

**B-67: Effect of plant density, levels of nitrogen and gypsum on total dry matter of groundnut (*Arachis hypogaea* L.) in Regosols in Batticaloa district**

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Based on a preliminary experiment, the effect of four plant densities viz 396,826 (24 x 10.5 cm); 352,733 (27 x 10.5 cm); 288,600 (33 x 10.5 cm) and 148,148 (45 x 45 cm) plants/ha, at two levels of nitrogen (15 and 30 kg/ha) and in combination with three levels of gypsum (0,250,500 kg/ha) on dry matter yield of groundnut was tested, using a variety MI-1. The treatments were arranged in a factorial Randomized Complete Block Design. The results showed that dry matter yield was higher at the plant density of 352,733 plants/ha when compared to untreated control. However, on per plant basis, dry matter was highest at the lowest density (148,148 plants/ha) tested.

Nitrogen levels tested did not have any effect on dry matter (stem, leaves, roots and pods). Application of gypsum at the rate of 500 kg/ha increased yield.