

**Shri Sarda Education Society's  
(A Linguistic Minority Educational Institute)**



**Smt Radhabai Sarda Arts, Commerce & Science College  
Anjangaon Surji, Dist - Amravati, Maharashtra  
NAAC Accredited 'A' with CGPA 3.21**

**Department of Botany**

**STUDENTS CENTRIC METHODS**

**2022-2023**

Shri Sarda Education Society's  
(A Linguistic Minority Educational Institute)  
**Smt Radhabai Sarda Arts, Commerce & Science College Anjangaon Surji**  
**DEPARTMENT OF BOTANY**

## **STUDENTS CENTRIC METHODS**

Various methods of experiential and participatory learning, as well as problem-solving methodologies, are implemented to make sure that students are dynamic participants than passive listeners in the teaching learning process.

### **Experiential learning:**

Faculty of the department promotes experiential learning method.

### **Practical like –**

- Plant morphology and Anatomy
- Plant identification
- Medicinal plant cultivation uses
- Community study of college campus
- Detection of primary metabolites
- Plant physiology experiments – Photosynthesis , Respiration and others

### **Projects on -**

- Wild edible plants
- Plant disease on crop plant survey
- Survey on Use of Medicinal Plants by Traditional Healers
- Fruit ripening centers
- Medicinal plants
- Nutraceutical Compound and Metabolites in Fruits marketed
- Nutraceutical Compound and Metabolites in vegetables
- Phytochemicals in some wild medicinal plants
- Fruit value etc

### **Participative Learning:**

- Seminars
- Group discussions
- Field visits/Industrial visits/Survey etc.
- Medicinal Plant Exhibitions
- Filed projects
- Medicinal Plant Sapling preparation techniques

### **Problem Solving Method:**

- Case studies : practical knowledge to develop problem solving ability
- Projects on
- Medicinal plants
- Cultivated medicinal plants in Anjangaon region
- Survey on herbicides used by farmers

## Experiential learning:

### **EXPERIENTIAL LEARNING –Hands on for Plant sapling preparation**



## EXPERENTIAL LEARNING –Participation in practical





## EXPERIENTIAL LEARNING –Photosynthesis process



## EXPERIENTIAL LEARNING –Chromatography



## Participative Learning:

### PARTICIPATIVE LEARNING –Participation in Seminar



### PARTICIPATIVE LEARNING –Participation in Seminar





## PARTICIPATIVE LEARNING –Participation in Group discussion (GD)



## PARTICIPATIVE LEARNING –Participation in Group discussion (GD)



## **PARTICIPATIVE LEARNING –Participation in Exhibition**





## Problem Solving Method:

### Department of Botany

#### FIELD PROJECT / SURVEY REPORT

Department of conducted field project and Survey related to Wild glory, Medicinal plant, Wild edibles, Cultivated medicinal plants , Ornamental plants, etc. prescribed by S G B Amravati University Amravati for B.Sc. II students. Fifty five students participated in field project and survey.

Participated students in Filed project and Survey :

SN	TITLE OF PROJECT/ SURVEY	CLASS	STUDENT NO
1	Morphology, Recorded and Local uses of – Herbal Medicinal plants in Anjangaon Taluka region	B.Sc. II SEM-III	53
2	Wild glory in Anjangaon region		
3	Survey on Wild Edibles marketed in Anjangaon Taluk region –		
4	Survey on Medicinal plants cultivated by farmers in Anjangaon Surji tahsil.		
5	Survey on Use of Medicinal Plants by Traditional Healers in Villages of Anjangaon Tahsil		
6	Survey on Use of Medicinal Plants by Traditional Healers in Anjangaon and Surji		
	Total of B.Sc. II SEM-III		53



  
Dr. Mangesh Dagwal  
Associate Professor & Head  
Department of Botany  
Smt. Radhabai Sarda Arts, Commerce & Science College  
Anjangaon Surji, Dist. Amravati (4315)

  
PRINCIPAL  
Smt. Radhabai Sarda Arts,  
Commerce & Science College  
Anjangaon Surji

