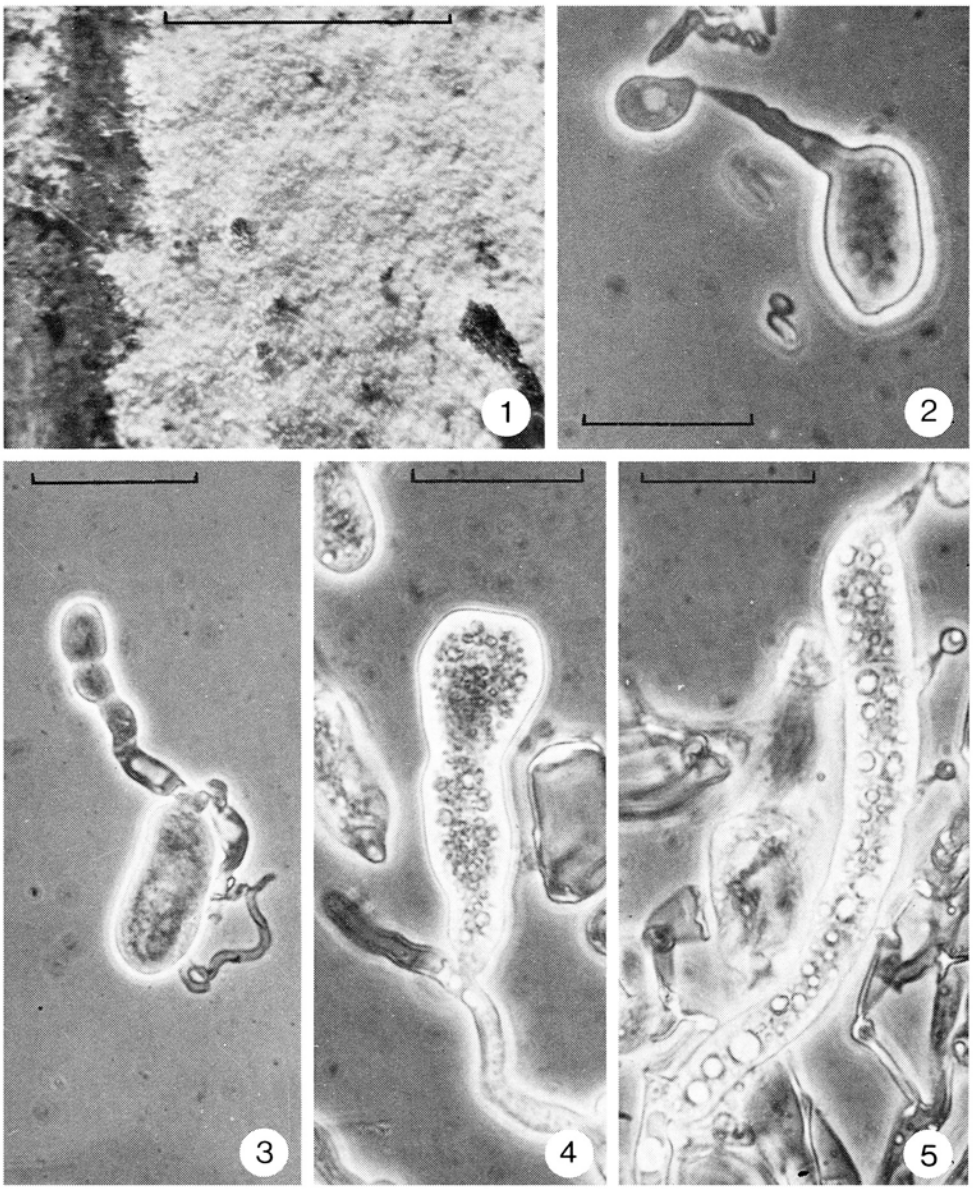
HELICOGLOEA FARINACEA



1, Basidiome; 2, basidiospore producing ballistospore; 3, inflated probasidium (below) and developing septate epibasidium; 4, probasidium; 5, mature epibasidium. Scales = 2mm in 1; 20μm in 2-5. All from DAOM 180475.

