Sixth Article (Shared with others inside the specialization – Published in local Journal – Printout from master thesis).

Performance of canola genotypes under water availability and deficit in newly reclaimed soil.
International Journal of Agronomy and Agricultural Research, (2016)
International Journal of Agronomy and Agricultural Research, (9) 3, 57-65.

Ghallab, K. H., Dewdar, M. D. H., **Khalaf, A. E.,** & Galal, M. A
[1]Agronomy Department, Faculty of Agriculture, Fayoum University, Fayoum, Egypt.

Article status	(Shared with others inside the specialization – Published in local Journal – Printout from master thesis).	Impact Factor: --

Abstract

This study was conducted to determine the effects of drought stress and the important genetic parameters on some canola genotypes. Thirteen genotypes were tested in a split plot design based on randomized complete block design with three replications in 2012- 2013 and 2013-2014 at the experimental Farm of the Faculty of Agriculture, Fayoum University. The results indicated that the analysis of variance for the studied nine traits showed significant and highly significant differences among irrigation intervals, genotypes and the interaction of irrigation x genotypes (I x G) in both seasons for all the traits except I x G interaction for seed index and oil percentage in the 1st season and seed yield per fed. In the 2nd season which exhibited non-significance differences. The means of irrigation treatments showed significantly reduction by increasing drought stress for all traits. The trait means under normal irrigation had higher values than those of drought conditions. The Mean performance of genotypes 12, 10, 11 and 9 responded in this respect to drought stress more than other genotypes. The phenotypic variance was greater than those of genotypic ones for all studied traits and the same trend for phenotypic and genotypic coefficient of variability. The heritability values were ranged from low to moderate values for most studied traits. Expected genetic advance (GA) values except for number of pods/ plant (high value) were low for all studied traits and Genetic advance as percent of mean seemed to be more important than GA values for further improvement in the tested genotypes.