RESEARCH ARTICLE

IMPACT OF SOLID AND LIQUID ORGANIC SOURCES ON CONTENT AND UPTAKE OF NUTRIENTS BY FINGER MILLET [*ELEUSINE CORACANA* (L.) GAERTN.] UNDER RAINFED CONDITION OF SOUTH GUJARAT

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Abstract: A field trial was conducted at Krishi Vigyan Kendra, Rajendrapur Farm, Navsari Agricultural University, Waghai to study the "Effect of organics on soil properties, yield and quality of finger millet [*Eleusine coracana* (L.) *Gaertn.*]" during *kharif* season of 2018 and 2019 under rainfed condition of south Gujarat. Treatments were laid out in a randomized block design (factorial concept) with three replications and compared with control recommended practice consisting of 40-20-0 NPK kg/ha. In *kharif* season, treatments were allotted to different experimental units of finger millet through solid organics (Factor - S *viz.*, S_1: 100 % RDN through biocompost, S_2: 75 % RDN through biocompost and S_3: 50 % RDN through biocompost) and foliar application of liquid organics (Factor - L *viz.*, L_1: Enriched Banana Psuedostem sap @ 1 %, L_2: *Jeevamrut* @ 1 %, L_3: *Vermiwash* @ 1 % and L_4: Cow Urine @ 1 %). Significantly higher nutrient content (N, P, K and Ca) in grain and straw were recorded highest in 100 % RDN through biocompost (S_1), which remained at par with the application of 75 % RDN through biocompost but phosphorus and calcium content of straw not to be found significant. Among liquid tested, application of enriched banana psuedostem sap @ 1 % showed highest value of grain and straw content over rest of liquid tested but did not show significant effect among the different treatments. In case of nutrient uptake by grain and straw, application of 100% and 75% RDN through biocompost as well as enriched banana psuedostem sap @ 1 % and Jeevamrut @ 1% recorded best nutrient (N, P, K and Ca) uptake among different treatments under study.

Keywords: Foliar nutrition, *Eleuscine coracana*, Finger millet

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