

PHYSICAL & CHEMICAL EVALUATION OF PALE CATECHU

Practical - 28

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

PHYSICAL AND CHEMICAL EVALUATION OF PALE CATECHU**Aim:** To perform the physical and chemical tests for evaluation of Pale Catechu.**Reference:**.....
.....**Requirements:**.....**Synonym:** Gambier, pale catechu, catechu.**Biological Source:** It is dried aqueous extract produced from the leaves and young twigs of **Uncaria gambier**.**Family:** Rubiaceae**Physical Characteristics:**

S. No.	Physical Character	Observation
1.	Colour	
2.	Odour	
3.	Taste	
4.	Shape	
5.	Size	
6.	Tears	
7.	Mass	
8.	Solubility	
9.	Extra features	

Chemical tests/Identification tests:

S. No	Test	Observations
1.	Dip a matchstick in the test solution, dry it and moist it with concentrated hydrochloric acid. Then warm the stick near flame.	
2.	Add sodium hydroxide to the alcoholic extract of drug and add few drops of petroleum ether in it, stirr the solution and kept it aside for some time.	
3.	When drug is treated with vanillin and hydrochloric acid.	
4.	Gambier fluorescin test: Gambier fluoescin present in pale catechu. If to its alcohol extract, a little sodium hydroxide is added and shaken with petroleum ether.	
5.	Vanillin-hydrochloric acid test: Drug shows with a mixture of vanillin: alcohol: dilute HCl in the ratio 1:10:10.	

Precautions:

1. Avoid direct contact with any hazardous chemical.
2. Do not mouth pipette.

Uses:

- Pale catechu is medicinally used as local astringent.
- In diarrhoea, it is used as general astringent.
- It is largely used in various countries of east for chewing with betel leaf.
- Large proportion of gambier is used in dyeing and tanning industries.

Report: From the above Physical characters and chemical test the given crude drug was identified as

_____.

Questions Bank

1. What is the taste of Pale Catechu?
2. Write the biological source of Pale Catechu.
3. What are the uses of Pale Catechu?
4. Write a note on solubility of Pale Catechu.
5. What happen when Pale Catechu treated with HCl?
6. Write a note on physical characters of Pale Catechu.
7. What happen when Pale catechu treated with vanillin and hydrochloric acid.
8. Write the hindi name of Pale Catechu.
9. Write the chemical constituent of Pale Catechu.
10. Paste the one marketed preparation of Pale Catechu.