



Tamilnadu Agricultural University approved
(Indian Patent:198434)



iGrain[®]
Insect Remover

*To Protect Food Grains in Storage
from Insects including Eggs.*



ABOUT US

India Grain Company has its own Sales and Service team in entire North India, East India and Central India with its regional offices and warehouses. Today IndiaGrain Group has strength of its 50+ technical and administration employees. IndiaGrain core strength is that our all Sales and Service people achieving its yearly target and work together as a one team. Our all employees are truthful and 70% people have their journey with company more than 7 years.

We are the one and only chemical free solution provider to prevent stored food grains from both insects and it's eggs

Mission

- India Grain Company mission is to create a value in a customers, employee and human's life with the support of technology innovation. To support the earth mother as well on many grounds to survive for upcoming generations.

Vision

- Company upcoming 5 years vision is Rs. 100 Cr Target with the help of Color Sorter in Multi commodity, Fortified Rice Business till 2026. Addition of Rs. 20 Cr Target per year and make the team of strong 100 People till 2026. In Long term Vision Company target is achieving Rs. 500 Cr Business till 2030 by linked business in the commodity market with the help of technology.



BUSINESS PROBLEM THAT WE ARE ADDRESSING INSECT EGG REMOVED FROM STORED GRAINS

INSECTS IN GRAINS

- It has been estimated that between one quarter and one third of the world grain crop is lost each year during storage.
- Much of this is due to insect attack. In addition, grain which is not lost is severely reduced in quality by insect damage.
- Many grain pests preferentially eat out grain embryos, thereby reducing the protein content of feed grain and lowering the percentage of seeds which germinate.

INSECTS AND EGGS

- Eggs are the root cause of damage to the grains during storage.
- In this modern technology rice which is manufactured by whitening method and silky polish will be having more moisture content in grains
- Because of this advanced technology the grains will be easily affected by eggs and insects.



Grains with Eggs



WHAT WE DO ?

Generally at the beginning of storing grains, insect eggs will exist in the commodity. The eggs hatch and become adults in 25 to 35 days. **The egg removal machine can remove these eggs as a result there will not be insects build up during storage of grains.** This machine also removes larvae, pupae, live and dead adults especially larvae and pupae of free living insects. We are authorized manufacturer and seller of this TNAU device as per the requirement of our clients (end-users).

BENEFITS OF GRAIN INSECTS & EGG SHORTING MACHINE

- **A machine to Clean & Remove insects from stored grain.**
- The machine Removes not only live Insects, But also Dead Insects and It also Removes Musty Smell Tiny Sand, Dusts and Flour from the stored grains.
- The Machine also removes Bored insect and Insect Stages from the grains. Typical example is the lesser grain borer, *Rhyzopertha dominica* in split pulses.
- More the time of processing the more the effect on removal of Insect Stages and Dust.
- The Advantage of Removing Flour and Dust is that the secondary insect pests will not get Attracted to processed commodities.
- The above facts are verified with **IIFPT**. No wastage of grains and Shelf life of grains will be increased after the Process.
- **It will not spoil the shape and size of the grains.**
- The device will be useful for the suppliers, wholesale distributors, exporters and also for government warehouses to avoid insects for long term

METHODS OF REMOVING INSECTS

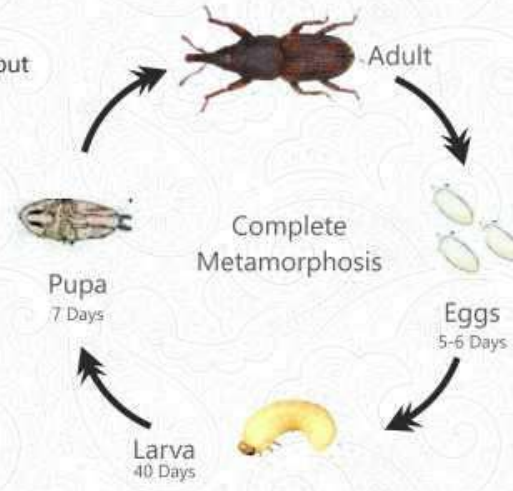
- As the use of pesticides and fumigants on or near stored grains is more dangerous to human beings.
- But in many cases even fumigants doesn't work out on insect eggs effectively in the removal process
- Hence, Insect egg removal device is developed to remove stored product insects and the eggs present in stored grains



