

Arctomia Th. Fr.

(LECANORALES S. LATO: ARCTOMIACEAE)

After Henssen, 1969, Poelt, 1969, and Thomson, 1984

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Thallus crustosegranular or minutely foliosesquamulose. Cortex distinctly delimited, \pm one cell thick, cells brown. Photobiont Nostoc, arranged in clusters between hyphal strands, the whole in a gelatinous matrix. Apothecia without thalline exciple; true exciple of radiating hyphae, forming a pseudoparenchyma. Paraphyses lax, simple, with clavate apices, 13celled, brown. Asci broadly cylindrical, 8spored. Spores colorless, multiseptate. Pycnidia \pm immersed; conidia bacilliform. No substances. On mosses and liverworts.

1. Spores 2646 x 5.56 μ m, straight, 47celled. Lobes thick, 0.20.6 mm across (length or width). Thallus forming small rosettes or dispersed; lobes somewhat imbricated in the rosette forms, rustbrown; cortex brown, not as well defined as in A. delicatula; medullary hyphae 511 μ m thick, or irregularly grouped ellipsoid or spherical cells. Apothecia redbrown, convex, to 0.5 mm broad; hymenium 70110 μ m; subhymenium 80245 μ m; paraphyses 12 μ m, the tips capitate, 48 μ m, brown; asci 5090 x 821 μ m. Spores fusiform. On mosses and other lichens, Arctic (Baffin Island) and Olympic Mountains of Washington. A. interfixa (Nyl.) Vainio

1. Spores 3575 x 47 μ m, 710(14)celled. Lobes 0.050.2(0.3) mm across. Thallus crustosegelatinous to coarsely granular or foliosesquamulose, rarely partly teretenodulose, dispersed or often forming a \pm continuous crust; surface matt, rather toughened; cortex well marked; medulla of loose network of cells; medullary hyphae 23 μ m thick when young, thickening to 511 μ m. Apothecia to 0.5 mm diam., frequently conglomerate, dark redbrown, convex, often shining, with an often paler true exciple which soon becomes excluded. Exciple 1080 μ m broad, radiate or in old apothecia paraplectenchymatous. Epithecium thin, brown; hymenium 95105 μ m tall, colorless. Subhymenium 3095 μ m. Paraphyses 12 μ m wide, with apices capitate, brown, to 58 μ m wide. Asci (70)8090(95) x (12)20(24) μ m. Ascospores fusiformelongate, with \pm attenuated apices. Pycnidia ca. 40 μ m diam.; conidia 23 x 1 μ m. On mosses and hepatics, or other lichens, on old trees or wood, on mossy boulders, and on earth and humus. Arctic (Ellesmere Island). May be confused with Massalongia carnosa, which occurs in similar habitats but has

smaller, 1127 x 4.58 um, 1(2)septate spores, and a cortex 34 um thick. 2

2. Thallus redbrown to olive, over mosses, plant remains and soil, rarely bark. Spores (3)47 um thick. A. delicatula Th. Fr. var. delicatula

2. Thallus olive, on wood. Spores 34.5(5.5) um thick. A. delicatula Th. Fr. var. acutior (Nyl.) Henssen
Literature

Henssen, A. 1969. Eine Studien ber die Gattung Arctomia. Sv. Bot. Tiskr. 63: 126138.

Poelt, J. & A. Vezda. 1977. Erg. I.

Purvis, O. W. 1992. Arctomia. In: Purvis, et al., Lichen Flora of Great Britain and Ireland.