

# Visit

14172

# Report

- 1) Anjaneri Hills
- 2) MPKV's Wheat Research  
Center, Kundewadi
- 3) Mahatma Phule Krishi  
Vidyapeeth, Rahuri

TOPIC

Date : / /

Page No. :

Miss. Wagh Pranjal Ramesh

Std : J.Y.B.Sc

Seat No. 14172

*[Signature]*

Smt. V.A. Gaware patil

Dept. of Botany

K.G.D.M. Arts, Commerce &  
Science College, Niphal

*[Signature]*  
Examiner.





Anjaneri Hills

TOPIC

Visit Report

Date: / /

Page No.:

## Anjaneri Hills

As per University curriculum a study tour is compulsory for S.V.B.Sc. Students to study Biodiversity & Angiosperms. So our department organizes visit to Anjaneri Hills near Trambakeshwar on 7<sup>th</sup> October 2012. During visit we get opportunity to study various plants their distribution as per height and soil type and also enjoy the trekking. The detailed information about the place is as follows.

Anjaneri is a scenic village with mythological importance and spectacular history. From Anjaneri village, it takes about one and half hour to reach the plateau of Anjaneri. This path leads to a magnificent trekking adventure through diverse sceneries of Anjaneri Lake, caves, waterfalls, Healing lake etc. which has great biodiversity of flora, fauna and fauna.

The foot of Anjaneri, being the birthplace of Lord Hanuman, has a great historical importance. Lord



Hanuman was the son of 'Pavani' (the wind) and 'Anjani', and hence the fort is called as 'Anjaneri'. Anjaneri is one of the important forts in the ranges of Trimbakeshwar near Nashik. Anjaneri Mountain, around 20 km from Nashik, near Trimbakeshwar, is the birthplace of Hindu God Hanuman. A temple dedicated to Anjani, mother of Hanuman is located here. The temple attracts more than 100,000 devotees during Hanuman Jayanti. The place also attracts more large crowd on Tuesdays and Saturdays. The temple is located in the Sahyadri Mountain ranges and is around 20 km from Nashik. The temple is near Trimbakeshwar.

It takes only 10 minutes to reach the temple of Anjani Mata from the plateau. This temple is quite big. You can see two different ways at a certain distance from Anjani Mata temple; one way to the left hand side that takes you to Sector cave in 10 minutes. There are two rooms in this cave where almost

10 to 12 people can stay comfortably. There are ~~two~~ many beautiful carvings inside Seta cave. The order way takes you to Citadel, where you can see one more temple of Lord Hanuman and Anjani Mata. It takes 20 minutes to reach this temple. Anjani Temple is built in stone and is situated 4,200ft above sea level. The right way ahead of the Anjani Mata Temple leads directly to the citadel of Anjaneri fort in 20 mins. Here one more big temple of Anjani Mata can be seen. The overall area of Anjaneri is vast.

The place is surrounded by mountain ranges, forests and green landscapes. "Anjaneri" is derived from the fact that God Hanuman is son of Anjani mata the wife of Pawan. Anjaneri fort is one of the important forts in Trimbeshwar range. It is located in the beautiful and hilly terrain of Anjaneri Hills - part of the Sahyadri Range in the state of Maharashtra. The 400 meters drive through the Anjaneri village is bound to attract visitors of the state & most

times in our lives. The Hanuman Jayanti fair at Anjaneri Village is famous for Jatra (procession) and wrestling. A 10 minutes walk from the temple to the left side takes one to the Sita Cave, another place associated with Ramayan.

Along with Anjaneri we also visited to Trimbakeshwar, 10th sacred Jyotirlinga in the Dwadash Jyotirlinga circuit. The place is memorable due to its picturesque hills, rocks and cool breeze. This hill station like place lies in the formidable shadow of Brahmagiri hills in the Sahyadri range and it is the source of holy river Godavari. The place is also known for its Simhastha Kumbha Mela, which comes every 12 years as per the Hindu calendar.

