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# Diploma in Pharmacy 1<sup>st</sup> Year

## Pharmacognosy

### Experiment

To perform the morphological study of Punarnava.

#### Aim:

To perform the morphological study of Punarnava.

#### Reference :

Dr. Gupta G.D , Dr. Sharma Shailesh , Kaur Navjit , “Practical Manual of Pharmacognosy” Published by Nirali Prakashan , Pg.No 51 - 54

#### Synonyms

Hogweed, Raktakunda.

#### Biological Source :

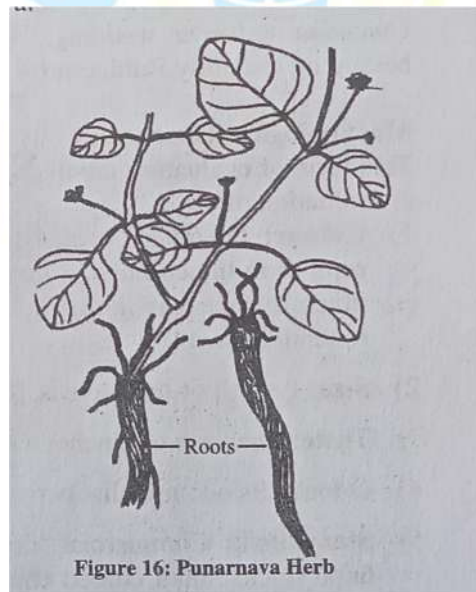
Punarnava consists of whole roots and herb of *Boerhavia diffusa*, belonging to family Nyctaginaceae.

#### Morphological Characters

This form of evaluation involves a series of tests using the sense organs. It refers to evaluation of.

- 1) **Colour:** The colour of the upper surface and lower surface of the leaves are green and white respectively. The colour of the stem is greenish-purple and the colour of the flower is pink on the upper side.
- 2) **Size and Shape:** Leaves range in length from 25 to 30mm. Small leaves are ovate, oblong sub-orbicular, and somewhat pointed at the apex, with a rounded or sub-cordate base. The leaves are petiolate, glabrous, and have a thick texture. The petioles are twice as long as the blade. The margin is present all over the leaves.

- 3) **Taste:** It is bitter in taste.
- 4) **Odour:** It is odourless.
- 5) **Stems:** At the nodes, stems are cylindrical, rigid, and thick. They are 1 metre long and branched. The stems are a bright reddish-brown colour at the top and a pale greenish colour at the bottom.
- 6) **Flowers:** These are internally sessile in small umbels, about 10 to 25mm in length.
- 7) **Fruits:** They are one sided, glandular, and about 0.5cm in size.
- 8) **Roots:** The roots of this plant are elongated, fusiform, tapering, and tuberous. Roots grow vertically downwards, piercing the soil deeply. They have exceptionally soft skin and are cream or light brownish-yellow colour. The knotty scars of fallen rootlets are common on old roots.



## Result :

The morphological study of Punarnava was performed.