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To
The Editor,

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Sir,

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

TNAU Trap finds Utility in France for Corn (Maize) Storage

Tami Nadu Agricultural University is one of the world leaders in the science of stored product insect monitoring device for their management. Recently one of the devices for stored grain insect management developed by Tamil Nadu Agricultural University has found its utility in France, a developed country for corn(maize) storage insect monitoring.

TNAU probe trap: (1 Foot)

The use of trap is relatively a new method of detecting, trapping insects in stored grains. The basic components of a TNAU probe trap consists of three important parts: A main tube, insect trapping tube and a detachable cone at the bottom. Equispaced perforations of 2 mm diameter are made in the main tube.

Concept:

Insects love “AIR” and move towards air. This behaviour of the insect is exploited in this technology.

Method of working:

The insect trap has to be kept in the grain like rice, wheat etc., vertically with the white plastic cone downside as shown the figure. The top red cap must be with the level of the

grain. Insects will move towards air in the main tube and enter through the hole. Once the insect enters the hole it falls down into the detachable white cone at the bottom. Then there is no way to escape and the insects are trapped forever. The white detachable cone can be unscrewed once in a week and the insects can be destroyed.

Salient Features:

No chemicals; No side effects and No maintenance cost.

Efficiency:

TNAU Insect traps are excellent insect detection devices in food grains and more effective in the detection of stored grain insects namely *Rhyzopertha dominica* (F.), *Sitophilus cryzae* (L.) and *Tribolium castaneum* (Herbst) in stored food grains both **in terms of detection** as well as **number of insects caught** than the standard normal sampling method (by spear sampling). The detection ratio (trap: normal sample) is higher in trap than of normal sampling method by factors ranging from 2 : 1 to 31 : 1. The insects catch is also higher in the probe trap than the normal sampling method by factors ranging from 20: 1 to 121 : 1.

They are also good mass trapping devices when used at 2 – 3 numbers / 25 kg bin (28 cm dia and 39 cm length). They should be placed at top 6 inches of the grain, where the insect activity is seen during early period of storage. They can remove > 80% of the insects within 10 – 20 days.

The trap model was developed by Dr. S. Mohan, Professor of Agricultural Entomology, TNAU, Coimbatore.

France – Feed back:

A French company purchased 25 units of TNAU probe trap model 1foot and tested for monitoring insect pests of stored corn (maize) as France is one of the leading producer of corn. Corn is stored in farms in large-scale for certain periods based on demand for export / shipping. It has been reported by the French company that TNAU probe trap model (1foot) length seems to be ok for corn grains which are attacked by storage pests like, maize weevil *Sitophilus oryzae,* Rusty grain beetles *Cryptolestes* sp etc.,

Paves way for export of TNAU product

This feedback opens the scope of TNAU probe trap model to find a place in management of stored product insects of corn not only in France but also in other countries leading to scope of export of this TNAU trap model, since corn being one of the major crops in many developed countries.

This is the first time a TNAU technology is tested and feedback made available from a developed nation.

In our country

This trap is very popular in our country with 0.5 million farmers/ households are currently using this trap.

Public Relations Officer