MORPHOLOGICAL AND ANATOMICAL STUDIES OF TWO WILD RICE SPECIES; *Oryza eichingeri* Peter AND *Oryza rhizomatis* Vaughan.

A PROJECT REPORT PRESENTED
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ABSTRACT

A detailed morphological and anatomical study on *Oryza eichingeri* Peter and *Oryza rhizomatis* Vaughan was carried out to evaluate their performances in relation their habitats. Both of these wild rice species are closely related by having CC genome, but *Oryza eichingeri* is a shade loving plant while *Oryza rhizomatis* prefer open areas. Therefore, it is important to study the leaf and root characters in detail in order to relate their performances to their microhabitats.

Live specimens of these rice species were collected from several locations in Sri Lanka. Morphological and anatomical characters of leaves and roots were observed by naked eye and by using a light microscope. Detail anatomy of the above species were studied by obtaining microtome sections in the laboratory. Detailed leaf characters were also recorded. Accurate microphotographs were made and data were analyzed using standard statistical software "Minitab 14.1".

Based on the study it was revealed that even though both species are grouped into the CC genome, the two species show different morphological and anatomical features that allow them to survive in different ecological niches.