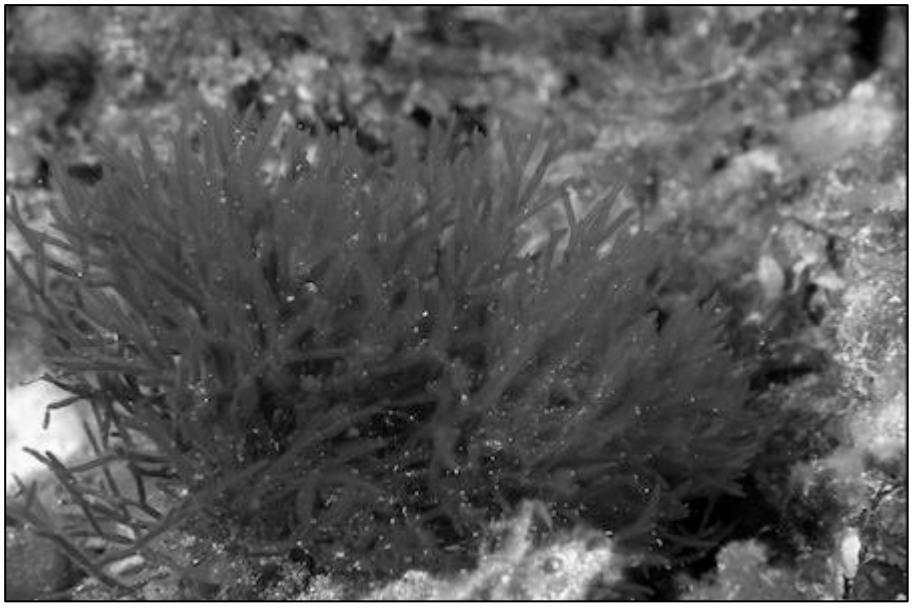
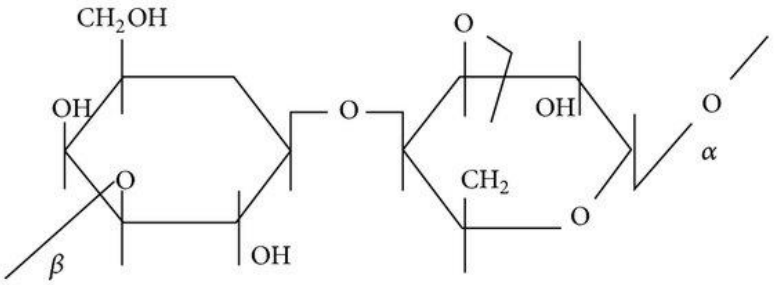
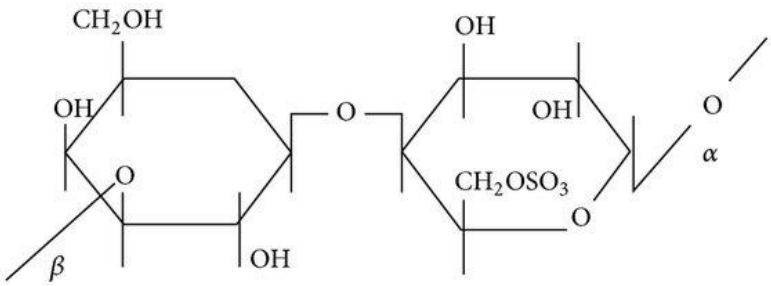
AGAR





Agarose



Agaropectin

Practical -16

Date: .../..../.....

MORPHOLOGY OF MORPHOLOGY OF AGAR

Aim: To identify the morphological characters of given organised drug.

Reference:……..

……..……..……..……..

Requirements:…….....……

Synonym: Agar-agar, Japanese Isinglass, Vegetable gelatin.

Biological Source: It is the dried gelatinous substance obtained by extraction with water from ***Gelidium amansii*** or various species of red algae like ***Gracilaria*** and ***Pterocladia***.

Family: Gelidaceae

Morphological characteristics:

S. No.	Morphological Character	Observation
1.	Colour	
2.	Odour	
3.	Taste	
4.	Shape	
5.	Size	
6.	Extra features	

Chemical Constituents

- Agar is a complex hetero saccharide and contains two different polysaccharides known as agarose and agaropectin.
- Agarose is neutral galactose polymer and is responsible for the gel property of agar. It consists of D-galactose and L-galactose unit.
- Agaropectin is responsible for the viscosity of agar solution.

Uses: It is used as:

- To treat chronic constipation, as a laxative, suspending agent, an emulsifier.
- It is used as a gelating agent for suppositories, as surgical lubricant, as a tablet excipient, disintegrant.
- In production of medicinal encapsulation and ointment and as dental impression mold base.
- It is extensively used as a gel in nutrient media for bacterial cultures, as a substitute for gelatin.

Report: The given organised drug was identified as……

Questions Bank

1. What is the laxative property?
2. What is the emulsifier?
3. What is the disintegrant?
4. Write the botanical name of Agar.
5. What is/are the main chemical constituent of Agar?
6. What is the gelatin?
7. Which chemical is responsible for the viscosity of agar solution?
8. Which chemical is responsible for the gel property of agar?
9. Write the biological source of agar.