



INTERACTIONS BETWEEN DROUGHT STRESS AND LEAF ROLLING OF *CTENANTHE* *SETOSA* (ROSC) EICHLER

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The changes of leaf rolling degree in different drought stress conditions were studied and some morphological and biochemical changes were reported in this study. The plants were vegetatively propagated and grown in plastic pots and then they incubated in a growth chamber at 25 °C in a cycle of 12 h light (250 μ mol m⁻²s⁻¹) and 12 h darkness with 70 % relative humidity. We found that leaf rolling is not only a simple response to water deficit stress in plant, some biochemical changes in the leaves also occurred together with leaf rolling. Proline, reducing and soluble sugars levels increased with the increasing degree of leaf rolling. It has been reported that the leaf rolling increased drought resistance in *Ctenanthe* as well as grasses. The first rolling was observed around 30 days after withholding water. All leaves were rolled around 45 days after withholding water. Maximum rolling (79 %) was obtained between 56 and 64 days after withholding water. It has been found that water deficit and air temperature affected the degree of leaf rolling, and irradiation increased the rolling together with water deficit but not alone in *Ctenanthe*. This study has been shown that leaf rolling is a good mechanism to maintain viability of plants under severe drought stress.

THE FLORISTIC AND FAUNISTIC (LEPIDOPTERA) INVESTIGATION OF ANAMUR HIGHPLATEAU (ABANOZ- AKPINAR)

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The research area (Mersin, C₄) is the south coast of the Turkey. The Mediterranean Climate with the sunny and dry period is typical. Total annual precipitation ranges between 20 -40 inches per year because of this the biodiversity is attractive. In the floristic determination studies, it is known that the research which is based dry and wet river side (Anamur and Dragon) were not published before. On the area, most of the genera are: *Centaurea*, *Sideritis*, *Salvia*, *Stachys*, *Marrubium*, *Phlomis*, *Origanum*, *Sedum*, *Astragalus*, *Vicia*, *Aegilops*, *Bromus*, *Rhus*, *Pistacia*, *Hypericum*, *Digitalis*, *Muscari*, *Campanula* and also mediterranean elements. In this area, Asteraceae, Lamiaceae, Fabaceae, Poaceae, Rosaceae, Liliaceae and Campanulaceae families are dominant. Also the common families of Lepidoptera on the area are: Papilionidae, Pieridae, Argynnis, Satyridae, Lycaenidae and Hesperidae. On the area, most of the genera (Lepidoptera) are: *Iphiclides*, *Papilio*, *Allanastria*, *Parnassius*, *Anthocharis*, *Euchloe*, *Pieris*, *Pontia*, *Colias*, *Gonepteryx*, *Vanessa*, *Aporia*, *Cynthia*, *Limenitis*, *Melanargia*, *Hipparchia*, *Pseudochazara*, *Pseudochazara*, *Issoria*, *Polyommatus*, *Lycaena*, *Quercusia*, *Satyrus*, *Callophrys*, *Coenonympha*, *Maniola*, *Pontia*, *Euchloe*, *Lampides*, *Thymelicus* and *Pyrgus*.