

ORIGINAL ARTICLE

HABITAT SPECIFICITY OF PHYTOLITH PRODUCTION IN *ACROSTICHUM AUREUM* L.

Raj Karmakar, Prashanta K. Mitra, Radhakanta Nandi and Sudha Gupta*

*Department of Botany, University of Kalyani, Kalyani-741235, West Bengal, India *Corresponding author: sudhaguptain@gmail.com*

Abstract: *The mangrove fern species *Acrostichum aureum* L. grown in different habitats namely, mangrove region of Sundarbans, and mesophytic regions of Kolkata and Nadia are chosen to study the habitat specificity of phytoliths (biogenic silica bodies) production in the plant. Five types of phytoliths (Type I, II, III, IV and V) are identified from the extracted leaf lamina of *Acrostichum*. The observation shows the types and percentage of phytolith distribution are more or less identical in the *Acrostichum* of Sundarbans and Kolkata whereas discriminating result is noticed for the specimen of Nadia. This discrimination suggests that the production of phytolith in different parts of plant depends on some ecological factors.*

Key Words: Phytolith, *Acrostichum aureum*, Sundarbans, Kolkata, Nadia.