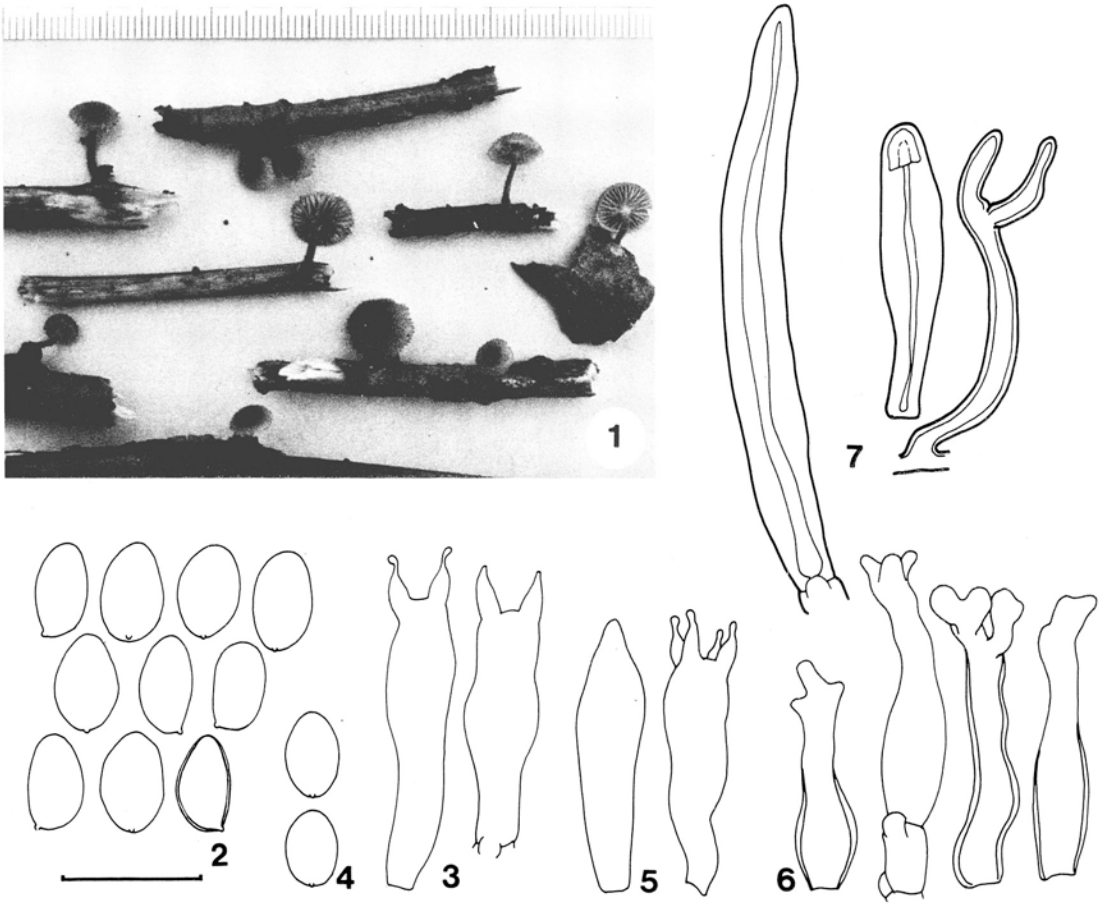
PHAEOMARASMIUS ERINACEUS



1, basidiomes (scale in mm); 2, 4, basidiospores; 3, 5, basidia; 6, cheilocystidia; 7, caulocystidia; 2-7, scale = 15μm; 4-5 DAOM 162754, all others DAOM 153741.

Phaeomarasmius erinaceus (Fr.) Kühner apud Singer, [Trudy bot. Inst. V.L. Komarova Akad. nauk S.S.S.R.] ser. II, 6: 483. 1950.
≡*Agaricus erinaceus* Fries, El. Fung., p. 33. 1828.
≡*Naucoria erinaceus* (Fr.) Gillet, Champ. de France, p. 543, 1874.
≡*Dryophila erinacea* (Fr.) Quélet, Enchir. Fung., p. 69. 1886.
≡*Pholiota erinacea* (Fr.) Rea, Brit. Basid., p. 121. 1922.
= *Agaricus aridus* Persoon, Myc. Eur. 3: 193. 1828.
≡*Phaeomarasmius aridus* (Pers.) Singer, Lilloa 22: 577. 1951.
= *Naucoria lanata* (Sowerby) ex Schroeter, Die Pilze Schlesiens I., p. 604. 1889.
= *Agaricus adpressus* Briganti & Briganti, Hist. fung. Neapol., t. 41, figs. 1-5. 1848, fide Saccardo, Syll. Fung. 5: 853. 1887, and Singer, l.c. 1950.
= *Naucoria badia* Murrill, N. Amer. Fl. 10: 182. 1917, fide Josserand & Smith, Mycologia 33: 502-503. 1941.

