



RESEARCH PAPER

Performance and evaluation of seed production of green manure crop sunnhemp (*Crotalaria juncea* L.) in rice fallow situation

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Abstract : In agriculture, green manure is created by leaving uprooted or sown crop parts to wither on a field so that they serve as a mulch and soil amendment. The plants used for green manure are often cover crops grown primarily for this purpose. The green manuring is the easiest and cheapest way to enrich the soil fertility besides adding huge amount of organic carbon to the soil and also which prevents soil erosion. The non-availability of green manure seed preceding to paddy is major a constrain at farmers level. In rice fallow pulses the yields are declining due to severe incidence of YMV and farmers are unable reap the pulses in rice fallow situations. Keeping in view of the present scenario in rice fallow pulses, this study on performance of seed production of green manure crops for seed availability and profitability were taken up in farmers fields as On Farm Testing. In the present study the performance of, sunnhemp (*Crotalaria juncea* L.) was studied for seed yield in rice fallow situation during *Rabi*, 2018-19 and *Rabi*, 2019-20 under rainfed ecosystem by DAATT Centre in collaboration with Department of Agriculture. The On-Farm Trails (OFTs) were conducted at farmers fields in 7 locations randomly covering entire district in *Rabi*, 2018-19 and *Rabi*, 2019-20. Observations were recorded on days to maturity and seed yield. The results revealed that significantly higher seed yield was observed in sunnhemp. Seed yield increase was achieved to a tune of 84.00% in sunnhemp crop (1179 kg ha^{-1}) over control. The increase in seed yield could be attributed to the performance of sunnhemp crop in-terms of more growth and yield components. The farmers realized that, sunnhemp is best suitable green manure crop for seed production in Visakhapatnam district of North Coastal Zone, Andhra Pradesh.

Key Words : Sunnhemp, Rice fallow situation, OFTs, Yield

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