



# Lab 5



# Pharmacognosy PHG112



# Faculty of Pharmacy

# Practical exam I

## I. Powder Identification

### Physical characters:

Cond... .

Color...

Odor...

Taste... ..

### Microscopically examination:

Mount in water... ..

Mount in KOH... ..

Mount in phloroglucinol +HCL

Comment... ..

### Diagnostic element (3 key elements):

Name... ..

Origin ... ..

Uses... ..

## II. Spots

### Spot 1

Name... ..

Origin... ..

Photo

### Spot 2

Name... ..

Origin... ..

Photo

### Spot 3

Name... ..

Origin... ..

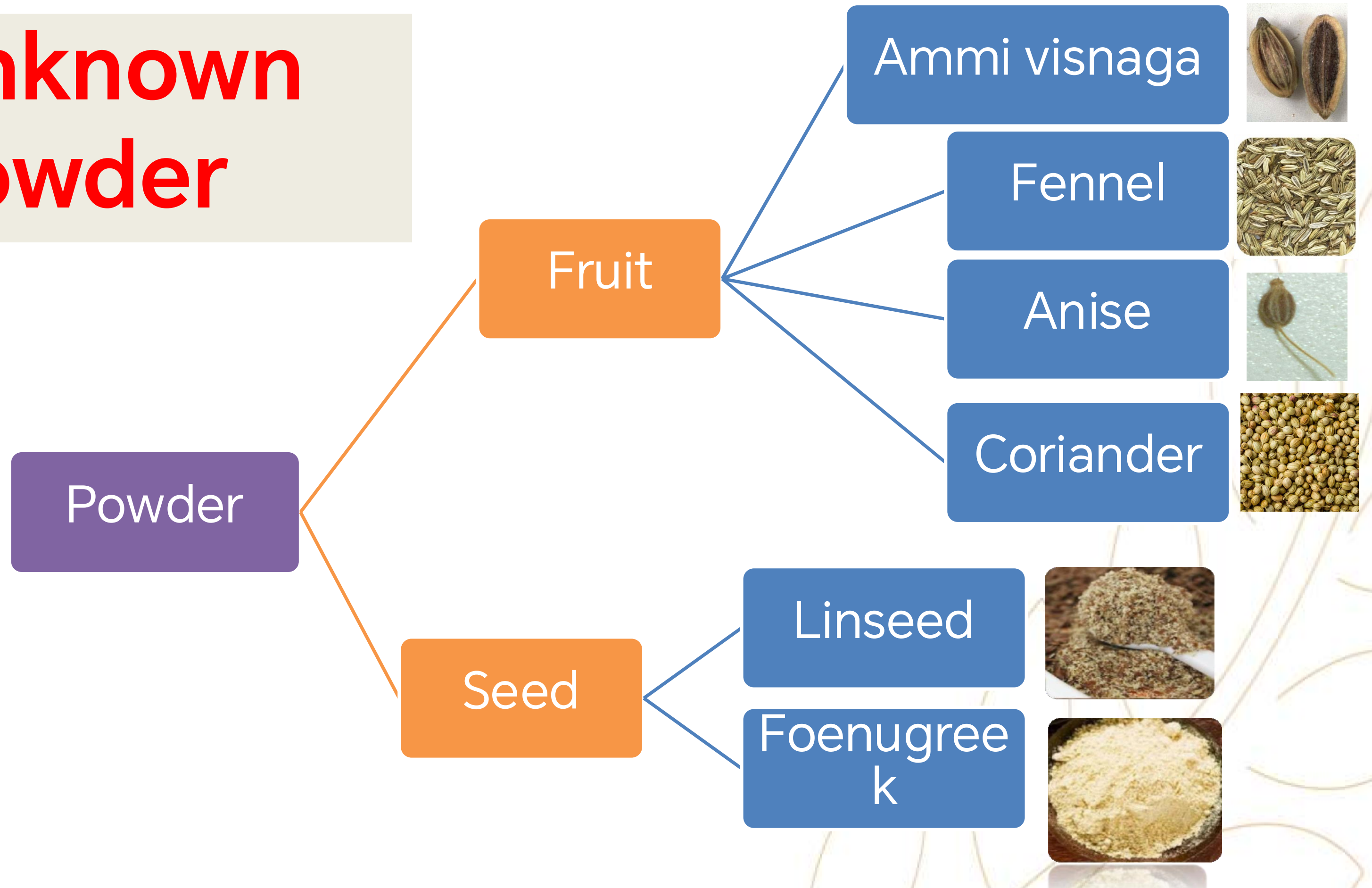
Photo

# I. Powder Identification

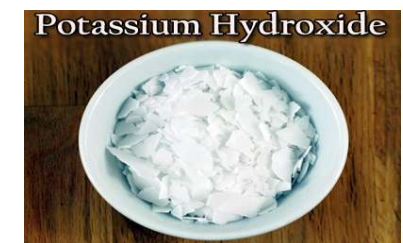




# Unknown Powder



# I. SCHEME FOR POWDER

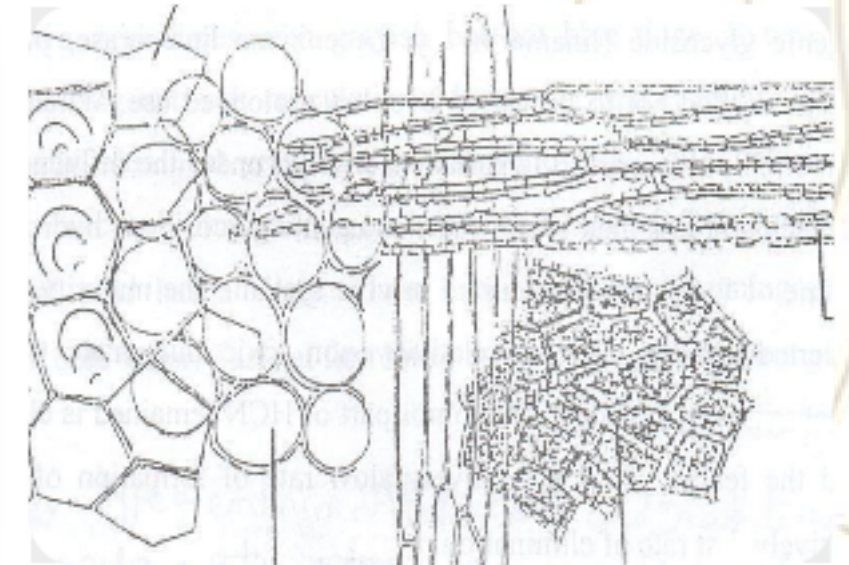


