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UPTAKE OF SOME ESSENTIAL NUTRIENTS IN CHICKPEA DURING DIFFERENT GROWTH STAGES IN RELATION TO BIOMASS YIELD

Hasan SEPETOĞLU, Metin ALTINBAŞ and Ihsanullah DAUR

Ege University, Faculty of Agriculture, ,Department of Field Crops,35100 Bornova-İzmir, Turkey

ABSTRACT

Chickpea (*Cicer arietinum* L.) is specially valued for its high protein efficiency ratio. Knowledge of nutrient uptake at different growth stages is an important aspect of plant mineral nutrition for achievement of high yield. A two year field experiment was conducted at the Experimental Field of Ege University Faculty of Agriculture, Department of Field Crops, Bornova-İzmir, Turkey to determine nitrogen, phosphorus, potassium, calcium, magnesium and sodium uptake of chickpea during different growth stages: slow vegetative growth, linear vegetative growth, flowering and grain filling stages. All elements except calcium showed almost similar dynamics with biomass increase during different growth stages. Calcium showed decrease in grain filling stage compared to biomass increase. These findings can be used for fertilizer management of chickpea, organic production and as a reference for interpretation of plant tissue analysis results of chickpea.

Keywords: Chickpea (*Cicer arietinum* L), nutrient uptake, biomass, growth, growth stages