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Gibberellin effects on soybean yield

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Soybean is a very important crop in Uruguay, however there are no studies on the potential of plant growth regulators to increase crop yield. This experiment was carried out at La Estanzuela Experimental Station to study the effect of different levels and moments of application of gibberellic acid (GA3) on soybean yield. The crop was planted as a second crop following a barley harvest. The experiment consisted in five foliar applications of GA3 sprayed at different doses and growing stages (GS) : 1) at GS V4/V6, 40 g ha<sup>-1</sup>; 2) at GS R2, 20 g ha<sup>-1</sup>; 3) at GS R5, 20 g ha<sup>-1</sup>, 4) at GS V4/V6, R2 and R5 at 10 g/ ha<sup>-1</sup> each application ; 6) every time the crop was treated with pesticides, 10 g/ ha<sup>-1</sup> , plus a control without GA3 . Treatments arranged in a randomized complete block design (RCBD) with five replications. The results showed that the lowest yield were achieved in the control and when AG3 was sprayed at V4/V6 (4780 and 4751 kg ha<sup>-1</sup> respectively and the highest with treatment 6 (5298 kg ha<sup>-1</sup>) but there were no significant ( $P < 0.05$ ) differences between treatments.