

KRK GOVERNMENT DEGREE COLLEGE, ADDANKI
DEPARTMENT OF BOTANY
STUDENT SEMINARS
2023-2024

AIMS AND OBJECTIVES:

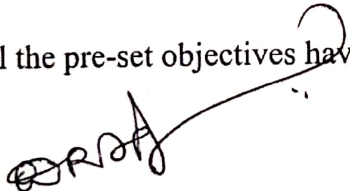
1. Students develop interpretation skills
2. Students improve language and soft skills
3. Students inculcate presentation skills and overcome fear complex

DESCRIPTION:

Keeping above aim and objectives in the consideration, as of every year department of Botany conducted student seminars for 5 semester 3 BSc, BZC students on 11 and 12.12.2023 in the department laboratory during class hours. Students chose the topic of their interest and prepared well for the seminar. Before the actual presentation of the seminar they submitted a written copy of their presentation. As they were instructed, each student was given 5-10 minutes of time to present the topic, followed by student and lecturer feedback.

OUTCOMES:

All the pre-set objectives have been achieved.


SIGNATURE OF THE LECTURER


SIGNATURE OF THE PRINCIPAL
Principal
K.R.K. Govt. Degree College
ADDANKI - 523 201.
Bapatla Dist.

~~DETAILS OF THE SEMINAR~~

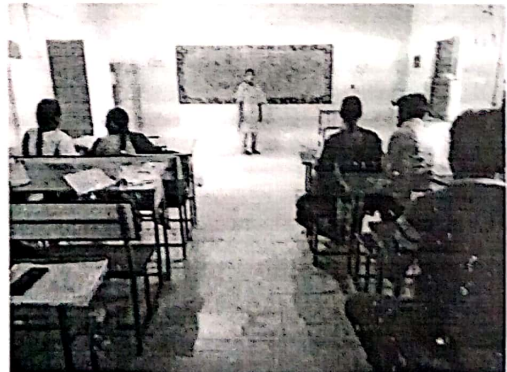
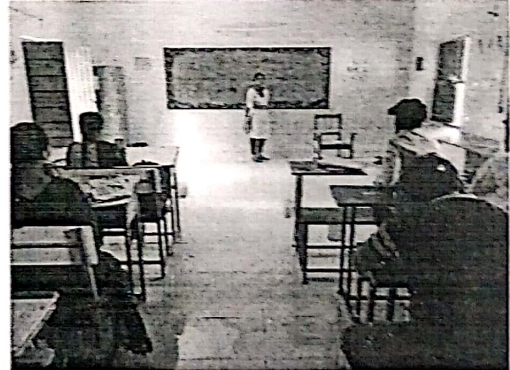
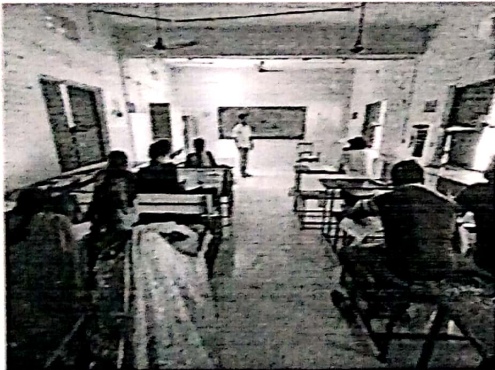
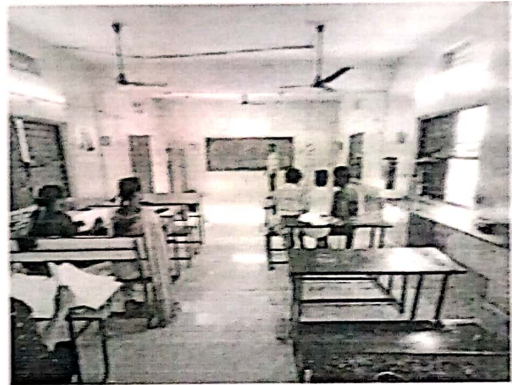


