

Low budget technologies can usher in success for small ryots



Ms. Rajareega mixing the karaisal at her farm at Muthupatti in Tamil Nadu

When the application of even some of the best technologies fails to yield a good harvest, farmers tend to either sell their land or borrow money for planting a second crop. With successive failures and mounting debts, agricultural activity comes to a grinding halt. In extreme cases some poor farmers go to the extreme of committing suicide to escape from problems.

Immediate need

What farmers need at the moment is a low budget technology that is efficient and proven. With more than 80 per cent of our farmers having small holdings (3 - 4 acres), the need for such technology is imperative.

Ms. Rajareega is a successful woman organic farmer of Raasi farms at Muthupatti village in Sivaganga district of Tamil Nadu. Who is growing a number of fruits, vegetables and trees in her 50 acre farm.

“If I am able to successfully manage this vast area only by organic methods, I don’t think small farmers having less than 3 acres can face any difficulty in managing their lands,” she said.

Minimal investment

Organic manures and sprays such as *Panchagavya*, *Dasagavya* and *Amirtha karaisal* have always been regarded as low budget technologies by farmers. “Though *Panchagavya* and *Dasagavya* are quite popular among organic farmers, (refer *Farmers Note Book*, July 13 and May 18, 2006 for information on their manufacture) not much is known about *amirtha karaisal*.

“Compared to both the *gavyas* I find *amirtha karaisal* more effective in the control of pests and increasing crop yield,” said Ms. Rajareega. “It is made by mixing about 10 kg of desi cow dung (in the absence of a

cow about 5kg of dung of a desi buffalo or bull may be used), 5-10 lts of cow's urine, 1-2 kg of jaggery, a handful of soil (soil taken from the field bunds), about 2 kg of any one of the following millet varieties: black gram, (called *Ulundu* in Tamil), green gram, (*Pasi payiru* in Tamil), horse gram (*Kollu* in Tamil), or cow pea (*Thattapayiru* in Tamil) and 2 lts of sour curd,".

Water is sprayed on the millet and it is allowed to germinate. After 3-4 days the germinated millet is ground well into a paste and mixed along with the other cattle products. The entire solution is diluted in about 200 lts of water and poured inside a cement or plastic drum. The solution should be stirred well once every 2-3 days, 3-4 times a day, in a clockwise direction and can be used after a week. It is advisable to filter this solution through a clean piece of cloth and store it in plastic cans to be used later.

Spraying time

The ideal time for spraying the *karaisal* is between 3 p.m and 7 p.m. In the absence of any sprayer, farmers can mix this solution along with the irrigating water. They can store this solution in a drum with a tap attached at the bottom and place it next to the irrigating tank, according to Ms. Rajareega. When water is opened from the irrigation tank for irrigating, the solution can also be released along with it. For an acre, about 200 litres of *karaisal* is sufficient. It can be sprayed once or twice a month.

The *karaisal* mixed with irrigating water acts as a tonic for the soil and makes it rich in nutrients. Earthworms which live deep under the soil surface, come to the top to feed on this solution. Their constant burrowing makes the soil more porous and helps in free air movement to the roots. The burrows also act as efficient rain water harvesters.

Effective medium

"But farmers should realise that the *karaisal* by itself cannot help plant growth. It is an effective medium or culture in which thousands of beneficial micro-organisms and bacteria essential for crop growth are created," she said.

Manufacturing cost

Regarding the cost of manufacturing this *karaisal* she said, "Most of our farmers have cattle with them and so getting the dung or urine is not a problem. "They can buy the jaggery, and millets. In fact for making the *karaisal* only Rs.5-8 may be the expense. But, if one opts for chemicals, then one has to spend Rs.500-Rs.700 per acre."The solution is effective for all crops. Even if one sprays more than the prescribed quantity the crop will not die. Unlike chemical sprays it does not have any negative impact on the crop, according to her.

Contact details: Ms. Rajareega, Raasi organic farms, Muthupatti, via Kallal, A. Siruvayal (post), Sivaganga district, Tamil Nadu, email: rajareega@rediffmail.com, mobile: 9865-582142 and phone: 04565-284937.

Source: web.thehindu@thehindu.co.in Copyright © 2010, The Hindu