

RESEARCH REVIEW

➤ Information on Research Station:

Name of Centre	Fruit Research Station, NAU, Gandevi
Year of Establishment	1935
Mandate of the Centre	<ol style="list-style-type: none"> 1. To introduce various tropical and sub tropical fruit crops in South Gujarat. 2. Standardization of agro-techniques for banana, sapota and papaya. 3. Establishment of nursery to provide certified grafts and seedlings. 4. Collection, conservation, evaluation and crop improvement of banana, sapota and papaya. 5. Survey and management of pests and diseases of banana, sapota and papaya. 6. To provide technical guidance regarding horticultural crops.

➤ Details of Land at The Center (ha):

Cultivated	Irrigated	Non- Irrigated	Area Under Infrastructure	Total
10.17	10.17	-	2.05	12.22

➤ Details of Budget (2018-19):

Funding Agency	Total of Scheme/Project	Budget Head	Grand Sanction (Rs. Lakh)	Balance Grant (1.1.2019)	% Use Grant
Plan	--	--	--	--	--
Non Plan	Research on Fruit crops	5014	38.26	18.37	51.99
ICAR	1. ICAR-AICRP on Fruits	2014-5	107.03	64.67	39.58
	2. Tribal Sub-plan	2075	10.00	7.02	29.80
GOI	--	--	--	--	--
Other Agency	--	--	--	--	--

➤ Details of Manpower (as on 01/01/2019)

Funding Agency	Name of employee	Designation	Pay scale	B.H.
Plan	--	--	--	--
Non Plan				
1.	Shri. Dineshbhai I. Chaudhari	Agri. officer	39900-126600	5014

Funding Agency	Name of employee	Designation	Pay scale	B.H.
2.	Mrs. Krutigna B.Patel	Agril. Asstt.	25500-81100	
3.	Shri. D. N. Patel	Sr. Clerk	25500-81100	
4.	Vacant (1.6.2002)	Mali	15700-50000	
5.	Vacant (8.2.2010)	Permanent Labour	14800-47100	
6.	Vacant (3.12.2010)	Permanent Labour	14800-47100	
ICAR				
1.	Vacant (1.2.2018)	Horticulturist	37400-67000 (AGP-8000)	2014-5
2.	Prof. A. R. Patel	Jr. Horticulturist	15600-39100 (AGP-7000)	
3.	Prof. B. M. Naik	Jr. Plant Pathologist	15600-39100 (AGP-7000)	
4.	Dr. K. D. Bisane	Jr. Entomologist	15600-39100 (AGP-7000)	
5.	Shri T. R. Ahir	Senior Technical Assistant	39900-126600	
6.	Shri. Nilay P. Naik	Field Man	25500-81100	
7.	Shri. H. R. Patel	Field Man	25500-81100	
8.	Shri. C. K. Kolgha	Lab. Attendant	15000-47600	
9.	Vacant (1.3.2018)	Mali	15700-50000	
10.	Vacant (1.7.2003)	Mali	15700-50000	
11.	Vacant (30.6.2007)	Mali	15700-50000	
12.	Vacant (23.11.2016)	Clerk-cum-Typist	19900-63200	
GOI	--	--	--	--
Other Agency	--	--	--	--

➤ **Scheme wise details of experiment (2018-19)**

A. Kharif:

Budget Head	Res. Sub-Committee	Year of Approval	PI	Title of experiment	Status
5014	Horticulture	2009	Shri. A. R. Patel	Varietal trial in sapota	Ongoing
		2012	Shri. A. R. Patel	Fertigation studies in sapota cv. Kalipatti	Ongoing
		2015	Shri. B. M. Naik	Effect of bio-fertilizer, growth regulator, and micro nutrients on fruit growth, yield and quality of sapota cv. Kalipatti	Ongoing
	Plant Protection	2018	Dr. K. D. Bisane	Varietal screening of sapota against bud borer and chiku moth	Ongoing
		2012	Dr. K. D. Bisane	Monitoring of fruit fly population in sapota	Ongoing