**GRAIN INSECT
& EGG SHORTING
MACHINE**



LIFE CYCLE



Before Processing



After Processing



UV INSECT LIGHT TRAP



Insects Collection

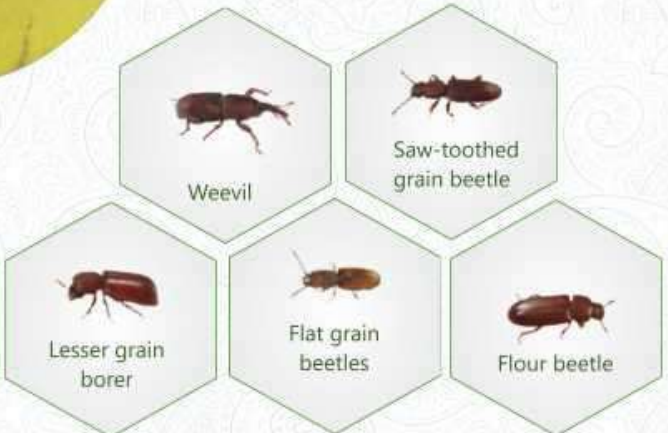
Catches flying insects that affect stored grains.

UV LIGHT TRAP will be useful for grain storage warehouses as Mass trapping device

Cross contamination of insects in grain stacks by insects can be controlled.

Best for *Rhyzopertha dominica*, *Tribolium sp.* etc

identification of common pests in stored grains



Weevil



Saw-toothed grain beetle



Lesser grain borer



Flat grain beetles



Flour beetle

INSECT PROBE TRAP

- Insects Trap helps to monitor and control further development of insects while storing the grains for a long duration.
- Once the insects are collected in a trap, further multiplication of insects will not be there ,thereby Insects egg will be reduced in the stored grain commodities.
- Keeping the trap inside the grains will help in monitoring and management of insects during storage of grains.
- Timely detection of insects by traps will help in taking preventive measures like mechanical cleaning by TNAU insect removal machine thereby control of insects can be achieved.
- Types of insects collected was Lesser grain borer, *Rhyzopertha dominica* Red Flour beetle *Tribolium sp.* etc.
- Types of grains where these probe traps will be useful: Rice, Wheat, broken dhal etc.
- The Insect Probe Trap was released by Tamil Nadu Agricultural university by in 1993 for public use.



Quality & Policy

Superlative policy: we give remarkable items and superb administrations that together convey premium worth to our clients. We are focused on giving the best in real life liquid administration arrangements that address the essential business issues and map a perfect solution

Vision

Agri commodities in general is a seasonal product. The commodity is stocked and provided throughout the year. During the time of stocking, the significant issue is insects which cause enormous quantitative loss besides nutritional loss. The fundamental motto of our machine is to control insects without using any synthetic compounds to save agriculture products during storage without chemicals.

OUR MENTORS TEAM

Dr. S. MOHAN

Retired scientist Specialist in designing and developing stored grain insect monitoring and management tools. (Non chemical Tamil Nadu Agricultural University Coimbatore)

Dr. PAUL FIELDS

Former Scientist, Agriculture & Agri Food Canada Winnipeg, Canada

Dr. QUENTIN M.E.

Former Ph.D. Scholar Michigan State University America



Makhana
Insects Removal Machine
(World First Machine)

Contact us:




Mahen Singh
Managing Director

+27 72 445 6442
mahen.singh@globalohlcommodity.com
www.globalohlcommodity.com

Overhead Line Hardware | Metals & Mineral Resources
Agricultural Commodities