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VIJAYAPUR- 586103.

ACCREDITED AT THE 'A' LEVEL In 3<sup>rd</sup> Cycle  
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07/01/2022


## DEPARTMENT OF BOTANY

STUDENT SEMINAR 2021-22

### NOTICE

This is to inform all the Bsc I Sem students that following is the list of participants in seminar against their allotted topics. All the students are informed to attend the seminar without fail.

Sl.No	Name of the student	Topic allotted	Date of seminar
1	Smithi Mukhihal	VAM Fungi	13-1-2022
2	Manoj kulakarni	Ultrastructure of bacteria	13-1-2022
3	Prajwal Patil	Economic importance of fungi	13-1-2022
4	Bhanu. Rajaput	Economic importance of bacteria	14-1-2022
5	Sonu Rajaput	General structure of virus	14-1-2022
6	Bhagyashree Biradar	History and development in the field of microbiology	14-1-2022
7	Vijayalaxmi Vastrad	Viroids	14-1-2022

  
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 DEPARTMENT OF BOTANY  
**BSC I SEMESTER DISCIPLINE SPECIFIC CORE COURSE**  
 Seminar to be given by students 2021 -2022

SL NO	ROLL NO	STUDENTS NAME	SIGNATURE	DATE / TIME
1	3	RAMYA A KADAKOL		13/01/22
2	6	SHRUSTI SINDAGI		13/01/22
3	16	BHAVANI HADAPAD		13/01/22
4	30	RADHIKA SHRISHAIL RATTAL		13/01/22
5	43	SIDDANAGOUD SIDDALINGAPPA BIRADAR		13/01/22
6	51	LINGARAJ MALINGARAYA HATTI		13/01/2022
7	52	WAGHMARE ADITYA SURESH		13/01/22
8	57	BHAGYASHREE APPASAHEB HAVINAL		13/01/2022
9	63	AKANKSHA		13/01/2022
10	67	SHOBHA SANGAPPA KOKATANUR		13/01/2022
11	68	RAHUL SANGANAGOUD BAGALI		13/01/2022
12	70	NITYA BHIMRAO GONGADI		13/01/2022
13	72	SANKETA ANIL KARAJAGI		13/01/2022
14	75	BHUNESHWARI		13/01/2022
15	78	ARPITA SOLAPUR		13/01/2022
16	80	ANJANA L BIRADAR		13/01/22
17	81	ROHITGOUDA HATTI		13/01/22
18	82	RAKSHITA PRAMOD NESUR		13-01-22
19	89	PRASHANT INGANAL		13/01/22
20	97	SHAKUNTALA IRAPPA HUDDAR		13-01-22
21	103	AKSHATA JAIN		13/01/22
22	108	SONUKNVAR JABBARSINGH RAJPUT		13/01/22
23	111	BHANUKUVAR TAKHATSING RAJPUT		13/01/22
24	112	ANKITA		13/01/2022

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25	115	ANJALI HOOLI	Anjali	13/01/22
26	116	HARSHITA MOHAN MALLUR	Hmallur	13/01/22
27	128	DANAMMA GURUBASAPPA MAMADAPUR	D.G.M.	13/01/22
28	129	MALLIKARJUN REDDY	M.Reddy	13/01/22
29	137	ASHWINI KATTIMANI	Ashwini	13/01/22
30	145	ASHWINI GUDDODAGI	A.Guddodagi	13/01/22
31	147	MAHESH PAWAR	M.Pawar	13/01/22
32	151	AMIT VITTAL POOJARI	Amit	13/1/2022
33	164	ARUN SURESH LAMANI	Arun	13/1/2022
34	173	KARTIK KORABU	K.K.	13/01/22
35	174	NIKITA VITTHAL NAD	N.Nad	13/01/22
36	183	AKSHAYAKUMAR JAGANNATH KALABA	A.K.	13/01/22
37	187	PRASANKUMAR HARUGERI	P.Harugeri	13/01/2022
38	189	SHARANKUMAR SURESH UMARANI	S.U.	13/01/2022
39	193	SUNIL KUMAR C LAMANI	S.K.	13/1/2022
40	194	KRUTIKA ANILKUMAR NIDONI	K.Nidoni	13/01/2022
41	195	PUJARI MEGHA MAHESH	P.Mahesh	13/01/2022
42	215	MALLIKARJUN SIDDAPPA KUMBAR	M.Kumbar	13/1/2022
43	229	SANGAMESH BASAPPA KUMBAR	S.B.Kumbar	13/1/2022
44	234	PRAVEEN ANIL RATHOD	P.Rathod	13/01/22
45	235	SAMARTHA CHANDAKAVATHE	S.C.	13/1/2022
46	249	BHIMASHANKAR MASHAL	B.Mashal	13/01/22
47	260	SAVITRI PARASHURAM MENDIGERI	S.M.	13/01/22
48	261	VIVEKANAND PARASHURAM MENDIGERI	V.Mendigeri	13/01/22
49	277	AKSHATA VEERESH KADI	A.Kadi	13/01/22
50	282	BHAGYASHREE SHIVANAGOUDA BIRADAR	B.Biradar	13/01/22
51	286	ANUSHA PATIL	A.Patil	13/01/22
52	292	AISHWARYA MAJJAGI	A.Majjagi	13/01/22
53	293	PRIYANKA PARASHURAM CHAVAN	P.Chavan	13-01-2022
54	295	ANKITA SALODAGI	A.Salodagi	13/01/22
55	297	KEERTANA KALLAPPA JAYAKKANAVAR	K.Jayakkanavar	13-01-2022

56	304	USHA RAJU RATHOD	Usha	13-1-22
57	305	PRATHAM SURESH MURAGE	P. Murage	13-01-22
58	306	MEHABOOB	M	13/1/2022
59	308	SAHANA SADASHIV HONAKAMBLE	S. Honakamble	13/01/22
60	310	VIJAYALAXMI RAMESH VASTRAD	R.V.	13/1/22
61	312	SANJANA GANESH DHOBAL	S. Dhobale	13/01/22
62	313	ABHISHEK ASHOK BUDIHAL	A.	13/1/2022
63	314	NAFEESA BADRODDIN MULLA	N. Mulla	13/1/22
64	322	MEGHA RAVI GAYAKWAD	M. Gayakwad	13/01/22
65	323	APEKSHA KADADI	A. Kadadi	13/01/22
66	326	YALLALINGA PUJARI	Y. Pujari	13/01/22
67	327	PREETI HIREMATH	P. Hiremath	13/01/22
68	332	HIREMATH NISARGA CHIDANAND	H.S.C.	13/01/22
69	336	JYOTI RAJAPUT	J. Rajaput	13/01/22
70	341	CHANNAREDDY	C.	13/1/2022
71	345	MANOJ KULAKARNI	M.	13-1-2022
72	347	SHRUTI PANDAPPA INDI	S. Indri	13-01-22
73	349	PRABHAVATI SHIRASHYAD	P. Shirashyad	13-01-22
74	352	SAGAR RAVATAPPA BHOSAGI	S. Bhosagi	13/01/22
75	359	BHAGYALAXMI MENDEGAR	B.M.	13/01/22
76	364	RENUKA MALI B	R. Malib.	13-1-22
77	366	PRIYANKA SHIVAPPA NIDONI	P. Nidoni	13/01/22
78	367	GOURI JOGANNAVAR	G.	13/01/22
79	368	AKASH VIJAYKUMAR PAWAR	A. Pawar	13/01/22
80	374	ROHINI SOMALINGA KUMBARA	R. Kumbara	13/01/22
81	377	ANKITA CHANDRAKANT POL	A. Pol	13/01/22
82	380	PREMA SHREESHAIL MULA WAD	P. Mulawad	13/01/22
83	381	DINESH UMMANAGOL	D.U.	13/01/22
84	384	SUJATA MANGESH RATHOD	S. Rathod	13/01/22
85	386	SUBHADRA RAJASHEKAR SANAKI	S. Sanaki	13/01/22
86	391	LAXMI SUBHAS KARIKABBI	L. Karikabbi	13/01/22
87	392	SRUSHTI SIDARADDI	S. Sidaraddi	13/01/22
88	394	BHUMIKA BORADE	B. Borade	13/01/22
89	403	RUCHITA KUNDARGI	R. Kundargi	13-1-22
90	416	SANJANA SHIVANANDA PAWATE	S. Pawate	13/01/22
91	417	NAVI MAHESH SHIVASHANKAR	N. Shivashankar	13-1-22

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92	419	RANAJEET RATHOD	R. Rathod	13/01/22
93	422	NIKITA G RATHOD	N. Rathod	13/01/22
94	425	SAKSHI SHANKAR AMBURE	S. Ambure	13/01/22
95	428	PREMA LAXMAN KOTI	P. Koti	14/01/22
96	430	PAVITRA MENDEGAR	P. M.	14/01/22
97	432	PRIYANKA GURUPADA BIRADAR	P. Biradar	13/01/22
98	433	SANGEETA KANTAPPA DASHAVANT	S. K. D.	13/01/22
99	434	N RAMYA	N. Ramya	13/01/22
100	437	PRAJWAL	P. Prajwal	13/01/22
101	439	KEERTANA DHAREPPA HALINGALI	K. D. H.	13/01/22
102	440	VISHAL MATH	V. Math	13/01/22
103	441	SHREYANSH KUSANAL	S. Kusanal	13/01/22
104	442	SMITHI SANGAPPA MUKIHAL	S. Mukihal	13/01/22
105	446	RADHIKA MELAPPA HALLI	R. Halli	13/01/22
106	449	ANUSHA RAJU ANGADI	A. Angadi	13/01/22
107	450	SUDEEP SHIVAPUTRAPPA BHANDARI	S. S. Bhandari	13-1-2022
108	451	BHAGYASHREE SHARANABASAPPA ANGADI	B. Angadi	13/01/22
109	461	SUMATI RAMESH HITTANLLI	S. Hittanalli	13/01/22
110	462	BHAGYASHREE SHENKAREEPPA MASABINAL	B. Masabinal	13/01/22
111	467	VINAYAK SHESHADRI	V. Sheshadri	13/1/2022
112	469	MOHAMMED ZUBER ARJUNGI	M. Arjunji	13/01/22
113	470	PRAJWAL SURESH BIRADAR	P. Biradar	13/01/22
114	472	MANJUNATH B UPPAR	M. Uppar	13/01/22
115	473	AISHWARYA VITTHAL BIRADAR	A. Biradar	13/01/22
116	477	VAISHNAVI POL	V. Pol	13/01/22
117	481	ANKITA RADDEKAR	A. Raddekar	13/01/22
118	483	SURESHSINGH HANAMANTHSINGH RAJPUT	S. Rajput	13/01/22
119	487	ARUN DHARMU CHAVAN	A. Chavan	13/01/22
120	489	VARSHA SHIVANAND DEGINAL	V. Deginal	13/01/2022
121	491	LAXMI BIRADAR	L. Biradar	13/01/22
122	493	SHWETA JNANESHWAR KHOT	S. Khot	13/01/22

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**SEMINAR BY STUDENTS**

Name of the student: Varshavi. Pol.

Class: B.sc I<sup>st</sup> Sem Date: 14/01/22

Time: 4:00 pm. No. of students present:

Topic: Ozone layer Depletion.

Remarks: Good handwriting on board.  
Good communication to students.  
Convey the topic

Staff in charge: [Signature]

[Signature]

HEAD

[Signature]

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**SEMINAR BY STUDENTS**

Name of the student: Bhagyashree Bimadar

Class: Bsc I Semeta Date: 14/1/22

Time: 4:00 PM No. of students present:

Topic: History and development in the field of Microbiology

Remarks: Brief explanation  
Good communication

Staff in charge:

[Signature]

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**DEPARTMENT OF BOTANY**  
**SEMINAR BY STUDENTS**

Name of the student: Manoj, Kulakarni  
 Class: Bsc I<sup>st</sup> Sem Date: 13/01/22  
 Time: 4:00 pm No. of students present:


Name of the student: Prajwal, Patil.  
 Class: B.sc I<sup>st</sup> Sem Date: 13/01/22  
 Time: 4:00 pm No. of students present:


Topic: Ultrastructure of Bacteria.


Topic: Economic importance of fungi.

Remarks: Good communication. Interest with students.

Remarks: Good hand writing. Good communication. Convey the topic.

