

**IMPACT OF PARTIALLY BURNT PADDY HUSK WITH COIR PEAT
ON GROWTH AND YIELD OF BEAN (*Phaseolus vulgaris*)**



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ABSTRACT

French Beans (*Phaseolus vulgaris* L.) are recognized as a good source of proteins, which is 2-3 times that of cereal grains. Growth and yield are very low in bean due to adverse weather and soil conditions. The experiment was conducted to study the effect of partially burnt paddy husk with coir peat on growth and yield of bean. The experiment was laid out in a Complete Randomized Design with seven treatments. Partially burnt paddy husk was prepared in two different methods. The treatments were soil (T1-control), Coir peat: partially burnt paddy husk 3:1 (T2-method 01), 2:2 (T3-method 01), 1:3 (T4-method 01), 3:1 (T5-method 02), 2:2 (T6-method 02) and 1:3 (T7-method 02).

The results reveals that there was no significant differences ($P>0.05$) among the tested treatments on growth parameters. But, significant variations were noted ($P<0.05$) on number of pods per plant, length and girth of pod, fresh and dry weights of pod. Fresh and dry weights of pods were high in T1 followed by T3. However, there were no variation ($P<0.05$) between T1 and T3. This study conclude that instead of soil as media, coir peat: partially burnt paddy husk at 2:2 ratio could be used in French bean cultivation.

Key words: Coir peat, french bean, growth, partially burnt paddy husk, yield

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ABBREVIATIONS

NUE	- Nitrogen Uptake Efficiency
DOC	- Dissolved Organic Matter
CEC	- Cation Exchange Capacity
EC	- Electrical Conductivity
GRHB	-Gasified Rice Hull Biochar
CC	-Container Capacity
UAW	-Unavailable water
P	-Phosphorous
K	-Potassium
CRD	-Completely Randomized Design