Helicogloea farinacea (Höhnel) Rogers in G.W. Martin, Univ. Iowa Stud. Nat. Hist. 18: 66. 1944.
≡ *Helicobasidium farinaceum* Höhnel, Sitzb. Kais. Akad. Wiss., Wein (Math.-nat. Kl., Abt. 1) 116: 84. 1907.
≡ *Saccoblastia farinacea* (Höhnel) Donk, Persoonia 4: 217. 1966.
= *Saccoblastia pinicola* Bourd. & Galz., Bull. Soc. Myc. Fr. 25: 16. 1909, fide Rogers (loc. cit.).
≡ *Helicogloea pinicola* (Bourd. & Galz.) Baker, Ann. Mo. Bot. Gard. 23: 89. 1936.
= *Stypinella killermannii* Bres. in Killermann, Denkschr. bayer, bot. Ges. 15: 34. 1922, fide Olive, Bull. Torr. Bot. Club 85: 14. 1958.
≡ *Helicobasidium killermannii* (Bres.) Bourd. & Galz., Hyménomycètes de France, p. 11. 1928.

BASIDIOMES: effuse, 2-4mm diam., confluent, forming sheets 3(-10) cm diam., up to 0.2mm thick. Margin white, thin, 0.5-1mm wide. HYMENIUM: smooth, finely pruinose to farinaceous, arid, white to pale yellow (Munsell 2.5Y8/4 to 8/6). HYPHAE: loosely woven, branched, 4-6μm diam., with clamp connections; the walls hyaline, thin or very slightly thickened, nonamyloid, cyanophilous. SUBHYMENIUM: scarcely differentiated. PROBASIDIA: formed as lateral basal inflations on terminal hyphal cells, initially very broad, approx. 25 × 16μm, when expanded cylindrical with a median constriction and sometimes irregularly lobed, 60-80 × 9-10μm, containing numerous oil drops, shrunken and obscure when the epibasidia mature; walls cyanophilous. EPIBASIDIA: formed from the terminal cell from which the probasidia arose, slenderly clavate, auriculariaceous, 90-120 × 8-10μm, ultimately 5-6 celled, the basal, nonsterigmate cell(s) usually collapsed, the wall cyanophilous; sterigmata up to 22μm long, sometimes forked. BASIDIOSPORES: broadly ellipsoid, the sides only slightly convex (i.e., nearly parallel), 15-20 × 10-11(-13)μm, the wall hyaline, thin to very slightly thickened (0.5μm), smooth, nonamyloid, cyanophilous, with the apiculus broad (2μm) and truncated, forming ballistospores directly on germination.

HABITAT: dead wood and bark of (1) *Corylus* sp., (2) *Ostrya virginiana* (Mill.) K. Koch, (3) *Picea mariana* (Mill) BSP., (4) *Populus* sp. and (5) *Salix* sp.

DISTRIBUTION: Quebec, Ontario, Manitoba.

COLLECTIONS: **Que.**: Cantley (10km NE of Hull), 25 June 1981, on 2, DAOM 180475 (Ginns 6313). **Ont.**: Lake Timagami, 30-31 Aug. 1936, on 5, DAOM F8889 (Jackson and Biggs 739); 31 Aug. 1936, on 1, DAOM 160221 (Jackson and Biggs, s.n.). **Man.**: Riding Mt. Nat. Park: 9.6km E of Clear Lake, 18 Aug. 1979, on 3 and over an old *Phellinus* basidiome, DAOM 180487 (Ginns 4234); Victoria Beach, 23 Aug. 1935, on 4, DAOM F5695 (Bisby).

NOTES: The Victoria Beach, Manitoba collection has been cited several times (Bisby *et al.* The fungi of Manitoba and Saskatchewan, Nat. Res. Council, Ottawa, p. 74. 1938; Baker, Ann. Missouri Bot. Gard. 23: 90. 1936) and probably was the basis of Martin's (Univ. Iowa Stud. Nat. Hist. 19: 94. 1952) Manitoba record. Martin also saw the Ontario collections cited above. Additional Ontario collections were cited by Baker (Mycologia 38: 632. 1946).

Helicogloea lagerheimi Pat., the fungus most similar to *H. farinacea*, has gelatinous basidiomes when fresh which dry to a thin, scarcely visible, waxy layer, and it lacks clamp connections (vidi DAOM 99863). It also occurs in Canada.

Donk (loc. cit.), "as a working hypothesis," treated *H. farinacea* in *Saccoblastia* Möll. However, the sole character he mentioned to distinguish *Helicogloea* from *Saccoblastia* was the texture of the basidiome. In *Helicogloea* it was "mucous-gelatinous" whereas in *Saccoblastia* it was "floccose (hypochnoid)". In the absence of correlating characters I do not believe that basidiome texture alone is sufficient to warrant generic separation.

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