

Utilization of agro-industrial wastes for the improvement of vegetative and yield characters in black gram (*Vigna mungo* L.)

■ ANJU SINGH AND A.VIJAYALAKSHMI

SUMMARY

An experiment was conducted to analyse the effect of the interaction between different rates of composted press mud, composted coirpith, farmyard manure and NPK on vegetative and yield parameters of black gram (*Vigna mungo* L. Var.Co. ADT5). On the 25th day a significant increase in root length (T₂- Composted coirpith), shoot length (T₉- Composted coirpith + 25 % NPK), number of leaves (T₆-Composted coirpith + 50 % NPK), number of nodules (T₂- Composted pressmud), fresh weight (T₁₁- FYM + 25% NPK), dry weight (T₁₀- Composted pressmud + 25%NPK) was observed. On the 45th day an increase in root length (T₁₁- FYM +25% NPK), shoot length (T₁₀- Composted pressmud + 25%NPK), number of leaves (T₈- FYM+50% NPK), number of nodules (T₆- Composted coirpith + 50% NPK), number of flowers (T₅- NPK 100%), fresh weight (T₇- Composted pressmud + 50%NPK), dry weight (T₇- Composted pressmud + 50%NPK) were noted. On the 55th day a significant increase in root length (T₉- Composted coirpith + 25% NPK), shoot length (T₁₀- Composted pressmud + 25%NPK), number of nodules (T₃- Composted pressmud), number of fruits (T₁₁- FYM+25% NPK), fresh weight (T₇- Composted pressmud + 50%NPK), dry weight (T₇- Composted pressmud + 50%NPK) was observed. And on 75th day the yield parameters number of pods/plant, length of pods, weight of pods, number of seeds/pod, weight of seed/pod, pods fresh weight and dry weight were significantly increased in T₁₁ (FYM + 25%NPK) treatment. Thus, in conclusion composted coirpith, composted pressmud and FYM increased the vegetative growth and FYM with 25%NPK increase the yield of black gram.

Key Words : Composted coirpith, Compostedpressmud, Farm yard manure, *Vigna mungo*

How to cite this article : Singh, Anju and Vijayalakshmi, A. (2013). Utilization of agro-industrial wastes for the improvement of vegetative and yield characters in black gram (*Vigna mungo* L.). *Internat. J. Plant Sci.*, 8 (2) : 381-384.

Article chronicle : Received : 11.12.2012; Revised : 01.05.2013; Accepted : 12.06.2013

MEMBERS OF THE RESEARCH FORUM

Author to be contacted :

A. VIJAYALAKSHMI, Department of Botany, Avinashilingam Institute for Home Science and Higher Education for Women, COIMBATORE (T.N.) INDIA

Email: a.vijayalakshmi85@gmail.com

Address of the Co-authors:

ANJU SINGH, Department of Botany, Avinashilingam Institute for Home Science and Higher Education for Women, COIMBATORE (T.N.) INDIA