A PRELIMINARY STUDY ON THE EFFECTS OF NON-THERMAL PLASMA TECHNOLOGY ON GROWTH PLANT OF BERSEEM (EGYPTIAN CLOVER) CROP

G.M.El-Aragi and G. Abed-Nasser Ahmed*
Plasma Physics and Nuclear Fusion Dept
Plant Research Dept.
Nuclear Research Center, AEA, PO 13759 Cairo, Egypt

Non-thermal plasma technology was used to evaluate the effect of exposure on growth plant of berseem crop (Egyptian clover). The exposure system that was used to generate plasma radiations is the atmospheric pressure plasma jet (APPJ). This system produces a high flux stream of reactive chemical species at atmospheric pressure and low temperature. The clover seeds were divided equally (100 gram weight) into several groups: one unexposed control group and other tested groups (six groups) which were exposed to different number of pulses i.e. different doses of radiations. Among the treatments, all tested groups (1, 3, 5, 7 pulses) except for other two tested groups (9 and 11 pulses) have positive effect of an increased growth plant of clover crop relative to control group.

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