Off in charge:   
 Prajwal

Staff in charge:   
 Prajwal

  
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<p>Name of the student: <i>Sangeeta Dashwant</i></p> <p>Class: <i>Bsc I Semeta</i> Date: <i>24/1/22</i></p> <p>Time: <i>9:00AM</i> No. of students present:</p>	<p>Name of the student: <i>Nijaylaxmi Vastrad</i></p> <p>Class: <i>Bsc I Semeta</i> Date: <i>24/1/22</i></p> <p>Time: <i>9:00AM</i> No. of students present:</p>
<p>Topic: <i>Structure and Reproductive of Puccinia</i></p>	<p>Topic: <i>Vroids structure</i></p>
<p>Remarks: <i>Good explanation communication should be improved.</i></p>	<p>Remarks: <i>Good communication voice should be louder</i></p>
<p>Staff in charge: <i>[Signature]</i></p>	<p>Staff in charge: <i>[Signature]</i></p>

*[Signature]*  
**HEAD**  
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*[Signature]*  
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**SEMINAR BY STUDENTS**

Name of the student: **Smithi Mukrikhal**  
 Class: **BSC I Semester** Date: **13/1/22**  
 Time: **4:00 PM** No. of students present:

Name of the student: **Bhanu Rajput**  
 Class: **BSC I Semester** Date: **14/1/22**  
 Time: **9:00 AM** No. of students present:

Topic: **VAM Fungi**

Topic: **Economic importance of Bacteria**

Remarks: **good communication  
 Interaction with audience  
 Brief explanation**

Remarks: **Brief explanation  
 Board teaching is good.  
 good handwriting.**

Staff in charge: **Bhanu**

Staff in charge: **Bhanu**

**Head**  
 HEAD



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Name : Sonu. Kavar. J. Rajput

Class : B.S.C. I<sup>st</sup> Sem

Roll.No. : 108

Topic : General structures of Virus.

Sub : Botany

Guided by :- A.S. Kannur  
B.S. Patil

The Virus are classified on based on shape

1. Icosahedral
2. Enveloped
3. Complex
4. Helical

### 1. Icosahedral :

The Virus appears spherical in shape but when we look closely it actually look like Icosahedral.

It is made up of equilateral triangle fused together in spherical shape. The genetic material fully enclosed inside the capsid.

An Icosahedral is defined as made up of 20 equilateral triangle arranged around the surface of the sphere.

Ex: poliovirus.

### 2. Enveloped :

This virus is conventional Icosahedral or helical structure. they are surrounded by lipid by layer membrane. The envelop of the virus is formed when the virus is exiting the cell by via budding and it infects of this virus is mostly dependent on the Envelop.

Ex: Influenza Virus.

of Picosahedral & helical structure have a combination of outer wall. The head tail shape and having complex unique to viruses. That infects bacteria only and known as bacteriophage. The head of virus is Picosahedral shape with the helical tail.

The bacteria / bacteriophage uses its tail to attack to bacterium & creates hole in the cell wall & then inserts the DNA into the cell using tail as a channel.

#### 4. Helical :

The virus has a capsid with a central cavity or hollow tube i.e. made up of proteins arranged in a circular fashion creating a disklike shape.

This disk shape are attached helically creating a tube with room for nucleic acid in the middle.

All filamentous virus are helical in shape they are 15 to 19 nm wide and range in length from 300 to 500 nm depending upon the genome size.

Ex: TMV.



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*[Signature]*  
**IOAC, Co-ordinator**

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Bangaramma sajjan campus

BLDE ROAD VIJAYPUR

Name → Vijayalaxmi R. Vastrad

Roll No → 310

Subject → Botany

Submitted to → AKshata Mam, Bhuvana Mam

# VIROIDS

## \* Introduction

- It is a small single stranded circular RNA.
- They are infectious pathogen.
- They do not have protein coat.
- All known viroids are inhabitants of Angiosperms.
- Most of viroids cause disease.
- The economic importance to human varies widely.

## Content:

Viroids are small circular RNA pathogens which infect the several crop plants & can cause diseases of economic importance. They do not code for proteins.

The first discoveries of viroids in 1970s triggered the historically third major extension of biosphere, to include smaller life entities. The unique properties of viroids have been identified by the International Committee on taxonomy of viruses.

→ Potato spindle tuber viroids

- May be limiting to potato growers
- First viroid characterized.
- Many variants described
- Control with detection in mother, stock, clean seed.

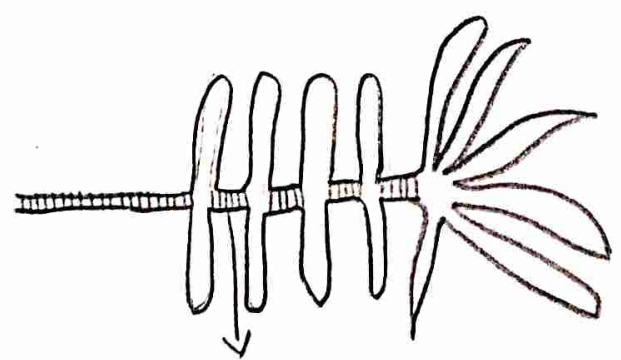
→ Viroid disease control:

- Disinfection of cutting tool.
- Cold treatment.
- Pre inoculation with protective mild strains of viroids has proved effective to control PSTVd.

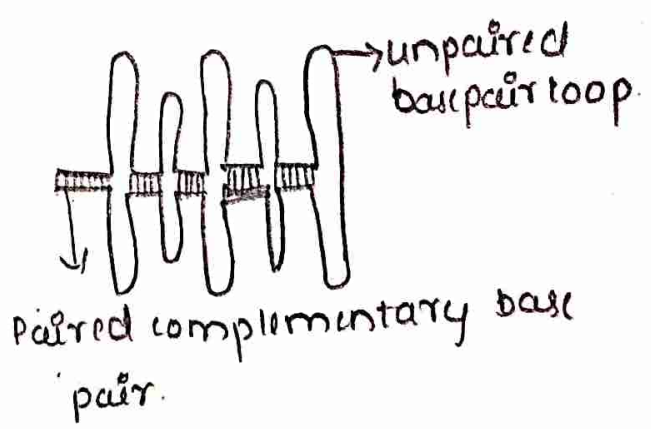
→ Transmission:

- Most Mechanically transmitted.
- Some seed or pollen transmitted
- Tomato planta macho viroid aphid transmitted.

→ Structure of Potato spindle tuber viroids.



Intrapaired base pairs  
Branchid type.



Paired complementary base pair.



## \* The Size of Virioids.

- Virioids are the smallest pathogenic agents yet described.
- They are single stranded circular DNA.
- RNA molecules which vary in length from 246 to 463 nucleotides & are found only in plants.

## Functions:

Mature virioids consist of a noncoding, covalently closed circular DNA that is able to autonomously infective reproductive host plant.

They must utilize proteins of the host for most biological function such as replication, processing, transport & pathogenesis.

## Effects

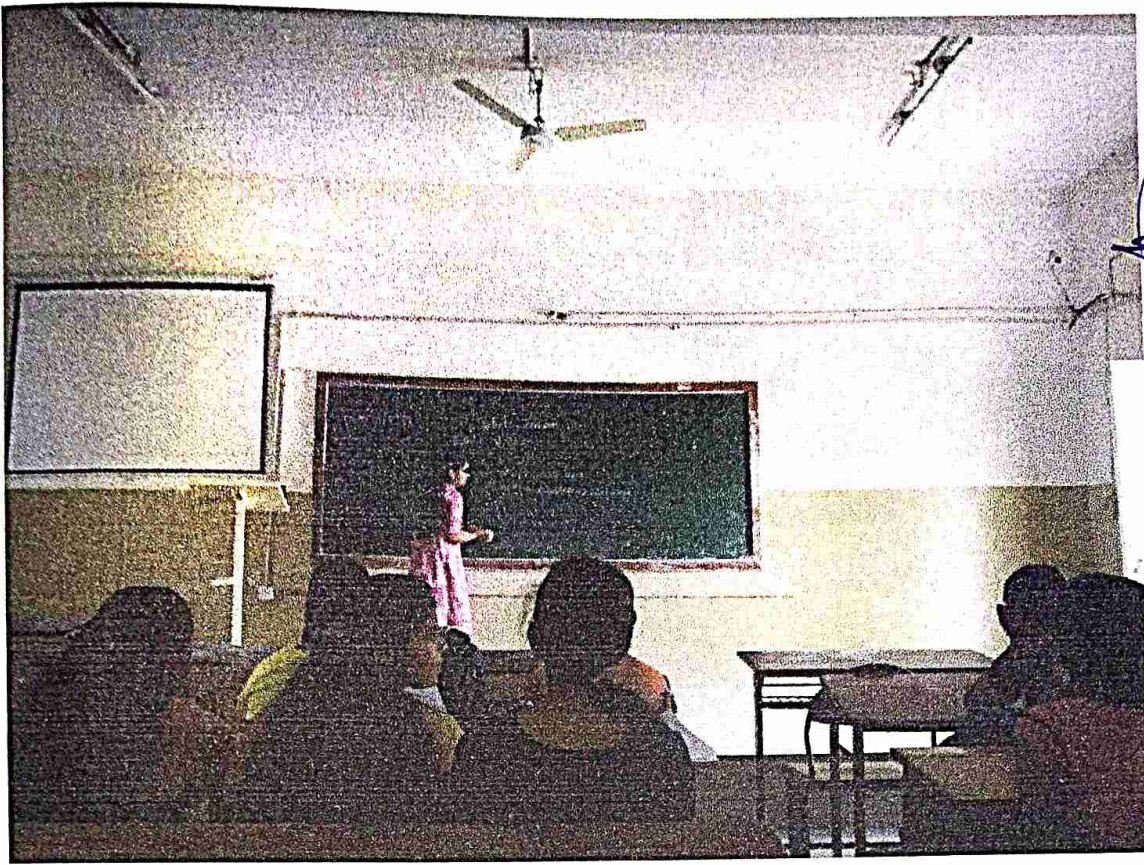
Symptoms of viroid infection in plant include stunting of growth, deformation of leaves & hult and death.

Because virioids in plants do not produce mRNAs. It was first shown that disease must be a consequence of virioid RNA binding to host protein. of Nucleotide.

## Treatment:

Current effective control methods for viroid diseases include detection & eradication and cultural controls.

In addition heat or cold therapy combined with meristem tip culture has been shown with effective for elimination of virioids for some viroid host combination.



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Name :- Bhanu. Kuvor. T. Rajput.

Class :- B.Sc. I<sup>st</sup> Sem.

Roll no :- 111.

Subject :- Botany [Seminar].

Topic :- Economic Importance of Bacteria.

Guided By :- A. S. Kannur.  
B. S. Patil.

~~Patil~~  
22/01/22  
Kannur  
22/01/22

# Economic Importance of Bacteria.

Economic Importance means:-

The Economic value of something or anything good or bad

Introduction :-

The bacteria are mostly know to be harmful since they produce many serious disease. On the other hand, their importance in the industry, antibiotics & natural recycling of material can not be ignored. As such, bacteria are both friends & foes of the human race.

Useful Activities :-

Following are some of the useful activities of bacteria.

1. Soil Fertility :- Bacteria participate most actively in nitrogen fixation. They increase soil fertility by converting molecular molecular nitrogen of the atmosphere into nitrogenous compound. These bacteria are placed into nitrogenous two groups:-

[i] Asymbiotic Bacteria:- Which occur in the soil & fix nitrogen directly.

Eg:- Azobacter, Clostridium.

[ii] Symbiotic Bacteria:- Which occur in the roots of leguminous plant.

Eg:- Rhizobium leguminosorum.

Nitrifying Bacteria :- These bacteria convert ammonia to nitrate. This process involves two steps.

In first, ammonia is converted into nitrite ( $\text{NO}_2$ ) by Nitrosomonas.

In second step, the nitrite is converted into nitrate ( $\text{NO}_3$ ) by Nitrobacter.

Ammonification :- Ammonifying bacteria convert protein into ammonia. The proteins are generally the dead remains of the plants & animals. Such bacteria are, therefore also called decay bacteria.

Ex:- Bacillus Mycoides.

In food Chain :- Bacteria act as decomposers & convert the complex organic substance to simple substances. Thus, they play an important role in the recycling of material.

5. In Dairy :- Various types of bacteria are found in the milk. These convert lactose sugar of the milk into lactic acid. which causes the milk protein casein to curdle.

Products.

Bacteria.

- |            |   |                           |
|------------|---|---------------------------|
| 1. Butter  | → | Streptococcus lactis.     |
| 2. Cheese  | → | Lactobacillus lactis.     |
| 3. Yoghurt | → | Lactobacillus bulgaricus. |



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1. In other Industries :- Many useful products of economic importance are manufactured by using bacteria.

Products.

Bacteria.

Preparation Acetone -  $\rightarrow$  Clostridium acetobutylicum.  
Butanol.

Manufacture of lactic acid  $\rightarrow$  Lactobacillus delbruekii.

Preparation of acetic acid or vinegar  $\rightarrow$  Acetobacter aceti.

2. Antibiotics :- These are metabolic products of one micro-organism which are detrimental to other micro-organisms. Antibiotic cure disease by competitive inhibition. They are obtained from bacteria.  
First Antibiotic  $\rightarrow$  Penicillium discovered by Sir Alexander Fleming in 1929.

Symbiosis in human Intestine :-

E. coli is a common colon bacteria found in human beings & many vertebrates. This bacterium is normally not harmful but is most useful in digestion.

