

Influence of distillery spentwash irrigation on the nutrients of fruits in untreated and spentwash treated soil

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ABSTRACT

Cultivation of some fruits plants was made by irrigation with distillery spentwash of different proportions. The spent wash *i.e.*, primary treated spent wash (PTSW) and 33% spentwash were analyzed for their plant nutrients such as nitrogen, phosphorous, potassium and other physical and chemical parameters. Experimental soils *i.e.*, untreated (plot-1) and spentwash treated (plot-2) soils were tested for their chemical and physical parameters. The fruits seeds/sets (Namadhari and Mayhco) were sown in the prepared land and irrigated with raw water (RW) and 33% spentwash. Influence of spent wash in untreated and spentwash treated soils on proximate principles (moisture, protein, fat, fiber, carbohydrate, energy, calcium, phosphorous, and iron), Vitamin content (carotene and vitamin-c), minerals and trace elements (magnesium, sodium, potassium, copper, manganese, zinc, chromium and nickel) of fruits were investigated at their respective maturity. It was found that the nutrients of all fruits were high in 33% than raw water irrigation. Further, the nutritive values were very high in spentwash treated soil (plot-2) 33% irrigation than untreated (plot-1) and raw water irrigations.

Key words : Distillery spent wash, Fruits, Nutrients, Proximate principles, Untreated soil, Spentwash treated soil

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