## EFFECT OF SPRAYING GIBBERELLIC ACID AND NITROGEN ON TWO TYPES OF POTATOES VAR. ALASKA.

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## **ABSTRACT**

The experiment was conducted in the field of Plant Production Department at Technical Institute in Mosul for the years 2010 and 2011 at the season-spring to study the effect of spraying gibberellic acid GA3 at different concentrations (0, 25, 50, 100) ppm and two levels of fertilizer nitrogen (20 and 40) kg/acre and two kinds of potatoes (full and cut in two halves) var. Alaska

The results showed that spraying growth regulator  $GA_3$  concentration of 100 ppm led to a significant increase in the character of plant height and number of branches and number of tubers / plant and average weight of the tuber and yield per plant and total yield / donum and add fertilizer nitrogen rate higher led to a response studied, and the impact of the quality of potatoes has been shown that treatment of tubers fragmented significantly outperformed the full treatment of tubers per traits under study.

Interaction the overlap between growth regulator GA3 and nitrogen fertilizer and the quality of cultivated potatoes that sprayed growth regulator GA3 concentration of 100 ppm and a high level of nitrogen fertilizer 40 kg and cutting tubers significantly highest yield 6.954 tons /donum as compared with lowest yield 5.275 tons / donum per unit area.

Key words: potato, Gibberellic, nitrogen fertilizer, plant height, tuber weight.

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