

Biomass Production and Decomposition Rate as Influenced By Age of Green Manures and Their Effect on Yield of *Kharif* Maize

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ABSTRACT

A field experiment was conducted at the Agricultural College Farm, Bapatla, to study the effect of *in-situ* incorporation of dhaincha, sunnhemp and pillipesara green manure at 60, 45 and 30 DAS. Highest biomass production was recorded from 60 days aged dhaincha. Age of incorporation had exerted significant differences in grain yield. Maximum grain yield was recorded when incorporated at 60 days (7871 kg/ha) which was significantly superior to 45 days (7030 kg/ha) and 30 days (6611 kg/ha) incorporation of green manures. Similar results were obtained for other yield parameters such as cob weight and test weight etc. Due to age of incorporation of green manure, maximum undecomposed portion was observed at 60 days (4.57 t/ha) age of incorporation followed by 45 days (1.46 t/ha) and 30 days (0.60 t/ha) age of incorporation, but all these were found to be significantly superior to one and another.

Key words : Green manure, Biomass, Undecomposed portion.