THE EFFECTS OF BACTERIAL (Rhizobium spp.) INOCULATION ON SOME PLANT CHARACTERISTICS OF CHICKPEA AT DIFFERENT GROWTH-DEVELOPMENT STAGES

C. AKDAĞ, O. DÜZDEMİR

Gaziosmanpaşa University, Agricultural Faculty, Department of Field Crops, Tokat. Turkey

ABSTRACT

This study was done to determine the effects of Rhizobium spp. inoculation for chickpea on some plant characteristics at different stages [(20th day, 40th day, and flowering (62nd day)] after the sowing. The research was carried out as a pot experiment and factorial design with five replications.

It was determined that bacterial inoculation had significant effect on total plant weight, root weight, weight of above-ground parts, number and weights of effective nodules, and nitrogen contents of root and above-ground parts at 40th and 62nd days (flowering). In addition, it was determined that bacterial inoculation had significant effects on all of the selected properties at flowering stage.

Key words: Chickpea, bacteria, N2 fixation, nodule.