

Innovative seeding machine to speed up kenaf planting

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Credit: Marina Ismail/UPM

Kenaf seeds as well as other seedlings such as corn can now be planted in an economical, easier and organized way and faster with the use of pneumatic seeding machine.

Only one seed is dropped into each ground slot while the soil is tilled by the machine which works very fast, thus saving the number of seedlings used compared to the use of normal machine which puts at least three seeds in just a hole.

The use of this machine enables [planting](#) to be carried out in a sprawling area of 1.7 hectare per day without the use of many manual labour.

Researchers of Universiti Putra Malaysia (UPM) started developing this machine in 2010 and it was ready by 2012.

A test on the use of the machine in the planting of kenaf was carried out that year at the University Agriculture Park (TPU), and it was proven to be a success. The machine, developed at a cost of RM28,000, is being patented.

Head of UPM Smart Farming Technology Research Centre, Prof. Ir. Dr. Desa Ahmad said the machine is a tractor-mounted, which includes a four-row unit planter that could plant seeds in the furrow. Furrow opener is adjustable.

Ridges and furrows are made by four furrowers mounted on a toolbar or chassis and are spaced at 30-75 cm from each other.

The row planting for kenaf seed is preferably spaced apart at predetermined intervals of 30 cm while for corn, the distant can go up to 75 cm.

The metering plate varies in sizes, depending on the size of the seeds to be planted whether it is kenaf, corn or garlic.

"What is so special about this machine is that it can drop and plant a seed in four rows simultaneously. Therefore, planting can be done fast in a straight row.

"This will save time and cost as there is no need to use many workers," he said.

He also said kenaf seeds in the special seeds tank will be evenly channeled onto the distribution plate seeds before they are sucked by the vacuum fan.

Subsequently, the [seeds](#) will be dropped in the ground slot or furrow before the soil is tilled, compressed and evenly leveled by the iron at the bottom of the machine.

He added that efforts were being made with the help of the industry to develop more of such [machines](#) for kenaf plantations.

Provided by Universiti Putra Malaysia (UPM)

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