# SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES



Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai Approved by Pharmacy Council of India, New Delhi.

Coimbatore -641035

COURSE NAME: PHARMACOGNOSY

D.PHARM/ I YEAR

TOPIC 2: MORPHOLOGICAL AND PHARMACOLOGICAL CLASSIFICATION

#### DESIGN THINKING STAGES IN CLASSIFICATION

**Empathize:** Understand the users — in this case, students, pharmacists, or researchers who use the alphabetical classification system.

**Define:** Clearly define the problem based on the insights from the empathize stage.

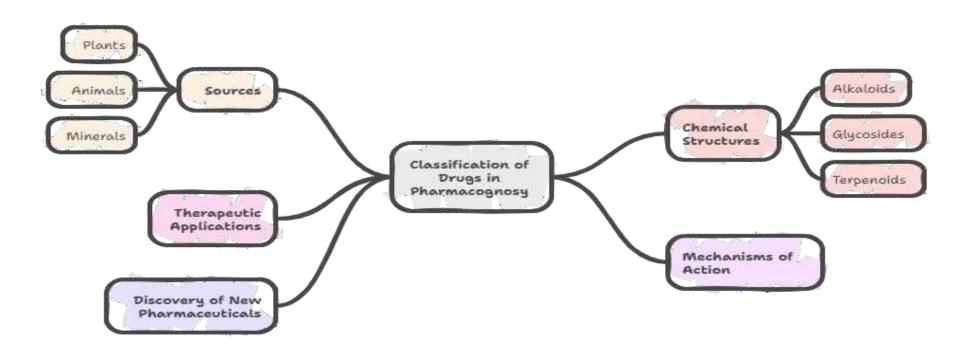
**Ideate:** Generate possible solutions or improvements.

**Prototype:** Create a tangible version of your solution

**Test:** Evaluate the prototype with real users.

## **MINDMAP**

## Classification of Drugs in Pharmacognosy



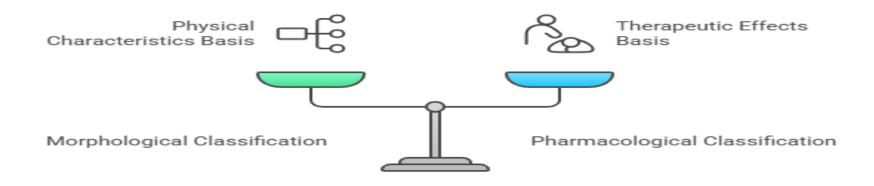






#### **INTRODUCTION**

## Compare drug classification methods in pharmacognosy.





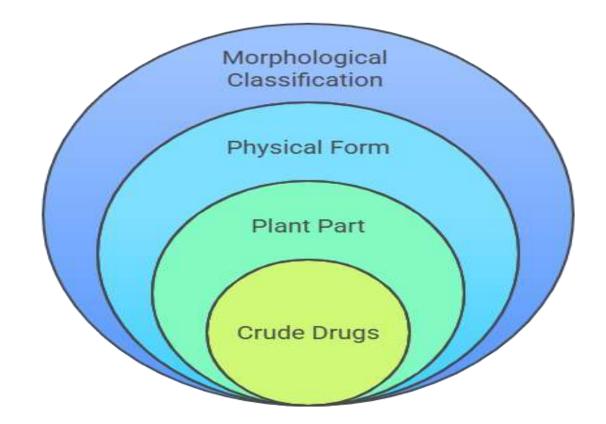
## **Morphological Drug Classification**

Categorization based on physical traits

Shape and texture of the drug

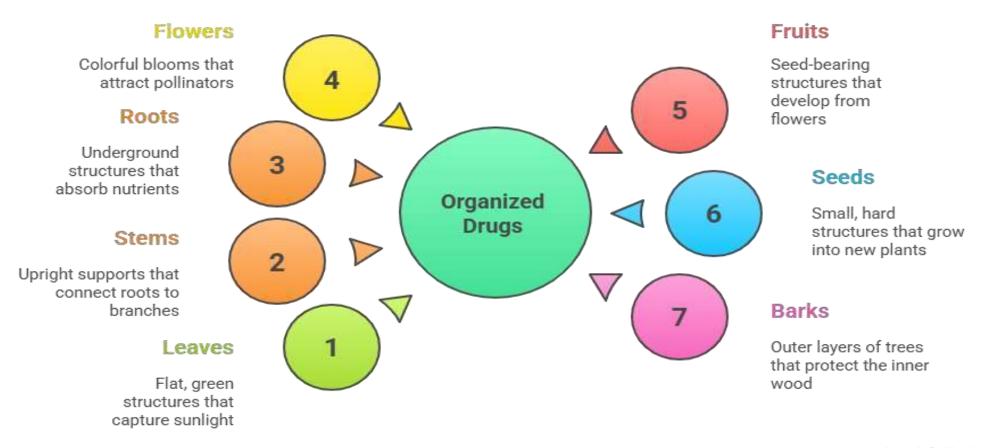
Specific part of the plant used (e.g., leaves, roots)

