

## EFFECT OF FIRST CUTTING AFTER OVER WINTER AND FOLIAR APPLICATION OF NITROGEN ON SEED YIELD AND IT'S COMPONENTS OF ALFALFA (*Medicago sativa* L.)

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### ABSTRACT

This experiment was carried out in the experimental station of the College of Agriculture ، University of Baghdad during summer season of 2012 and 2013 . The main objective was to find out the effect of 1<sup>st</sup> cutting after over winter (mid. of Feb. ، beginning of March and mid. of March)were assigned as a main plots and foliar application of N at four conc. (0,1000, 2000 and 3000 mg/L)were assigned as a sub-plots on seed yield and It's components in a local cultivar of alfalfa, The experiment was layout according to split plots arrangement in (R.C.B.D.)with three replication. Results show that، in 1<sup>st</sup> season. The 1<sup>st</sup> cutting after winter only significantly influenced on number of pods per racemes. Since، plants cutting on mid. of march gave highest number of pods per raceme (11.32).while the other components and seed yield were not significantly influenced by the date of 1<sup>st</sup> cutting after over winter. In 2<sup>nd</sup> season ، date of cutting had significant effect only on number of pods per raceme ، number of racemes per stem and seed yield . In both seasons ، Foliar application of N had significant effect on all seed yield components and seed yield except number of seeds per pod and 1000 seed weight . As average for two seasons ، higher seed yield ( 877.5kg/ ha ) can be obtained from stands first cutting date on mid. of march and sprayed with N at beginning of flowering stage with conc. Between 1000 – 2000 mg/ L.

**Key words:** alfalfa ,date of first cutting after over winter , foliar nitrogen fertilizer, seed yield components , seed yield.

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