The hindu, 15 01 2015

Easy to carry, effective solar-powered insect trapper

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Special Arrangement
The trapper is capable of controlling different flying pests.
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Pest management is one of the major expenditures that can drill a hole in a farmer’s pocket.

Right from sowing till the crops are harvested and sold, pests need to be managed effectively and economically without creating a dent in the fragile economical condition of a farmer.

A solar powered insect trapper developed by an entrepreneur, Mr. Abdul Kadhar, from Puducherry seems to promise both.

It is not priced high (Rs.2,625 a piece) and secondly, it is proving to be quite popular among farmers in the Tamil Nadu region.

Led technology

“Reducing and controlling the pest population using light traps is an age old practice in our country. Though there are several models and designs available I wanted to develop something that could be solar-powered and not dependent on fuel or electricity. The result is the Led technology for lighting

with low ultra violet light to attract flying pests in crops," says Mr. Abdul.

This device operates automatically, turning on the light during dusk (6:00 – 7:00 PM) and turns it off after five hours, sometime prior to midnight using a micro controller chip. Most of the damage causing insects are active only during that time, according to Mr. Abdul who adds, "It avoids capturing beneficial insects in the field."

Installing one light trap in an acre attracts at least 10 adult pests a day.

The device has been tested in different crop fields like paddy, sugarcane, vegetables, fruit crops like mango, pomegranate, guava, coconut, tea, coffee and jasmine crops across Tamil Nadu.

Mr. C.M. Pillai from Kiliyanur – Villupuram district, Tamil Nadu says, "I have been testing this device in my field for the last two months and am able to notice that there has been quite good control of white flies, hoppers, stem borer and leaf folder insects."

Controls different pests

The trapper is capable in controlling flying insects, nymphs, adults of leaf folder, stem borer moths, fruit borers, moths, hoppers, aphids, white flies, fruit weevil and different crop beetles etc.

The improved solar light trap was field tested in Sevaiyur village in Sivaganga district for about three months continuously on various vegetable crops and is effective.

The device seems promising to farmers since it has been capturing adults of many sucking pest, borers, and flies thereby reducing the dependence on bio pesticide usage to the tune of 50 per cent.

"We have initiated discussions with "Annamalai University and Tamil Nadu Agriculture University, Coimbatore for testing this device on the trial farm for two crop seasons. We are yet to receive an interim test report from this experiment," says Mr. Khader

Attracting adult insects to fire to manage insect population has been a traditional community practice. However, of late this is not practised due to over reliance and chemical methods of pest management.

Environment friendly

"It is perhaps the most environment-friendly practice as the source of light for trapping insects is the Sun. Hence, solar light traps need to be promoted in a big way as cost effective and environment friendly technology," says Dr. Sreenath Dixit, Zonal Project Director, Indian Council of Agricultural Research (ICAR) Hebbal, Bengaluru.

Solar light traps have added advantage of very little or no maintenance, ease of carrying and installation.

All it needs is a good network of sales and after-sales service. In view of the current emphasis on non-chemical and environment-friendly options for managing crop pests, solar light traps can be termed as appropriate technology.

Encouraging need

There is a need for encouraging small entrepreneurs to come out with cost effective and innovative models of solar light traps. This will also expand avenues in agri-business and agri services adding more jobs. A demonstration of the product is uploaded in https://www.youtube.com/watch?v=znS1i4e0kH0&feature=youtu.be.

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