What makes the Trimbakeshwar Jyotirlinga unique is that it has three faces embodying Lord Brahma, Lord Vishnu & Lord Mahesh (Shiva). All other Jyotirlingas have Shiva as the main deity. The temple is known for its appealing architecture and sculpture.

This visit was very fruitful and enjoyable for all students. We thank to our faculty Smt. V.A. Gargonepatil for organizing this visit and thanks to Principal Dr. P.V. Raval for providing permission and inspiration for visit.

*Smt. V.A. Gargonepatil*  
Smt. V.A. Gargonepatil  
Dept. of Botany  
K.G.D.M. Arts, Commerce &  
Science College, Niphad

Examiner.

Visit reportsMPKV's Wheat Research Center,Kundewadi, Niphad.

Wheat is carbohydrates and protein rich cereal crop, which is mainly used in diet. MPKV's Wheat Research Center, Kundewadi, Niphad is main wheat research center established in 1932 initially in this center research is carried on wheat, Bajara, Gram, pigeon pea, Onion etc. with respect to development of varieties, crop cultivation methods etc. but from 1969 it is concentrated only on wheat and from 1971-72 it was declared as main south center of All India Wheat Research Programme.

Aims of Center:

- i) To develop more yield giving, rust resistance exportable, heat resistance of Sarbati and Nansi types.
- ii) To develop new technologies of crop cultivation, organic farming for newly developed varieties of wheat.



- iii) To run the fundamental and basic seed production programme.
- ix) To study drawbacks of wheat production at center and farmers field.

### Achievements

Yet today this research center developed 25 varieties of wheat of 15 sorbati and 10 Bansi following are the varieties which are recently developed by this center:

- 1) Tapowan (NIA W-917)
- 2) Panchwati (NID W-15)
- 3) Godavari (NID W-295)
- 4) Trambak (NIA W-301)
- 5) Nipheal (NIA W-34)

In this center research is carried on in following aspects.

### I] Increase production of wheat

During visit Dr. Gudekar shared various ways for increase production of wheat which are as follows.

Use of proper type of soil.

cultivation in favorable time.

management & use of fertilizers and cooler  
use of good yielding varieties.

management of diseases and pest control

proper methods and time of harvesting

If all these points are considered then yield  
of crop ultimately increases.

### ii] Protection of Wheat Crop:

In this center research work is carried on  
protection of wheat crop from various diseases,  
insects and their management.

Red rust, Black Rust, smut, Black point head  
etc are the main diseases on wheat while  
mites, Mill bugs, insects are also affect crop  
along with these when crop fully mature, rats  
also causes large scale damage to the crop,  
so proper management is necessary to provide  
protection to crop.

### iii] Seed production programme:

for increase crop yield seed is  
basic factor. To achieve high crop

yield maintenance & genetically pure seeds is important. To provide pure seeds to farmers seed passes through various stage at breeder's level which are as follows.

- i) Nuclear seeds.
- ii) Breeder seeds.
- iii) foundation seeds.
- iv) Truthful seeds.

During visit Dr. Gadekar explain all these stages which was really very great experience for all students.

#### iv) Soil and water analysis.

To get more yield fertilizers and water management is necessary for that soil and water analysis provide help and it will help to improve quality and productivity of soil by considering this importance wheat research center also provides guidance to farmers by providing facility of soil and water analysis in very cheap rate. Center has well spacious and equipped laboratory for soil and water analysis.

This visit was very fruitful for all students as we get total knowledge about wheat crop regarding all its aspects. We are gratified to Dr. P.N. Rasal and Dr. Gadekar for giving us valuable information and satisfactory explanation for all our doubts.

We also thankful to our faculty - Smt. V.A. Gawarepatil for organizing this visit and last but not least thanks to principal Dr. P.V. Rasal for proving permission and inspiration for visit.

*Gawarepatil*

Smt. V.A. Gawarepatil  
Dept. of Botany  
K.G.D.M. Arts, Commerce &  
Science College, Niphad

Examiner.

