



Shape of the leaf

Experiment 2

OBJECT

Identification of leaf drug **Digitalis** by study of morphological characters.

Synonyms

Foxglove, Fairy glove.

Morphological characters

Size	10–20 cm long, up to 4–10 cm wide
Shape of lamina	Oblong, lanceolate
Apex of lamina	Obtuse or rounded
Margin of lamina	Crenate to dentate
Base of lamina	Asymmetric
Surface	Upper pubescent (hairy) lower surface more pubescent (hairy)
Texture of leaf	Paper-like
Petiole	Winged
Venation	Pinnate, midrib prominent, lateral veins leave at an acute angle
Type of leaf	Simple

Organoleptic characters

Colour	deep green to yellowish green
Odour	Tea like
Taste	Bitter

Chemical constituents

It contains purpuria glycosides A and B primarily. It also contains digitoxin, gitoxin, gitaloxin as secondary glycosides of medicinal importance.

Use

Cordiotonic.

Biological source

The given sample of crude drug consists of dried leaves of *Digitalis purpuria* belonging to the family Scrophulariaceae.

Experiment 7

OBJECT

Identification of leaf drug Nim by study of morphological characters.

Synonyms

Neem, nimba.

Morphological characters

Size	3- 6 cm long
Shape of lamina	Ovate, lanceolate
Margin of lamina	Serrate
Stipule	Existipulate
Type of leaf	Imparipinnate, alternate

Organoleptic characters

Colour	Dark green
Odour	Typical
Taste	Bitter

Chemical constituents

Nim oil contains glycerides of palmitic acid, stearic acid, linoleic acid, etc. It also contains nimbidin, nimbin, nimbidol.

Use

As antifungal and antiseptic, stimulant, wormicide

Biological source

The given sample of crude drug consists of fresh or dried leaves of Azadirachta indica belonging to the family Meliacea.

Experiment 9

OBJECT

Identification of Bark drug Ashok by study of morphological characters.

Synonym

Asoka.

Morphological characters

Size	40 cm long, 4-6 mm wide and 5-8 mm thick.
Shape	Channelled.
Outer surface	Smooth with circular lenticels or transversely ridged or cracked.
Inner surface	Smooth and longitudinally striated.
Fractures	Short and fibrous.

Organoleptic characters

Colour outer surface	Yellowish to gray
Colour inner surface	Reddish brown
Odour	Odourless
Taste	Astringent and bitter

Chemical constituents

It contains tannins, catechol, sterol, phlobaphenes, organic calcium compound and ketosterol.

Use

Astringent and uterine tonic.

Biological source

The given sample of crude drug consists of dried bark of Saraca indica, belonging to the family Leguminosae.