PILEUS: 5-14 mm wide, convex, often becoming plane on the disc, dry, opaque, densely tomentose to fibrillose-scaly, bay to umber on the disc, rust to umber elsewhere, often with the ochreous trama visible in sparsely tomentose areas, occasionally bleached nearly white on old arctic collections, centrally to

slightly excentrically stipitate; margins fibrillose, depressed when young; context ochreous to dark brick, fleshy-tough; odor and taste not distinctive. LAMELLAE: adnate, often becoming broadly ventricose, moderately spaced, buff to fulvous; lamellulae in 2-3 tiers. STIPE: 5-10 mm long, 0.5-1.5 mm wide, tapering upwards, usually curved, velvety to sparcely tomentose in minute patches, bay to chestnut or umber, sometimes with vinaceous tints, stuffed, becoming fistulose, tough, often appearing erumpent from bark, arising from a tomentose subcortical subiculum of pale yellowish to cinnamon mycelium. PILEIPELLIS: composed of a loose mat of fibrils; hyphae free or aggregated, noninflated, 3-9μm diam., moderately to coarsely incrusted, brownish, long-celled, thick-walled (-2μm thick); end cells fusoid, obtuse to subacute. PILEUS TRAMA: hyphae subparallel, often slightly inflated, 3-13μm diam., smooth to finely incrusted, hyaline to pale yellow, clamped. LAMELLAR TRAMA: hyphae similar to the pileus trama hyphae, 3-4.5μm diam.; subhymenium hyphae interwoven. CHEILOCYSTIDIA: abundant, forming a sterile margin, 26-32 × 6.5-7μm, ventricose to fusoid basally, neck elongated, often undulating, mostly irregularly capitate or branched apically or subacute, hyaline above, often brownish and some with walls thickened at the base, occasionally with a loose wrinkled membrane over the apex; some cystidia, just below the pileipellis near the pileus margins with distinctly clavate often septate bases. BASIDIA: clavate to obscurely utriform, 2- or 4-spored, prominently projecting when mature, 26.5-32 × 6.5-9μm, hyaline or rarely pale yellow, basidioles sometimes fusoid ventricose and cystidia-like. BASIDIOSPORES: 7.2-10.8 × 5.0-6.4 × 5-7.4μm, ovoid to obscurely amygdaliform in profile, ovoid to obscurely rhomboid in face view, slightly compressed, frequently collapsed in revived mounts, smooth, pale reddish brown in KOH, amberish-ochreous in mass; apiculus minute; walls thin to pronounced, paler at the apices. STIPE TRAMA: hyphae parallel, thin-walled, 3-8μm diam., smooth to finely incrusted, hyaline to pale yellowish brown. CAULOPELLIS: hyphae parallel, thick-walled, smooth to incrusted, hyaline to brown, 2-5μm diam.; bearing clusters of lanceolate to fusoid cystidia-like hyphal ends which are thick-walled, brown, moderately to coarsely incrusted, frequently with a septum at the base, up to 65μm long, often with a collapsed short apical cell with thinner walls; also bearing tangled masses of contorted and undulating smooth, hyaline, thick-walled projecting thin hyphae, 1.5-3.5μm diam. BASAL MYCELIUM: hyphae noninflated, thick-walled, clamped, smooth, hyaline or brownish, contorted, often branched, undulating, 1.5-3.5μm.

SUBSTRATE: solitary to caespitose on fallen or standing senescent corticated twigs and branches of 1, *Alnus* spp.; 2, *Corylus* sp.; 3, *Salix* sp.; 4, *Betula papyrifera* Marsh.; 5, *Populus tremuloides* Michx. and 6, *Amelanchier*.

DISTRIBUTION: Nova Scotia, Ontario, Manitoba, British Columbia, Yukon Territory.

COLLECTIONS: **N.S.**, Kentville, 11.VII.1932, DAOM 110730 (K.A. Harrison 430). **Ont.**, Cochrane Dist., Otaswain R. at Hwy. 11, 20.VI.1977, on 1, DAOM 162754 (S.A.R. 2276); Leeds Co., St. Lawrence Islands National Park, Grenadier Is. central zone, 11.VII.1975, on 1, DAOM 153741 (S.A.R. 1631); Nipissing Dist., L. Timagami: 12.VIII.1933, DAOM 50115 (H.S. Jackson), 30.VII.1934, on 4, DAOM 80590 (H.S.J.); 19.VIII.1935, DAOM 80591 (R.F. Cain); Thunder Bay Dist., Black Sturgeon L., 20.VI.1977, on 5, TRTC (D. Lahaie 20.6.77/6 DGL); Timiskaming Dist., Burt L., 24.VIII.1979, on 3, TRTC (D. Lahaie). **Man.**, Riding Mt. Natl. Park, Katherine L., 17.VIII.1979, on 2, DAOM 173210 (S.A.R. 2828); Winnipeg, 21.VI.1926, on 6, DAOM 156898 (W.P. Fraser & G.R. Bisby). **B.C.**, Vancouver, Univ. B.C. Endowment Lands, 17.VI.1960, on 3, UBC (R.J. Bandoni, BC-1035). **Yukon Terr.**, Bear Cr., 8.VIII.1962, on 3, DAOM 93020 (J. Holms).

NOTES: Josserand & Smith (l.c.) described collections by H.S. Jackson and A.H. Smith of *P. erinaceus* on *Corylus* and *Betula* from L. Timagami, Ontario, and Wehmeyer (The Fungi of New Brunswick, Nova Scotia and Prince Edward Island, p. 92. 1950) cited the Nova Scotian collection listed above as *Naucoria erinacea*. In addition to these, the reports of *Pholiota erinacella* Peck from Manitoba (Bisby, Buller & Dearness, The Fungi of Manitoba, p. 112. 1929; Bisby et al., The Fungi of Manitoba and Saskatchewan, p. 104. 1938) are in part based on collections of *P. erinaceus*. This is evident from the brief description in the latter publication and by the redetermination as *P. erinaceus* of a collection (DAOM 156898) identified by Fraser and Bisby as *Pholiota erinacella*. Additional information on North American collections is given in Smith & Hesler (The North American species of *Pholiota*, p. 75-77. 1968).

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