## The Mahatma Phule Krishi Vidyapeeth, Rahuri.

The Maharashtra Krishi Vidyapeeth, Rahuri is established on March 29, 1968 and subsequently named as Mahatma Phule Krishi Vidyapeeth (MPKV) after a great social reformer "Mahatma Jyotiba Phule". It has started functioning from October, 1969 at Rahuri, District Ahmednagar, Maharashtra, India. The campus is situated 160 km from Pune on Pune - Delhi highway in Ahmednagar district. Forty kilometer in the south is Ahmednagar town and 50 km in the North is Shirdi, famous for the saint Saibaba. Newasa, land of Saint Dnyaneshwar is 33 km from Rahuri. The campus is 10 km from Rahuri Railway Station and 110 km from Manmad railway junction. Ahmednagar is a historical place and was a capital of the Nizam rulers. It is famous for co-operative sugar and dairy industries. The annual average maximum & minimum temperature ranges between 30 to 40°C and 10 to 20°C, respectively.

The basic mandate assigned to this University are Advancement in teaching, ~~rese~~ research and imparting extension education to the farmers of the state. There are four Agricultural Universities in the state, catering the similar services in their locality. The Jurisdiction of Mahatma Phule Krishi Vidyapeeth, Rahuri extends over Western Maharashtra, covering ten districts.

The University has a very good network of research stations spread over different agro-climatic zones. In all 23 research stations, 4 state level specialists and 16 research testing / verification centers are located in different agro-climatic zones in addition to 4 zonal ~~res~~ research stations.

Of the three fold functions, it is mandatory on the part of the University to transfer the technology from the research centers to the ultimate users through extension education programme.

The MPKV has released number of varieties of important crops of the region. These varieties are further developed and tested rigorously at the testing / verification

research centers of the University as well as on the farmers fields under different agroclimatic conditions. Some of the varieties are very popular and has increased the remarkable production in this state as well as in the country. In addition to crop varieties, the University has developed numerous techniques in all the fields of related agricultural sciences.

## Research in the faculty of Agriculture.

Research is one of the important activities of the University. The research programme is organised through 4 main research stations and 21 sub-stations located throughout the jurisdiction of the university. There are 172 research projects funded through ICAR, Govt. of India, state Govt. and other funding agencies in the country and abroad. The operational area of the University is divided into five zones on the basis of agro-climatic conditions. To strengthen the location specific research programmes, the ICAR has sanctioned National Agricultural Research Project (NARP) for these zones viz

- i) Scarcity,

ii) Plain zone.

iii) Sub-montane.

iv) Ghat zone &

v) Assured rainfall zone.





TOPIC

Date: / /

Page No.:

## Highlights of research activities

### I) Crop improvement programmes

The important cultivated crops in the jurisdiction of the University are sorghum, pearl millet (kanna), rice, pigeon pea (tur), groundnut and cotton in kharif wheat, sunflower, gram in rabi. The sugarcane, cotton, grapes, citrus, banana and pomegranate, onion, chillies and vegetables are the important commercial crops.

### II) Floriculture crops

The University has initiated research work on floriculture crop and standardised the pulsing treatment for gladiolus, roses, gerberas and carnation to improve the vase life of cut flower and finalised packaging treatment for various types of flowers. The Government of Maharashtra has sanctioned a research project on "Hi-tech Floriculture" at Agriculture college, pune during 2000. The Green houses / poly houses of different sizes have been erected for different floriculture crops.



### iii) Dryland Farming

Eighty seven percent of the cultivated area in Maharashtra is rained out of which 40% is drought prone. The University is proud to have one of the oldest Dry farming work Research Station in the country established at ~~near~~ Solapur in the year 1933. As a result of research work, the university has recommended many dry farming technologies which are being widely adopted in rained areas of the State. The important components of dry farming systems studied are use of the improved variety, application of fertilizer, plant protection and life saving irrigation. The useful findings of the dry farming research station are widely adopted in National Watershed Development Programmes throughout the state which helped in increasing the production by 50 to 100%.

