

EFFECT OF PLANTING DATE AND AMOUNT OF SEED ON LIGHT DISTRIBUTION AND INTERCEPTION THROUGH CANOLA CULTIVARS CANOPY

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Introduction: Nowadays, success in plant inbreeding science to increase yield, in a large extent depends on light distribution and utility's management in plant canopy. Evident show that whatever the amount of light interception is more, both economical and biological function will increase, the more amount of light absorption, the more both economical and biological yield, but ration's increase as economical yield as compared with biological yield in grain crops, such as canola is considered. Therefore, in a successful cultivation, firstly the sufficient leaf area should be provided to absorb the maximum irradiance in the plant association and secondary this leaf area should be obtained in a much shorter time. Management's actions in planting plants such as canola for its planting adornment, plant density and cultivation's time should include these purposes too. To study the connection between planting time and bush density by light transmission and depreciation method in the plant Canopy of canola spring cultivars.

Material and method: This study performed in 2006, in the farm of investigative designs of Isfahan natural resources and agricultural research center in Kabootarabad Agricultural Research Station. Three Canola spring cultivars were studied in three winter planting dates and each of them in three seed amount in the form of split-factorial statistical design with four replications.

Result and discussion: Results showed that light absorption in all of the present depth for all the studied cultivars in planting date of 9th February, was more than its sooner and later cultivation. RGS003 cultivar with absorption 725 w/m² showed the most amount of light absorption in the flowering stage. With comparison of different bush densities, also in general, the most using density that is 12s Kg seeds used in each hectare, was the light depreciation amount in the present depth. The ability of these three planted cultivars was in absorption of solar irradiation resulted from planted seed amount. The amount of bush dry weight and grain yield resulted from the total amount of light absorption and the share of upper and lower half of canopy resulted from various cultivars showed difference in this case.

Key words : Canola, seed amount, light interception, leaf area index