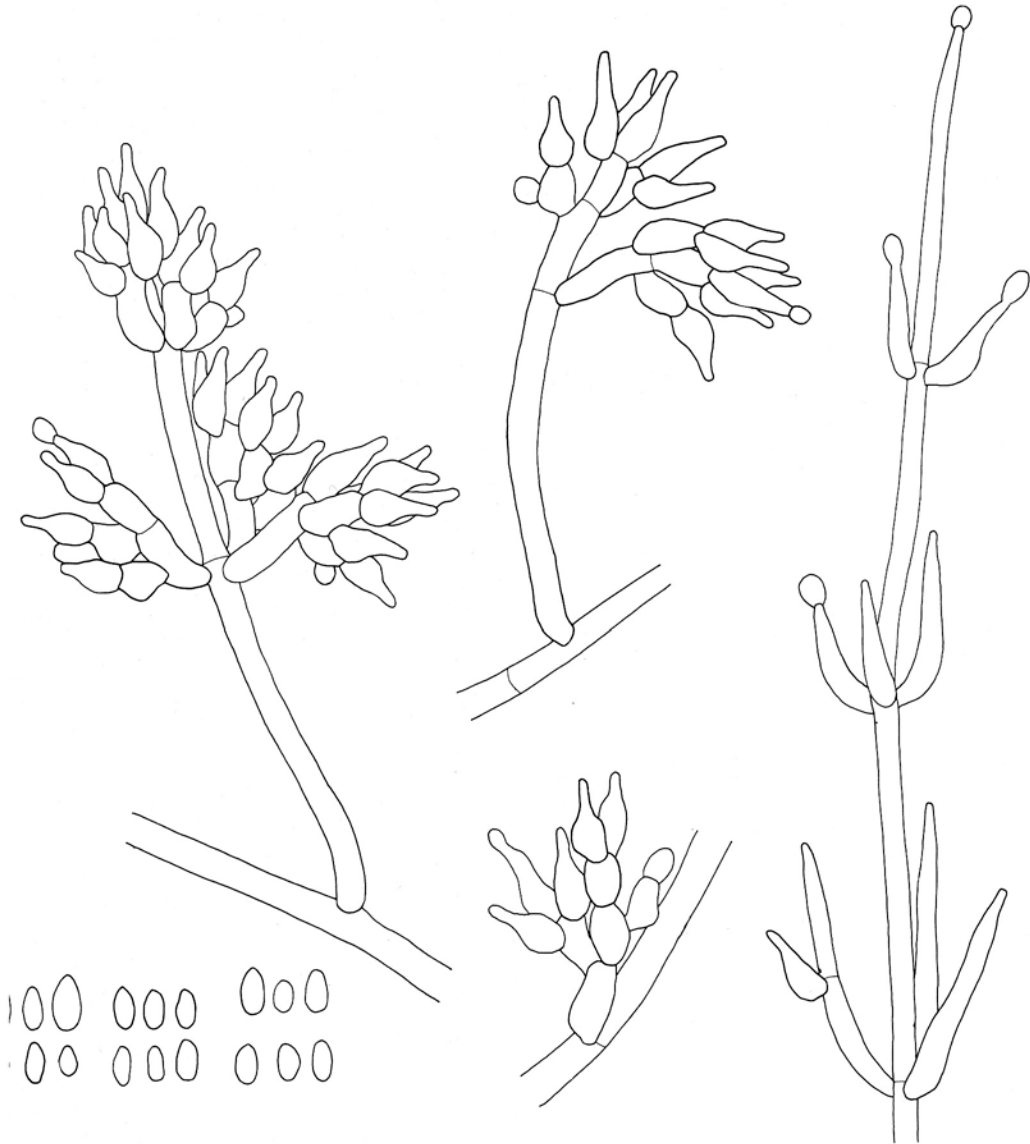


PAECILOMYCES FUMOSOROSEUS



Conidiophores and conidia. $\times 1500$. From DAOM 166976, on 2% malt agar.

Paecilomyces fumosoroseus (Wize) Brown & Smith, Trans. Brit. mycol. Soc. 40:67. 1957.

\equiv *Isaria fumosorosea* Wize, Bull. int. Acad. pol. Sci. Lett., Classe Sci. math.-nat. 1904: 721.

COLONIES with a moderate growth rate, 3-4 cm in diameter after 10 days, fresh isolates appearing powdery with abundant sporulation, some strains developing distinctive, feathery synnemata, older cultures usually deeply floccose; white at first, conidial areas slowly developing pink shades from Venetian pink (Ridgway Pl. XIII) to deep vinaceous (XXVII). Reverse uncolored, yellow or buff. Exudate absent, or produced as small, colorless droplets. Odor lacking. MYCELIUM smooth-walled

walled, hyaline, 1.0-3.2 μ m wide. CONIDIOPHORES arising predominantly from mycelium immersed in the substratum, mostly less than 60 μ m long, 2.0-3.0 μ m wide, smooth-walled, hyaline, irregularly branched, or bearing verticils of 2-5 adpressed to divergent branches at 2 or 3 levels below the apex; branches short cylindrical, 4-10 \times 2.3-3.5 μ m, frequently bearing secondary branches. Conidiophores and their branches terminating in a group of 1-6 (usually 2-4) adpressed or slightly divergent phialides. In older isolates the conidiophores arising mostly as short lateral branches from the aerial mycelium, 7-28 μ m long, sparingly branched, frequently monoverticillate, or with solitary phialides or whorls of phialides disposed irregularly on the unbranched, trailing mycelium. PHIALIDES on complex conidiophores relatively short, 5-9 \times 2.5-3.3 μ m, ellipsoidal in the lower part, narrowing abruptly into a short neck about 1 μ m wide; solitary phialides and phialides on simple conidiophores longer, 8-30 \times 1.5-2.5 μ m, awl-shaped or slightly inflated at the base, tapering gradually to a relatively long neck. CONIDIA hyaline, smooth-walled, ellipsoidal to oblong, ends bluntly rounded or more pointed at the apex, 2.5-4.0 \times 1.4-2.2 μ m (ave. 3.6 \times 1.7 μ m), occasional conidia up to 5.0 \times 2.6 μ m; in short divergent or tangled chains.

SUBSTRATE: Isolated from soil.

DISTRIBUTION: Quebec.

COLLECTION: **Que.**, Lacolle, isolated from the A-horizon of a maple forest soil, VI.1975, DAOM 166976 (P. Widden LP31).

NOTES: The colony description is from cultures on 2% malt-extract and potato-dextrose agars, grown at about 22°C (room temperature) in diffuse daylight.

Paecilomyces fumosoroseus can be distinguished by its pink colonies, complex conidiophores with inflated branches and phialides, and nearly oblong conidia.

In addition to the above collection, this species has also been reported in Canada from sandy soil under a pure stand of *Pinus strobus* L. at St. Williams, Ontario (P. Widden & D. Parkinson, Can. J. Botany 51:2275-2290. 1973), and from peat soil under *Thuja occidentalis* L. near Guelph, Ontario (G.C. Bhatt, Can J. Botany 48:333-339. 1970).

Several synonyms were listed by Samson (Stud. Mycol. 6:38. 1974) who also reported the pathogenicity of this species on insects of several diverse orders in Europe, Africa and Asia.

J. Bissett