



Tamil Nadu Agricultural University
Coimbatore – 641 003



Dr. M. Rajavel, Ph.D.,
Public Relations Officer
Mobile: 94890 56730

Phone: 0422 - 6611302
Fax: 0422 – 2431821
E-mail: pro@tnau.ac.in

To
The Editor,
Sir,

Date: 31.01.2024

I request that the following message may kindly be published in your esteemed daily:

**TNAU awarded a design patent
“Narrow Row Spaced Weeding and Earthing Up Equipment”**

The Tamil Nadu Agricultural University has been awarded a design patent for the invention of the "Narrow Row Spaced Weeding and Earthing Up Equipment". The Office of the Controller General of Patents, Designs and Trademarks of the Union Ministry of Commerce and Industry granted this patent.

Narrow row spaced weeding and earthing-up equipment consist of a prime mover, ground wheel, power transmission, spading unit, and a miniature plough for earthing-up operation. Drive is provided to the spading unit from prime mover through existing power transmission system. Spading action is done with scotch yoke mechanism to improve the weeding efficiency in narrow spaced crop. Weeds are up-rooted and chopped by trapezium shaped blade and it is mounted at end of the connecting rod with spading action. Soil compaction reduced and weeding efficiency is improved by spading action instead of rotary action of existing type weeder. Miniature plough is attached behind the spading unit to carry the earthing-up operation, which provides proper aeration to the crops, and enhance the crop root growth. Power operated weeding cum earthing-up equipment is a unique design mechanism to remove weeds in narrow row spaced crops with spading action and also soil earthing-up operation with miniature of plough. The weeding cum earthing-up operation in narrow spaced crops can be effectively done, where the movement of heavy tractor or power tiller operated unit is limited.

Dr.V.Geethalakshmi, Vice Chancellor, TNAU honoured the patent holders by handing over the patent certificates on the 30th of January 2024 in the presence of the Dean, SPGS and Dean, AEC&RI, Coimbatore.

Public Relations Officer