Deficit Irrigation × Jeevamrutha-Based Nutrition in Marigold Crop

① Jeevamrutha preparation



Materials: jaggery, pulse flour, cow urine, dung



Mixing (with soil + water)



Fermented, kept in shade for 7 days

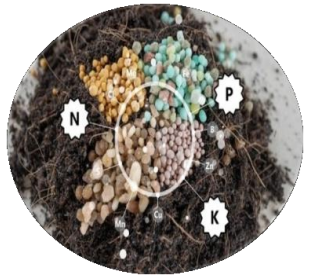
② Applied under surface (furrow) deficit irrigation (I_1 1.0, I_2 0.8, I_3 0.6 ETc) to African marigold



Experimental furrow-irrigated plots



Rhizosphere microbial abundance ↑
bacteria, fungi & actinomycetes; dehydrogenase activity ↑



Soil nutrient availability ↑
available N, P, K & micronutrients in the root zone

Outcomes — best combination I_3N_2 (0.6 ETc + 100% Jeevamrutha-N)



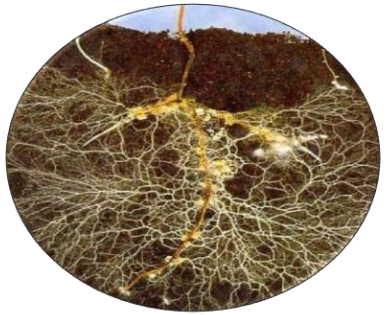
Flower yield



Irrigation water saved



Net return (B:C 1.90)



Microbial abundance & fertility