

## Impact of Cow and Poultry Manures on Seed Yield of Okra (*Abelmoschus esculentus*) in Sandy Regosol

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A field experiment was carried out in the Eastern region of Sri Lanka to feasibility evaluate the effect of cow and poultry manures as a basal application on seed yield of okra (*Abelmoschus esculentus*) in sandy regosol. It was experimented in a Randomized Complete Block Design (RCBD) with seven treatments and three replicates. They included inorganic (control) and organic (cow and poultry manures at the different ratios: 5:0, 4:1, 3:2, 2:3, and 0:5 w/w) fertilizer applications. Air dried organic manures were applied two weeks before planting and other agronomic practices were done as recommended. The results revealed that the number of mature fruits per plant, number of seeds per mature fruit, oven dried weight of mature fruit per plant, air and oven dried weights of seeds per mature fruit increased by 45.86%, 29.22%, 62.33%, 11.29%, 34.9%, and 34.58% respectively 3:2 ratio of cow and poultry manures when compared to the control treatment. The same exhibited significantly ( $P < 0.05$ ) higher seed yield (0.85 kg/plot, plot size was 7.2 m<sup>2</sup>) than other tested treatments. The combined use of cow and poultry manures at 3:2 ratio therefore, could be used to substitute the inorganic basal fertilizer application for seed production of okra in sandy regosol.

Key words: *Abelmoschus esculentus*, Organic manures, Seed production