

**EFFECT OF GOAT MANURE AND FISH MEAL ON
GROWTH AND YIELD IN COMBINED CROPPING
OF GREEN GRAM (*Vigna radiata*L.) AND
RADISH (*Raphanus sativus* L.)**



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ABSTRACT

Sustainable Food production is an inevitable need of day to day increasing world population. Intercropping is a good concept to efficiently utilize the space with time and produce more than one crop. Utilization of organic manures as an alternative for chemical fertilizer in intercropping system is an environmental friendly to achieve the productivity. Based on all the above concepts, the experiment was undertaken to find out the effect of goat manure and fish meal on intercropping of green gram (*Vigna radiata* L.) and radish (*Raphanus sativus* L.). The experiment was designed in Randomized Complete Block Design with five treatments and four replicates. The treatments were chemical fertilizer (T1), 10 t/ha goat manure alone (T2), 10 ton/ha goat manure +0.1 ton/ha fish meal (T3), 15 t/ha goat manure (T4) and 15 t/ha goat manure + 0.1 ton/ha Fish meal (T5). The fresh and dry weight of leaf, stem, root, seeds and pods of green gram were weighed at reproductive stage. Other than these plant height, number of nodules, leaf area and chlorophyll content were also measured. Fresh weight of leaf, tuber and whole plant were weighed as parameters for radish. The results showed that there was a significant difference in yield of green gram and radish among the treatments. The highest yield for green gram was recorded as 2654.73 kg/ha obtained in T5(15 t/ha goat manure + 0.1 ton/ha Fish meal). Similarly T5 produced highest yield for radish 39428.33 kg/ha. Therefore study ensured there is a positive effect of goat manure and fishmeal applied to green gram.

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