



1, Carpophores ($\times 1$); 2, cheilocystidia; 3, basidia; 4, basidiospores; 5, cuticular hypha, showing encrustations. (2-5, $\times 1500$).

Inocybe dulcamara (Alb. & Schw. ex Pers.) Kummer, Führer Pilzk., pg. 79. 1871.

\equiv *Agaricus dulcamarus* Alb. & Schw. ex Pers., Myc. Eur., III, pg. 197. 1828.

PILEUS convex to nearly plane, occasionally umbonate or somewhat depressed, dry, radially silky-fibrillose, finely fibrillose-scaly (especially at centre) or prominently squamulose throughout, occasionally marginate with veil fragments, orange-brown, ochre or ochre-brown, 6-57 mm in diameter. **STIPE** orange-brown or ochre, dry nearly glabrous and silky-shiny or squamulose, annulate or not, equal to slightly enlarged at base, solid or hollow, 6-52 \times 2-6 mm. **LAMELLAE** usually yellow-brown but varying to olivaceous, often quite pale at first and white marginate or not, usually sinuate. **FLESH** buff to brown, lacking a distinctive odour or taste.

CUTICULAR HYPHAE forming a radiating interwoven layer and recurving in fascicles to form the squamules, clamped, marked with more or less annular encrustations, 3.5-10.5 μ in diameter. **PLEUROCYSTIDIA** none. **CHEILOCYSTIDIA** consisting of branching and more or less swollen hyphae, abundant and nearly continuous along the edge of the lamellae or in scattered fascicles, with terminal cells cylindrical to broadly pyriform and measuring 12-41 \times 4-15 μ . **BASIDIA** mostly 4-spored but with some 2-spored ones mixed in, clavate, 24-47 \times 7.0-10.5 μ . **BASIDIOSPORES** phaseoliform to unilaterally flattened-elliptical in side view, flat or concave on the ventral face, ovate in face view, with a broadly rounded base, with an inconspicuous apiculus, smooth, with a very obscure apical thin spot, reddish brown in mass, 7-14 \times 3.8-7.0 μ .

SUBSTRATE: In gravelly and mossy soils in alpine, boreal and arctic habitats.

DISTRIBUTION: Northwest Territories, Ontario, Alberta.

COLLECTIONS: N.W.T., Mackenzie Dist., Clinton Point, in mossy ground, 9.VIII.1963, DAOM 96353 (Parmelee). Ont., Cochrane Dist., Ft. Albany, in gravelly area in marsh, 2.VIII.1972, DAOM 129479 (Malloch). Alta., Calgary, soil under *Populus balsamifera*, 24.VI.1972, DAOM 143580 (Danielson).

NOTES: Stuntz (Mycologia 39:21-55. 1947) reports this species to be extremely rare in the United States and cites only a single collection (from Washington State). There is a second collection, identified by Stuntz, from Wilderness State Park, Michigan (DAOM 40116). I have examined three Swedish collections of *I. dulcamara* (Fung. Exs. Suecici 2302, 2303 and DAOM 64808) that are nearly identical to our three Canadian collections. Favre (Ergebn. Wiss. Unters. Schweiz. Nat. Parks 33:1-212. 1955) reports *I. dulcamara* to be the third most common mushroom in the Alpine zone of the Swiss Alps; Larsen (Botany of Iceland II (III) 1932) lists it as a common species in Iceland and Lange (Medd. om Gronland 148 (2). 1957) states that it is the most abundant *Inocybe* in southern Greenland.

The apparent rarity of *I. dulcamara* in Canada is probably a reflection of its rather undistinguished stature, a condition leading to infrequent collections. In addition, there has been very little Canadian mycological work in the kind of area where *I. dulcamara* might occur. I would expect it to be fairly common in gravelly or mossy soil throughout alpine, boreal and arctic Canada.

David Malloch