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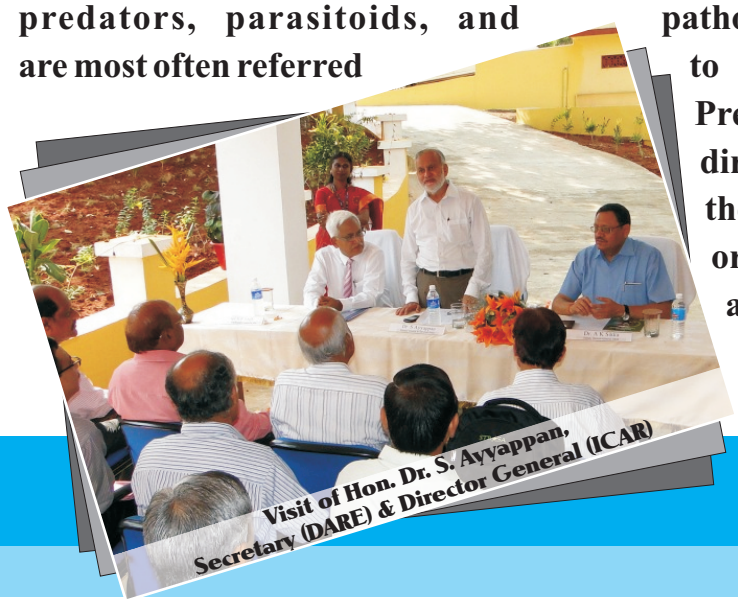
ICAR - Central Coastal Agricultural Research Institute
ICAR
NORTH GOA
"Serving Farming Community of Goa"

संवाद पत्र
NEWSLETTER


Visit of Hon. Shri Radha Mohan Singh Ji Union Minister of Agriculture, GOI

From the Programme Coordinator's Desk...

Biological control is a method of controlling pests such as insects, mites, weeds and plant diseases using other organisms. It relies on predation, parasitism, herbivory, or other natural mechanisms, but typically also involves an active human management role. It can be an important component of integrated pest management (IPM) programs. There are three basic types of biological pest control strategies: importation (sometimes called classical biological control), augmentation and conservation. Importation or classical biological control involves the introduction of a pest's natural enemies to a new locale where they do not occur naturally. Augmentation involves the supplemental release of natural enemies, boosting the naturally occurring population. In inoculative release, small numbers of the control agents are released at intervals to allow them to reproduce, in the hope of setting up longer-term control, and thus keeping the pest down to a low level, constituting prevention rather than cure. The conservation of existing natural enemies in an environment is the third method of biological pest control. Natural enemies are already adapted to the habitat and to the target pest, and their conservation can be simple and cost-effective.Natural enemies of insect pests, also known as biological control agents, include predators, parasitoids, and pathogens. Biological control agents of plant diseases are most often referred to as antagonists.The bio control agents are,1. Predators are mainly free-living species that directly consume a large number of prey during their whole lifetime.2. Parasitoids lay their eggs on or in the body of an insect host, which is then used as a food for developing larvae and the host is ultimately killed.3. Pathogenic micro-organisms include bacteria, fungi, and viruses.


Visit of Hon. Dr. S. Ayyappan, Secretary (DARE) & Director General (ICAR)

Programme Coordinator In-Charge

KVK Workdone

01 : Assessment of Chilli variety / hybrid under Goan Conditions

The trials were taken up during the rabi of 2014 covering 05 nos. of farmers in 0.5ha area. The trials were conducted as the local variety were susceptible to diseases Arka Meghna and Arka Harita of ICAR- Indian Institute of Horticulture Research, Bengaluru were tried performed well in the Goan condition and found to be non susceptible to the disease. Performance of the technology production went up from 213 q/ha to 316 q/ha

02 :Assessment of Thrips and Purple Blotch management in Onion.