1. In ruminant animals :- In these animals rumen is inhabited by cellulose digesting bacteria like Ruminococcus albus. Ruminant animals eat grass but the cellulose is digested only by the ruminant bacteria present in them.

10. Sewage Disposal :- Fecal matter collected in sewage tanks is digested by the number of aerobic & anaerobic bacteria. In this process methane &  $\text{CO}_2$  are produced. Of these, methane is used as biogas, whereas  $\text{CO}_2$  is used by certain algae present in the tank for photosynthesis.

Ex:- of Algal - bacterial Symbiosis.

11. Genetic Engineering :-

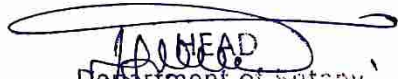
Genetic Engineering is associated with direct manipulation of individual genes.

Genetically modified bacteria are used to produce large amount of proteins for industrial use.


for Ex:- By cutting & pasting the gene for human insulin to bacteria. we can use the bacteria as biofactories to produce insulin for diabetic patients.

  
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Department of Botany,  
S.B. Arts & KCP Science College  
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THANK YOU . . . . .

  
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S.B. Arts & K.C.P. Science College,  
Vijayapur.



Sangeeta Dashavant

Bsc. I sem

Roll No: 433

Sub: Botany

Topic: Puccinia,

Penicillium

# Puccinia.

## Classification :

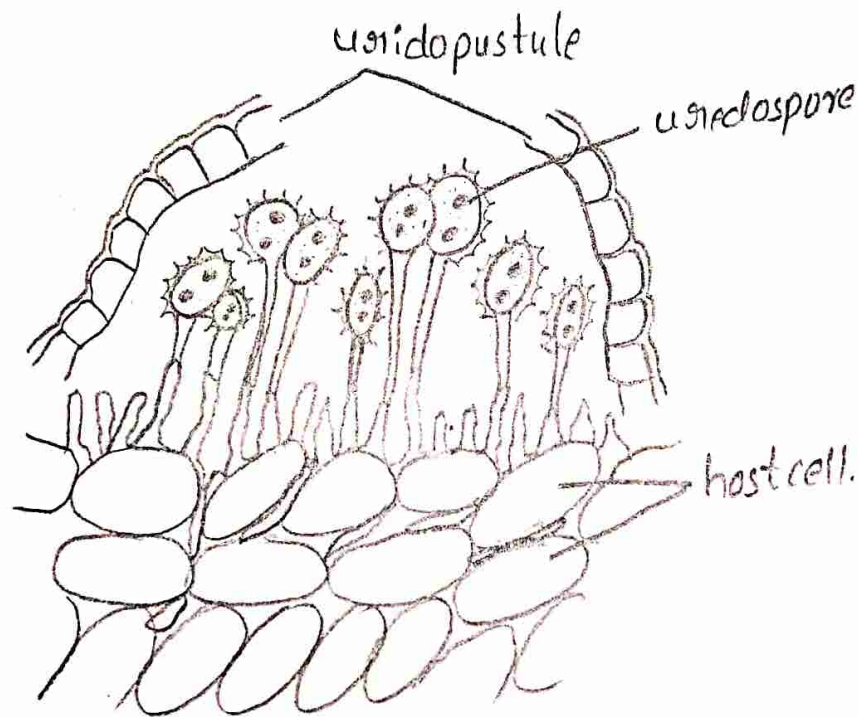
Kingdom : Mycota.  
Division : Eumycota  
Class : Basidiomycotina  
Order : Uredinales  
Family : Pucciniaceae  
Genus : Puccinia  
graminis.

- \* Puccinia are known as 'Rusts' because of reddish brown colour of the spores.
- \* Puccinia are obligate parasites on some important cereals. [family - Gramineae or Poaceae] that are wheat, Maize, and oat, Bajra, jowar and other plants like berberis and thalictrum.
- \* Puccinia graminis are heteroecious (i.e. they complete their life cycle on 2 different hosts).
- \* It is macrocyclic (i.e. having 5 different spore).

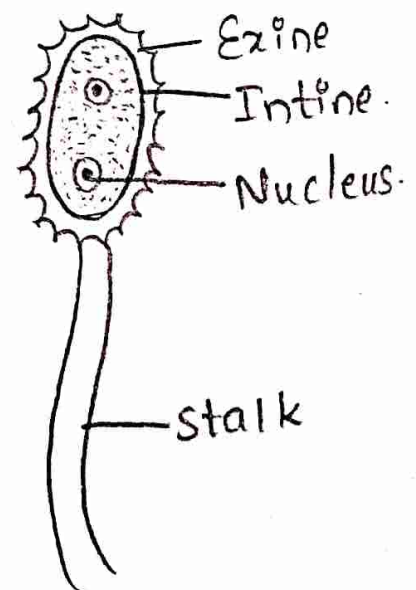
They are : Uredospores.  
Teleutospores.  
Basidiospores  
Pycniospores.  
aeciospores.

## Vegetative Structure.

- \* The mycelium is well developed, branched & septate.
- \* It is generally intercellular and sometimes showing globular haustoria.
- \* Mycelium is dikaryotic [Because it possesses two nuclei of different strains in each cell].
- \* Cell wall is composed of chitine and glucan.
- \* Cells contain cytoplasm and also contain various oil globules and glycogen bodies, etc.



T.S of wheat leaf through Uredopustule.



Uredospore.

Puccinia

## Uredospores.

- \* These are found on wheat leaf.
- \* They appear as red oval shaped on the leaves and leaf sheaths.
- \* The uredosorus in section reveals the ruptured host epidermis due to the pressure of uredospores.
- \* The dikaryotic and branched mycelium is aggregated beneath the epidermis.
- \* The uredospores are produced in massive group from this mycelium.
- \* Each uredospore is binucleate, stalked and random or ablong in shape.
- \* It has an outer exine which is finely rough verrucous inner smooth intine.
- \* Each uredospores has 4 equational germ pores.
- \* The uredospores get disseminated by wind and infect the fresh wheat plant.

# Penicillium.

## Classification :

Kingdom - Mycota.

division - Eumycota.

Subdivision - Ascomycotina

class - Puctomycetes.

order - Eurotiaceae.

family - Eurotiaceae.

Genus - Penicillium.

\* Occurance : This is a saprophytic fungus and usual grows up on rotten vegetables, fruits, meat and many other moist and that organic substrates this fungus is also known as green or blue mould. Some species are parasite also penicillium notatum is a most common species.

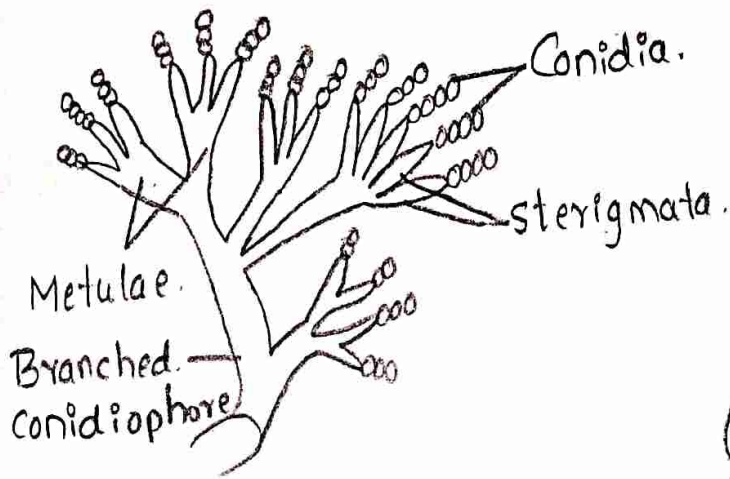
\* Structure : The thallus of penicillium consists of such branched pale coloured mycelium and thin walled hyphae. hyphae are septate and each cell is uni or multinucleate.

## Vegetative structure :

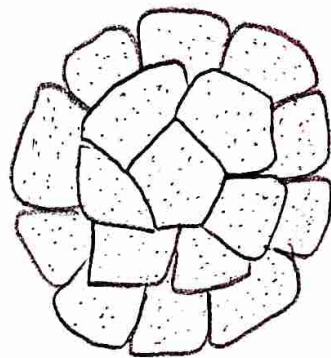
→ The fungus is saprophyte and is commonly found on citrus and other fruits, jellies and other food stuffs.

→ The mycelium is freely branched, septate and each cell is uni or multinucleate.

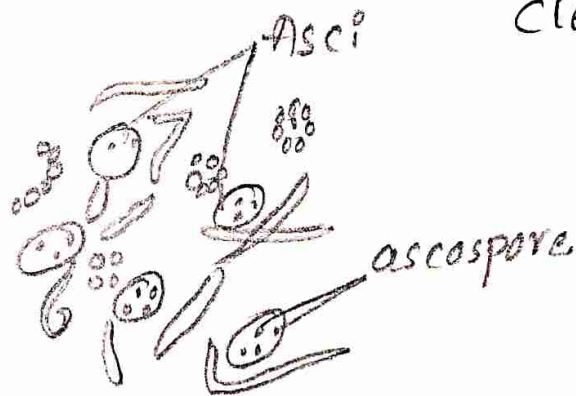
- The mycelium may grow superficially on the surface of substratum or may penetrate deeply.
- The hyphae are generally coloured due to pigment on the surface of hyphae walls.



Mycelium bearing Conidiophore and chains of conidia.



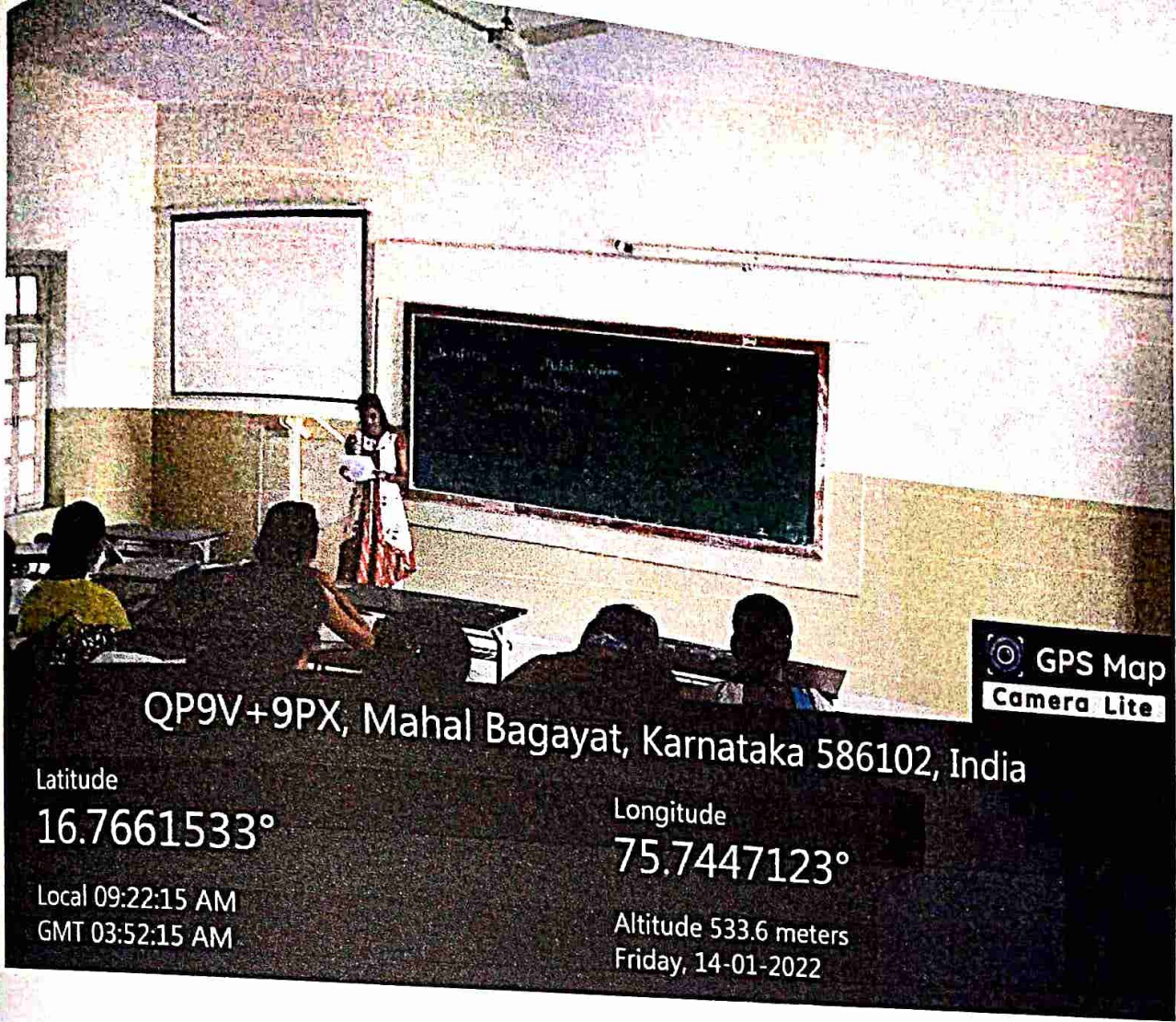
Cleistothecium.



