

Pharmacognosy& Phytochemistry Department



Digitalis lanata Monograph

1. Name and Synonyms

Scientific Name: Digitalis lanata

Family: Plantaginaceae

English common name: woolly foxglove or Grecian foxglove

قمعية صوفى :Arabic common name

2. Morphology:

- The leaves are the medicinal part of the plant, *Digitalis lanata* is an herbaceous biennial or perennial, The leaves are sessile, simple, narrow-lanceolate, 15 to 35 cm long, entire and ciliate in the upper area of the shoot axis.
- The flowers are inflorescent with long and densely flowered, with racemes facing all directions.
- The fruits are 4 stamens, often stretching out of the corolla tube. The ovaries are superior, 2-chambered, clavate, glandular-haired, gradually merging into the stigmas.

3. Active constituents

- Cardioactive steroid glycosides (cardenolides) including:
 - 1. Primary glycoside: lanatoside A, B, C, D and E
 - 2. Secondary glycoside: digitoxin, gitoxin, digoxin and gitaloside.
- Pregnane derivatives: including digifolein, glucodigifolein, diginin, digipronin, lanafolein, gitonine.
- Steroid saponins: including lanagitosides I and II, tigonin, desglucolanatigonin.

4. Pharmacological applications:

It is used in the treatment of congestive heart failure (CHF).

5. Side effects

Hypertonias in gastrointestinal area, loss of appetite, vomiting, diarrhea and headache.





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6. Contraindication:

Neither the drug nor pure glycosides should be administered in the presence of first- and second degree atrioventricular Block, , hypercalcemia, hypokalemia, hypertrophic cardiomyopathy, carotid sinus syndrome, ventricle tachycardia and thoracic aortic aneurysm.

7. Suitable methods of administration:

The plant extract is not used today, only the administration of pure glycosides is to be preferred (digitoxin, digoxin, alpha-acetyldigoxin, beta-acetyldigoxin, lanatoside C, deslanoside).

8. Examples of drugs in the market found as pure glycoside, Digoxin.



9. References

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