

## Evaluation of the effect of some herbicides on *Vicia faba* L. growth traits

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**ABSTRACT:**

A field experiment was conducted to estimate the effects of registered and unregistered herbicides in some broad bean (*Vicia faba* L.) growth traits. Four herbicides were used in this study: Illoxan (Diclofop - methyl) with two rates 0.88 and 1.76 kg a.i./ha, Basagran (bentazone) at 1.44 kg a.i./ha, Treflan (trifluralin) at 0.576 kg a.i./ha and TOPIK 15 wp (clodinafop-propargyl) at 0.12 kg a.i./ha as well as the control treatment (non-treated). Most of these herbicides showed a reduction of most of the parameters. Control treatment recorded a significant superior in leaf area, root size and top biomass weight which was 341 cm<sup>2</sup>, 5.90 cm<sup>2</sup> and 2.46 gm respectively, while; TOPIK recorded the higher number of leaves (20.67) without significant differences as compared with control treatment. All herbicides revealed no differences between them in most parameters except Illoxan at 0.88 kg a.i./ha, which gave the best results in most plant growth traits while trifluralin gave higher degree of injury (2.33).

**Keywords:**

Herbicides, Degree of injury, Growth traits, Broadbean.