A part of cleistothecium in cross section.

### A Sexual reproductive structure :-

- \* The conidia are the asexual spore borne on long, erect branched conidiophores.
- \* The branched conidiophore, with its conidia looks like a small 'penicillus' (a brush in latin).
- \* Each conidiophore grows vertically from the mycelium and branches at its upper end. The ultimate branches are known as metulae.



QP9V+9PX, Mahal Bagayat, Karnataka 586102, India

Latitude

16.7661533°

Local 09:22:15 AM

GMT 03:52:15 AM


Longitude


75.7447123°

Altitude 533.6 meters

Friday, 14-01-2022

GPS Map  
Camera Lite

  
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Fax: 08352 - 261766 E-mail: [bldeasbkcp@gmail.com](mailto:bldeasbkcp@gmail.com) Web: [www.bldeasbkcp.org](http://www.bldeasbkcp.org)



DATE:25/11/2021


**DEPARTMENT OF BOTANY  
STUDENT SEMINAR 2021-22**


**NOTICE**

This is to inform all the Bsc 3<sup>rd</sup> Sem students that following is the list of participants in seminar against their allotted topics. All the students are informed to attend the seminar without fail.

Sl.No	Name of the student	Topic allotted	Date of seminar
1	SATISH NAGAPPAGOL	Structure of Anther and pollen	27/11/2021
2	MALLANAGOUDA	Double fertilization	27/11/2021
3	SEEMA.S.JITTI	Secondary growth in dicot stem	01/12/2021
4	AKSHATA RACHAGOND	Types of ovules	01/12/2021
5	BHAGYASHREE BAGALLOOR	Stelar and extra stelar secondary growth in dicot stem and root	01/12/2021
6	MANASA SHIVASHARANA UJJINI	Structure of monocot and dicot seed	01/12/2021
7	HARIPRIYA KAVI	Meristematic tissue and its types	01/12/2021
8	SUREKHA PRANESH KULKARNI	Simple tissues	01/12/2021
9	SAHYADRI BASAVARAJ DITIHAL	Leaf fall	01/12/2021
10	VAISHNAVI KUMBAR	Pollination	02/12/2021

  
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1	S2028923	1	VAISHNAVI KUMBAR	
2	S2028955	16	YASHODHA SURESH ROOGI	
3	S2028719	18	PRIYANKA BHEEMARAY KANNUR	
4	S2028754	20	ROOPA BASAVARAJ HIPPARAGI	
5	S2028702	21	PRASHANT BHAGANNA KANNUR	
6	S2028470	29	ANITA CHOUDHARY	
7	S2028489	33	ASHA	
8	S2028529	34	BHOOMIKA S BELLAD	
9	S2028748	36	RESHMA BHAGAWAN	
10	S2028444	37	AKSHATA KORI	
11	S2028608	44	LAXMI BALI	
12	S2028426	45	AISHWARYA SAJJAN	
13	S2028562	50	HARIPRIYA KAVI	
14	S2028574	51	JUBER MUJAWAR	
15	S2028481	58	APSANA MUJAWAR	
16	S2028542	61	DAMINI BHIMANGOURA NAGARADDI	
17	S2028491	64	ASHWINI	
18	S2028555	65	GEETA HULLUR	
19	S2028564	90	PREETI CHANDRAKANT HORTI	
20	S2028772	91	SAHYADRI BASAVARAJ DOTIHAL	
21	S2028584	94	KATTIKAR KARANAKUMAR AMASIDDA	
22	S2028550	98	VIKAS SUKHADEV GADADE	
23	S2028936	101	VIDYASHREE CHATTI	
24	S2028634	106	MANASA SHIVASHARANA UJJINI	
25	S2028786	111	SATISH NAGAPPAGOL	
26	S2028867	112	SUDEEP SATIHAL	
27	S2028456	115	AMBIKA	
28	S2028799	117	SHANTABAI MARUTI JAMADAR	
29	S2028648	123	NEHA NARAYAN KAMBLE	
30	S2028774	125	SAKSHITA BASAPPA DALAWAI	
31	S2028888	128	SUREKHA PRANESH KULKARNI	
32	S2028755	129	ROOPA DHANNUR	
33	S2028925	132	VAISHNAVI N KULKARNI	
34	S2028726	134	PUNEET LINGADALLI	
35	S2028474	148	ANJANA LONI	
36	S2028742	150	RASHMI BALESH TIKOTI	
37	S2028850	152	SONALI SANGAPPA KARJOL	
38	S2028483	154	ARATI KAREPPA KODEKAL	
39	S2028639	160	MEGHA BIRADAR	
40	S2028478	163	APOORVA WAGHMORE	
41	S2028716	164	PREETI POLICE PATIL	
42	S2028592	185	KAVITA S NALKAMAN	
43	S2028530	187	BHUVANESHWARI LAXMAN BATAGUNAKI	
44	S2028913	191	UMARANIKAR SHRUTI DEVENDRA	

SL. NO	RCU NO.	ROLL NO	STUDENT NAME	SIGN
45	S2028451	193	AKSHATA VIRUPAKSHAYYA HIREMATH	<del>A.K.S.H.A.T.A</del>
46	S2028450	194	AKSHATA VIJAYAKUMAR METRI	A.V.Metri
47	S2028896	196	SUSMITA TILAGUL	S.I.A.T
48	S2028793	197	SEEMA SURESH JITTI	S.P.J.T.T.I
49	S2028743	207	RASHMI RAMACHANDRA BHAVIMANI	Rashmi R.B
50	S2028864	213	SRUSHTI ULLAGADDI	(SRU)
51	S2028643	214	NANDA ARAKERIMATH	N.K.S.
52	S2028534	218	CHANDANA	Chandana
53	S2028921	220	VAISHNAVI JAKANUR	V.J.
54	S2028402	221	ABHISHEK	Abhishek
55	S2028519	222	BHAGYASHREE JANAGOUDAR	B.J.
56	S2028801	223	SHARANABASABAVA SADYAPUR	Sharan
57	S2028472	224	ANJALI PATIL	Anjali
58	S2028928	227	VANISHRI HIRAJRAY BIRADAR	V.H.B.
59	S2028500	228	BAGALKOT ANJALI SURESH	S.S.
60	S2028812	229	SHIVARAJ	Shivaraj
61	S2028817	235	SHRADDHA TONDIKATTI	Shraddha
62	S2028692	236	PRAFULA YALAMELI	P.P.
63	S2028417	238	AISHWARYA ISHWAR SAVANT	A.I.S.
64	S2028885	240	SUPRIYA CHIKKAYYA MATHAPATI	Supriya
65	S2028630	241	MALLANAGOUDA	M.N.
66	S2028815	242	SHIVUKUMAR KANNI	Shivukumar
67	S2028520	243	BHAGYASHREE NAGENDRA HADAPAD	B.N.H
68	S2028909	246	TANUJA BARADOL	T.B.
69	S2028679	251	POOJA ASHOK WALIKHNDI	Pooja
70	S2028576	252	JYOTI S GUNAKI	Jyoti
71	S2028600	253	KEERTI SHASHIKANT GADYAL	Keerti
72	S2028413	256	AISHWARYA DAYANAND ANKALAGI	Aishwarya
73	S2028852	257	SOUBHAGYA SURESHBABU ITAGI	S.S.B.
74	S2028940	258	VIJAYALAXMI MALLIKARJUN PATTANAD	V.M.
75	S2028682	263	POOJA RAJU SINDAGI	Pooja
76	S2028866	265	SUDEEP S SHIVASHARAN	S.S.
77	S2028728	267	RABIYA MOPAGAR	Rabiya
78	S2028929	268	VARSHA AGASAR	Varsha
79	S2028945	269	VINOD SIDDAPPA KAPSE	V.S.
80	S2028401	270	A VIKAS	A.V.
81	S2028629	272	MALAPPA MAHANINGAPPA POOJARI	M.P.
82	S2028886	277	SURAKSHA SANGANNA JERATAGI	S.S.
83	S2028593	278	KAVYA BASAVARAJ YADAWAD	K.B.
84	S2028715	282	PREETI KALLAPPA HANJI	P.K.H.
85	S2028511	285	BHAGYASHREE BAGALLOOR	B.B.
86	S2028854	286	SOUMYA AGNI	Soumya
87	S2028538	287	CHANDRAKANTH	Chandrakanth
88	S2028680	289	POOJA BAGALI	Pooja
89	S2028535	290	CHANDAN SHANTAPPA KARNAL	C.S.
90	S2028887	299	SUREKHA C PAWAR	S.P.
91	S2028454	300	AMARALAXMI SHARANAGOUDA MULIMANI	A.M.
92	S2028517	301	BHAGYASHREE HANAMANT ARASANAL	B.H.A.
93	S2028422	305	AISHWARYA PRAKASH NAGAVI	A.P.

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94	S2028720	312	PRIYANKA KOTIKHANI	<i>Priyanka</i>
95	S2028627	314	MAHESH SURESH PATTANASHETTI	
96	S2028424	320	AISHWARYA S BIRADAR	<i>P.B.</i>
97	S2028559	323	GURU MOUNESH PATTAR	<i>G.P.</i>
98	S2028691	336	PRADNYA DATTATREYA KULAKARNI	<i>P.P.</i>
99	S2028485	343	ARAVIND KUMBAR	<i>A.K.</i>
100	S2028536	361	CHANDANA D SHRINGERI	<i>C.D.</i>
101	S2028446	363	AKSHATA RACHAGOND	<i>A.R.</i>
102	S2028554	371	GANGADHAR PUJARI	<i>G.P.</i>
103	S2028407	377	ABHISHEK ALAGUR	<i>A.A.</i>
104	S2028853	380	SOUJANYA PRAKASH BAMMANALLI	<i>S.P.</i>
105	S2028440	381	AKASH SHIVASHANKAR INGALESHWAR	<i>A.S.</i>
106	S2028572	382	JAYASHREE BAJANTRI	<i>J.B.</i>
107	S2028713	383	PREETI BASAVANTAPPA PATIL	<i>P.P.</i>
108	S2028468	389	ANILKUMAR	<i>A.K.</i>
109	S2028458	392	AMBIKA MONAPPA BADIGER	<i>A.M.</i>
110	S2028437	396	AKASH KABADE	<i>A.K.</i>
111	S2028533	397	CHAITRA SALOTAGI	<i>C.S.</i>
112	S2028578	398	KAVERI CHENNUR	<i>K.C.</i>
113	S2028484	401	ARAVIND ASHOK SHEGUNASI	<i>A.A.</i>
114	S2028528	402	BHIMANGOUND THABBANAVAR	<i>B.T.</i>
115	S2028557	410	GIRISH MUKARTIHAL	<i>G.M.</i>
116	S2028409	417	AFREEN	<i>A.F.</i>
117	S2028765	422	SAEE PRAKASH WAGHMARE	<i>S.P.</i>
118	S2028410	426	AISHWARYA ANAND SHIPARAMATTI	<i>A.A.</i>
119	S2028900	430	SWATHI BIRADAR	<i>S.B.</i>
120	S2028625	434	MAHESH BIRADAR	<i>M.B.</i>
121	S2028622	435	MAHANTAYYA	<i>M.A.</i>
122	S2028620	436	MADHUGOUDA MALLANAGOUDA ASKI	<i>M.M.</i>
123	S2028512	437	BHAGYASHREE CHANDRAKANT AMBAGER	<i>B.C.</i>
124	S2028521	445	BHAGYASHREE RAMESH BADIGER	<i>B.R.</i>
125	S2028872	446	SUJATA KIRASUR	<i>S.K.</i>
126	S2028773	447	SAIKUMAR YAMANAPPA ILAGER	<i>S.Y.</i>
127	S2028506	450	BHAGANNA DATTAPPA POOJARI	<i>B.D.</i>
128	S2028862	455	SPOORTI S SHETTENAVAR	<i>S.S.</i>
129	S2028636	456	MANJUNATH RAVASAB KHOT	<i>M.R. Khot</i>
130	S2028580	459	KARISHMA KUSHAL NADAF	<i>K.N.</i>
131	S2028415	461	AISHWARYA GURURAJ KOULAGI	<i>A.G.</i>
132	S2028563	464	HIRAGOND SIDDHANNA RAMAGOND	<i>H.R.</i>
133	S2028805	470	SHASHI	<i>S.S.</i>
134	S2028408	471	ABUSUFIYAN ATANUR	<i>A.A.</i>
135	S2028466	473	ANAND VIJAYAKUMAR PATIL	
136	S2028467	483	ANIL TILGOOL	<i>A.T.</i>
137	9	484	SAKSHI SHIVANAND HALLI	
138	S2028663	486	NIVEDITA PATIL	
139	S2028700	487	PRASHANT	<i>P.P.</i>
140	S2028732	488	RAJASHEKHAR KAROT	<i>R.K.</i>

141 S2025041 498 MANJUSHA G. MARATHE

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Name of the student: Satish nagappagol

Class: B. Sc III<sup>rd</sup> sem Date: 27/11/2021

Time: 10:15 to 11:10 am No. of students present: \_\_\_\_\_

Topic: Structure of Anther & Pollen

Remarks: Explanation is good.  
Black board work is nice.