# Mixed Powders

Powder+  
KOH  
(Boil)

## Linseed

- Mat like structure: “Sclerides (narrow elongated cell with thick lignified pitted wall) overlapped with hypodermis”.



**Condition:** Fine powder

**Color:** Yellowish brown with dark particles

**Odor:** Oily characteristic odor of linseed

**Taste:** Mucilaginous oily



# Buff Powder

## Powder:

Condition: Fine powder

Colour: Yellowish buff

Odour: Characteristic odour

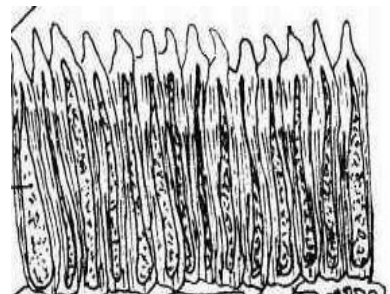
Taste: Mucilagenous slightly bitter

Powder+ KOH(Boil)

under the microscope



- Palisade-like epidermal cells



**Foenugreek**

# Khelline test

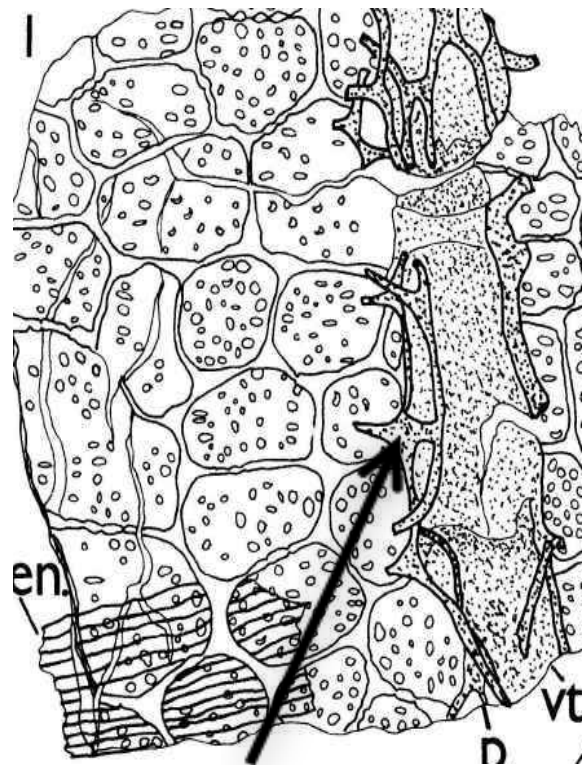
- Red color

Powder+  
KOH  
(Boil)

