

Laboratory testing of broad bed furrow planter for different crops

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■ **ABSTRACT** : The feasibility study of tractor operated broad bed furrow planter was carried out at College of Agricultural Engineering and Technology, Jalgaon Jamod with assistance of Krishi Vigyan Kendra, Jalgaon Jamod during 2012-2013. The planter was developed by department of Farm Power and Machinery, Dr. PDKV, Akola. The planter was tested in laboratory as per RNAM test code for the crops sunflower, soybean and chickpea, respectively. The planter was used for preparing broad bed furrows and simultaneously sowing of seeds on beds. The laboratory test was conducted in which the average number of plants per metre was observed to be 5.38, 13.79 and 13.33 and plant population 122775, 459770 and 444444 per hectare for sunflower, soybean and chickpea, respectively. The seed rate was calibrated and found to be 7.7 kg/ha, 78.27 kg/ha and 77.20 kg/ha for sunflower, soybean and chickpea, respectively. The visible damaged is very less in the planter and found to be 1.5% for sunflower, 1.41% for soybean and 1.58% for chickpea. The average width of broad bed and furrow was recorded as 1.95 m, 1.50 m and 1.50 m for sunflower, soybean and chickpea, respectively. The average row to row spacing was found to be 45 cm, 30 cm and 30 cm for sunflower, soybean and chickpea, respectively.

■ **KEY WORDS** : Broad bed furrow planter, Laboratory testing, Calibration

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