Staff in charge: Aruna  
N.S. Dasgupta.

Name of the student: Mallanagouda


Class: B. Sc III<sup>rd</sup> sem Date: 27/11/2021

Time: 10:15 to 11:10 am No. of students present: \_\_\_\_\_


Topic: Double fertilization.

Remarks: Stage courage is good.

Staff in charge: Aruna  
N.S. Dasgupta.

  
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**SEMINAR BY STUDENTS**

Name of the student: *Hosivriya Kavi*

Name of the student: *Surekha. Praneesh. Kulkarni*

Class: *B.Sc III<sup>rd</sup> sem*      Date: *01/12/2021*

Class: *B.Sc III<sup>rd</sup> sem*      Date: *01/12/2021*

Time: *11:10 - 12:05*      No. of students present:

Time: *11:10 - 12:05*      No. of students present:

Topic: *Meristematic tissues and it's types*

Topic: *Simple tissues*

Remarks: *Explanation is good*

Remarks: *Seminar representation is good*

Staff in charge: *M.S. Dalhgal.*


Staff in charge: *M.S Dalhgal.*




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**SEMINAR BY STUDENTS**

<p>Name of the student: <i>Seema. Jithi</i></p> <p>Class: <i>B.Sc III<sup>rd</sup> sem</i>      Date: <i>01/12/2021</i></p> <p>Time: <i>9:20 to 10:10 am</i>      No. of students present:</p>	<p>Name of the student: <i>Akshata. Raghond</i></p> <p>Class: <i>B.Sc III<sup>rd</sup> sem</i>      Date: <i>01/12/2021</i></p> <p>Time: <i>9:20 to 10:15 am</i>      No. of students present:</p>
<p>Topic: <i>Secondary growth in Dicot stem</i></p>	<p>Topic: <i>Types of ovules</i></p>
<p>Remarks: <i>Seminar presentation is very neat</i></p>	<p>Remarks: <i>Stage coverage is good.</i></p>
<p>Staff in charge: <i>M.S. Reddygal.</i></p>	<p>Staff in charge: <i>M.S. Reddygal.</i></p>

*M.S. Reddygal*  
 Department of Botany  
 SB Arts & KCP Science College  
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*M.S. Reddygal*  
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*M.S. Reddygal*  
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**DEPARTMENT OF BOTANY**  
**SEMINAR BY STUDENTS**

Name of the student: *Manasa. Shivasharana Ujini*

Class: *B.Sc III<sup>rd</sup> sem* Date: *01/12/2021*

Time: *12:05 to 1:10 Pm* No. of students present:

Topic: *Structure of monocot and Dicot seed.*

Remarks: *Stage coverage is good.*

Staff in charge:   
*N.S. Dasgupta.*

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Name of the student: *Sahyadri. Bavaraoj. Dathihal.*

Class: *B.Sc III<sup>rd</sup> sem* Date: *01/12/2021*

Time: *12:05 to 1:10pm* No. of students present:

Topic: *Leaf fall.*

Remarks: *Explanation is good.*

Staff in charge:   
*N.S. Dasgupta.*

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**SEMINAR BY STUDENTS**

<p>Name of the student: <b>Bhagyashree. Bagaloor</b></p> <p>Class: <b>B.Sc III<sup>rd</sup> sem</b>      Date: <b>01/12/2021</b></p> <p>Time: <b>9:20 - 10:15 am</b>      No. of students present:</p>	<p>Name of the student: <b>Varishnavi. Kumbkar</b></p> <p>Class: <b>B.Sc III<sup>rd</sup> sem</b>      Date: <b>02/12/2021</b></p> <p>Time: <b>10:15 - 11:10 am</b>      No. of students present:</p>
<p>Topic: <b>Stelar and extrastelar Secondary growth in dicot stem</b></p> <p>Remarks: <b>Explanation skill is very nice. Good stage coverage</b></p>	<p>Topic: <b>pollination: 2's types, mechanism of pollination and agents of pollination</b></p> <p>Remarks: <b>Good explanation, and the confidence level is high</b></p>
<p>Staff in charge: </p> <p align="center"><b>N.S. Sakthivel.</b></p>	<p>Staff in charge: </p> <p align="center"><b>N.S. Sakthivel.</b></p>

  
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Name :- Manasa. S. Ujjini

Sub :- Botany

Rollno :- 106

RCU no. :- S2028634

# Seminar Report

Topic :- Structure of  
Dicot & Monocot  
Seed.

Valued.  
Ms. Sahyal.

## Seed :-

### Dicot seed.

- \* seed is the ripened ovule which are formed after the fertilization
- \* seed consists of seed coat and embryo.
- \* seed are the characteristic feature of spermatophytes (Gymnosperms and Angiosperms)

A seed may have one or two coverings called seed coats. The outer testa inner tegmen.

The surface of the seed possesses a fine pore at one end is called micropyle.

The micropyle of ovule permits the entry of water needed at the time of germination.

Just behind the micropyle hilum is present. It is the scar left on the seed coat when it is detached from the fruit wall.

with in the seed coat there is the embryo, consisting of an embryonal axis and two cotyledons. The cotyledons are often fleshy and full of reserve food materials.

At the micropylar end of the embryonal axis bears radicle and the other end contains plumule.

plumule gives raise to the shoot system.

Radicle gives raise to the root system.

# Two types of seeds.

\* Albuminous

\* Exalbuminous

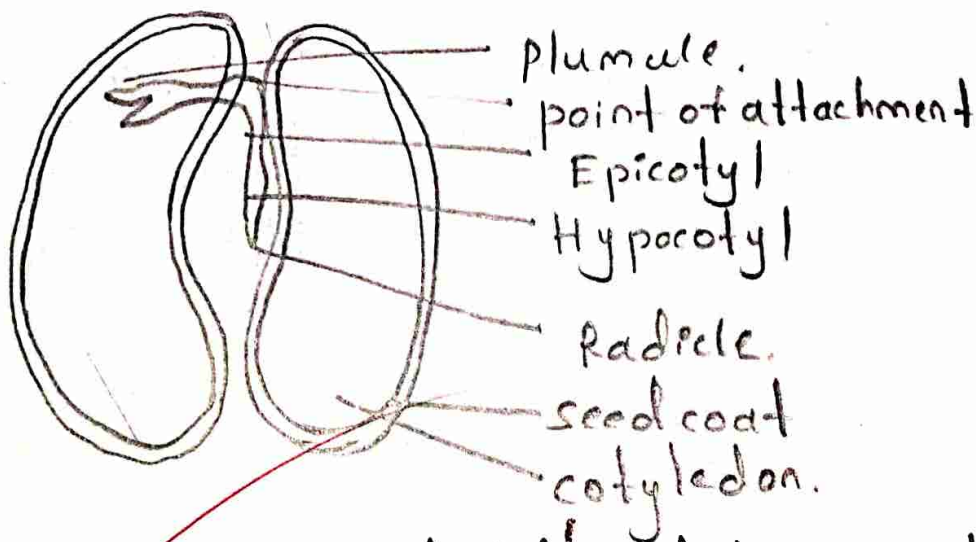
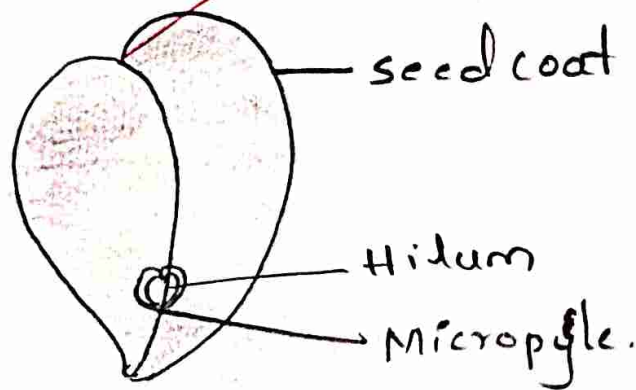
\* In these seeds food is stored in the endosperm.

EX:- corn, wheat  
castor, onion  
etc.

\* They usually store RFM in cotyledons

In these seeds, the endosperm is used up and not present in mature seeds.

EX:- bean, gram & pea.

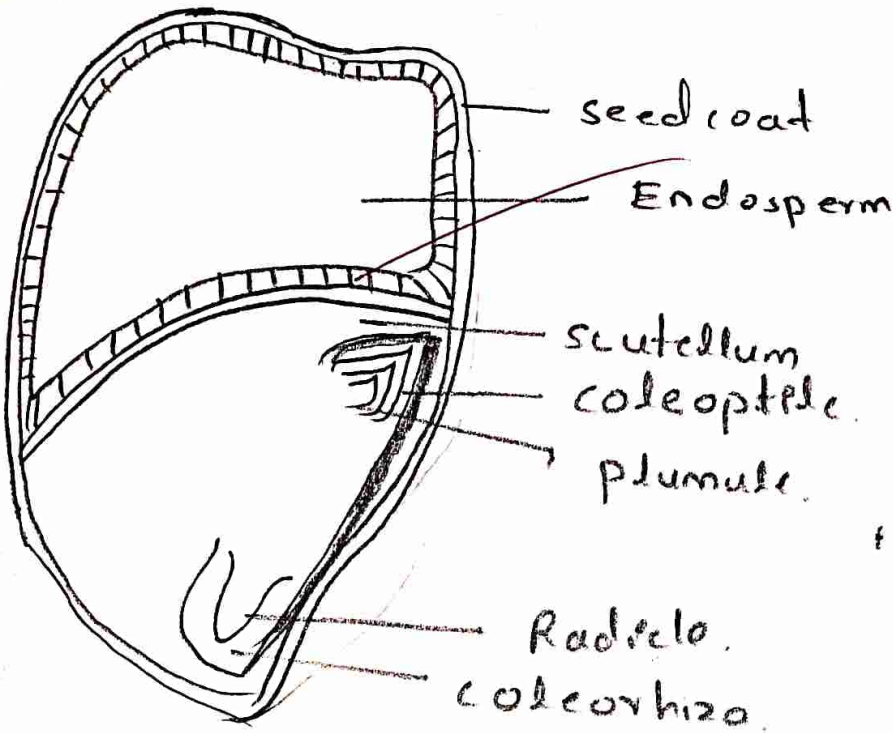


The portion between radicle and the point of attachment of the cotyledons - Hypocotyl

plumule & cotyledon - Epicotyl

\* Most dicotyledonous seeds are exalbuminous  
 \* A few dicotyledons like castor, bean and rubber have albuminous seeds. As their cotyledons are thin & papery.

### Monocot seed



\* In the seeds of cereals such as maize the seed coat is membranous and generally fused with fruit wall [pericarp]

The major part of the grain is occupied by a large endosperm which is rich in starch.

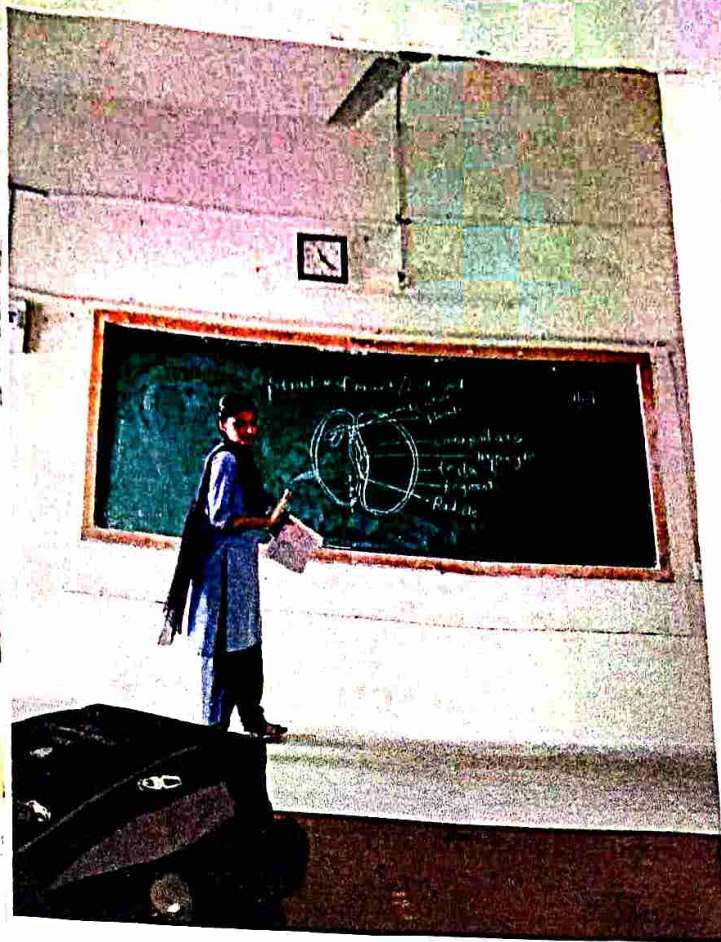
The outer covering of the endosperm separates the embryo by a proteinous layer called aleurone layer.