**Participated students in Filed project and Survey :**

SN	TITLE OF PROJECT/ SURVEY	CLASS	STUDENT NO
1	Survey on Hebicides and Biofertilizers use by farmers for weeds eradication from crop field in Anjangaon region	B.Sc. III SEM-V	55
2	Banana Ripening Centers In Anjangaon Taluka Region ( Artificial and Natural )		
3	Nutrient deficiency and symptoms in Crops cultivated in Anjangaon Surji region		
4	Review on Pharmacognosy of <i>Piper longum</i>		
5	Carbon sequestration by plants in college campus		
6	Plant Community Study of College Campus		
7	Carbon sequestration by plants in along the road side in Anjangaon		
<b>Total of B.Sc. II SEM-III</b>			<b>55</b>

  
 Principal  
 PRINCIPAL  
 Smt.Radhabai Sarda Arts,  
 Commerce & Science College  
 Anjangaon Surji

  
 Dr Mangesh Dagwal  
 Associate Professor & Head  
 Department of Botany  
 Smt Radhabai Sarda Arts, Commerce & Science College  
 Anjangaon Surji, Dist. Amravati (43)



# **SMT RADHABAI SARDA ARTS, COMMERCE & SCIENCE COLLEGE**

Anjangoan Surji , Dist. Amravati (MS) - 444705 Estd. 1966

Affiliated to Sant Gadge Baba Amravati University, Amravati



## **DEPARTMENT OF BOTANY**

**TOPIC NAME -**

*Survey of Wild Edible in Anjangaon Surji Region*

Class B.Sc. 2<sup>nd</sup> Year (III sem)

Guided by

Dr. Mangesh Dagwal Sir



SMT RADHABAI SARDA ARTS, COMMERCE & SCIENCE COLLEGE, ANJANGAON  
SURJI  
DEPARTMENT OF BOTANY

Project on - Survey on Wild Edible plants from Anjangaon Surji region.

Sheet No.

SURVEY SHEET

Date: 25/11/2022

Time 05:04 PM

1. Name of Informant: Asha Samadhan Rajane

2. Address: At Post Kumbhargaoon, Tq. Anjangaon  
Surji, Dist. Amravati.

3. Age: 62 Occupation: Farmer Caste: SC

4. Name of the Plant:

Local Name: Chavali

Botanical Name: Amaranthus viridis

Family: Amaranthaceae

5. Plant part used: Leaves

6. Location: Found in muddy area

7. Recipes: First boil leaves, then take a vessel,  
take oil, spices, salt, onion, garlic and mix all with  
leaves.

8. Uses: Rich in Iron and contain  
healty nutrients and proteins.

9. Additional information: Different benifits are- reduce inflammation in the  
body, helps to reduce appetite and increase weight  
loss.

Name & Signature of student collected information

Om P. Khode. B.Sc.-II



Signature of informant

3-11-21 27/11



**SARDA EDUCATION SOCIETY (TRUST)**

SMT Radhabai Sarada Arts, Commerce And  
Science College

Anjangaon Surji Dist. Amravati (M.H)444705

**DEPARTMENT OF BOTANY**

**TOPIC NAME**

**SURVERY ON USE OF MEDICINAL PLANTS IN UNANI MEDICINE  
FROM ANJANGAON SURJI REGION**

**CLASS :- Bsc. II Year  
(Third Semester)**

**GUIDED BY**

**Dr.Mangesh Dagwal**


SMT Radhabai Sarda Arts, Commerce And  
Science College

DEPARTMENT OF BOTANY  
**CERTIFICATE**

This is to certify that Humaira Saleha, Javeriya Firdous,  
Ayesha Humaira, Absar Anjum, Ashna Navira,  
Javeriya Tabassum, Mahevish Anam, Farha Parveen,  
Saniya Firdous, Iqra Anam.

BSC - II (Sem III) 2022-2023 has completed project  
entitled Survey on use of Medicinal Plants in Unani  
Medicine from Anjangao Surji Region during 31st  
September to 15th November 2022.

