



EFFECT OF LIQUORICE EXTRACT, YEAST SUSPENSION AND BORON ON GROWTH AND YIELD OF THREE CULTIVARS OF BEAN (*VICIA FABA* L.)

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Abstract : A field experiment was carried out in the field of experiments of the Department of Field Crops, Faculty of Agriculture University of Muthanna during 2016-2017 growing season. The experiment included the effect of yeast spray (0, 5-10 gm.L⁻¹), liquorice extract (0, 5, 10 gm.L⁻¹) and boron (0, 400 mg gm.L⁻¹) and their interaction on three varieties : local, GranoVioletto and Filo Semillas. The experiment was carried out with (R.C.B.D) design. The results showed that the treatment (liquorice + yeast 10 g L⁻¹+ boron (400 mg L⁻¹) gave higher number of fruit branches, chlorophyll content, number of flowers, number of pods, number of seeds in pod and the seed yield (9.33 branches, 389.6 mg.m⁻², 587 flowers, 29.67 pods, 4.91 seeds.pod⁻¹, 7.72 tons.h⁻¹). GranoVioletto variety has high number of flowers, percent of fertilization, number of pods and seed yield (503 flowers, 5.63%, 27.00 pods, 7.08 tons.h⁻¹) compared with other varieties.

Key words : Liquorice extract, Yeast suspension, Boron and bean, R.C.B.D.