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INFLUENCE OF DROUGHT STRESS ON PHYSIOLOGICAL CHARACTERISTICS OF SAFFLOWER CULTIVARS *(CARTHAMUS TINCTORIUS* L.)

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ABSTRACT

In this research effect of drought stress on physiological characteristics of Safflower (*Cartamus tinctorius* L.) cultivars was studied under different moisture regimes. A three replicate split plot RCBD field experiment was conducted at the filed of Islamic Azad University, Khorasgan Branch. Main plot included different environmental conditions normal irrigation, medium drought stress, severe drought stress and subplot included different genotypes. In three environmental conditions, different physiological traits such as chlorophyll, proline content, RWC, LWC, RWL, MRC, ELWC were measured. Results indicated that there was not-significant difference between moisture conditions for MRC, RWL, chlorophyll content, RWC, LWC, ELWC. On the other hand significant differences were observed between moisture conditions for proline.

Key words: Safflower, Drought stress, Physiological characteristics