

Investigation the Effect of Source-sink Dynamics on Yield and Yield Components of Rape Cultivars Sowin of Different Dates

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Abstract

In order to investigation the effect of source-sink changes on yield and yield components of rape cultivars under different sowing dates, an experiment was conducted as a split factorial based on randomized complete block design at Bayekola Research Station during 2006. Treatments were included sowing dates as a main plot with two levels (consisted of October 22 and November 1), cultivar and source-sink alterations with three levels (consisted of Hayola 401, RGS 003 and PF) and five levels (consisted of removal of 1/3 leaves from down, medium and end of plant, removal of 1/3 flower and control), respectively. Results of ANOVA showed that different cultivars had significant difference in terms of all measured traits while sowing dates had a significant effect only on pod number per plant. In addition, Source-sink alteration had a significant effect on pod number per main stem and pod length. According to mean comparison, the first sowing date (October 22) had a greater pod number per plant. The highest grain yield was belonging to Hayola 401 with the first sowing date and PF with the second sowing date. Since 1/3 leaves from down part of plant at the first sowing date removed the highest pod number per plant was obtained.

Key words: rape, grain yield, source, sink, sowing date

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