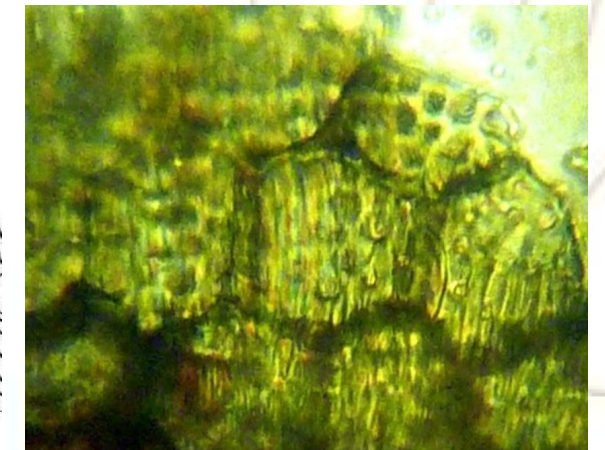
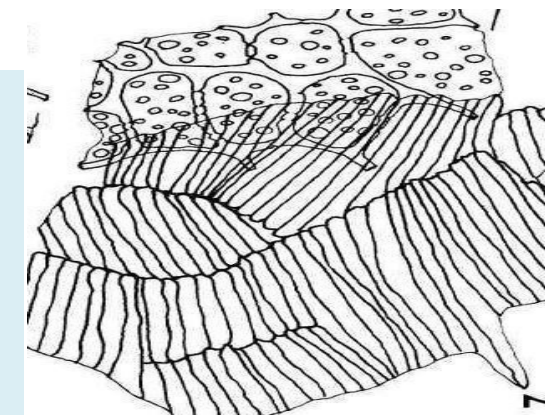
under the microscope

- Inner most layer of mesocarp
- Parquetory endocarp
- Club shaped vittea

**Ammi-visna**  
**ga**



Club shaped vittea  
with radiating cells



## Powder:

Condition: Fine powder  
Colour: Brownish green  
Odour: Aromatic odour  
Taste: Bitter taste



# Khelline

## test

**Condition:** Fine powder  
**Colour:** Yellowish green  
**Odour:** Coriander Aromatic odour  
**Taste:** Aromatic faste wavy fibers

• NO Red

Boil in KOH

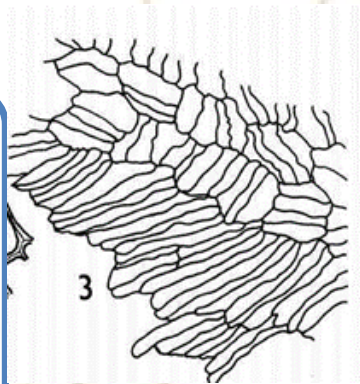
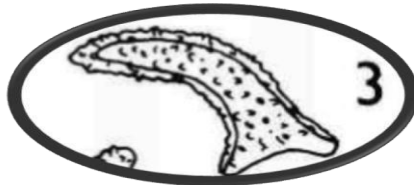
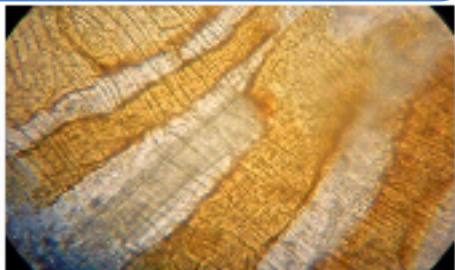
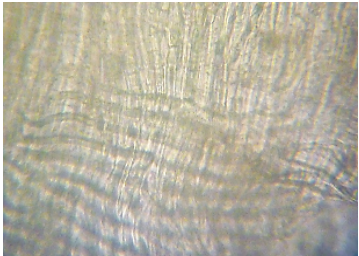
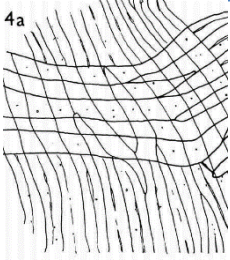
Anise