The trials were done during the rabi of 2014 covering 10 nos. of farmers an area of 0.5 ha. The trials were taken up to manage the thrips and purple blotch disease in onion. Trials were conducted with Tricyclozole @ 01ml, carbosulfon @ 02ml, Hexaconazole 0.1%, Profenofos 01 ml and Dimethoate @ 1.7ml / ltr, Mancozeb @ 02gm / ltr. The disease incidence were reduced from 22.82 % to 02.64-02.96%.

03 : Assessment of Broadrow furrow method system of planting groundnut under irrigated & residual moisture situations.

The trials were taken up during the rabi of 2014 with 02 nos. of farmers participated helping in covering 01 ha of trial. The trials were taken to deal with the gaps in the groundnut plot resulting in low productivity. The treatments included with dibbling seed in lines @30 x 10cm and sowing at 30 x 10cm in broadbed (1.5 mtr) and furrow and the yield went up from 17.60 q/ha to 23.6 q/ha.

04 : Assessment of waste recycling technologies for manure production.

The trials were taken up during 2014 with 03 nos. of units to study the conversion ratio of agro waste to organic manure. . The objective of the study was to control burning of agro waste and production of organic compost. Trials were conducted with two composting technologies vermicomposting and Biocomposting with earthworms and microbial / composting culture respectively. The waste conversion ratio was 60-65% with 1745 kgs / year of organic manure.

FLD - Frontline Demonstrations

01 : ICM in Makam varieties under SRI System

Rice being the major crop of Goa during the Kharif season to increase the production of the crop SRI method was introduced with var. Makkam (Red kernel Rice). The demonstration was conducted covering 11.6 ha and involving 29 farmers. The avg B:C ratio of the demonstration was 3.47 in against 2.49 of local check. The yield increase was 48.31% with yield of demo was 70.6 (q/ha) as against 47.6 (q/ha) in local check.

02 : ICM in Kharif Rice var. Naveen

During the Kharif of 2014 the demonstration on white rice was also taken up with var. Naveen. This demonstration covered 5.6ha involving 15 farmers. The avg B:C ratio of the demonstration was 2.88 in against 2.30 of local check. The yield increase was 49.31% with yield of demo was 65.7 (q/ha) as against 44.0 (q/ha) in local check.

03 : ICM in improved groundnut varieties in rice fallows under residual moisture

After Rice many Rice fields stay fallow some farmers with irrigation facility take up vegetables. Although they also take up groundnut in certain areas of Goa but in general many fields remain fallow or gives low production due to local seeds. To

overcome this problem KVK came up with a demonstration on improved groundnut varieties in rabi under residual moisture. Groundnut c.v. GPBD-5 was demonstrated covering 02 ha and involving 08 farmers. The avg B:C ratio of the demonstration was 3.24 in against 2.27 of local check. The yield increase was 31.29% with yield of demo was 23.41 (q/ha) as against 17.83 (q/ha) as local check

04: ICM in Green gram c.v.S-4 under residual moisture conditions for participatory seed production

Similar to the Groundnut demonstrations, Greengram demonstrations were also conducted by KVK to overcome the problem of Rice fallow and low yielder local varieties. For the demonstration greengram var. S-4 was selected covering 02ha involving 06 farmers. The avg B:C ratio of the

demonstration was 2.67 in against 1.70 of local check. The yield increase was 103% with yield of demo was 6.1 (q/ha) as against 3.0 (q/ha) in local check

05 :Integrated Pest Management in Cowpea (Alsando-1)

Apart from Groundnut and Greengram another common crop of Rabi in Goa is Cowpea (Alsando) which is local favorite. The crop is taken up during rice fallow with irrigation facility. The crop is susceptible to pest due to which famers suffer a huge losses. To deal with this issue KVK demonstrated the Integrated Pest management for Cowpea covering 02 ha involving 10 farmers. The PDI % was dropped from 38.20% to 3.32% giving yield increase of 79.95% with 8.35 q/ha as against 4.64 q/ha of local practices. The B:C Ratio was 2.42 as against 1.45 local practices.

