

WATERING UNIFORMITY OF DRIP IRRIGATION SYSTEMS USING IN IRRIGATION OF MAIZE FOR KONYA-ÇUMRA PROVINCE, TURKEY

Ahmet Rasih İNCİMAN¹, Bilal ACAR¹

e-mail: ahmet_rasih19@hotmail.com

Abstract

This study was conducted to determine water distribution uniformity of emitters at different drip irrigation systems using at maize farms in Çumra region of Konya, Turkey. Watering performance of drippers was classified by using two criteria namely Uniformity Coefficient, UC, and Emission Uniformity, EU. In results, UC varied from 68% to 84% with an average of 75% and water delivery class was 'Moderate' in accordance of such a mean value. EU varied from 44% to 71% with an average of 55%, and watering performance was 'Poor' or 'Unacceptable' in regard to average of EU value. Variations in emitter discharge rates in all examined drip irrigation systems were found higher than 10%. Drip irrigation system should be designated in accordance of hydraulic principles, installed by experienced people and timely maintenance-repair works are needed for maximizing water distribution uniformity consequently improvement grain/silage yields as well as more economical returns.

Key words: maize, drip irrigation systems, watering efficiency of drippers
