

Classification of drugs for study:

- Vegetable drugs can be arranged for study under the following headings:

1- Alphabetical Classification:

- Arrange alphabetically by using either Latin name or English name

e.g.: Pharmacopoeias

2- Taxonomical Classification:

- The drugs are **divided** into **groups taxonomically** based on;

family, genus, species

3- Morphological Classification;

- The drugs are **divided** into **groups**, based on **plant part used** medicinally such as **leaves**, **flowers**, **fruits**, **seeds**, **barks**, **roots**, **rhizomes**, **woods** and those are known as **organized** drugs and as **gums**, **resins**, **oils**, dried **extracts**, which known as **unorganized** drugs.

4- Chemical Classification:

- -The drugs are <u>classified</u> into <u>groups</u> according to <u>the chemical nature</u> of <u>the active constituents</u>,
- e.g. drugs containing alkaloids , glycosides , tannins, bitter principles, volatile oils.

5- Pharmacological Classification:

- The drugs are **classified** into **groups** accord. to their

pharmacological action or therapeutic uses

e.g. antihypertensive drugs, cardio tonic drugs,

anticancer drugs, antispasmodic, ..etc

Adulteration of natural products

- Generally occurs when a drug has high price
- Adulterant must be cheap and available in large amount
- Adulterated drug is that which does not comply with the official requirements

Types of Adulteration;

1- Sophistication or True adulteration

The addition of an inferior material to any article with intends to defraud.

e.g. addition of wheat flour to powdered ginger, with enough capsicum →to enhance the pungency and enough curcuma →to maintain color.

2- Substitution

Replacement of the original drug by the adulterant (An entirely different article used). Different ways of substitution:

Substitution of exhausted drugs:

e. g.: As in the preparation of volatile oils from clove.

3- Admixture

The addition of one article to another through accident, ignorance or carelessness i.e. Argel instead of Senna.

4- Deterioration

Can be defined as: An impairment of drug quality by $\rightarrow \rightarrow$ the abstraction or destruction of valuable constituents by $\rightarrow \rightarrow$ distillation, extraction, aging, moisture, heat, fungi, insects e.g. coffee which lost its caffeine through over roasting.

5- Spoilage

A form of deterioration in which: the quality or value or usefulness of an article is impaired or destroyed by fungal action $\rightarrow \rightarrow$ as to render the drug unfit for human consumption.

6- Inferiority

- Is any substandard condition for any cause.

i.e. addition of synthetic material to fortify inferior products such as, adding citral to lemon oil.