

Evaluation of Superabsorbent Application on Corn Yield under Deficit Irrigation

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Abstract : This research was planned in order to study the effect of drought stress and different levels of Superabsorbent and their effect on grain yield, biologic yield and harvest index. In this study, 3 different depths of irrigation were considered as the main treatment I1, I2, I3 as 100, 75 and 50 percent of water requirement of plants respectively and different levels of Superabsorbent were used as secondary treatment (S0, S1, S2 and S3, equal to 0 (control), 15, 30 and 45 gr/m² respectively). According to the results, independent effects of irrigation and Superabsorbent treatments at 1% level on biologic and grain yield of corn were significant. In addition, independent effect of irrigation treatments at 5% level on harvest index was significant. But independent effect of Superabsorbent treatments on harvest index was not significant.

Keywords : corn, deficit irrigation, superabsorbent, yield

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