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## Effects of treated wastewater and fresh water on growth and yield of tomato (*Lycopersicon esculentum*)

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Department of Soil and Water Engineering, College of Agricultural Engineering, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.) India Email : thakursatyendra007@ gmail.com ■ ABSTRACT : Study was conducted to examine the effects of two sources of water on the growth of tomato (*Lycopersicon esculentum*) at Maharashtra in Jalgaon district. The sources of irrigation water were: treated wastewater and fresh water. The quality of these sources was monitored for a period of three months (2017). Samples from both of the source taken were sent to the laboratory for analysis. Each water source was used to irrigate tomatoes planted in the field using split plot design (SPD) as the experimental design for a period of three month. The treatments were two (treated wastewater and fresh water) with three replications. During the growing period, soil fertility status was monitored for a period of three months. During this period, plant height, number of flowers and fruits were determined. Here results shows that treated wastewater was also used for irrigation purpose and get 01-05 per cent less yield as compared to fresh water yield. So the wastewater with appropriate plant protection measures was found suitable for irrigation of tomato crop.

■ KEY WORDS : Tomato, Treated wastewater, Fresh water, Growth, Yield

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