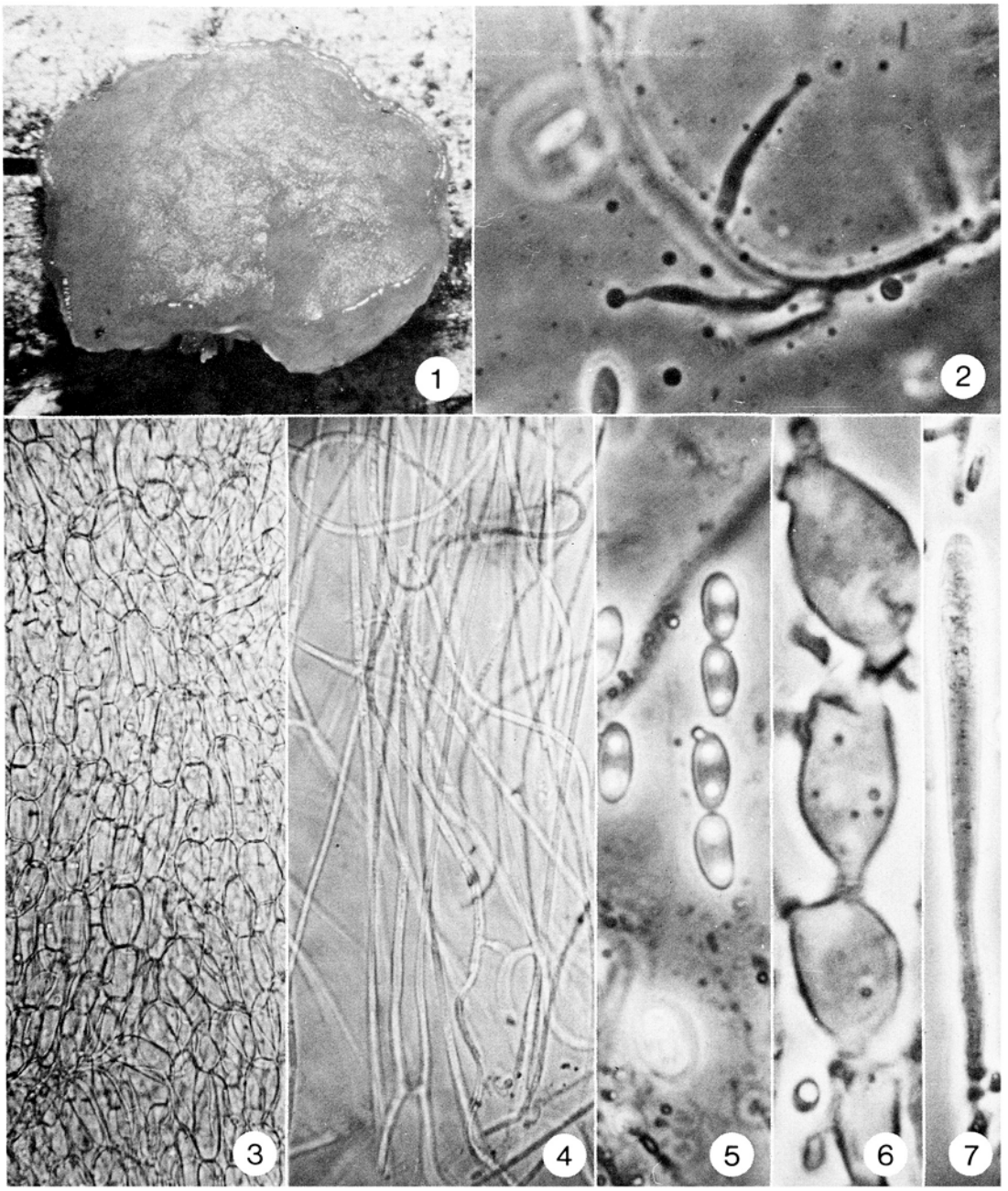
NEOBULGARIA PURA



1, Apothecium, about 1 cm diam.; 2, microconidia (× ca 2000); 3, inner layer of ectal excipulum (× ca 750); 4, medullary excipulum (× ca 1000); 5, ascospores (× ca 2000); 6, catenulate swollen cells of subhymenium (× ca 2400); 7, slenderly clavate ascus with crozier at base and pore at apex, its wall weakly stained in Melzer's (× ca 1800). All from DAOM 147591.

Neobulgaria pura (Fr.) Petrak, Ann. Myc. 19: 45. 1921.
≡*Bulgaria pura* Fr., Syst. Myc. 2: 168. 1823.

