ICAR INNOVATION

Two-row semi-automatic vegetable planter for tomato, brinjal, and chili

Developed by ICAR- AICRP on FIM

To solve the problem of high labour requirement and high mortality rate in vegetables (chili, tomato, brinjal) transplanting, a two row semi-automatic vegetable planter having cup type metering mechanism for cell feed nursery has been developed by the Centre of AICRP on FIM (All India Coordinated Research Project on Farm Implements and Machinery), PAU Ludhiana in collaboration with M/s Dashmesh Mechanical Works, Amargarh.

The metering unit consists of 5 vertical cups mounted over a disc of 500 mm diameter. The cross section of the cups is 71 x 71 mm and length is 240 mm. A cam is provided on the periphery of the plate which controls the opening and closing of vertical cups.

The transplanter could transplant tomato, brinjal and chilli seedlings with plant missing of less than 4%. The effective field capacity of the machine for transplanting is 0.108, 0.126, and 0.152 ha/h at forward speed of 1.00, 1.25 and 1.50 km/h, respectively.

85% saving in labour with the use of the machine over manual method for transplanting. It saves the cost of cultivation: 24% for tomato, 31% for brinjal and 29% for chili

The approximate cost of the machine is Rs 2,50,000/-

For further information, contact:
Project Coordinator, AICRP on Farm Implements and Machinery
ICAR - Central Institute of Agricultural Engineering
Nabi-bagh, Berasia Road, Bhopal - 462 038,
Tel: 91-755-2521163 (O), E-mail: crmehta65@yahoo.co.in; cr.mehta@icar.gov.in