06 : Management of leaf blight in Cucumber

In vegetables the hill cucurbits are major crop of hilly areas of Goa during Kharif. The major problem with the crop is Leaf blight which has 24.65% damage to the crops. To cover come this probralem KVK demonstrated the Management of Leaf Blight in Cucumber / hill cucurbits covering 01 ha involving 15 farmers. The avg B:C ratio of the

demonstration was 3.68 in against 2.86 of local practices. The yield increase was 43.93%. Yield (q/ha) of demo was 133.0 in against 92.40 of loca practices.

07 :ICM in Onion with special emphasis on use of Trichoderma

The price fluctuation for the crop like Onion is very unpredictable which shows good potential for the profit. To utilize this demonstration on Onion was taken up under Integrated Crop Management in Onion. The var. Arka Lalima of IIHR, Bangaluru was selected covering 0.25 ha and involving 05 farmers. The avg B:C ratio of the demonstration was 3.70 in against 2.77 of local check. The yield increase was 83.13% with yield of demo was 315 (q/ha) as against 172 (q/ha) in local check

08 : Management of Cashew Stem and Root Borer

Cashew is one of the most important commercial crops of Goa. Which also provides GI to Goa for Cashew liquor "Feni". These trees of cashew mainly suffer from Stem and root borer and reduces the production due to which farmers incurred huge losses. To management his problem KVK took up Demonstration on Management of Cashew Stem and Root Borer which helped 76.8 % trees to recover from the pest in against local untreated trees. Demonstration was done in covered 02 ha involving 10 farmers.

Training conducted / organized

During the period of issue 77 training were conducted by KVK in various disciplines for Farmers and farm women, Rural youth, Extension functionaries on as well as off campus involving 2001 participants.

Other Extension Activities done

OFT, FLD and Trainings KVK also organized / conducted Extension activities for technology dissemination. Among various activities like exhibition, field days, etc. 581 programmes were conducted involving 39,781 participants.

Seeds / Planting Materials

KVK has always worked as a source of better seed and planting material for the famers of Goa. During the issue period 12,333 nos. of seeds and planting materials has been provided to 3,004 of farmers for improving the production and benefit of the farmers.

Bio Inputs Products

KVK has served farmers as leading source of Bio products like Bio fungicide *"Trichiderma viride"*, Vermicompost, Earthworms (for the farmers who want to start new vermicomposting unit). In this league KVK has produced 364.5 kg of *Trichiderma viride*, 3733 kg of vermicompost and supplied 14 kg of earthworms.

Livestock Production

In the Livestock unit KVK have Diary, poultry, goat demonstration units. From dairy unit the 13840 ltrs of milk was sold, from poultry unit 224 nos. of broiler, 334 nos. of vanraja breed, 1796 nos. of vanaraja eggs and136 nos. of quails were sold and from goat unit 34 crossbreed animals were sold combining the revenue generated to 7,54,312/-.

Home Science Products

KVK has also inspire the house hold production and income generating activities through the trainings and have generated revenue of 4,700/- from pickle, chutney, syrup and virgin coconut oil.

Soil Testing Facility

We have a fully functional Soil and Water Testing Lab with help of which the soil and water of the Oft and FLD farmers with other progressive farmers were tested and advised. Soils sample tested were 272 were as water sample tested were 17 generating revenue of 12,813/-

Externally Funded Projects

Apart from mandatory work KVK also have 07 nos. of Externally Funded Projects from RKVY and NHM with fund allocation of 284.86 Lakhs.

ICT Implementations

KVK has worked as a source of information and help for the farmers through OFT, FLD , Trainings and Other extension activities also have electronic and paper means of information for the benefit of the farmers. KVK have fully functional website http://www.kvkicarrcgoa.in where all the information of upcoming and past events are updated and publications for distribution to the farmers.

Personila

During the period with addition of staff KVK has few valuable staff transferred or retired. Following are the details for the reporting period:

Dr. Sanjaykumar V. Udharwar, Subject Matter Specialist (Animal Science) joined KVK on 02 nd September, 2014.

Mr. H. R. Prabhudesai, Subject Matter Specialist (Agronomy), Retired w.e.f. 31st December, 2014