

# UNIT-2

Definition, history and scope of  
Pharmacognosy

# DEFINITION

**Pharmacognosy is the study of medicinal uses of various naturally occurring drugs its history, sources, distributions, method of cultivation, active constituents, medicinal uses, identification test, preservation methods, substituents and adulterants.**

**Crude drugs is referred to the natural product that has not been in advanced in value or improved in condition by any process or treatment beyond that which is essential for its proper packaging and prevention from deterioration.**

# Scheme for pharmacognostic studies of a natural drug:

- ▣ Official title, synonym ,or vernacular terms
- ▣ Biological source and family
- ▣ Geographical source and habitat
- ▣ History and introduction of crude drug
- ▣ Cultivation, collection and processing of drug.

- ▣ Morphological or macroscopical traits
- ▣ Microscopical or histological studies.
- ▣ Chemical constituents & qualitative chemical tests.
- ▣ Pharmacological/therapeutical actions
- ▣ Commercial varieties, substituents and adulterants
- ▣ Quality control of crude drug .

# OFFICIAL TITLE

- ▣ It is the title of a drug which appears in official reference books.
- ▣ The latin name of plant is botanical name
- ▣ The latin name of animal is zoological name.

# Biological source and family

- ▣ Covers nature ,limits for active constituents and relevant information affecting the quality of the crude drug during processing or storage.
- ▣ eg: digitalis consists of dried leaves of *Digitalis purpurea* dried at a temperature below 60 degree celcius immediately after collection and the dried leaves should not contain more than 5% moisture.

# HISTORY & INTRODUCTION

- ▣ Reveals information about its introduction to mankind, knowledge of a crude drug, original place of growth and its introduction into modern medicine.  
eg Rauwolfia etc

## CULTIVATION, COLLECTION & PROCESSING

- ▣ Collected on basis of whether they are rich in their chemical constituents.
- ▣ Drying of plant material prior to packaging is important in order to minimise microbial contamination



# MACROSCOPICAL TRAITS

- ▣ It includes shape, size, organoleptic traits, nature of inner and outer surface.

## MICROSCOPICAL TRAITS

- ▣ Reveals histology, i.e. arrangement of tissues in . T.S. & L.S. through a microscope

## CHEMICAL CONSTITUENTS

- ▣ The utility of a crude drug is due to its therapeutically active constituents

## THERAPEUTIC ACTION

Eg: senna used as purgative

## COMMERCIAL VARIETIES

Eg :dog senna is an adulterant of senna