Fennel

Branched vittae

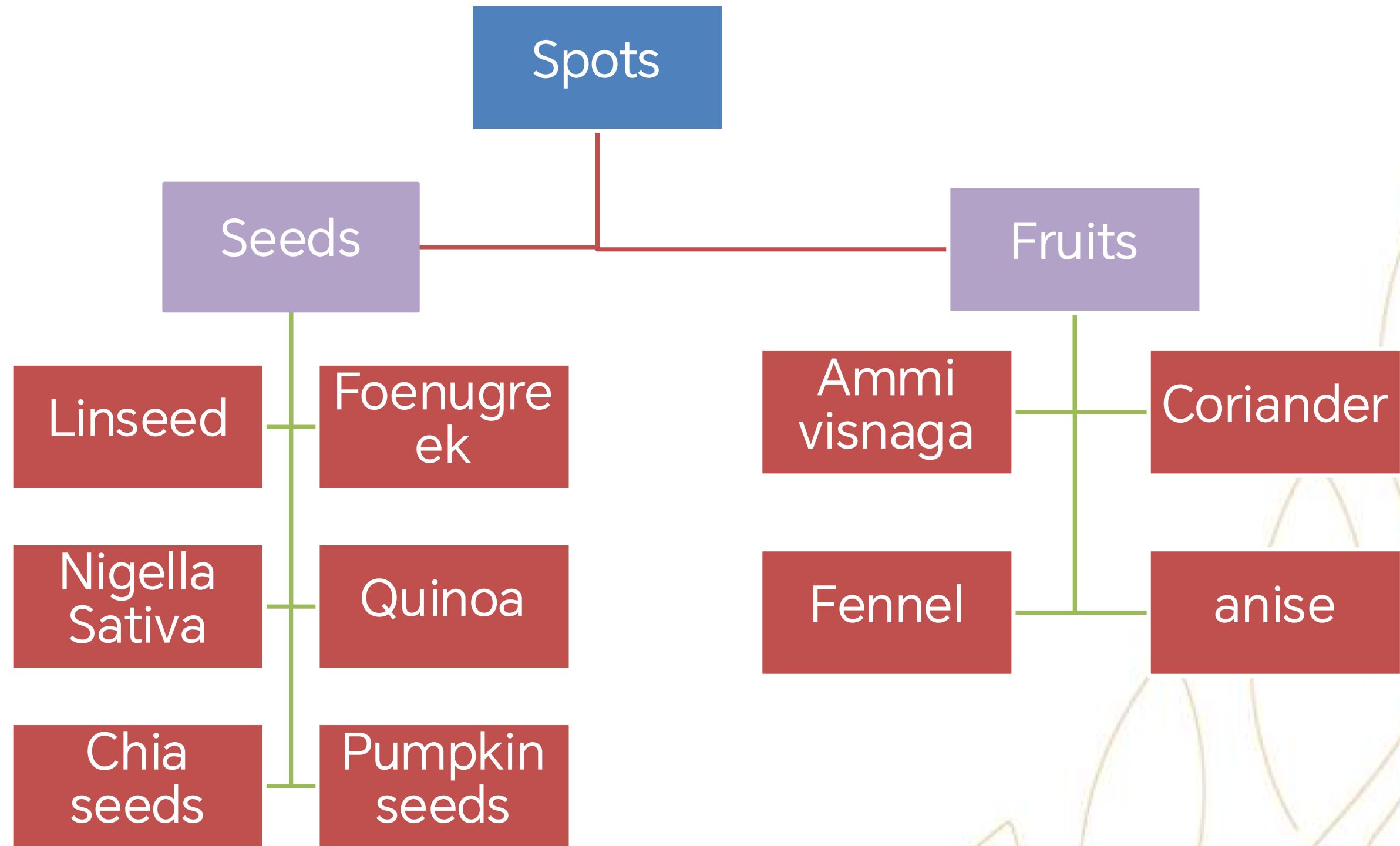
Non-glandular Hair

Simple vittea overlapped with parquetry endocarp



# Spots







# Linseed



It is the dried ripe seeds of *Linum usitatissimum* Family: Linaceae.

# Foenugreek



Dried ripe seeds of *Trigonella*  
*Foenum-graecum* Family Leguminosae.



# Quinoa



**Dried ripe seeds of *Chenopodium quinoa*, a  
flowering plant in the **Family****



# Chia



**Dried ripe seeds of** *Salvia hispanica*, a flowering plant in the **Family** “**Lamiaceae**”

# Pumpkin



Dried ripe seeds of *Cucurbita pepo*, Family  
"Cucurbitaceae"



# *Nigella sativa*



Dried ripe seeds of *Nigella sativa*; Family  
“Ranunculaceae”

# Coriander



It is the dried ripe fruits of *Coriandrum sativum* family Apiaceae.



# Fennel



It is the dried ripe fruits of *Foeniculum vulgare*  
Family Apiaceae (Umbelliferae).

# Anise



It is the dried fruits of *Pimpinella anisum*  
Family Apiaceae.

# Ammi visnaga



It is the dried ripe fruit of *Ammi visnaga* Family Apiaceae



Established by Dr.Nawal El Degwi  
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# Thank You!

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