ABSTRACT

THE RESEARCH OF USABILITY OF LIQUID ANIMAL MANURE AS TOP-DRESSING AND SUITABLE DOSAGE IN COTTON CULTIVATION

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In this study, usabılıty of liquıd animal manure as top-dressıng in cotton was discussed. The treatment was established in lands of Nazilli Cotton Research Station Directorates in May of 2012. The treatment comprised totally 6 application, 2 control and 4 liquid animal manure. Liquid animal manure doses occured as 4, 8, 12 ve 16 kg N/da, and control parcels occured as 0 and 9 kg N/da(chemical fertilizer). In the study, quantitive characteristics were analyzed such as leaf nutrient content, plant height, number of monopodia, number of sympodia, the number of open boll, the number of closed boll; ginning out turn, 100 seed weight, fiber strength, fiber length, fiber fineness, earliness and total seed cotton yield values. It was determined that liquid animal manure application increased N and Ca content and decreased Fe content of leaf, and no effect was detected on the other nutrient elements content. Besides, positive effects were determined on plant height, number of sympodia, number of monopodia, seed cotton yield, ginning out turn and 100 seed weight. The highest cotton unseed yield was obtained from the liquid manure application (12 kg da^{-1}) and amonium-nitrate application (control-2), and no change was identified statistically in qualitative specifications. The highest cotton gin yield was obtained from the dose of 12 kg da^{-1}. With this study, the usability of liquid manure was determined as a top-dressing in cotton cultivation.

Key words: Cotton, Fertilizers, Fertilization, Liquid Fertilizing.