often 3–7 connate, plane and thinly margined when young, at length strongly convex and immarginate, disk blackish-brown with the epithecium roughened. Spores ellipsoid, oblong-ellipsoid or cymbiform, one to three septate,  $14-34 \times 3-6\mu$ , paraphyses distinct, concrete or somewhat lax, bluish-green at the apices, hypothecium reddish-brown, hymenial gel., with I + blue, the color persisting.

The species is reported from Port Clarence, Alaska, Greenland and Newfoundland, under the generic synonym of Lecidea of its section Toninia, and from Lake Nipigon, Ontario, Arctic America, Islands of Behring Straits, and from the Canadian Rockies under the name of Biatora artyla.

Lecidea sublatypea Leight. Lich. Flora G. Brit. ed. I, p. 271 (1871).

Thallus effuse or sub-determinate, granulate, ashy-fuscous, K—, C—, Apothecia small (0.5 mm.), sessile, scattered or connate, plane or concave, with a persistent or evanescent, opaque or shining entire margin, disk black. Spores 8, ellipsoid, simple,  $12 \times 6.5 \mu$ , hypothecium brown, asci ventricose, paraphyses distinct, compacted, tips blackishgreen, hymenial gel., with I + deep-blue.

Granite rocks. Sidney, Vancouver Island; Prof. J. Macoun. Previously unreported from America.

## Xylographa micrographa sp. nov.

Thallus hypophlaeous, the hyphema ramifying through the superficial fibers of the substratum, algae Palmella, few and scattered, K—, C—, Apothecia innate, scattered, parallel with the fibers, small (less than 1 mm in length), lirelliform or fusiform, accuminate, typically concave, but sometimes plane, with a prominent slightly inflexed margin, or the margin reduced and the disk nearly plane, black. Spores 8, ellipsoid, simple, nebulous, filled with granular protoplasm or developing nucleoli, 11–13 x 7µ, hymenium and hypothecium colorless, asci inflated-clavate, paraphyses distinct, slender, lax, abundant.

Old decorticated log. Sidney, Vancouver Island; Prof. J. Macoun.

The thallus visibly whitens the wood, and is effuse. The internal characters ally the plant with X. parallela (Ach.) Fr., the external with X. hians Tuck. Type specimen in herbarium Merrill.

Rockland, Maine.