### iv) Water Management

Only 1% of the total cultivated area in the state is irrigated. Harnessing all the water resources the maximum

area which can be brought under irrigation could be to the extent of 30%. Judicious utilization of available irrigation resources would help in maximising production and productivity of various cultivated crops. As a result of research work carried out on various aspects on irrigation water management the useful recommendations on field layouts, scheduling of irrigation and ditch irrigation system viz. sprinkler & Drip have been advocated to the farmers. The University has done pioneering work on pressurized system of irrigation. Drip irrigation has been popularised and adopted over 35000 hectare in the state. This method helps in saving water to the extent of 40 to 70% and gives 15 to 20% increased yield. There is considerable saving in expenditure on land development and preparing irrigation and field channels.

#### v) Post Harvest Management of fruits and Vegetables.

Due to large scale production of fruits and vegetables the glut

is created in the market and prices slump down during flush season. The Department of Food Sciences Technology and the research unit in Post Harvest Technology of horticulture crops has developed suitable technologies for processing of different fruit crops to prepare candy, juice, syrup, drying of fruits & vegetables etc. The centre of Bakery is established at the University for imparting training on bakery products for self employment.

#### vi) Medicinal and Aromatic Plants "Dhanwantri Udyan"

"Dhanwantri Udyan" with more than 400 species of perennial shrubs/herbs (131), Trees (111), Climbers (62) and seasonal and annual (80) species of important medicinal and aromatic plants is established at Raiburi. The work to evaluate performance and utility of various species has been initiated. The most promising species are Isabgol, asparagus, guggul seed, davana, citrohella, geranium, mint, sandalwood, thus plants is

being multiplied and tested under different agroecological situations in the state. On the basis of the findings suitable species will be recommended for cultivation in the state for exploitation. Along with these there is production of various medicinal oils from Lemon grass, citternella, Nilgiri and also Trifala churn, Ashwagandha churn, Amala churn etc.

### VII] Biochemistry.

Substantial research work has been carried out on bio-fertilizers like Rhizobium, Azotobacter, Azospirillum, blue green algae, VA-mycorrhizae (VAM) and phosphate solubilizing cultures. The Bio-pesticides such as Nuclear Poly-Hedrosis Virus (NPV) to control Helicoverpa armigera are produced on commercial scale and supplied to farmers / Govt. agencies under the name 'Hilokil'. In case of bio-fertilizers, recommendations and seed treatment with microbial cultures in different crops have been supplied to the farmers which resulted in increasing the



TOPIC

Date

Page No.

Cow yields by 12-13%. Microbial cultures for rapid decomposition to form waste for compost making have been developed. A research work has been initiated in tissue culture viz. micro-propagation of elite material of banana, sugarcane, guava, eucalyptus, coconut and guava.

#### iii) Animal Science:

White Trivet - The breed has been developed through crossing of Holstein Friesian Jersey and Gir. The cow produces on an average 3000 liter to 3500 liter of milk per lactation with average fat content of 6.0%. It has good adaptability and disease resistance.


Phala Unnati - This is a strain developed through selective breeding of Osmanabadi goats. The colour of the breed is entirely black and has good prolificacy (average 70% fertility), growth (average weight at slaughter 20 kg) and wide adaptability.



Phule sanchayam - An improved strain of singamneri sheep developed through selective breedings of Deccani sheep. It has a better growth rate (average weight at 6 months 19 kg) and good adaptability.

The University campus is very pleasant. This tour was really fruitful to all of us as we get lots of experiential experience during tour. We are grateful to Dr. Sonali for giving us valuable information and permission.

We also thank to tour faculty staff. Smt. V.A. Gagarepatil for organizing this visit and last but not least thanks to Principal Dr. P.V. Raval for providing permission and inspiration for visit.

  
Smt. V.A. Gagarepatil  
Dept. of Botany  
K.G.D.M. Arts, Commerce &  
Science College, Niphad

Examiner.