

Abstract :

To evaluation the effects of drought stress and different levels of sandy storm on quantitative yield of autumn canola (*Brassica napus* L.) and soil traits, an experiment was conducted at research farm of University of Zabol, Iran in 2015 cropping season. Experimental treatments were arranged in a split plot design in randomized complete block design with three replications. Treatments included main plot of drought stress in three level (50, 100, 150 mm evaporation from evaporation pan level.) and sub-plot of sandy storm (witness (Non-use), 100, 200 Ton/ha), respectively. The results show the superiority of water evaporation on the surface tension of 50 mm compared to the other treatments. 50 mm evaporation treatment could rape quantity as well as some soil traits affect the way that the maximum height, number of lateral branches, 1000 seed weight, pods number, seeds in pod, stem diameter, seed oil content (48/14%), yield economic (483/10 kg/ha), biological yield (1359/7 kg/ha), harvest index (35/38%), soil water and soil moisture treatment volumetric water content was 50 mm evaporation. The lowest values were obtained in 150 mm evaporation. The maximum soil temperature was obtained in 150 mm evaporation. Grown plants treated with 200 ton of sandy storm per hectare also surpassed other treatments and most of the vast properties were measured at the highest levels. This research clearly showed the beneficial role of irrigation without tension, as well as the use of sand. Results showed that the combination of drought stress and sandy storm, they can rise to the separate use of rape role play a bit of soil traits.

Key words: soil temperature, soil water, oil content.



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