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Indigenous Paddy Cultivation - Experiences of a farmer Sri. Gomathy Nayagam

Kitchili samba is a traditional rice variety popular for its use in the south indian meal and also for making a special dish "Biriyan". Sri. Gomathy Nayagam of Vivasaya Seva Sangam, Puliyangudi, Tirunelveli Dist. obtained seeds of this variety from CIKS and cultivated it during the samba season of the year 2000. He raised the seedling for one acre using 40 kgs of seeds. The seedlings were transplanted on the 30th day. He used 40 loads of farmyard manure while preparing the main field. Before transplantation he irrigated the main field with

dilute slurry. On the 25th day after transplantation he irrigated the field with cowdung solution. On the 30th day a litre of cow's urine diluted in 10 litres of water was sprayed. On the 40th day he sprayed Panchakavya using a power sprayer. Only one weeding was done.

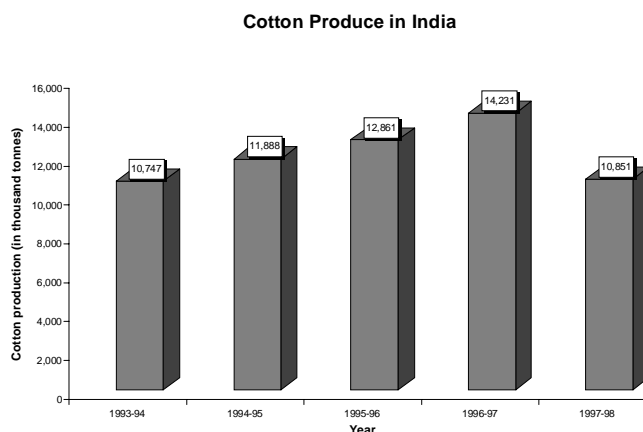
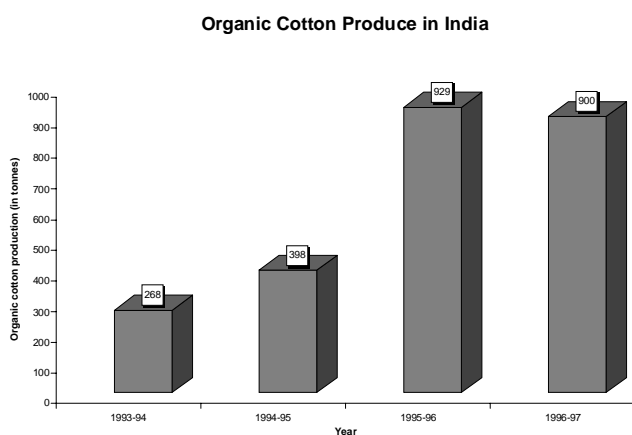
Preparation of Panchagavya

For preparing panchagavya Sri Gomathy nayagam had taken 5 litres of slurry, 3 litres of cow's urine, 2 litres of cow's milk, 2 litres of curd prepared from cow's milk and 1 litre of ghee. All these were put in a wide mouthed vessel and left in a shady place. The solution was mixed with hand everyday in the morning and evening. The panchagavya is ready at the 9th day and can be used for the next 30 days. Since ghee does not dissolve easily he used a power sprayer. 3 litres of panchagavya was diluted with 100 litres of water and spray. After spraying panchagavya on the 40th day after transplantation he irrigated the field. 130 days after transplantation the crop was ready for harvest. He got an yield of 1400 kg.

According to Sri Gomathynayagam this variety was easy to cultivate and tasty to eat. It was extremely good for preparing pongal and pepper rice. Sri Gomathynayagam mentions that the yield could be increased over a period of time by increasing the soil fertility gradually. He plans to distribute seeds of this variety to others in his area. He suggests that to preserve the soil quality and the environment it is better to cultivate such varieties organically.

Organic Cotton in India

India is the third largest producer of cotton. About 8.9 million hectares of agricultural land (5%) is under cotton production and the pesticide used for this is 54% of the total pesticide consumption. However, organic cotton production in India makes for not even a miniscule percentage of the total cotton production. And while production of insecticide-intensive cotton farming hits a plateau, organic cotton production is yet to pick up.



Source : Down to Earth, May 15, 2001

Control of Soil borne Diseases

Most soil borne diseases are caused by fungal pathogens such as *Fusarium oxysporum*, *Macrophomina phaseolina* etc. To prevent this, solarization is one of the best method practised. In this method, cover the soil with transparent polyethylene sheets for about 15 days. This controls the growth of soil borne pathogens. The control effects reached a soil depth of 30 cm. In a field experiment, the control effect increased when the plots received irrigation and fertilizer (e.g. FYM) prior to solarization. Higher soil moisture increases the sensitivity of resting structures of the pathogens to heat treatment. This practice further is effective in controlling weeds in standing crop, reduction being greater in wet solarized plots.

Source : *Natural crop protection in the tropics*

Encouraging Ladybirds

It is well documented that ladybird beetles are effective insect predators and play a vital role in checking pest population in various crops. Both the adult and larval stages of the lady bird beetle prey on pest insects. These garden friends usually feast on aphids, however they also feed on other pest insects such as scale, white flies, mealy bugs, and other soft bodied insects.

