

## Development and evaluation of mechanical earthing up equipment for groundnut crop

■ D.J. SHRINIVASA, MURUKANNAPPA, V.D. PARADKAR AND S.L. RATHOD

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See end of the Paper for authors' affiliation

Correspondence to :

**D.J. SHRINIVASA**  
Department of Farm  
Machinery and Power  
Engineering (C.T.A.E.),  
Maharana Pratap University  
of Agriculture and  
Technology, UDAIPUR  
(RAJASTHAN) INDIA  
Email : [shrinv70@gmail.com](mailto:shrinv70@gmail.com)

■ **ABSTRACT** : Groundnut is the major oil seed crop in India and it plays a major role in bridging the vegetable oil deficit in the country and also serves as a protein supplement to animals in term of feed. Lower penetration of groundnut pegs and weeds grown with the crop are the responsible for drastic reduction of yield. Earthing up destroys weeds and increases pod development by increasing penetration of pegs in the soil. But traditional methods of earthing up are tedious, laborious, and time consuming which leads to high cost of production. Pertaining to this, a simple mechanical earthing up equipment was developed and evaluated under groundnut crop at two operating conditions *i.e.*, 2 and 4 rows at a time. The results obtained at 2 rows and 4 rows earthing up condition were the earthing up efficiency (96 and 93 %), plant damage (1.96 and 3.5 %), effective field capacity (0.096 and 0.126 ha/h), field efficiency (80 and 52.5 %), fuel consumption (4.72 and 3.96 L/ha) and cost of earthing up (628.67 and 500 Rs./ha), respectively.

■ **KEY WORDS** : Development, Earthing up, Evaluation, Groundnut, Mechanical earthing up

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