

TWO NEW SPECIES OF *ORTHOSEIRA* (BACILLARIOPHYCEAE) FROM LAVA TUBES IN THE NORTHERN AND SOUTHERN HEMISPHERES

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While studying algal biodiversity on relatively remote archipelago in Hawaii (Lowe & Kociolek) and Ile Amsterdam in the southern Indian Ocean (Van de Vijver) we independently discovered that lava tubes present unique isolated microhabitats that appear to support several new species of algae. In this case, two new species of the diatom genus *Orthoseira* Thwaites. From Pua Poo lava tube in Volcanoes National Park we here describe *Orthoseira johansenii* Lowe & Kociolek sp. nov. and from Ile Amsterdam in the southern Indian Ocean *O. verleyenii* Van de Vijver sp. nov. Based on light and scanning electron microscopy observations, the morphological features of both species are illustrated, comparing them to similar *Orthoseira* species worldwide. Notes on their ecology are added.

POSTER