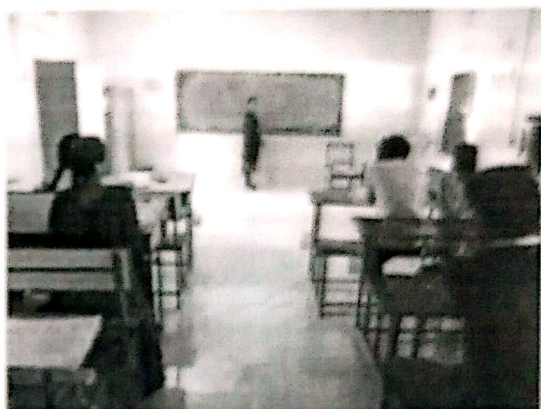
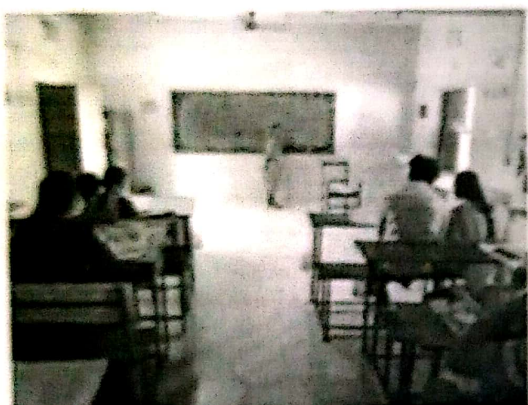
S No	NAME OF THE STUDENT	TOPIC
1	K. Hepsi	— ABSENT —
2	SK. Ismail	— ABSENT —
3	J. Salman Raju	milky mushroom
4	P. Sireesha	— ABSENT —
5	N. Estheru	Edible mushrooms- white button mushroom.
6	K. Vijaya Durga	medicinal mushrooms in South India.
7	D. Sravanthi	— ABSENT —
8	K. Durga Prasad	structure of mushroom
9	P. Koteswara Rao	raising
10	N. Lakshmi Narayana	morphology of mushrooms.
11	A.Hema	milky mushroom
12	P. Veeranjanyulu	white button mushroom.
13	G. Anita	oyster mushroom
14	P. Padmaja	poisonous mushrooms.
15	P. Sunil	

16	G. Pavitra	paddy shawl mushroom
17		
18		
19		
20		
21		
22		


SIGNATURE OF THE LECTURER

PHOTOGRAPHIC EVIDENCES





Topic :-

MORPHOLOGICAL FEATURES OF FOUR EDIBLE MUSHROOM.

- Morphological features refer to the physical characteristics or external appearance of an organism, such as its size, shape, colour, texture, and structure.
- The case of mushrooms, morphological features such as cap shape, gill attachment stem texture, and spore colour:

① white button mushroom.

- *Agaricus bisporus* is a small to medium-sized mushroom with a smooth, dry cap, and a distinctive ring or veil on the stem.
- It is widely cultivated as an edible mushroom due to its mild flavour and high nutritional value.

12-2023

A. Hema

(Botany-6A) Y213001001

SEMINAR

MILKY MUSHROOM

Scientific name: Calocybe Indica

- First Indigenous and Commercialised mushroom.
- It is native to India
- mushroom is white in colour, and Umbrella Robus And CAP is 10 to 4 cm. in size convex initially and becomes flat at ~~maturity~~ maturity.
- Cuticle is easily peeled off gills are thick, crowded and turn brown at maturity.
- Stem is 10 cm. in length, no alva
- The mushrooms smell oily, tastes like radish or unripe coconut.
- Basidium produces 4 spores they are oval shaped, white coloured 6 to 7 microns long and 4 to 5 microns wide

Medicinal mushroom in South India

Medicinal mushroom have been an important part of traditional medicine in South India for centuries, and their popularity as a natural remedy for various health conditions continues to grow.

- > Medicinal mushroom are a valuable source of natural compounds with therapeutic properties.
- > In recent years, their use has gained increasing attention as more people are seeking natural remedies for various health conditions.
- > These mushrooms are typically consumed as a dietary supplement, or added as a seasoning to food.
- > They are generally considered safe, with few reported side effects.
- > These mushrooms have been found to contain bioactive compounds that have therapeutic properties, and anti-cancer effects.

Seminar

Botany - 6A

G. Anitha

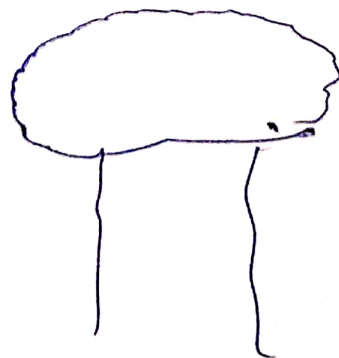
Reg No:- V213001004

Date:- 11.12.2023

Oyster mushroom

Scientific Name :- *Pleurotus sajorajou*.

