

Three labour saving technologies are developed at ICAR-CTRI

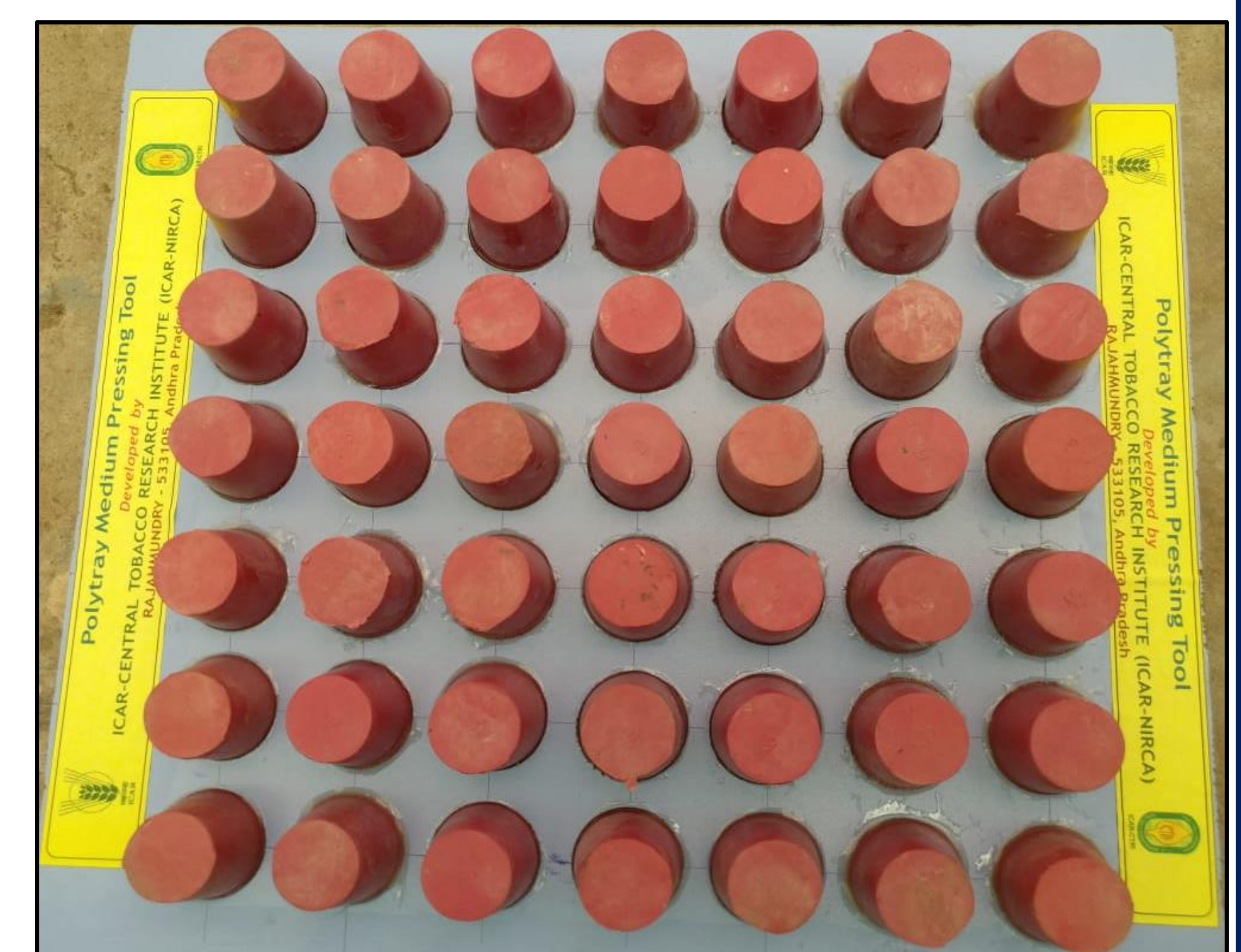
Tobacco Bale Pressing Machine:

1. Low cost Bale Pressing Machine was designed and developed by ICAR-CTRI which consists of a Steel plate (30x30") fixed on cement platform. A manually operated adjustable iron plate (29 x 29") fixed with the help of a screw handle to the Iron frame of 43" size fixed over the steel plate on the ground.
2. The wooden box is placed on the steel plate and the cured leaf is packed periodically in a systematic manner with the help of the adjustable iron plate fixed to the Iron frame.
3. After packing the required cured leaf (110-150kg), the wooden boards of the bale boxes are removed and the bale is packed with gunny bag and ropes.
4. This particular machine is a modified version of previous machine to reduce the cost for easy portability and assembling.
5. Baling of graded cured leaf through bale pressing machine reduces the labour, drudgery and improves the efficiency. This machine reduces 25% labour charges apart from improving uniformity in baling.
6. ICAR-CTRI licensed this technology for the wide spread use by the farmers.



Polytray Medium Pressing Tool

1. To produce uniform disease free healthy seedlings, growing of tobacco seedlings in polytrays is recommended.
2. In polytrays, coirpith growth medium is filled manually which is a time consuming, labour intensive and involves drudgery and moreover is not uniform.
3. Polytray Medium Pressing Tool device fitted with rubber corks which exactly fits in the poly trays was designed by ICAR-CTRI. It is having the 49 corks, which can press half of the tray at a time. The device is having two handles which facilitates the proper filling of the growth medium.
4. Coir pith is to be placed in the polytrays, packed with this device once, filled again and packed finally.
5. Polytray Medium Pressing Tool reduces time by 47% and the density of filling was also more, which facilitates better root development.
6. ICAR-CTRI is popularizing this technology for the benefit of farmers.



Hand held Battery operated Topping Tool

1. Topping is a unique cultural operation in tobacco, arrests the apical dominance and aid in increasing the size & weight of leaves and thereby overall yield (20-25%) per hectare.
2. Farmers generally do topping operation manually, which is tedious and time consuming.
3. To replace the manual topping, ICAR-CTRI has developed hand held battery operated topping tool consisting of rotating blades with leaf deflector, DC motor, battery and PVC handle.
4. The machine will run up to 8 hours with 3 hours of charging. For convenience a USB port was provided for charging and can be used with a regular USB cable.
5. The machine was evaluated in burley tobacco and found effective in terms of ease of Topping, saving labour and time.
6. ICAR-CTRI is popularizing this technology for the benefit of farmers

