

 An Asian Journal of Soil Science

 Volume 9 | Issue 1 | June, 2014 | 67-72 | 🖒 e ISSN-0976-7231 | Open Access | www.researchjournal.co.in



## **Research** Article

## Studies on nitrogen fractions as influenced by organic and inorganic sources of nutrients under different cropping systems in Vertisol

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Received : 26.11.2013; Revised : 28.04.2014; Accepted : 10.05.2014

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A field experiment was conducted at Dry land Research Station, Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani during 2003-04 and 2004-05 in Vertisol with application of organics and inorganics sources of nutrients under different cropping system viz., soybean-pigeonpea and sorghum-pigeonpea. The results revealed that, all nitrogen fractions like total hydrolysable nitrogen., amino acid nitrogen, organic ammonium nitrogen, acid insoluble nitrogen and total nitrogen were increased significantly in all treatment combinations. The combined application of organic and inorganic fertilizers caused significant increase in available nutrient status of soil. The relationship as simple and multiple regressions between available N and different N fractions was interdependent to each other.

Key words : Nitrogen fractions, Relationship, Cropping systems

How to cite this article : Mairan, N.R., Dhawan, A.S. and Kausadikar, H.K. (2014). Studies on nitrogen fractions as influenced by organic and inorganic sources of nutrients under different cropping systems in Vertisol, Tamil Nadu. Asian J. Soil Sci., 9(1): 67-72.

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