

## عنوان مقاله:

Effects of drought stress on some physiological variables and grain yield of different wheat varieties

## محل انتشار:

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## خلاصه مقاله:

This study was conducted to determine the effect of drought stress on yield and some physiological characteristics of wheat cultivars. Six cultivars were grown under normal and drought stress in greenhouses and field conditions. Leaf samples were taken for physiological measurement including relative water content, transpiration rate, membrane stability, chlorophyll content and chlorophyll fluorescence parameters and stomatal frequency and length. Grain yield was determined for plants grown under field condition. Results showed that treatments have a significant impact on plant traits. Drought stress decreased leaf chlorophyll content and photochemical efficiency of PSII due to increasing  $F_0$  and decreasing  $F_m$  and increased ion leakage. Drought stress also decreased grain yield and the highest yield was obtained in plots with normal condition. Cultivars Alvand and Chamran showed the highest level of photochemical efficiency of PSII, membrane stability and grain yield under drought stress and were considered as the more tolerant cultivars to drought stress than other cultivars under conditions of this investigation.

## کلمات کلیدی:

Chlorophyll fluorescence, Drought Stress, Photosystem II efficiency, Wheat, Yield

## لینک ثابت مقاله در پایگاه سیویلیکا:

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