

SUCCESS STORY : Fruit Fly

Navsari Agricultural University, Navsari

South Gujarat is leading in fruits and vegetable production in Gujarat state. Three districts viz., Surat, Navsari and Valsad are included in agri-export zone for fruits and vegetables, which require quality production. Fruit flies are the major constraint which ravages considerable loss in terms of quality and production. Moreover, these flies are good fliers and thereby their spread is also very high and hence area wide adoption of management strategy can only be useful against the flies.

Fruit flies, although a serious pest, are largely uncontrolled or controlled by cover sprays of insecticides which are undesirable in fruits and vegetables. Intensity of damage recorded as high as over 30 per cent in mango and sapota, while 20-40 per cent in cucurbitaceous vegetables. Male Annihilation Technique (MAT) by using sexual lures is the only way to manage flies.

Considerable efforts made in this regard during the implementation of DFID-ICAR sponsored project on fruit flies in Navsari Agricultural University. NAU has also designed and commercialized an eco-friendly, economical and easily adoptable fruit fly trap popularly known as "**Nauroji-Stonehouse Fruit Fly Trap**".

Rashtriya Krishi Vikas Yojana is the key to support state and district action plans funded by the Ministry of Agriculture, GOI. A project on "**Community approach for implementation of eco-friendly IPM technology for fruit fly management in fruits and vegetables in agri-export zones of south Gujarat**" was implemented under the aegis of Navsari Agricultural University in two districts of South Gujarat. The project is aimed to create awareness among the farming community about organic production of fruits and vegetables by implementing eco-friendly IPM technology for fruit fly management in wider area. At the same time, a mass adoption of technology can be useful for recognizing the production area as PFA (Pest Free Area), and thereby to promote the export of fruit like mango, sapota and cucurbitaceous vegetables.

Sr. No.	District/	No. of Villages	No. of Farmers	Area (ha)	No. of Trans
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The RKVY project is implemented during the year 2008-09 and 2009-10 in 209 villages of six talukas of two districts and strategies have been successfully demonstrated in 7681 ha of fruit orchards and 579 ha in cucurbitaceous vegetable crops. The selected area comprising of 15339 beneficiaries, among them 53.23 per cent of SC/ST, 35.51 per cent OBC and 11.26 per cent of other category availed the benefit of RKVY project. Using this technology, the fruit fly infestation in mango orchards **minimized to 3.06 (0 to 4) per cent**, which was 30.34 (30 to 35 %) in untreated orchards. Thus, more than **85.0 per cent infestation** due to fruit fly is reduced which resulted in increase of **27.27 per cent yield**. While computing economics, an estimated **benefit of Rs. 81,840/ha** is accrued by spending merely 350/- Rs. per ha. Thus, an implementation of fruit fly technology in over **6000** hectares of mango could have benefited about **49 crores**. While in case of cucurbitaceous vegetables, the fruit fly infestation was **minimized up to 2.5 to 4.6 per cent** by using the technology which was 19 to 32 (30.50) per cent in untreated fields. Thus, more than **85.0 per cent infestation** due to fruit fly **was reduced and 27 per cent yield increased**. An estimated **benefit of 26,250 Rs /ha in bittergourd and 39,350 Rs/ha in bottle gourd** was achieved by spending only 550/- Rs. Thus implementation of fruit flies technology in over 327 hectares of cucurbitaceous vegetables crops yielded **benefit over Rs. 1 crore**.

				Mango	Sapota	Cucurbits vegetables	
	<u>Navsari</u>						
1	Gandevi	32	2325	890	952	-	20612
2	Chikhali	55	3799	1136	719	395	25091
	<u>Valsad</u>						
3	Valsad	35	2822	1390	304	-	21343
4	Pardi	28	1864	1406	223	-	20001
5	Dharampur	37	2280	814	-	162	11481
6	Kaparada	22	2249	819	-	272	12112
	Total	209	15339	6485	1196	579	110642



