

## ATLAS OF DIATOMS (BACILLARIOPHYTA) FROM DIVERSE HABITATS IN REMOTE REGIONS OF WESTERN CANADA

BY

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High-resolution LM images of diatoms (Bacillariophyta) from remote regions of western Canada are presented as a contribution to our knowledge of diatom floristics, ecology and biogeography in North America. Approximately 600 taxa are imaged in 132 plates. Genera with the most taxa are *Cymbella* (19 taxa), *Cymbopleura* (29), *Encyonema* (23), *Encyonopsis* (15), *Eunotia* (77), *Gomphonema* (42), *Navicula* (47), *Neidium* (20), *Nitzschia* (35), *Pinnularia* (50) and *Stauroneis* (34). Diatoms were collected from diverse habitats in four of North America's major biomes: Arctic tundra, taiga, Rocky Mountains and Pacific rainforest. Many of the photographed taxa could not be identified to species and are likely new to science. Other taxa may represent new records for North America or Canada. Images of voucher specimens are keyed to individual collection sites. Detailed descriptions of the collection sites include GPS coordinates, colour photographs, vegetation, algal substrates, elevations, pH, temperature and conductivity. Samples were collected from natural substrates in fresh to brackish, flowing and standing waters. Voucher slides are deposited in the Montana Diatom Collection (Helena) and the University of Montana Herbarium (Missoula). Cleaned diatom frustules have been deposited in the Diatom Herbarium of the Academy of Natural Sciences of Philadelphia.

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