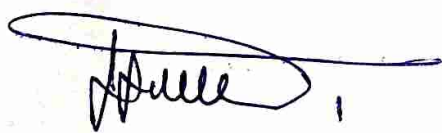
\* The embryo consists of a cotyledon and an embryonal axis.

The cotyledon is also called scutellum in cereals / Monocots.

\* The lower end of the axis is called the radicle which has a protective sheath called coleorhiza.

The upper end of the axis is called the plumule covered by coleoptile.



  
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Name :- Seema S. Jitti

RO No :- 197

Reg NO : S2028793

Sem : BSc III<sup>rd</sup> sem (CBZ)

Sub : Botany Seminar

Topic : SECONDARY GROWTH IN DICOT STEM

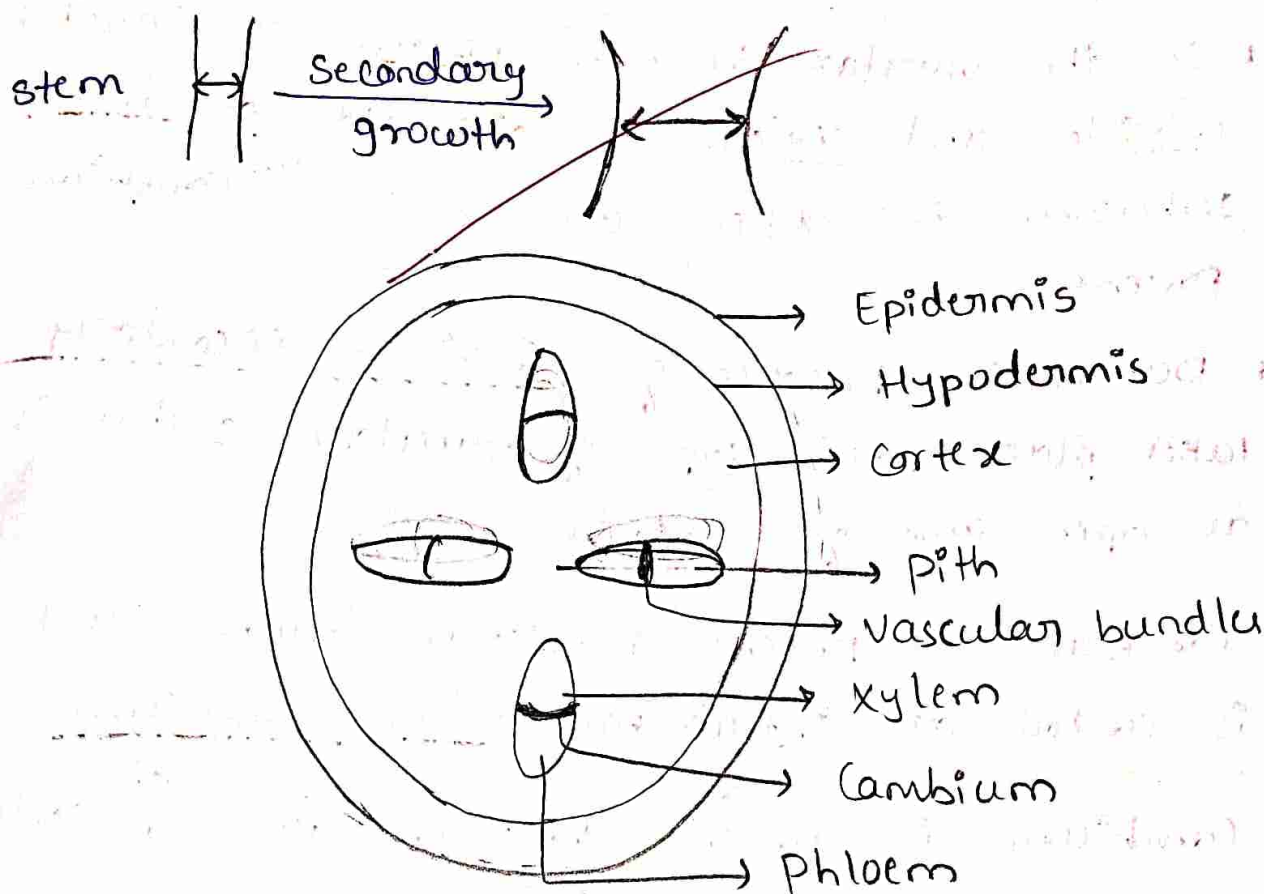
Date : 2/12/2021

Valued  
ms. Laxyaal.

## SECONDARY GROWTH IN DICOT STEM

Secondary growth :- The Process of increase in the girth of the plant body is called secondary growth.

or  
The Process by which the thin delicate plant transform into strong thick tree.



The outermost layer is called as epidermis which gives protection to the vascular bundles.

The layer that is situated just below the epidermis is called hypodermis in dicot plants. hypodermis is made up of only from collenchymatous cells which helps to mechanical support.



\* The region between Hypodermis and endodermis is 3-4 layered cortex which are made up of parenchymatous cells.

\* In dicot stem mainly presence of four to six or less than six vascular bundles are present is called as Diarch or Tetrarch or Hexarch Condition.

\* In the vascular bundles phloem is situated on outside and xylem is situated on inner side. Inbetween the xylem and phloem Cambium is present.

\* Due to the presence of Cambium secondary growth takes place. This type of vascular system is called as open type of vascular system.

\* Cambium is present inbetween xylem and phloem is called as Intra fascicular Cambium.

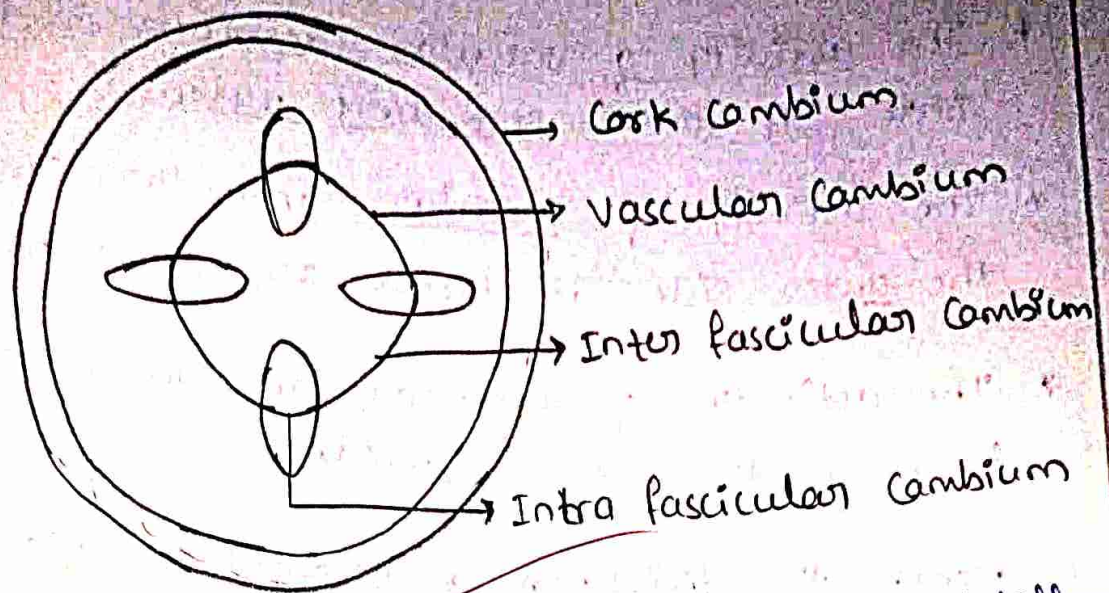
\* Cambium is present between two vascular bundles are called Inter fascicular Cambium.

\* They are 2 types in Cambium.

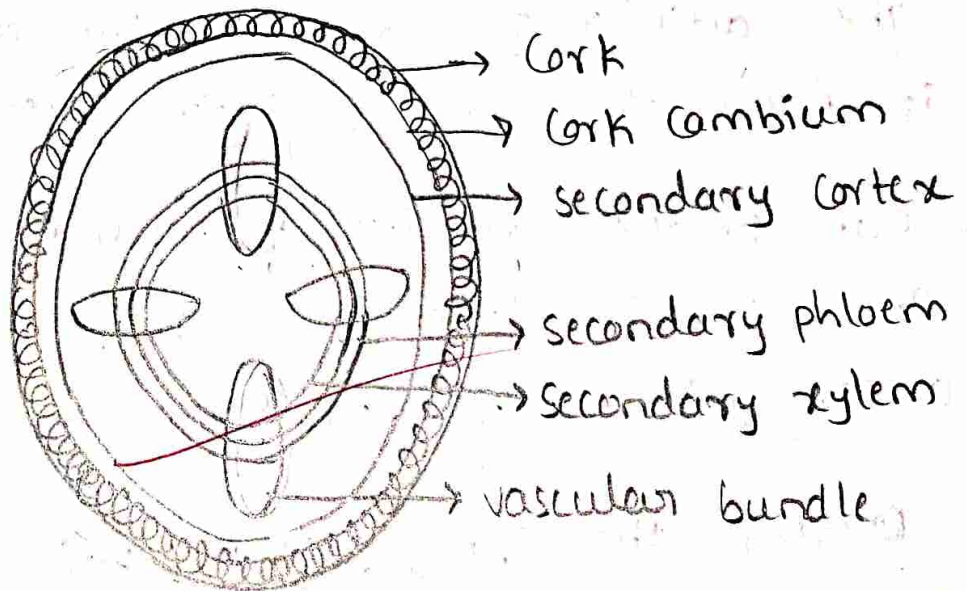
1) Cork Cambium

2) Vascular Cambium.

The Cork Cambium is formed by the dedifferentiation of cells of cortex. The both Cambium cells are on both outer and Inner side.



The vascular cambium is formed by the dedifferentiation of cells of medullary rays. As a result the ring of dividing cells are formed by joining of these inter-fascicular cambium with the newly formed. Inter fascicular cambium this ring is called as vascular cambium.



The activity of vascular cambium adds secondary phloem on the outer side and secondary xylem on the side.

- \* The activity of vascular cambium on the inner side it forms secondary xylem.
- \* The activity of vascular cambium on the outer side it forms secondary phloem.
- \* The activity of vascular cambium on the inner side is more than the outside.
- \* Hence the thickness of secondary xylem is more than the secondary phloem.
- \* Simultaneously the activity of cork cambium on the outside it forms thick dark layers of dead cells it gives protection to the epidermis from any mechanical barriers.

The activity of cork cambium on the inner side it forms the secondary cortex layer.

- \* Due to the activity of vascular cambium and cork cambium the primary phloem and primary cortex get crushed by the newly formed layers.

- \* During the spring season activity of vascular cambium is more the secondary xylem formed lighter in colour and the ring has wider in diameter is called spring wood.

- \* During the autumn season activity of vascular cambium is decrease the secondary xylem formed dark

in colour so the ring is relatively narrower & is called Autumn wood

In a year one ring is spring wood inner to vascular cambium and one ring of autumn wood outer to vascular cambium is collectively called one Annual ring which is used to determine the age of Tree

\* In the ~~Next~~ year new layers spring wood, autumn wood and secondary phloem, secondary cortex and cork are formed.