Raw plant materials used in medicine



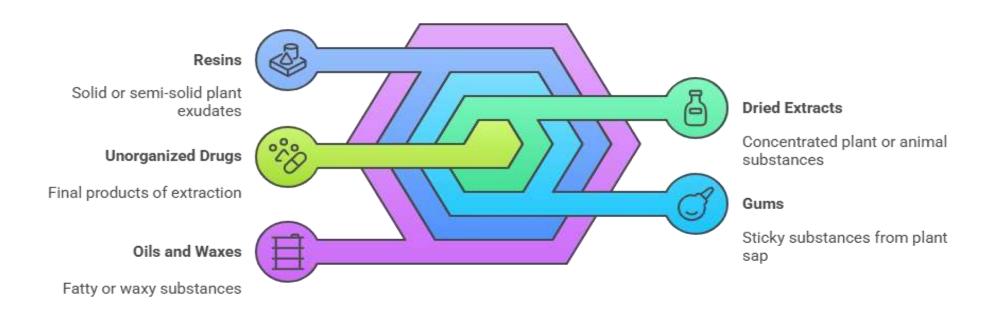


## **Components of Organized Drugs**



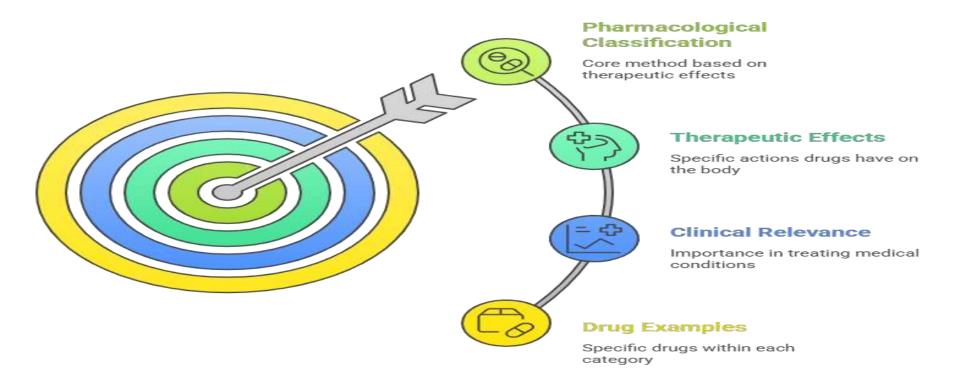


## **Unorganized Drugs Composition**



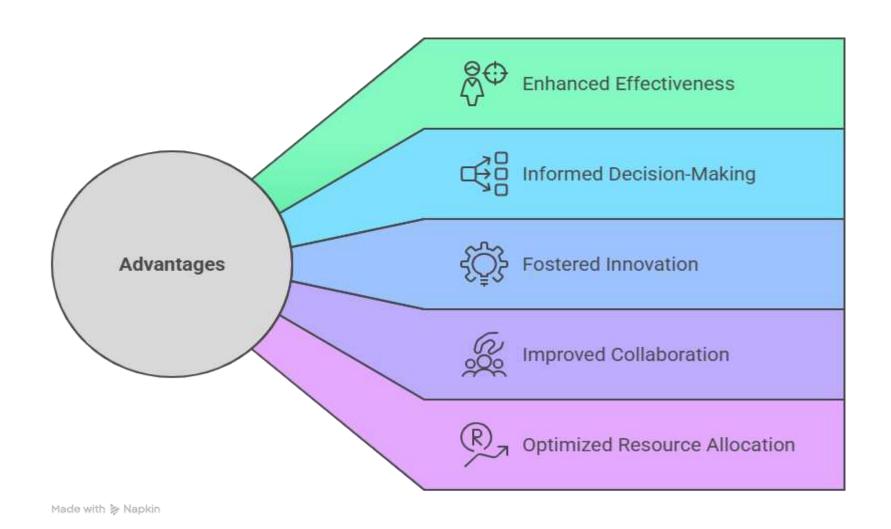


#### **Pharmacological Drug Classification**





## **Unveiling the Multifaceted Benefits of Advantages**





#### **Limitations of Morphological Classification**

#### Does Not Account Chemotypes

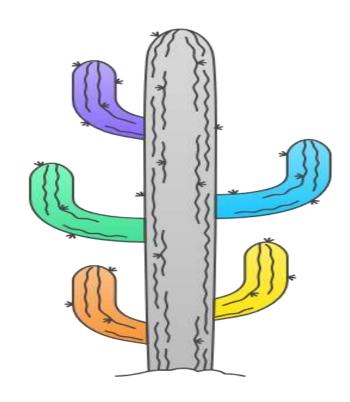
Inconsistencies in pharmacological activity

#### Subjectivity in Identification

Leads to inaccurate categorization

#### **Limited Correlation**

Variations in chemical composition



#### Lack of Pharmacological Info

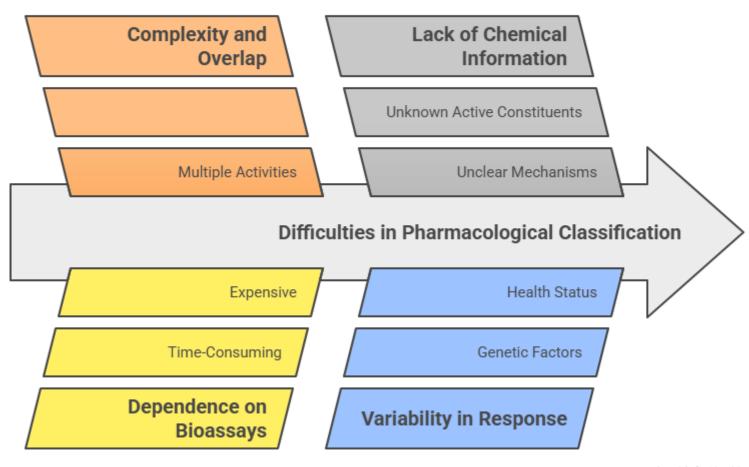
Requires further therapeutic investigation

#### Focus on Plant Part

Ignores active therapeutic constituent



## Challenges in Pharmacological Classification of Drugs





## **Morphological Classification of Drugs**





#### **Pharmacological Classification of Drugs**



Cardiotonics

Drugs that strengthen the heart

Antihypertensives

Drugs that lower blood pressure

Analgesics

Drugs that relieve pain

