

CONSOLATION

Herbal pesticide for fruits and vegetables

Ganesh Dutt Sharma Kullu, Himachal Pradesh

Ganesh Datta Sharma (43), a farmer and a well-known herbal healer of the area has developed a herbal formulation containing the extracts of five local plants, which is used to control *Gahali, Fundiya, Hara kida, Kala kida* in vegetable and fruits crop.

Living atop a hill with his wife and son, Ganesh Dutt cultivates vegetable and fruit crops using organic practices in his one acre land as well as on leased land. He believes in sustainable agriculture and promotes chemical free agriculture. He has been using the herbal formulation for the past eight years. He also has good knowledge of local herbs and their uses in medicinal purposes like for wound healing, fracture, epilepsy etc.

The formulation

Ganesh uses the extract of five local plants (name withheld due to intellectual property reasons), essential oil from one of the five plants, and cow urine to prepare the formulation. For use 200ml of the mixture in diluted in 10l water, which is sufficient for one bigha of land. Spraying has to be done on vegetable and fruits crop in the evening to prevent evaporation. The herbal formulation is used to control *Gahali* (White

grub), Fundiya, Hara kida (Cut worm), Kala kida (Heliothis) in vegetable and fruits crop and can be stored for one year.

In an experiment on okra, the formulation of Ganesh Dutta @40ml/L showed significantly lower green fly counts as compared to other treatment including chemical control. It was found that the formulation of Ganesh Dutta @ 10ml/l controlled fruit borer (50%) and reduced fruit damage (20.7%) which was at par with other check herbal preparations and chemical control. The formulation of Ganesh Dutta @ 40ml/l showed 21.75% better yield than control.

A research trial was performed at NIF's research farm during 2015-2016, to study the effect of fourteen different herbal preparations and a chemical control on yield in Okra crop. It was found that formulation of Ganesh Datta @40 ml/l showed the highest per cent reduction of white fly at 92.2 % after 5 days of treatment. Also, during Kharif 2016, farmers in Chhattisgarh used this formulation on a trial basis in Brinjal crop and found it to be effective for insect control.