



## RESEARCH PAPER

# Effect of green manure intercropping with different levels of fertilizer on growth attributes of rice

A. Selva Rani\* and S. Subbulakshmi

Krishi Vigyan Kendra, Thirupathisarm, Kanyakumari (T.N.) India (Email : [selvarania1974@gmail.com](mailto:selvarania1974@gmail.com))

**Abstract :** Green manuring is an age old practice and its value is known to the farmers for several centuries ago. Greenmanuring to rice crop improve the soil fertility and productivity. The greenmanure application to the soil promotes the activities of soil microorganisms through which CO<sub>2</sub> is liberated, the chemical reactions in the soil are speeded up and more plant nutrient is made available to rice crop. Organic acids produced during the decomposition of greenmanure helps to release phosphates and made them available to the crop. The greenmanure crop withdraws plant nutrients from the lower layers of soil and concentrates them to the surface, when ploughed in and this assists the succeeding or associating crop. For sustainable crop production, Pathak and Ghose (1996) emphasized that application of greenmanure, complementary use of N through organic manures and improved composted manures and crop residue utilization are important. *In situ* incorporation of *Sesbania aculeata* @ 12 t ha<sup>-1</sup> recorded higher grain yield and higher cooking time of rice due to the increased hardness of grain (Hemalatha *et al.*, 2000).

**Key Words :** Green manure intercropping, Different levels, Fertilizer, Growth attributes, Rice

**View Point Article :** Selva Rani, A. and Subbulakshmi, S. (2023). Effect of green manure intercropping with different levels of fertilizer on growth attributes of rice. *Internat. J. agric. Sci.*, 19 (1) : 206-209 DOI:10.15740/HAS/IJAS/19.1/206-209. Copyright@2023: Hind Agri-Horticultural Society.

**Article History :** Received : 25.09.2022; Revised : 22.11.2022; Accepted : 24.12.2022

---

\*Author for correspondence:

<sup>1</sup>Agricultural College and Research Institute, Killikulam, Thoothukudi (T.N.) India