

Biatora (Bilimbia) sabuletorum forma simplicior Nyl. Scand. p. 205 (1861).

Thallus not differing from that of the species. Apothecia within brownish-yellow. Spores variable in form and size, oblong or fusiform-oblong or somewhat cymbiform, usually one, sometimes two or three septate, $11-18 \times 4-5\mu$, asci inflated-clavate with a thick apical wall, hypothecium sometimes fuscous, hymenial gel. with I + blue.

Over mosses. Pipestone Pass, Rocky Mountains; Prof. J. Macoun.

Not heretofore recorded from a Continental North American station.

***Biatora (Bilimbia) syncomista* (Flk.) comb. nov.**

B. artyta (Ach.) Tuck. Gen. p. 162 (1872).

Mosses over rocks. Pipestone Pass, Athabasca; Prof. J. Macoun.

Th. M. Fries in Lich. Scand., Pt. II, p. 336, states that the original specimens of *Lecidea artyta* Ach., as designated in the Acharian herbarium, are to be referred to *Stereocaulon tomentosum* b. *alpinum* and *S. denudatum* b. *pulvinatum*. Acharius in Synopsis p. 20, cites *Lecidea sabuletorum* b. *syncomista* Flk. in Berol. Mag. 1808, p. 310, as equivalent to his own *L. sabuletorum* b. *geochroa*. On page 33 of the Synopsis he defines *Lecidea artyta*. This may only be construed as a definite opinion of the distinctness of the two plants. Schaerer in Spiclg., p. 151, cites *L. artyta*, *L. sabuletorum geochroa* of Acharius and *L. sabuletorum* b. *syncomista* of Floerke as synonymous with his own *L. sabuletorum* b. *muscorum*. Tuckerman asserts that Schaerer knew *Lecidea artyta*, as sent to Acharius by Schleicher, and there is evidence that he was acquainted with the Floerkeian plant, for it is cited with a mark of emphasis. There seems to be a total lack of definite knowledge regarding *L. artyta*, and Tuckerman's effort to save the name is merely an example of ingenious inference. While in most of the essentials the authors agree in their descriptions of the species, there are discordances that prove perplexing. The hypothecium is noted to be extremely variable in color, ranging from yellowish to deep black, and the hymenial reaction is given as blue, deep-blue, violet, blue followed by violet and sordid-violet, sordid-yellow or wine-red. The following description of our specimen is inserted for purposes of comparison.

Thallus indeterminate, granulose-squamulose, the squamules small, thickened, crenate-lobulate, more or less contiguous, grayish-white K—, C—. Apothecia sessile, aggregated,