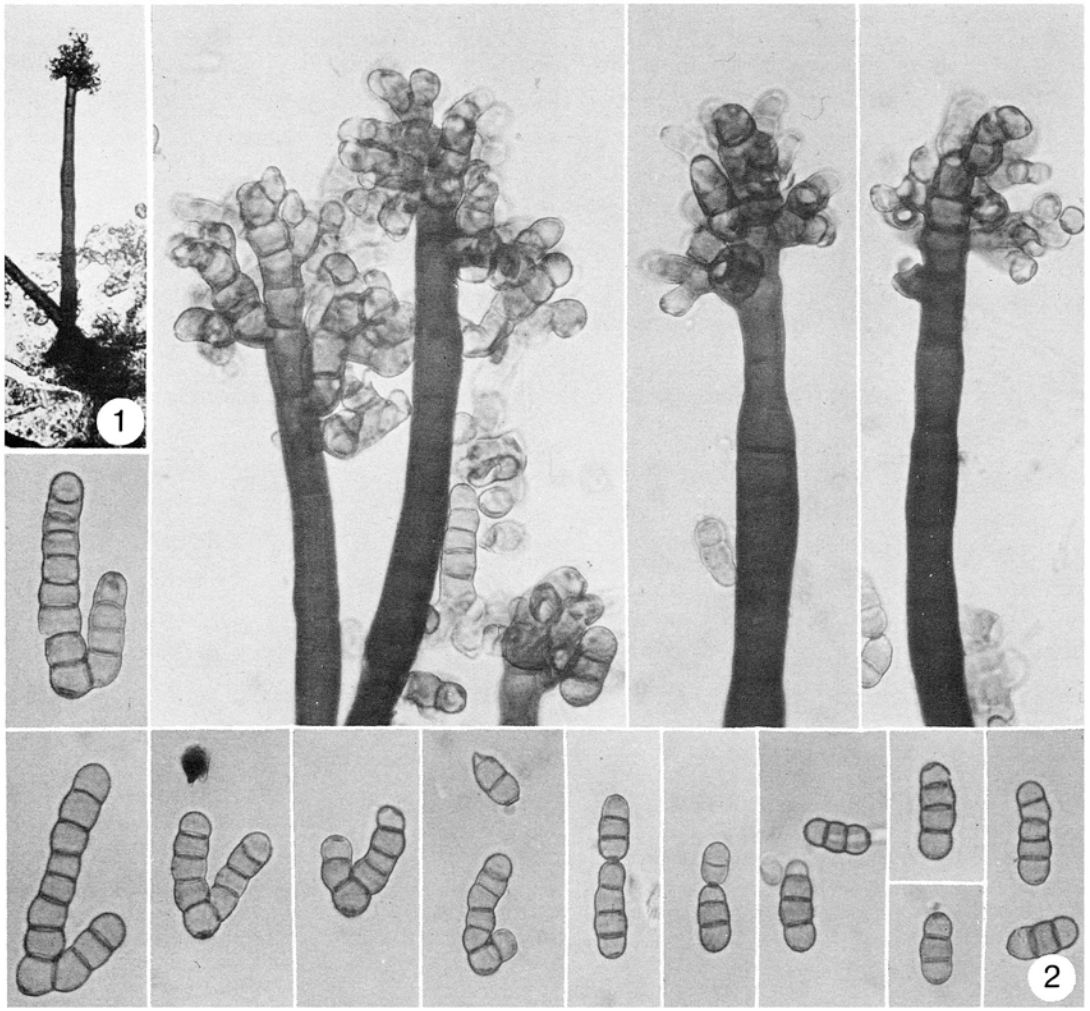
DENDRYPHION COMOSUM



Conidiophores and conidia. 1, × 160. 2, × 640. From DAOM 88483.

Dendryphion comosum Wallroth, Flora crypt. German. 2:300. 1833.

COLONIES effuse, dark brown to black, composed of scattered or crowded conidiophores. MYCELIUM immersed, composed of branched, septate, subhyaline to brown hyphae 2.5-7μ wide. CONIDIOPHORES erect, composed of a simple stipe and an arborescent apex, arising singly or in groups of up to six from stromatic aggregations of dark brown hyphal cells which are up to 12.5μ wide, or from crowded anastomosed dark brown hyphae: stipe straight to slightly flexuous, smooth, subcylindrical, thick-walled (up to 1.8μ), septate at 15-38μ intervals below the branched head, dark brown toward the base, paler above, up to 400μ long, 9-14μ wide above the base which may be swollen (to 18μ), tapering distally to 7-9μ. The shorter distal cells of the stipe bear up to 7 solitary or paired primary branches which are finally up to 70μ long, and these bear up to 4 secondary branches which themselves may bear 1 or 2 tertiary branches. The branches are mostly upwardly directed and flexuous or irregularly bent or geniculate and closely septate with constrictions at most septa. During development the distal cell of the stipe and of its branches bears a terminal conidium at an apparent pore: when the conidium is maturing, or following conidium secession, the conidiogenous cell proliferates by 1 or 2 sympodial extensions arising to one side of the conidium scar. Another conidium is formed on each new

conidiogenous cell so produced and the process repeated so that an irregular arborescent head results. Conidium scars on the conidiogenous cells appear as darker rings of wall with a central 'pore'. CONIDIA produced singly at an apparent pore at the apex of the conidiogenous cells and their successive sympodial proliferations and also on the terminal cell of conidia resulting in short chains of up to 3: they are subcylindrical, usually slightly wider in the middle but sometimes broadest below, straight or slightly curved, 1-5(-9)-septate, slightly constricted at the septa, minutely verruculose, pale brown, more or less rounded at the apex and base but bearing at each end a more deeply pigmented thickened and flattened zone of wall which represents the scar. Conidia occasionally have 2 scars at the distal end, indicating a branched chain. Conidia are 9-65μ long and 5-9μ wide: the length varies with the septation as follows, 9-11.5μ (1-septate), 14-19μ (2-septate), 18-31μ (3-septate), 22-35μ (4-septate), 29-43μ (5-septate), 45-50μ (7-septate), and 54-65μ (9-septate). Basally furcate conidia are not uncommon and the terminal cell of each arm can be conidiogenous: the arms are divergent or adpressed and may or may not be of equal length.

SUBSTRATE: dead branch of *Sambucus pubens* and dead stems of *Urtica*.

DISTRIBUTION: British Columbia

COLLECTIONS: **B.C.**: Lynn Valley, North Vancouver, II.1961, DAOM 88483 (R.J. Bandoni); Wreck Beach, Vancouver, IV.1959, DAOM 63220 (R.J.B.).

NOTES: *Dendryphion comosum* is the type species of *Dendryphion* Wallr. (loc. cit.). *Dendryphion curtum* Berk. & Br. (Ann. & Mag. Nat. Hist. ser. 2, 7:176. 1851) is a synonym of *D. comosum* (Hughes, Can. J. Botany 36:761. 1958, and Ellis, Dematiaceous Hyphomycetes, p. 503. 1971). According to Mason & Ellis (Mycol. Papers 56:1-127. 1953) *Dendryphion toruloides* (Fres.) Sacc. (≡ *Periconia toruloides* Fresensius, Beiträge zur Mykologie 2:73. 1852) is another synonym of *D. comosum*. Overholts (Mycologia 25: 422. 1933) recorded *Dendryphion toruloides* from Pennsylvania, U.S.A.; his illustrated account certainly points to *D. comosum*.

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