- Cap is Tongue shaped or shell shaped.
- It ranges 50 to 150 mm.
- Cap is white to grey in colour at young stage and turns blue to grey. at maturity.
- Flesh is thin and white margin is wave.
- Gills are white, recurrent and distantly present.
- Stalk is short and disappeared at maturity.
- The basidium produces 4 spores. They are whitish to lilac grey. mycelia is also white in colour.



STUDENT

SEMINAR

Koteswara Rao.

Department of Botany
Paper - V (IC)

Name: P. Koteswara Rao.

Group: III BSC (B.ZC)

Reg NO: - Y21300013.

Casing: * good quality casing soil must have the following properties.

They are (a) pH - 7-8 pH,

(b) electrical - conductivity - 0.5-1.5 m.
- S/cm.

(c) cation exchange Capacity → It is the Capacity of the soil.

Hold on 2 Nutrients This must be always 10- to 20 m.e. eq/100 gams.

(d) organic matter → 50 to 70%

(e) particle size → 1-5 millimeter

(f) moisture content: 55-60%.

(g) microbial content: Free.

TOPIC :-

Volvariella volvacea (paddy straw mushroom) :-

→ Volvariella volvacea is also known as paddy straw mushroom.

→ It is a small to medium sized mushroom.

Morphological characters :-

a) Cap :-

→ The cap of Volvariella volvacea is initially hemispherical or bell shaped.

→ The colour of mushroom is initially white.

b) Gills :-

→ The gills are free from the stem and are initially pinkish and then turn purplish-brown.

c) Stem :-

→ The stem is 5-15 cm tall and 1-2 cm in diameter.

→ It is white and smooth, and has a membranous ring.

d) Flesh :-

→ The flesh is firm and white, with a mild flavour.

e) Spores :-

→ The spores of Volvariella volvacea are elliptical, smooth.

→ They are purplish-brown in colour.

Topic :- Botany

Paper :- Fc.

1. White button mushroom (Agaricus bisporus)

1. Agaricus bisporus is a small to medium-sized mushroom with a smooth, dry cap, and a distinctive ring or veil on the stem.

2. It is widely cultivated as an edible mushroom.

Morphological characters :-

a) Cap :-

1. The cap of Agaricus bisporus is spherical and the convex or flat as it grows.
2. Cap measures 5-10cm the cap is white to light brown.

b) Gills :-

1. The gills are initially pink then dark brown as the mushroom matures.
2. They are free from the stem and crowded together.

c) Stem :-

1. The stem is 3-10cm tall and 1-2cm in diameter.
2. It is white and has a ring or veil near the top.

d) Flesh :-

1. The flesh is white and has a mild flavour.

e) Spores :-

1. The spores are elliptical, smooth, and measure 4-6 x 6-9 μ m.
2. They are dark brown in colour.

Morphology of poisonous mushrooms.

- * They can have irregular colours or textures, and their caps and stems may be easily separable.
- * Sharp or unpleasant odour
- * bitter, acrid, or metallic.
- * gills are free or only slightly attached
- * black, red, or other unusual colours
- * poisonous mushrooms are usually found growing in the wild and can be difficult to identify
- * They can cause a variety of symptoms, including, nausea, vomiting, abdominal pain, and even death.
- * They may become slimy, bitter, or unpleasant
- * poisonous mushrooms may have a slimy, rubbery, or woody texture.

12.2023

1:70

K.R.K Govt Degree College, ADDANKI

(Department of Botany)

STUDENT SEMINARS

2023-2024

J. Sarma Raju

III BSC B2C

V213001007

Calocybe Indica (milky mushroom):

- * Calocybe Indica is a species of edible mushroom commonly known as the milky mushroom or the Indian milky mushroom.
- * It is a large, fleshy mushroom (is initially hemispherical and then becomes convex, with a diameter of 10-20cm.) with a distinct milky taste and firm texture.
- * It is widely cultivated for its edible and nutritious properties.

