



RESEARCH ARTICLE :

Response of summer groundnut (*Arachis hypogaea* L.) to different irrigation level and mulches under drip irrigation

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SUMMARY : A field experiment was conducted during 2013-14 to study the response of summer groundnut (*Arachis hypogaea* L.) to different irrigation level and mulches under drip irrigation at the AICRP on Irrigation Water Management, VNMKV, Parbhani (M.S.). Soil of the experimental plot was clayey in texture and slightly alkaline in reaction. It was medium in total nitrogen and available phosphorus and fairly high in exchangeable potassium (K_2O). The experiment was framed out in Split Plot Design with four irrigation level (I_1 - Irrigation at 0.6 PE, I_2 - Irrigation at 0.8 PE, I_3 - Irrigation at 1.0 PE and I_4 - Irrigation at 1.2 PE) in main plots whereas four mulches [M_1 - Black polythene mulch with drip, M_2 - Transparent polythene mulch with drip, M_3 - Soybean straw mulch with drip and M_4 - Control (drip)] were assigned in sub plots. Results of the experiments revealed that the irrigation at 1.0 PE provided congenial conditions for better growth resulting in to significantly higher number of pods per plant, dry pod yield and haulm yield per hectare under 1.0 PE than 0.6, 0.8 and 1.2 PE. The yield attributing characters like number of pods per plant, dry pod yield, haulm yield, biological yield kg per hectare was maximum under transparent polythene mulch as compared to rest of the mulches.

KEY WORDS :

Groundnut, Drip irrigation, Mulches

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