

DEVELOPMENT OF MANUAL EXPERIMENTAL PLOT SEEDER

R.A. Bangale¹, R.V. Sanglikar², L.B. Bhore³ and P.A. Turbathmat⁴*Dr. A S. College of Agril. Engineering, Mahatma PhuleKrishiVidyapeeth, Rahuri, Dist- Ahmednagar, Maharashtra, India.**Received-02.11.2016, Revised-16.11.2016*

Abstract: The basic purpose of mechanization is to raise agricultural productivity, increase profitability and thus improve quality of life of farming community. The improvement of machine for sowing of experimental plots is a continuing problem facing by plants breeders, agronomists, plant pathologists and other agricultural scientists. Most part of the country, old traditional method is used for sowing. Traditional sowing method adversely affects result in improper placement of the seed into the soil at the correct soil depth, failure to properly keep the seeds firmly in the soil, uneven placement of the seeds at the correct interval in a row. Seed sowing is the most labour intensive operation. The labour requirement in manual sowing of gram seed is as high as 30 labour-ha⁻¹ and time requirement for sowing is also high. Keeping this in mind, manual experimental plot seeder was developed for gram. The field capacity of experimental plot seeder was observed to be 0.0547 ha h⁻¹ (Digvijay variety of gram) and 0.0864 ha h⁻¹ (Kripa variety of gram) & the field efficiency was observed to be 75.95 % (Digvijay variety of gram) and 80 % (Kripa variety of gram).

Keywords: Plot seeder, Field experiment, Crop, Productivity

REFERENCES

- Angus, Banting** (1960). Design five row experimental plot seeder. Agriculture engineering department, Macdonald College, Quebec: 37.
- Bush, H.L. and Brewbaker, H.R.** (2000). A Six-Row Experimental Plot Planter. Statistician-Agronomist and Director, respectively, Experiment Station, Great Western Sugar Company, Longmont, Colo: 163-165.
- Ahmad, Ejaz; Muhammad, Khan, Haji, Aslam; Ahmad, Khalil; Muhammad, Himayatullah; Khan, Ayaz and Hussain, Amir** (2010). Studied effect of row spacing and seeding rates on growth, yield and yield components of chickpea. Sarhad J. Agric. Vol. 26, No. 2 : 201-211 <http://www.indiastat.com>
- B., Ibukun, Agidi, Ikechukwu1, Gbabo, C., Ikechukwu, Ugwuoke.** (2014). Design and Fabrication of a Single Row Maize Planter for Garden Use. J. of Advancement in Engineering and Technology Voume1/Issue2 ISSN: 2348-2931.
- Mohsenin, N. N.** (1970). Physical properties of plant and chemical materials. Gordon and Breach Sci. Publ. New York. Pp. 84-113.

*Corresponding Author