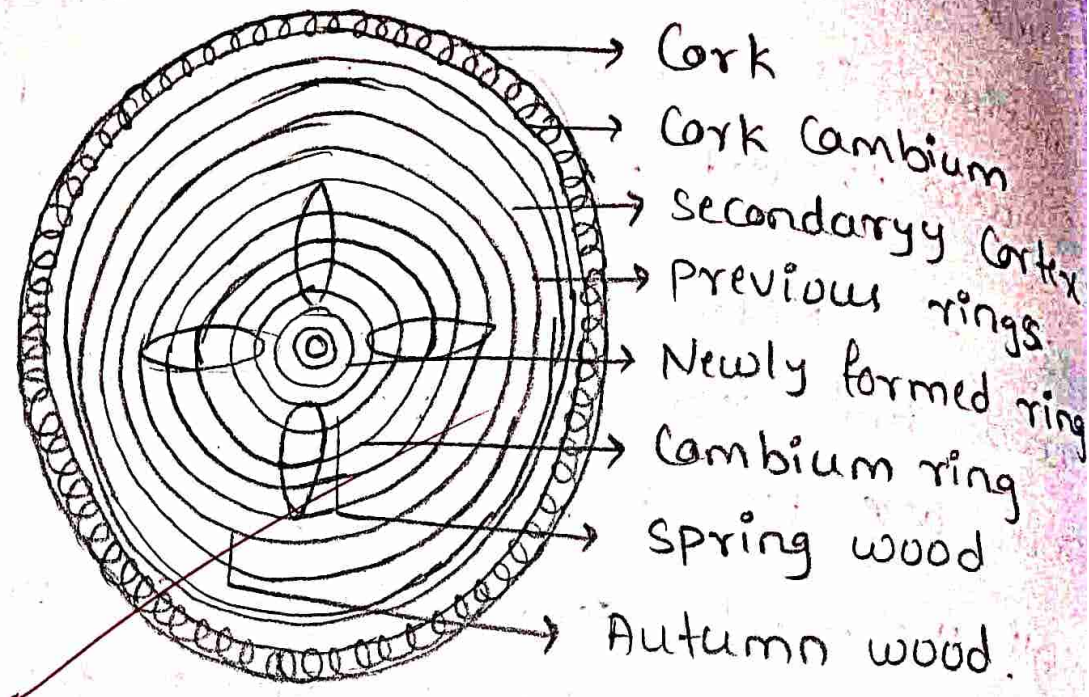
\* All the newly formed layers are present either just inner to the cambium or outer to it completely depends on their position.

For ex: The second annual ring is present just inner to vascular cambium secondary ring of secondary phloem present just outer to the vascular cambium.

\* All the previous formed layers movers away from the cambium new layers of secondary xylem and secondary phloem formed

\* The previously formed layers become non-function so on that time the process of conduction is performed by the newly formed secondary xylem and secondary phloem.

\* Similarly here new layers are added and as a result the girth of the tree keeps on increasing



Reference book : Erroless book.



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Date 27/12/2021

## DEPARTMENT OF BOTANY

### STUDENT SEMINAR 2021-22

#### NOTICE

Its hereby inform all the Bsc V Sem students, that following list of participants will going present seminar with allotted topics. All the students are informed to attend the seminar sessions without fail.

Sl.No	Name of the student	Topic allotted	Date of seminar
1	Rashmi Dashayal	Significance of green house technology	7-1-2022
2	Harshita Bhat	Effects of ozone depletion	7-1-2022
3	Karthik Metri	deforestation	7-1-2022
4	Kamalakar	Anther culture	7-1-2022
5	Vijayakumar Hugar	Post harvest technology of fruits	7-1-2022
6	Pratiksha Ingale	Embyo culture	7-1-2022
7	Amogh	Types of forest	7-1-2022

  
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**DEPARTMENT OF BOTANY**

**BSC V SEMESTER**

**STUDENT SEMINAR ATTENDENCE REPORT-2021-2022**

SL NO	ROLL	STUDENT ID	NAME OF THE STUDENT	SIGN
1	4	S1925238	SHREYA KOLUR	<i>[Signature]</i>
2	16	S1925038	MADHU BADIGER	<i>[Signature]</i>
3	19	S1925170	RENUKA TONNE	<i>[Signature]</i>
4	21	S1925245	SHRILAXMI KATTIMANI	AS
5	28	S1925151	RAJESHWARI BHUYAR	<i>[Signature]</i>
6	30	S1925186	NIKITA SALUTAGI	<i>[Signature]</i>
7	40	S1925026	LAXMI AWATI	<i>[Signature]</i>
8	45	S1925340	VIDYASHREE AWATI	<i>[Signature]</i>
9	47	S1925280	SUDHA BEERANAGADDI	<i>[Signature]</i>
10	58	S1924988	ISHWAR KOTENNAVAR	<i>[Signature]</i>
11	59	S1924849	AMOGEPPI GOUNDAGAN	<i>[Signature]</i>
12	64	S1925054	MEENAKSHI PATIL	<i>[Signature]</i>
13	65	S1924998	JYOTI MALAGAR	<i>[Signature]</i>
14	72	S1925156	RAMESH NAVI	AS
15	80	S1925223	SHIVALINGAMMA JAYAGOND	<i>[Signature]</i>
16	84	S1924993	JYOTI ANGADAGERI	<i>[Signature]</i>
17	85	S1925260	SNEHA KUMBAR	<i>[Signature]</i>
18	86	S1925346	VIJAYALAXMI HEGADI	<i>[Signature]</i>
19	94	S1925323	VAIBHAV KANNUR	<i>[Signature]</i>
20	99	S1925248	SHRUTI SHIRSHAYAD	<i>[Signature]</i>
21	103	S1925012	KAVYA SHIVAKERI	<i>[Signature]</i>
22	109	S1925317	TEJASHWINI HITNALLI	<i>[Signature]</i>
23	111	S1924835	AKSHATA NAYAK	<i>[Signature]</i>
24	120	S1925019	LAKKAPPA HUNACHYAL	AS
25	122	S1924912	BASAVRASHMI BIRADAR	AS
26	125	S1925302	SUSHMA PATIL	<i>[Signature]</i>
27	140	S1925000	KALAVATI BIRADAR	<i>[Signature]</i>
28	141	S1925021	LAKSHMI KUMBAR	<i>[Signature]</i>
29	150	S1924975	GEETA MALIPATIL	AS
30	151	S1924814	AISHWARYA PUJARI	A.R. Pujari
31	158	S1925062	NAYANA MASALI	<i>[Signature]</i>
32	165	S1925160	RASHMI BAGOJI	<i>[Signature]</i>
33	183	S1925209	SAVITA MINAJAGI	<i>[Signature]</i>
34	185	S1925191	SANGEETA KHAVASPUR	<i>[Signature]</i>
35	191	S1924894	ASMITA GONDALI	AS
36	192	S1925255	SHWETA MUGIN	AS



SL NO	ROLL	STUDENT ID	NAME OF THE STUDENT	SIGN
37	196	S1925076	NIVEDITA SINGARADDI	AS
38	198	S1925206	SARITA BELLUBHI	S.D. Bumbho
39	203	S1925261	SNEHA SIRIGOUD	AS
40	204	S1925307	SUSHMITA KODEKALMATH	AS
41	232	S1925171	RENUKA SIDWADKAR	AS
42	240	S1925067	NIKITA NAIK	A.P.
43	246	S1926061	NEELAVVA KOTI	AS
44	255	S1924941	BRAMARAMBIKADEVI PATIL	AS
45	259	S1925141	PRIYANKA HADAPAD	P. Hadapad
46	262	S1925205	SARASWATI PUJARI	AS
47	272	S1924870	APOORVA BAGALI	AS
48	274	S1924868	APEKSHA SHIRASHYAD	AS
49	276	S1925281	SUDHAKAR BIRADAR	AS
50	277	S1925139	PRIYANKA DALAWAI	AS
51	278	S1925097	POOJA VAGGA	H.V.
52	280	S1924867	ANUSHREE MASALI	AS
53	289	S1925303	SUSHMA DANNUR	AS
54	297	S1925127	PRATIKSHA INGALE	D. Inga
55	298	S1925239	SHRIDEVI PATIL	S. Patil
56	299	S1925251	SHUBHAM HALLI	AS
57	300	S1925096	POOJA DASHAVANT	AS
58	301	S1924984	HARSHITHAKUMARI H K .	H.K.
59	302	S1925162	RASHMI DASHYAL	R. Dashyal
60	303	S1925299	SUPRIYA PATIL	AS
61	304	S1925324	VAIBHAV KULKARNI	AS
62	305	S1924828	AKSHATA NAYAK	A. Nayak
63	306	S1925322	VAIBHAV KALADAGI	AS
64	307	S1925181	SACHIN MALLI	S. Malli
65	308	S1924880	ARVIND UTNAL	A. Utnal
66	314	S1925227	SHIVARAJ NATEKAR	S. Natekar
67	316	S1924801	AAISHA JAMADAR	AS
68	318	S1924892	ASHWINI PUJARI	A.A. Pujari
69	319	S1924807	AFRIN BILAGI	AS
70	322	S1924842	AMBIKA BIDARAKOTI	A. Bidarakoti
71	328	S1925277	SRUSHTY SAVALI	S. Savali
72	340	S1924972	MEGHA GAVANDI	M. Gavandi
73	344	S1924964	DEVIKA SINHASANMATH	AS
74	361	S1925004	KARTEEK METRI	K. Metri
75	363	S1925047	MALLIKARJUN AVARADI	M. Avaradi
76	366	S1925079	PALLAVI BENUR	P. Benur
77	368	S1925230	SHRAVYA SAVALASANG	S. Savalasang
78	370	S1925154	RAKSHITH TUMBAGI	R. Tumbagi

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79	384	S1925283	SUHASINI ARAKERI	
80	386	S1925331	VANISHREE DASHAVANT	
81	388	S1925319	UDESH JANAWAD	
82	393	S1925290	SUNIL GURAV	
83	394	S1924856	ANIL PUJARI	
84	399	S1924854	ANAND GOKHLE URF	
85	401	S1925069	NIMBABAI GHORPADE	
86	402	S1925165	RASHMI EVOORA	
87	404	S1925002	KAMALAKAR AWARADI	
88	409	S1924955	DATTAPPA HOSAMANI	
89	410	S1924845	AMIT KAMAT	
90	411	S1925005	KARTHIK PATIL	
91	413	S1925235	SHREEPRASAD SAGAR	
92	417	S1924983	HARSHAVARDHAN	
93	418	S1924802	ABHILASH MUJANNI	
94	419	S1925050	MANJU NAGUR	
95	422	S1925089	PARVATI PATIL	
96	423	S1924873	ARATI PATIL	
97	424	S1924913	BHAGYA BIRADAR	
98	425	S1924811	AISHWARYA MADAGI	
99	428	S1925349	VIJAKUMAR MURAGANUR	
100	430	S1924885	ASHWINI POOJARI	
101	439	S1925342	VIJAYAKUMAR HUGAR	
102	441	S1925308	SUSHMITHA UPPALADINNI	
103	442	S1925126	PRATIBHA KABADE	
104	454	S1925125	PRASHANT JANAWAD	
105	485	S1824941	R KRANTHI RATHOD	
106	487	S1825030	SHANKARALING AMARODAGI	

STUDENT NAMES AND TOPIC

(As per notice)

STAFF INCHARGE

1.

2.

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<p>Name of the student: <i>Karthik. Methi</i></p> <p>Class: <i>B.sc 3<sup>th</sup> sem</i>      Date: <i>11/10/2022</i></p> <p>Time: <i>3.30 to 4.45</i>      No. of students present: <i>77</i></p>	<p>Name of the student: <i>Kamalakar.</i></p> <p>Class: <i>B.sc 3<sup>th</sup> sem</i>      Date: <i>11/10/2022</i></p> <p>Time: <i>1 to 1.50</i>      No. of students present: <i>77</i></p>
<p>Topic: <i>Degeneration.</i></p>	<p>Topic: <i>Endothelium - culture</i></p>
<p>Remarks: <i>Finalud presentation,</i></p>	<p>Remarks: <i>v-good board work.</i></p>
<p>Staff in charge: <i>[Signature]</i></p>	<p>Staff in charge: <i>[Signature]</i></p>



*[Signature]*  
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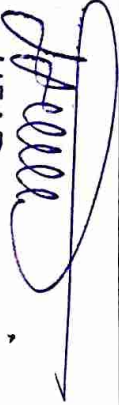
*[Signature]*  
**Principal,**  
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<p>Name of the student: <b>Karthik. Meshi</b></p> <p>Class: <b>B.Sc V<sup>th</sup> sem</b>      Date: <b>11/1/2022</b>  <b>Paper II</b></p> <p>Time: <b>3.30 to 4.45</b>      No. of students present: <b>77</b></p>	<p>Name of the student: <b>Karnalakar.</b></p> <p>Class: <b>B.Sc V<sup>th</sup> sem</b>      Date: <b>11/1/2022</b>  <b>Paper I</b></p> <p>Time: <b>1 to 1.50</b>      No. of students present: <b>77</b></p>
<p>Topic: <b>Degeneration.</b></p> <p>Remarks: <b>Finalud presentation.</b></p>	<p>Topic: <b>Endothel-culture</b></p> <p>Remarks: <b>v-good board work.</b></p>
<p>Staff in charge: </p>	<p>Staff in charge: </p>

  
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**Co-ordinator**  
 S.B.Arts & K.C.P.Science College  
 VIJAYAPUR

**B.L.D.E.A's**  
**S.B ARTS AND K.C.P SCIENCE COLLEGE VIJAYAPUR**  
**DEPARTMENT OF BOTANY**  
**SEMINAR BY STUDENTS**

**B.L.D.E.A's**  
**S.B ARTS AND K.C.P SCIENCE COLLEGE VIJAYAPUR**  
**DEPARTMENT OF BOTANY**  
**SEMINAR BY STUDENTS**

Name of the student: Rashmi Dabhyal.  
 Class: B.Sc 5th sem - 1 Date: 11/11/2022  
 Paper-2  
 Time: 2 to 2.45 No. of students present: 17

Topic: Importance of green house technology

Remarks: good presentation, communication skill was very good

Staff in charge: [Signature]

Name of the student: Hanshta Bhatt.  
 Class: B.Sc 5th sem Date: 11/11/2022  
 Paper-2  
 Time: 3 to 3.30 No. of students present: 17

Topic: Effect of ozone depletion.

