Abstract

*Didymosphenia geminata* (Lyngb.) Mart.Schmidt has been found in the River Izari near Lake Shikotsu, Hokkaido, Japan. The sampling point is truly riverine and so might be representative of its natural distribution. The ultrastructure of these individuals was compared with Icelandic and Mongolian individuals using an SEM. Though the densities of striae and areolae show much variation, the ultrastructure of the areolae are identical and so the individuals are thought to be part of the variation of a single taxon. Another small *Didymosphenia* taxon, which has one stigma, has very different form of areola from *D. geminata*.

Key index words: areola, *Didymosphenia geminata*, “Didymo”