Morphological Characters:

- Cap: The Cap of the milky mushroom initially hemispherical and then becomes convex, with diameter of 10-20cm.
- * The cap surface is smooth and slightly sticky when wet.
- * It is white when young and slightly turns beige or light brown as it matures.
- Gills: The gills free from the stem and are crowded together.
 - * They are white at first and then become pinkish brown as the mushroom matures.
- Stem: The stem is smooth, cylindrical, and measures 5-10cm length and 2-4cm in diameter.
- Flesh: The flesh is firm and white, with a pleasant odour and taste.
- Spores: The spores of the milky mushroom are, elliptical, smooth, and measure $6-8 \times 3-4 \mu\text{m}$
 - * They are white in colour.

Date: 11/12/2023.

III BSC BZC

Y213001012.

Dept: Botany Paper: 7C.

Structure of mushroom.

→ mushroom consists of the following parts.

1. Cap:-

→ the cap is the umbrella-shaped top part of the mushroom that typically ranges in size from a few centimeters to several inches in diameter.

2. Gills or pores:-

→ the gills or pores are the thin, pores are small holes that cover the underside of the cap.

3. Stem:-

→ the stem is the tall, cylindrical or bulbous structures that supports the cap.

4. Ring or veil:-

→ the ring or veil is a thin membrane that surrounds the stem near the top of the mushrooms.

5. Spores:-

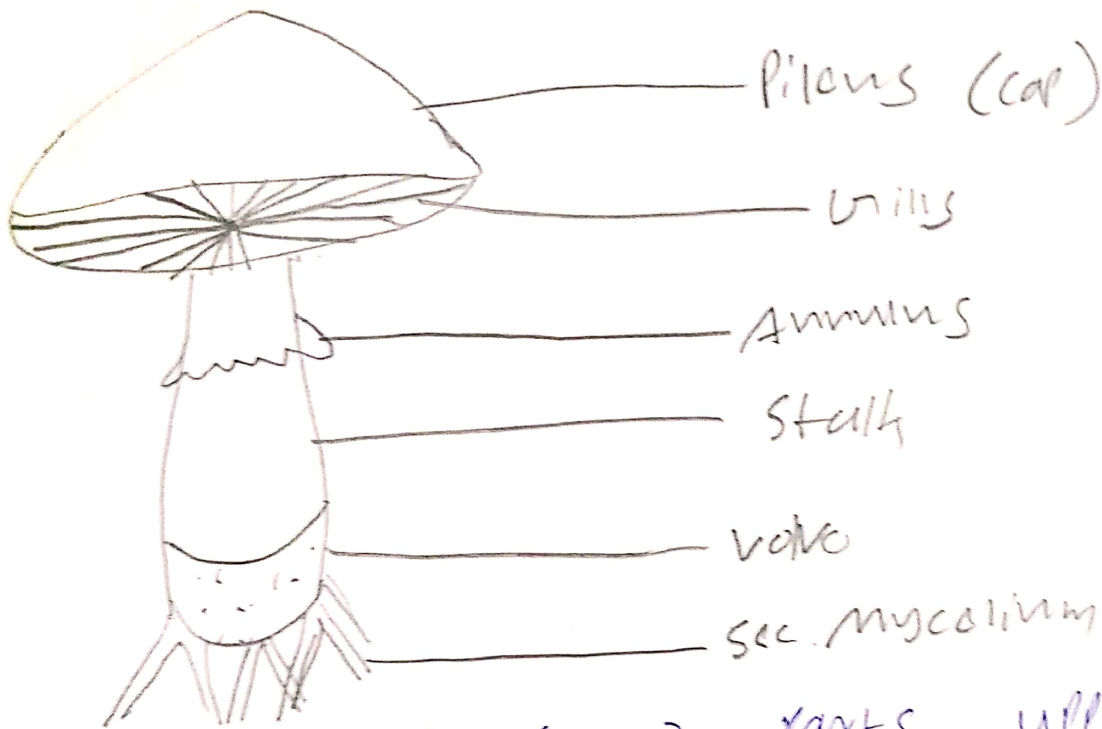
→ the spores are tiny reproductive cells produced by the gills or pores of the mushrooms.

BLT, - Botany,
Date: 12/12/2023

K. Durgaprasad
Y213001008

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Mushroom habit



- ① Mushroom contains 2 parts upper part is called Pileus (or) Cap.
- ② Below side of the cap long spike like structures are present called Gills.
- ③ Cap is attached with a long stalk.
- ④ Over the stalk near the cap a thin layer is hung down called Annulus.
- ⑤ At the base of the stalk a cup like structure is present called Volva.
- ⑥ Gills produce basidiospores.