



## Standardisation of seed rate and harvest schedules for fodder crops grown under hydroponic system

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### Abstract

The experiment was aimed to identify suitable fodder crops from ten crops viz., rice, barley, maize, wheat, sorghum, bajra, ragi, cowpea, horse gram and green gram and, to standardise the seed rate and harvest schedules for selected crops under hydroponic fodder production system. The first experiment was aimed to identify suitable crops for hydroponic fodder production system and the crops were grown in a low cost hydroponic structure. Among the crops, maize recorded highest B:C (2.51) ratio and net income. Considering yield and quality, green gram recorded significantly higher green fodder yield (GFY: 10.17 kg kg<sup>-1</sup> seed), protein content (20.97%) and B:C ratio (> 1.0) while fibre and ash contents were low. Considering all these factors, maize and green grams were found as the best among crops for hydroponic mode of fodder production system. The second experiment was done to standardize seed rate and harvest schedules for maize and green gram. It was observed that seed rate 200 g ft<sup>-2</sup> (2.15 kg m<sup>-2</sup>) was optimum for both the crops. Fodder harvest on 11<sup>th</sup> and 7<sup>th</sup> day recorded significantly higher GFY (6.03 and 10.18 kg kg<sup>-1</sup> seed) and B:C ratio (2.51 and 1.20) in maize and green gram, respectively.

**Keywords:** Fodder crops, Harvest schedule, Hydroponics, Seed rate