  
Incharge Guide

  
Dr. Mangesh Dargawa  
Botany Department  
Smt. Radhabai Sarda College  
Anjangao Surji Dist. Anantnagar  
Head  
Mangesh Dargawa  
Charge Science Faculty  
S. Radhabai Sarda College



SMT RADHABAI SARDA ARTS, COMMERCE & SCIENCE COLLEGE, ANJANGAON  
SURJI

DEPARTMENT OF BOTANY

W- 2022

Project on – Survey on use of Medicinal Plants in Unani Medicine from Anjangaon Surji  
Region

Sheet No.

SURVEY SHEET

Date :

Time

Name of Informant : Dr. Amir Sohail (BHMS)

Address : Seva clinic Eidgah Road Near  
Tehsil Anjangaon Surji.

Age: 30 Occupation: Doctor Religion: Muslim

Name of the Plant used :

Local Name: Adulsa

Botanical Name: Justicia adhatoda

Family: Acunthaceae

Plant part used: All parts of this plant

Plant collected from Location: Botanical garden.

Local Use: it is used in the treatment  
of cough, Bronchitis, Asthama,  
dented ailments, bleeding  
gums, pyorrhoea, toothache. etc.

Additional information: it is an strong expectorant  
and antitussive properties for  
individuals suffering from colds,  
coughs, and bronchitis, etc.

Name & Signature of student

Fauziya Jirbous

Signature of informant

Amir

Name of Guide

**Shri Sarda Education Society (Trust)'s  
(A linguistic Minority Education Institute)**



**Smt.Radhabai Sarda Art's,Commerce And Science  
College Anjangaon Surji Dist.Amravati  
(M.H.)444705**

(Affiliated to Sant Gadge Baba Amravati University,Amravati)

**NAAC Accredited 'A' with CGPA 3.21**

**- Topic -**

**Survey on Herbicides & Biofertilizer use by  
farmers for weeds eradication form crop field in  
Anjangaon Surji**

**Department Of Botany (AY 2022-23)**

**B.Sc. III ,Sem-V**



**Guided By**

**Dr. Mangesh Dagwal Sir**

**Prof. Ramchandra Kulkarni**



**SARDA EDUCATION SOCIETY (TRUST)**

**SMT Radhabai Sarada Arts, Commerce And  
Science College**

**Anjangaon Surji Dist Amravati (M.H) 444705**

## **DEPARTMENT OF BOTANY**

**TOPIC NAME**

**NUTRIENT DEFICIENCY AND SYMPTOMS IN CROPS  
CULTIVATED IN ANJANGAON SURJI REGION**

**CLASS :- BSc. III Year**

**(Fifth Semester)**

**GUIDED BY**

**Dr.Mangesh Dagwal**



# SOYABEAN

**Botanical Name: - Glycine max**



## INTRODUCTION

The soybean, soy bean, or soya bean (*Glycine max*) is a species of legume native to East Asia, widely grown for its edible bean, which has numerous uses. Traditional unfermented food uses of soybeans include soy milk, from which tofu and tofu skin are made.

## NUTRIENT DEFICIENCIES IN SOYABEAN

Nitrogen (N), Phosphorous (P), Potassium (K), Magnesium (Mg), Sulphur (S), Iron (Fe), Manganese (Mn), Sudden death syndrome (SDS)

## SYMPTOMS

- Poor nodulation on roots.
- Stunted, spindly plants with light green color, which appears first on lower (older) leaves.
- Leaves usually have a dark green to bluish tint.
- Intervernal chlorosis starting from the base of the leaf.
- Reduction in overall growth. Yellowing, reddening and dying leaf margins on lower (older) leaves during vegetative growth and on upper (younger) leaves during grain fill.
- Basal portions of the leaf remain green.
- Ragged appearance of older leaves.
- Stunted and slow growth.
- Development of purple seed stain, and misshapen and wrinkled seeds.