Remarks: Very confident, good stage courage

Staff in charge: [Signature]

[Signature]  
**HEAD**

[Signature]  
**Principal,**

Department of Botany  
 S.B Arts & KCP Science College  
 Vijayapur.  
 580103.



S.B. Arts and KCP Science College  
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[Signature]  
**IOA Co-ordinator**

S.B. Arts & K.C.P. Science College  
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**SEMINAR BY STUDENTS**

<p>Name of the student: <b>Vijay Kumar - Hugar</b></p> <p>Class: <b>B.Sc 5th sem Paper-I</b>      Date: <b>7/11/2022</b></p> <p>Time: <b>1 to 2</b>      No. of students present: <b>11</b></p>	<p>Name of the student: <b>Pooja Krishna - Ingale</b></p> <p>Class: <b>B.Sc 5th sem</b>      Date: <b>7/11/2022</b></p> <p>Time: <b>1 to 2.</b>      No. of students present: <b>11</b></p>
<p>Topic: <b>Post Harvest-technology of Fruits</b></p> <p>Remarks: <b>good presentation.</b></p>	<p>Topic: <b>Embryos culture</b></p> <p>Remarks: <b>v-good boardwork &amp; bit more information.</b></p>
<p>Staff in charge: </p>	<p>Staff in charge: </p>

  
**HEAD**  
 Department of Botany  
 SB Arts & KCP Science College  
 VIJAYAPUR-585101

  
**Principal,**  
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S. B. ARTS

AND

K. C. P. SCIENCE

College Vijaypur.

Name of the student - Karteck. Metri.

Roll. no . - 361 - B.Sc. V sem

RCU. No - 51925004.

Subject - Botany.

Topic - Natural source.

Submitted to - Krishna Sir,  
Shweta mam.

# "Natural Resources"

## Deforestation.

- \* Deforestation is the destruction of forests by cutting.
- \* It is the removal or elimination of forest resources

## Causes of deforestation.

- \* logging - cutting wood
- \* forest fire
- \* conversion of forest into agricultural lands
- \* Illegal felling and selling of precious forest wood

## Impact of deforestation.

- \* Floods
- \* Droughts
- \* Reduce rainfall
- \* wild habitat modified
- \* climate changes.
- \* Global warming increase



## Preservation of deforestation

- \* Afforestation
- \* forest fire should be prevented
- \* Grazing is regulated
- \* social forestry
- \* Pests and diseases are controlled



AT 16°50'47" N  
ONG 75°42'42" E

FRIDAY 01.07.2022  
LOCAL TIME 14:42:43

HEAD  
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S.B. Arts & KCP Science College  
VIJAYAPUR-586103.

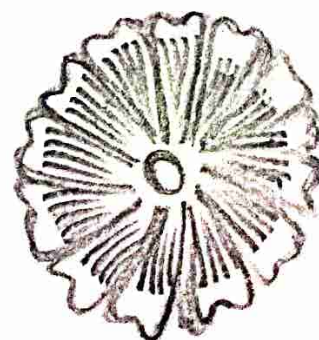
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VIJAYPUR.

Name of the Student - Rashmi. G. Dashyal.  
RCU. No - 51925162.  
Roll. No - 302. [B.Sc. V Sem]  
Subject - Botany.  
Topic - Green house technology.  
Submitted to - Krishna Sir  
& Shweta mam.

Date :- 18/1/22.



# Topic ~ GREEN HOUSE TECHNOLOGY.

Green house technology is the technique of providing favourable environmental condition to the plants. It is rather used to protect the plants from the adverse climatic conditions such as wind, cold, precipitation, excessive radiations, extreme temperature, insects pest and diseases. It also play a vital role in maintaining the microclimate around the plants.

Green houses are framed or inflated structures covered with transparent or translucent material for the purpose of admitting natural light for plant growth.

## Advantages of Green house.


- \* Undergreen house one can grow crops under controlled environment throughout the year four to five crops can be grown due to the availability of required environmental conditions.
- \* The productivity of the crop is increased.
- \* Superior quality produce can be obtained as they are grown under suitable controlled environment.
- \* Effective control of pests and diseases is possible.
- \* Percentage of germination of seeds is high in green houses.
- \* Disease free & genetically superior transplants can be produced.
- \* Export quality produce meeting international standards can be produced in green house.
- \* Self employment for educated youth in form can be increased.


- \* The acclimatization of plantlets of tissue culture technique can be carried out in a green house. hardening of tissue cultured plants.
- \* Ideally suited for vegetable & flower crops.

### Limitations :-

- \* The main disadvantage of greenhouses is that they are extremely difficult to set up as well as to maintain.
- \* Greenhouses need constant care and attention at most times of the year.
- \* Greenhouses are fairly expensive. Gardeners will spend more money to buy or build or to construct them.
- \* Electricity costs normally rise during the winter heating time, since the majority of greenhouses require heating during the winter time.
- \* Gardeners must expend time & money to maintain greenhouses by adding ~~insulation~~ insulation when necessary.



  
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Name of student - Harshitha Kumari.

RCU Number - 1924984.

Roll Number - 301, [BSc V sem].

Subject - Botany Seminar Script.

Topic - "Green house effect  
and Ozone depletion"

Submitted to - Krishna sir,

Shweta mam.

Date - 18/01/22

# TOPIC OF SEMINAR :

## "GREEN HOUSE EFFECT AND OZONE DEPLETION"

Planet Earth is sustainable for living forms of life, this is because of earth's atmosphere which is thin blanket around planet earth. Role of atmosphere is to prevent the entry of harmful radiation into earth's surface. This is normal in earlier days, but now it's been disturbed by anthropogenic activities which is leading to side effects on planet earth.

Excess release of green house gases into environment of earth shows the ill effect of "greenhouse gases" called "Green house effect". This effect shows the property of earth which will not allow heat to escape through earth surface, thus heat is retained in resulting in increase of earth's temperature. This shows the properties of "Global warming".

Sources of Green house gases :

- 1)  $CO_2$  → Fuel combustion, Burning of vegetation, Deforestation
- 2)  $CH_4$  → Animal excreta, Paddy field, decomposition of litter
- 3) CFC's → Industries, Coolants
- 4)  $NO_2$  → Coal burning etc.

thus increased production of green house gases through anthropogenic activities leads to adverse effects like

- 1) Global warming
- 2) Respiratory disorders
- 3) Environmental changes.
- 4) New variant of new diseases.



Control measures:

Page No - 2

- Kyoto protocol  $\rightarrow$  5% decrease of Greenhouse gases <sup>emissions</sup> to reduce the emission of greenhouse gases.
- 1) Educate public to reduce the emission of greenhouse gases.
  - 2) Afforestation & Re-forestation

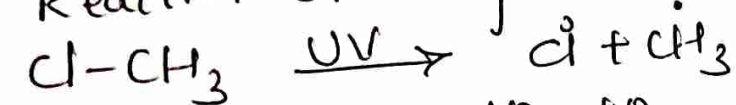
Ozone depletion:

Ozone layer is found in stratosphere layer of atmosphere. But due to depletion, troposphere shows the presence of Ozone ( $O_3$ ).

Ozone layer absorbs UV light and lets IR radiation which are not harmful to the surface of earth.

But due to release of CFC's, HFC's,  $ClCH_3$  by anthropogenic activities into environment, there is thinning of Ozone layer which is referred as "Ozone hole".

Reaction showing Ozone layer thinning:



Here, there is no  $O_3$  formation that means Ozone is depleting.

Control measures:

1) Montreal protocol in 1987 -

Reduce the usage of Ozone depleting substances like CFC's, HFC's,  $ClCH_3$ ,  $NO_2$  etc

2) Create Awareness among public about this ill effect

3) Use ecofriendly products instead of products which release huge amount of Ozone depleting substances.



*[Handwritten Signature]*  
HEAD

Department of Botany  
SB Arts & KCP Science College  
Vijayapur, 585103.

*[Handwritten Signature]*  
Principal,

S.B. Arts and KCP Science College  
VIJAYAPUR

*[Handwritten Signature]*  
IQAC, Co-ordinator

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14:00:19

BLDEA'S

SB ARTS AND KCP SCIENCE  
COLLEGE

Name :- Pratiksha. P. Ingale

Uni.No :- S1925127

RollNo. :- 297

Subject :- Botany I

Seminar On topic of Embryo  
Culture

Submitted To :- Department of Botany

Dt :- 07/01/2022

# Tissue Culture

A method of biological research in which fragments of tissue from an animal or plant are transferred to an artificial environment in which they can survive and function.

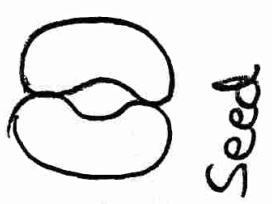
## Embryo Culture

It is the culture of isolated immature or mature embryo.

- Seed is taken, as explant embryos taken and dipped in cultured vital.
- Callus is formed, Organogenesis takes place.
- Growth hormones are added.
- Radical grows in Root and Plumule into shoot
- For root initiation Auxin is added, shoot initiation Cytokinin is added
- After its initiation the root plant is shifted to another container.
- After the initiation it is sent for hardening
- Later it is planted in the fields

## Significance

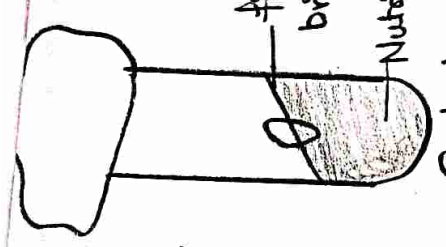
- Hard seed plants grow rapidly
- Nutrient content of plant can be studied
- Shortening the germination period by overcoming seed dormancy.



Seed



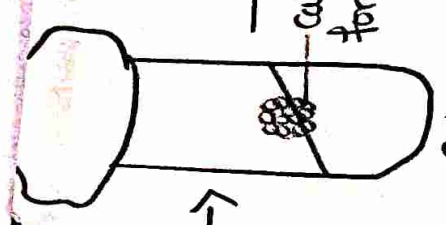
Embryo



Explant

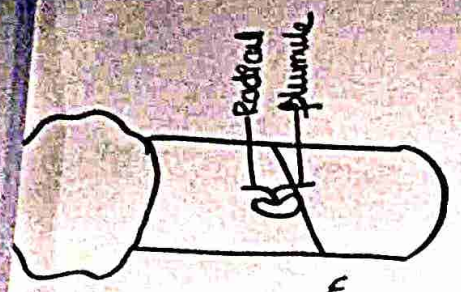


After bridge

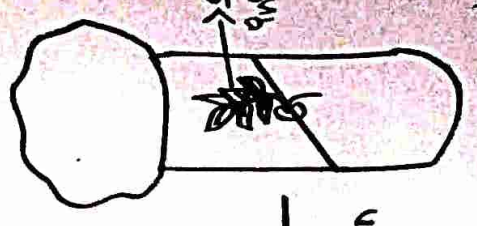


Callus

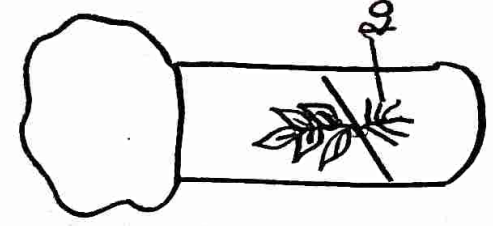
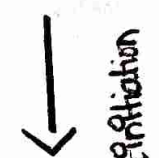
Callus formation



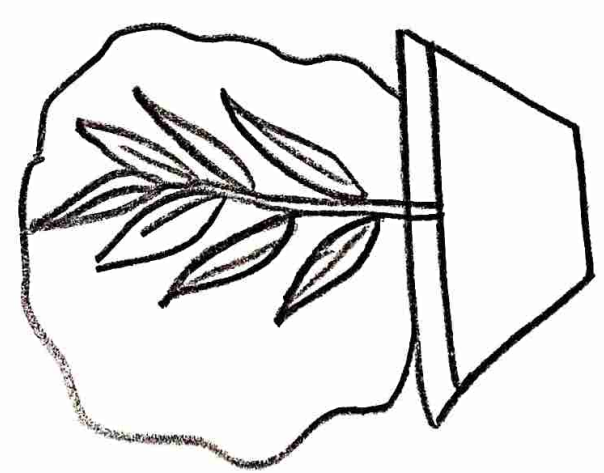
Shoot  
initiation



Shoot proliferation  
Auxin ->  
Cytokines ->



ATC  
CT



Hardening

# Diagrammatic Representation of Embryo Culture



  
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