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## RESEARCH ARTICLE:

# Studies on organic manures and liquid organic manures to quality parameters in sweet corn [*Zea mays* (L.) *Saccharata*]

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# ARTICLE CHRONICLE:

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**KEY WORDS:** 

Sweet corn, Organic manures, Liquid organic manures, Fertilizer, Dehydrogenase activity, Quality **SUMMARY:** The experiment has twenty four treatment combinations comprising of six main plots, organic manures mainly green leaf manure (GLM), enriched compost, FYM and vermicompost in combinations compared with RDF and FYM + RDF and four sub plots, liquid organic manures mainly bio-digester liquid manure, panchagavya and cow-urine. The treatments comprised of application of  $7.5\,\mathrm{t\,FYM} + \mathrm{RDF}\,(100:50:25\,\mathrm{N}, \mathrm{P_2O_5}, \mathrm{K_2O}\,\mathrm{kg}\,\mathrm{ha^{-1}} + 10\,\mathrm{kg}\,\mathrm{ZnSO_4})$  (RPP) and (100:50:25 N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O kg ha<sup>-1</sup> + 10 kg ZnSO<sub>4</sub>) (RDF) alone exhibited significant effects on quality parameters *viz.*, protein content, reducing and non-reducing sugar, total sugar, total soluble solids and total carbohydrates content in sweet corn kernels of sweet corn. Among the organic manurial combinations GLM + EC + VC (top dressing at GGS) recorded higher quality of sweet corn with all liquid organic manures over basal applied vermicompost. Similarly, Bio-digester and cow urine @ 10% spray noticed higher quality of sweet corn over control. Irrespective of organic manures, the dehydrogenase activity was significantly higher with GLM + FYM + VC (top dressing at GGS) and GLM + EC + VC (basal) equivalent to RDN over RPP and RDF.

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