Sedatives

Drugs that calm or induce sleep

Laxatives

Drugs that promote bowel movements

Antidiarrheals

Drugs that stop diarrhea

Antidiabetics

Drugs that control blood sugar

Antimicrobials

Drugs that fight infections

#### **IMPORTANCE AND FUTURE**



## Unlocking Natural Drug Knowledge Through Dual Classification



Organizes drugs by physical form

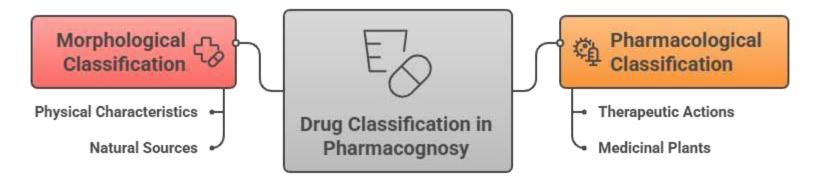


# Pharmacological Classification

Groups drugs by therapeutic action

#### **SUMMARY**

## **Drug Classification in Pharmacognosy**





## **ASSESMENT**

# Which classification method is most suitable for understanding drug properties?



Morphological
Classification
Simple, based on physical
characteristics







1. Morphological classification of crude drugs is based on:





- a)Therapeutic use
- b)Chemical nature of constituents
- c)Plant part used
- d)Alphabetical order

## **ASSESMENTS**

## 3. Which of the following is an example of a leaf drug?









## **REFERENCES**

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- 2. Pharmacognosy Varro E. Tyler, Lynn R. Brady, James E. Robbers
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