To make your garden suitable and attractive to beneficial insects like lady bird beetles, a welcoming environment must exist in the form of consistent food source, especially nectar and pollen. Certain plants like coriander, beans, peas attract lady bird beetles. By growing these plants you can allure these garden friends and avoid pesticides in your gardens.

Source : *Journal of Pesticide Reform Vol. 18, 1998*



News Line

TN Plans Bio-control Laboratories

Tamilnadu is planning to set up bio-control laboratories in the State's three cotton belts as part of the intensive cotton cultivation programme initiated under the National technology Mission for Cotton (TMC). The biocontrol labs, to be set up at an estimated cost of Rs.2 crore, will be located in Perambalur, Salem and Villupuram districts and these have been proposed by the State Agriculture Department under the TMC's mini-mission-II programme.

Source : Business Line, 14th March 2001

ICAR Launches IPM Missions

In a bid to popularise cheaper and environment friendly techniques of integrated pest management (IPM) among farmers, ICAR has launched a mission-mode programme for crops as cotton, pigeonpea, chickpea and groundnut in different agroregions of the country. IPM involves monitoring pest population in the field and if the population exceeds the danger mark, recommending biopesticides and minimum possible chemical pesticides.

Under the programme, IPM demonstration centres would be set up in over 100 villages in nine States - Punjab, Haryana, Himachal Pradesh, Rajasthan, Jharkhand, UP, Maharashtra, Karnataka and Andhra Pradesh. About 2000 officials and workers would be trained in the project, an ICAR release said. Other crops covered by the programme are tomato, cabbage, apple and mango. The crops selected consume about 70 per cent of the country's total pesticide, the release added.

Source : Business Line, 12th April 2001

Fish as bio-agents in Rice

Under Cauvery delta conditions of Tamil Nadu, mixed farming with rice, poultry

and fish generated higher income and employment. The herbivorous feeding habits of many fish species in intensive rice-cum-fish culture offers scope for an ideal biological control for several weed species.

Source : The Hindu, March 22, 2001

Cowdung Spray Controls BLB

In a pot culture experiment conducted at TRRI, Aduthurai, Foliar spraying of cowdung extract twice and cow's urine twice at 10 days interval from 24 hours after inoculation of Bacterial Leaf blight culture into the plants reduced the disease intensity when compared to untreated check. It was similar to chemical spray constituting nickel nitrate and streptomycin (0.06%). In the cowdung treated pots, yield obtained was maximum i.e. 5050 kg/ha and in control 4120 kg/ha was recorded. Cow's urine pots recorded an yield of 4900 kg/ha. Hence foliar spray of cowdung extract (20%) starting from initial disease appearance and 10 days later could check BLB and prevent yield loss.

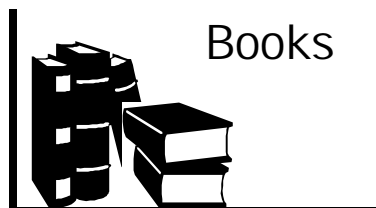
Source : VISTAS of Rice, Tamilnadu Rice Research Institute, Aduthurai

BSE The Copper Connection

Mark Purdy, a Somerset farmer with no formal scientific training, believes scientists have been missing the point about BSE. He has gathered what some people regard as convincing evidence that suggests the outbreak of BSE in the UK was a direct result of a commercial pesticide and its impact on the interaction of copper and manganese.

For more details visit :
www.biointegrity.org.

Source : Soil & Health, March, April 2001



HUNGRY FOR TRADE, John Madeley, 2000, 139 pp

In this book the author puts forward many ideas and proposals made by non-governmental organizations who work alongside the hungry to examine various issues around the fundamental question : will free trade benefit transnational corporations or the millions who are currently malnourished? Drawing upon the experience of countries of the South, including India, it shows how crucial is the issue of food security.

Price : Rs.200/-

Available from : Penguin Books India (Pvt.) Ltd.

PATENTS - MYTHS & REALITY, Vandana Shiva, 2001, 146 pp

This book explains in detail how under IPR laws natural resources are taken by western corporations without recognition or payment;

how local communities are prevented from using their centuries old knowledge by corporations who have patented that knowledge; and how third world countries are forced to buy products based on their indigenous knowledge at much higher prices than if they were produced locally. Would interest all those concerned with issues of ecology and equity.

Price : Rs.200/-

Available from : Penguin Books India (Pvt.) Ltd.

Website : www.penguinbooksindia.com

STOLEN HARVEST, Vandana Shiva, 2000, 140 pp.

In Stolen Harvest, Vandana Shiva charts the impacts of globalized, corporate agriculture on small farmers, the environment and the quality of the food we eat. With chapters on genetically engineered seeds, patents on life, mad cows and sacred cows, and the debate on shrimp farming, this is an impassioned and inspiring book that will shape the debate about genetic engineering and commercial agriculture for years to come.

Price : Rs.195/-

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