≡*Ombrophila pura* (Fr.) Fr., Summ. veg. Scand., p. 357. 1849.
=*Ombrophila violascens* Rehm in Rabenh., Krypt. Fl., 2 Aufl. 1 (Pilze), 3: 478. 1891, fide Petrak, l.c., p. 45.
=*Coryne foliacea* Bres. in Strasser, Verh. zool.-bot. Ges. Wien, 55: 611. 1905, fide Petrak, l.c.
≡*C. bresadolae* Rehm, ut *nom. nov.*, Ber. bayer. bot. Ges. 15: 252. 1915.
≡*Neobulgaria foliacea* (Bres.) Dennis, C.M.I., Mycol. Pap. 62: 166. 1956.
≡*N. pura* var. *foliacea* (Bres.) Gamundi & Dennis, Darwiniana 15: 19. 1969.
=*Ascotremella turbinata* Seaver, Mycologia 22: 53. 1930, fide G. & D., l.c.

APOTHECIA when fresh, turbinate, 1-2 cm diam., or tremelloid up to 4 cm diam., in clusters with a common stipe, both forms up to 5 mm thick. Exterior gelatinous, smooth, pale flesh brown. Stipe very short, generally obscure. Hymenium plane to somewhat convex, pale lilac gray, like a granulose frosty film over transparent tissue.

ECTAL EXCIPULUM composed of two layers: the external layer of hyphae imbedded in a gelatinous matrix, loosely parallel to somewhat interwoven, (1-)2(-2.5)μ diam., occasionally to rarely branched and with scattered septa; the inner layer a *textura prismatica* with cells swollen to barrel shape, 30 × 15-20μ wide. MEDULLARY EXCIPULUM composed of loosely woven hyphae in a gelatinous matrix, the hyphae hyaline, occasionally branched, 1.5-2.5μ diam. SUBHYMENIUM thin, in part composed of catenulate, almost globose cells, 12(-20)μ diam. ASCI 8-spored, 60-80 × 6-6.5μ, the pore wall a pale blue in Melzer's Reagent. PARAPHYSES filiform, straight, 2μ diam. ASCOSPORES ellipsoid to narrowly ovoid, usually with two oil drops, (5.5-)6.5(-7) × 3-3.5(-4)μ; the wall smooth, thin, hyaline. MICROCONIDIA produced on conidiophores on external surface of the apothecium, globose, 1-2μ diam., hyaline, borne in terminal clusters.

SUBSTRATE: wood and bark of *Acer, Betula, Fagus* and on unidentified wood.

DISTRIBUTION: Nova Scotia, Quebec, Ontario.

COLLECTIONS (selected): N.S.: Kentville, X.1952, DAOM 111968 (K.A. Harrison). Que.: Montreal, IX.1931, 1027 (H.A.C. Jackson); Cantley (near Ottawa), XI. 1974, 147591 (J. Ginns 2875). Ont.: Fallowfield (near Ottawa), X.1954, 45221 (C.A. Bowerman); Algonquin Park, IX.1938, 63948 (H.S. Jackson, TRTC 13401); Lake Timagami, IX.1935, 6947 (R.F. Cain 4816).

NOTES: Except for the measurement of spores, the description was drawn from fresh specimens. Quite watery-gelatinous when fresh, the apothecia often shrink on drying to a horny, thin, transparent layer with scattered folds. The catenulate swollen cells of the subhymenium, sometimes obscured in dried specimens, have not been previously described. Seaver (The North American Cup-fungi. Inoperc., p. 235. 1951) reported the asci "often strongly swollen" but I did not see any in such a condition.

In the Great Lakes-St. Lawrence area, the species is collected principally from mid-September to mid-October, but occasionally as early as August 10 and as late as November 7.

Dennis (British Ascomycetes..... 1968. p. 109) suggests that what he then called *N. foliacea* might be "no more than an overdeveloped state of *N. pura*". This seems to me a more acceptable approach than to separate the foliose fructifications at the subspecific or specific level. Collection 147591 showed both kinds of apothecial development on one twig.

The fungus most likely to be confused with *N. pura* is *Ascotremella faginea* (Pk.) Seaver. *A. faginea* can be distinguished by its longitudinally striate spores and generally larger cerebriform apothecia.

J. Ginns

National Mycological Herbarium, Biosystematics Research Institute
Research Branch, Agriculture Canada
Ottawa, Ontario, K1A 0C6

April, 1976