		2010	Dr. K. D. Bisane	Assessment of losses in sapota due to insect pests (Bud borer & Chiku moth)	Ongoing
		2010	Dr. K. D. Bisane	Studies of population dynamics and natural enemies of sapota midrib folder, <i>Banisia myrsusalis elearalis</i> (Walker)	Ongoing
		2016	Shri. B. M. Naik	Assessment of yield losses due to pests and diseases in banana	Ongoing
		2016	Dr. K. D. Bisane	Assessment of yield losses due to pests and diseases in papaya	Ongoing
2014-5	Horticulture	1990	Shri. A. R. Patel	Collection, characterization, conservation, evaluation and utilization of germplasm	Ongoing
		2014	Shri. A. R. Patel	Clonal selection in banana	Ongoing
		2017	Shri. A. R. Patel	Evaluation of the field performance of the macro-propagated plants of banana	Ongoing
		2015	Shri. A. R. Patel	Enhancing the input use efficiency in banana	Will be concluded in 2019
		2017	Shri. A. R. Patel	Alleviation of soil moisture deficit stress in banana	Ongoing
		2013	Shri. A. R. Patel	Assessment of phenology, productivity and incidence of insect pests and diseases in banana grown under varying climatic conditions	Ongoing
		2018	Shri. B. M. Naik	Evaluation of Arka Microbial Consortium (AMC) for papaya	Ongoing
		2017	Shri. A. R. Patel	Net house cultivation of papaya	Ongoing
		1991	Shri. B. M. Naik	Collection, characterization, conservation, evaluation and utilization of sapota germplasm	Ongoing
		2013	Shri. B. M. Naik	Widening the genetic base in sapota	Ongoing
		2017	Shri. A. R. Patel	Evaluation of new hybrids of sapota	Ongoing
		2012	Shri. A. R. Patel	Spacing and canopy management in sapota	Ongoing
		2012	Shri. A. R. Patel	Rejuvenation of sapota at normal spacing	Concluded during 2018 in NAU & ongoing in AICRP
		2012	Shri. B. M. Naik	Studies on residual and cumulative effect of nutrients in sapota	Ongoing

2014-5		2015 (Modified)	Shri. B. M. Naik	Standardization of stage wise requirement of nutrients in sapota	Ongoing
		2013	Shri. B. M. Naik	Assessment of phenology, productivity and incidence of insect pests and diseases in sapota grown under varying climate conditions	Ongoing
	Plant Protection	1990	Dr. K. D. Bisane	Survey and surveillance of emerging insect pests of sapota and their natural enemies	Ongoing
		2014	Dr. K. D. Bisane	Assessment of losses due to seed borer in different varieties of sapota	Ongoing
		2016	Dr. K. D. Bisane	Management of seed borer in sapota	Ongoing
		1991	Shri. B. M. Naik	Survey of emerging disease (s) of banana	Ongoing
		2009	Shri. B. M. Naik	Diagnosis of banana viruses in germplasm and planting material used in experiments	Ongoing
		2011	Shri. B. M. Naik	New and emerging disease (s) of papaya	Ongoing
		2016	Shri. B. M. Naik	Integrated management of papaya diseases	Ongoing

B. Rabi:

Budget Head	Res. Sub- Committee	Year of Approval	PI	Title of experiment	Status
--	--	--	--	--	--

C. Summer:

Budget Head	Res. Sub- Committee	Year of Approval	PI	Title of experiment	Status
--	--	--	--	--	--

➤ **Details of seed production (2018-19):**

Crop	Season	Type of seed (Breeder / Foundation), etc.	Area (ha)	Production (kg)
Turmeric	Kharif	Truthful	0.5	5000

Nursery Activity:

Year wise selling of grafts / seedlings:

Particular	Year				
	2013-14	2014-15	2015-16	2016-17	2017-18
B. H. 5014 (Non-Plan)					
1. Mango grafts	1912	1336	2163	2899	2689
2. Sapota grafts	584	680	584	925	907
3. Coconut					
A. West coast tall	7825	6549	4414	9968	2177
B. (TxD) F ₂	1500	2969	2633	2492	3644
C. (DxT) F ₂	257	350	370	198	161
D. Bona	72	42	140	66	28
E. Mahuva selection	152	30	135	70	52
4. Rayan seedlings	1200	3006	1000	500	500
5. Mango seedlings	2000	6424	1500	1500	1400
6. Arecanut seedlings	205	261	1555	535	244
7. Black pepper seedlings	181	169	10	13	--
8. Miscellaneous	2023	2678	1891	2315	1739

➤ **Year wise No. of Recommendation (Last Five year):**

Budget Head	Res. Sub-Committee	Year				
		2013-14	2014-15	2015-16	2016-17	2017-18
5014	Horticulture	-	-	-	-	-
	Plant Protection	-	-	-	-	-
2014-5	Horticulture	--	03	02	--	02
2014-5	Plant Protection	02	02	--	--	--
	Total =	02	05	02	--	02

➤ **Total Receipt (Last Five year):**

Income (Rs. in Lakhs)

Budget Head	Year				
	2013-14	2014-15	2015-16	2016-17	2017-18
5014	10.12	13.14	10.34	14.88	10.53
2014-5	5.52	6.03	5.72	5.12	3.11
Total =	15.64	19.17	16.06	20	13.64

Noteworthy Achievements:

- Conferred ICAR Chaudhary Devi Lal Outstanding All India Coordinated Research Project Award 2016 under ICAR-AICRP (Fruits) programme as "Best Centre" during 16th July, 2017.

- Position in the performance rating of ICAR- AICRP (Fruits) in GD meeting:
 - **2018: Third**
 - **2016: First**
 - **2015: Second**
 - **2014: Third**
- **“National Consultation Meeting on Sapota”** was jointly organized by ICAR-AICRP on Fruits and Navsari Agricultural University on September 29, 2015 at Swami Vivekanand Hall, ASPEE, College of Hort. and Fore., NAU, Navsari. A total of 100 delegates from the SAU-based and the ICAR-institute-based centres of AICRP, research scholars, progressive farmers, SHGs and presidents of the growers associations participated.
- K. D. Bisane: **Awarded with 2nd Rank in Best Oral presentation** in National Symposium on “Sustainable Management of Pests and Diseases in Augmenting Food and Nutritional Security” held at NAU, Navsari during 22nd to 24th January, 2019.
- A. N. Patel; A. R. Patel and T. R. Ahir: **Awarded with 1st Rank in Best Poster presentation** in National seminar on “Role of Organic Farming in Climate Resilient and Sustainable Agriculture” held at ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari during 9th & 10th January, 2014.
- K. D. Bisane; B. M. Naik and A. N. Patel: **Awarded with 2nd Rank in Best Poster presentation** in National seminar on “Role of Organic Farming in Climate Resilient and Sustainable Agriculture” held at ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari during 9th & 10th January, 2014.
- Book on **“Sapota Cultivation”** prepared and released during 18th Group Discussion meeting of AICRP (TF) and 9th University Convocation during 2013.
- A Farmers' Meet under banana TSP programme of ICAR-AICRP (Fruits) was organized at FLD tribal village Godadiya in Dang dist. on 20-12-2018 with about 150 farmers including male and females.
- Farmers training programme on “Recent technology in banana, sapota, papaya and mango cultivation” was organized at FRS, Gandevi sponsored by ATMA project during 10th 14th November, 2014. About 150 farmers of Navsari districts (30 farmers of each 5 taluka) were participated in the training.

Date: 24-01-2019

Signature with Designation