



BIOSTIMULANT AND PLANT GROWTH REGULATOR: APPLICATIONS AND SIGNALING MECHANISM

ISBN: 978-81-981142-7-3 | Year: 2025 | pp: 115 - 125 |

Physiology Of Mangrove Fern *Acrostichum Aureum* L. From West Coast of Maharashtra

¹V. B. Chopade

²Shakil D. Shaikh

¹Assistant Professor, Department of Botany, SGM College, Karad

²Assistant Professor, Department of Botany, Rajarshi Chhatrapati Shahu College, Kolhapur.

Email: ranichopade26@gmail.com

Article DOI Link: <https://zenodo.org/uploads/14789145>

DOI: [10.5281/zenodo.14789145](https://doi.org/10.5281/zenodo.14789145)

Abstract

A plant's adaptation to its environment is one of the most important issues in evolutionary biology. *Acrostichum aureum* is a common mangrove fern that grows rapidly after mangrove forests have been clear felled for timber. *Acrostichum* is the only pteridophyte genus found in the mangrove ecosystem. It grows luxuriantly in brackish water habitats also. *Acrostichum aureum* L. is the only species from the Indian coast. This rhizomatous fern shows clumped distribution and produces golden yellow leathery fronds and hence aptly called golden leather fern. In the present investigation *Acrostichum aureum* L. was collected from various localities of West Coast of Maharashtra and analysed for some physiological parameters such as polyphenols, proteins, carbohydrates, macronutrients and micronutrients.

Keywords: *Acrostichum*, Mangrove fern, macronutrients and micronutrients.

Introduction

Ferns are generally used in traditional medicine for the cure of many lethal diseases like skin problems, wounds, cough and reproductive problems as well as to make insect repellent [1, 2]. A large number of medicinal ferns like *Adiantum capillus-veneris*, *Cheilanthes*

albomarginata, *Asplenium nidus*, *Ceratopteris thalictroides* including, *Acrostichum aureum* exist in Asia [3-5]. *Acrostichum aureum* Linn (Family- Pteridaceae), common name: Hudo (Bangladesh), Tiger Fern, Piai raya (Singapore), Golden Leather Fern (South Florida) (1), Swamp Fern, Mangrove