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Explorers and Field Scientists in South-East Asia and Australasia**

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Taxonomic Studies of Selected Species of Genus *Echinochloa* based on Morpho-anatomical Markers from Pakistan

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The aim of the present study is the morphological studies and Light microscopy and Scanning Electron Microscopy of the leaf epidermis and pollen in order to describe grass anatomy and palynology in a consistent manner and to record diagnostic characters for use in identification and taxonomic studies of the genus *Echinochloa* from Pakistan. The present research project provides a botanical approach to identify the selected species of genus *Echinochloa* systematically on the basis of the morphological, anatomical and palynological characters. Elemental Dispersive Spectrophotometer analysis in the present research project presents a standard basis for the identification of selected genera focussing on the silica bodies giving their specific organizational detail that is constructed for various purposes ranging from their taxonomical description to classification and quantitative analysis of silica bodies. The specific objective of the study of the EDS analysis of the phytoliths often determines a new structure used as an aid in taxonomic characterization. The quantitative analysis provides Silicon as a new taxonomic character to distinguish different species within the different and even same genera.