

Baits and lures help farmers get the upper hand on fruit flies

Farmers in India and Pakistan stood by helplessly as fruit flies laid their eggs on their precious fruit and vegetables. They couldn't afford insecticide sprays and often lost nearly a quarter of their crop. Cheap home-made fruit fly traps, concoctions of banana and raw sugar, and home-made or locally manufactured lures (blocks of wood soaked in a solution that attracts and kills male flies) have turned this around.

Together these have cut losses by nearly two-thirds. The traps and lures work particularly well for tree fruits, such as mango, guava and citrus, and vegetables of the cucurbit family, such as cucumber, melon and pumpkin.

Fruit flies don't respect farm boundaries

In common with all other insects, fruit flies don't respect farm boundaries. So, isolated efforts don't work very well. But, when the whole village works in unison, farmers find that they can reduce nearly all their losses on cucurbits and over 90% in tree fruit.

Where fruit flies fly no more

In India, small farmers in Kerala and Goa enthusiastically began to wage war on fruit flies with these cheap home-made baits and lures and found that they doubled their sales. In Gujarat, orchard fruit cooperatives, learning from these successes, started to show their members how to make the bait concoctions and lure blocks.





The cooperatives found that the orchards where these were being used produced twice as much saleable fruit as orchards where they were not. By 2006, 4,000 members of two Gujarat cooperatives were using the baits and lures in 7,000 hectares of orchards. Independent growers are also beginning to use them routinely. This has encouraged agricultural suppliers in central Gujarat to start to produce and market lure blocks.

Cooperatives, NGOs and the private sector play key roles

Farmers can be very conservative when new ways of doing things are suggested. They are reluctant to try anything new until they have seen with their own eyes that it works. This is where cooperatives and NGOs play a key role. Farmers know that these organisations are mainly interested in improving profits for producers. So, know-how about ways of controlling fruit flies from these sources are well received. Cooperatives and NGOs can also encourage local manufacturers to start producing low-cost lure blocks.

Private sector wholesalers can also play a part in spreading these ways of controlling fruit fly. True, theirs is a self-interest, in more and better quality fruit and vegetables. But, in pursuit of this, they too can pass on know-how to farmers and, in some cases, also finance them so that they can buy locally made lure blocks.

Quite often too, farmers don't realise that controlling fruit flies needs to be routine. Pest management still isn't part of everyday farm work. NGOs, cooperatives and extension workers could do a lot to change this.

Why isn't local production of lure blocks booming?

Once farmers have learned the value of using home-made lure blocks and decided to buy them instead of making them themselves, they need to be sure that they are buying the real thing - not some imitation that won't work.

To deal with this lack of consumer confidence, some small Indian suppliers are now beginning to sell lure blocks in factory-sealed packages.

A major hindrance though is that most countries have a lengthy and expensive registration process for any new products aimed at dealing with pests. This makes it really difficult for small entrepreneurs to start manufacturing lure blocks.

What are the other benefits?

The home-made or locally produced baits and lures for fruit fly can dramatically reduce the amounts of pesticides being used. Although the lures contain very small amounts of chemicals, they are never directly in contact with fruit or vegetables and there is no danger of drift as there is with sprays.

These low-cost ways of controlling pests can help farmers make the all-important transition from subsistence to the market economy as horticulture and orchards can be very profitable, especially near urban centres.

For more information

For further technical information go to the RIU online database at www.researchintouse.com/database and type in **CPP19** or email riuinto@nrint.co.uk

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