

Extent of adoption of eco-friendly agricultural practices in sugarcane cultivation

V. KALIRAJAN AND K. KANAGASABAPATHI

See end of the article for
authors' affiliations
.....

Correspondence to:

K. KANAGASABAPATHI

Department of Agricultural
Extension, Faculty of
Agriculture, Annamalai
University, ANNAMALAI
NAGAR (T.N.) INDIA

Accepted : July, 2008
.....

ABSTRACT

The study was conducted to analyse the extent of eco-friendly agricultural practices in Tirunelveli district of Tamil Nadu. Three hundred farmers were identified based on the proportionate random sampling method and data were collected from them by using well-structured and pre-tested interview schedule. The collected data were subjected to statistical analysis like percentage analysis. Popular eco-friendly agricultural practices like application of FYM, practising earthing up, growing castor crop in boarder, seed treatment with Azospirillum, sheep penning, releasing egg parasites of Trichogarma were adopted by about half of the sugarcane growers of the area.

Key words : Eco-friendly, Adoption, Sugarcane cultivation.

An eco-friendly technology may be defined as the use of knowledge and resources in systematic way to produce desired outputs without harming the environment (Reijntjes *et al.*, 1992).

The world population of 5.3 billion in 1990 is expected to increase over 10 billion by 2050. Such growth in population will create unprecedented pressures on the limited natural resource base to produce additional food, fibre, fuel and raw materials. In the past, these increased requirements were met mainly through technological innovations, institutional and infrastructural development and policy initiatives that promoted growth in agricultural productivity.

Eco-friendly practices are simple, low cost, pollution free techniques and operations that are socially and economically accepted. They are not only evolved and tested over a period of time by the farmers, but also test verified by the scientists.

There is an urgent need to develop farming techniques, which are sustainable from environmental, production, and socioeconomic points of view. Modern agricultural production throughout the world does not appear to be sustainable in the long-term. The agricultural community is thus setting its hopes on sustainable agriculture, which will maintain the cycles of input-output and ecosystem balance. FAO (1988) also insists on eco-friendly approaches in agriculture for attaining sustainable environment.

METHODOLOGY

Tirunelveli district of Tamil Nadu State was selected

for the study considering the wide variety of micro-agro climatic zones available in this district. A sample size of 300 farmers were selected based on the proportionate random sampling procedure from the taluks. In each taluk four villages were selected randomly and the data were collected by using well-structured and pre-tested interview schedule.

OBSERVATION AND DISCUSSION

The distribution of respondents according to the extent of adoption of eco-friendly agricultural practices is given in the Table 1.

From the perusal of Table 1, it could be observed that 58.33 per cent of respondents adopted the practice of burning sugarcane trashes before the next ratoon crop for killing insects and pathogens followed by application of FYM @ 12.5t/ha before last ploughing under garden land and application along the furrow in wetlands (58.00 per cent), practising earthing up in sugarcane at 50 days after planting to control early shoot borer (52.00 per cent), topping and breaking the ridges with spade after the harvest of canes before allowing for ratoon to enable root growth and soil aeration (46.66 per cent), sett treatment with Azospirillum by preparation of the slurry with 10 packets (10 pockets/ha) of Azospirillum inoculum with sufficient water and soaking the setts in the slurry for 10-15 minutes before planting (41.66 per cent), detrashing the canes to control scales and mealy bugs. (40.00 per cent), sheep penning and application of sheep manure (37.33 per cent), selection of setts with shorter internodes for planting to maintain optimum plant density (37.33 per cent), release of egg parasites of Trichograma at the rate of 2.5cc/release/ha with six releases for every fifteenth day starting from fourth month onwards to