## The Effect of Planting Date on Phonological Stages and Quantity Traits of Four Winter Rapeseed Cultivars in Yasouj

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## **Abstract**

In order to study the effect of planting date on phonological stages and quantity traits of four cultivars of winter rapeseed, an experiment was carried out in 2008-2009 at the research field of Agriculture Research Station of Boyerahmad. The experiment was carried out in using factorial with randomized complete block design and four replications. Four planting dates (September 12, September 22, October 2 and October 12) as a first factor and four cultivars (Zarfam, Okapi, Elite and SLM-046) as second factors were used. The results of this study showed significant differences between the occurrence date of cultivars and planting dates with one percent level of probability. Delay in planting increased the process of planting and completion rosette, but decreased rosette periodic duration, during flowering and planting to maturity. Delaying in canola planting caused the interaction of grain filling and oil accumulation with higher temperature with decreased grain, oil and protein yield. Elite and Zarfam cultivars, due to faster completion of their rosette, finished over wintering with stronger rosette and began their regrowth at end of cold season earlier. Therefore, the reproductive stages of these cultivars were encountered with better weather conditions and also led to higher performance. In general, at September 12 planting date, Elite cultivar and at delay planting, Zarfam cultivar were superiors over other cultivars.

**Keywords:** Sowing date, Cultivar, Canola; Developmental stages, Oil and Protein