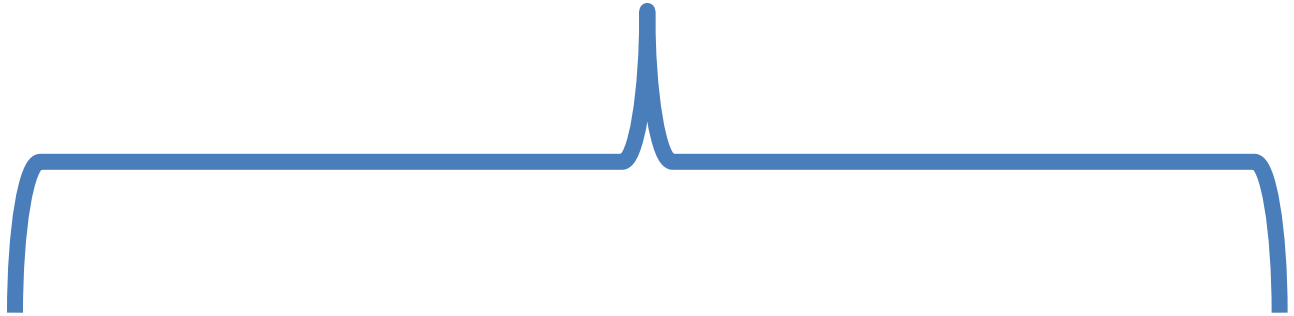

3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
MSA
UNIVERSITY
IN EGYPT SINCE 1996
Established by Dr.Nawal El Degwi
MSA UNIVERSITY
جامعة أكتوبر للعلوم الحديثة والآداب
Pharmacognosy
PHG 112
Fall 2026



Lab 5

Revision

Practical exam I



Unknown Powder

Spots

Unknown powders

Fruits

- Anise



- Fennel



- Ammi



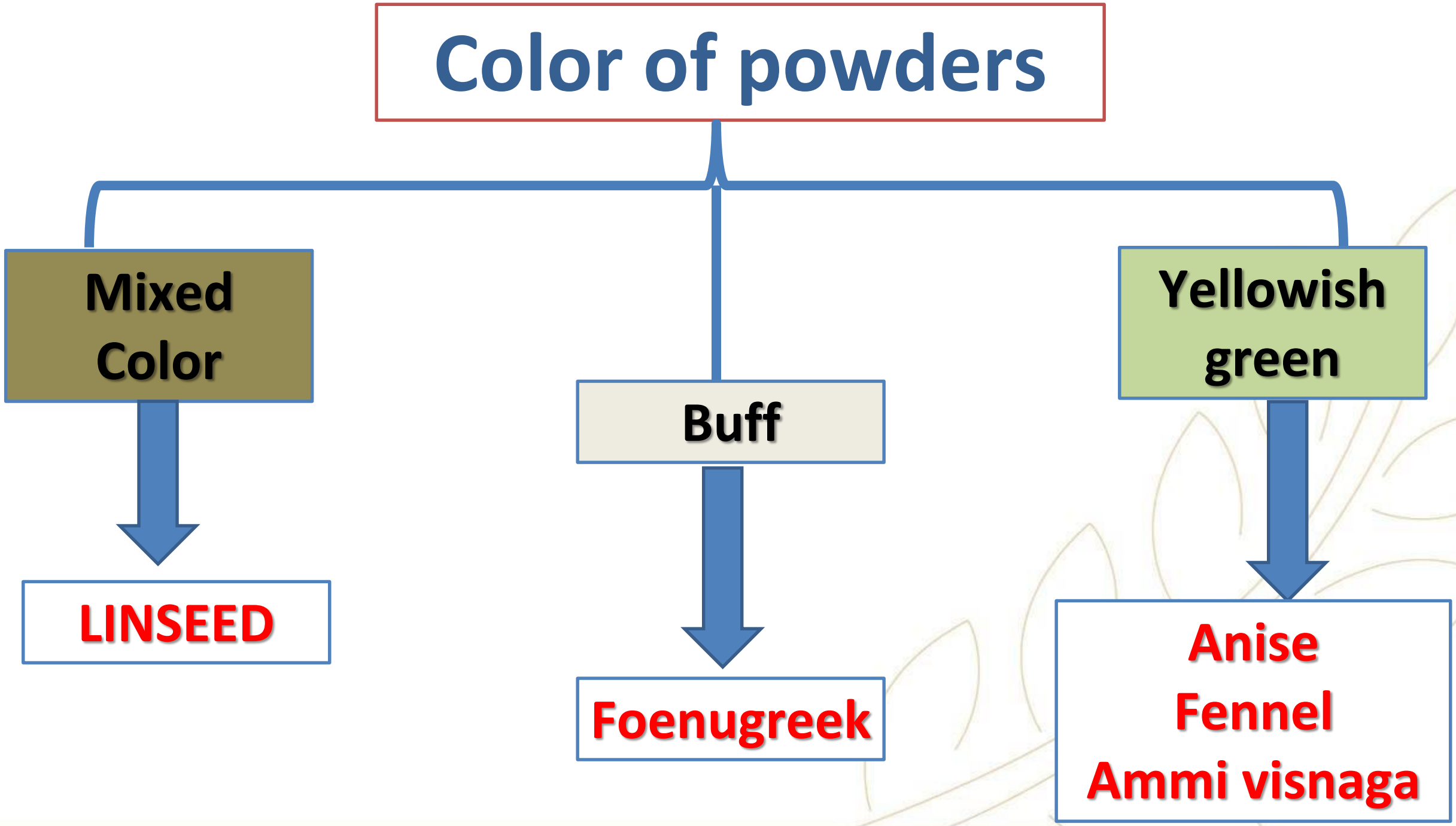
Seeds

- Linseed



- Foenugreek




Color of powders
Mixed Color
LINSEED
Buff
Foenugreek
Yellowish green
Anise
Fennel
Ammi visnaga

IF Mixed Color



Mount in KOH:



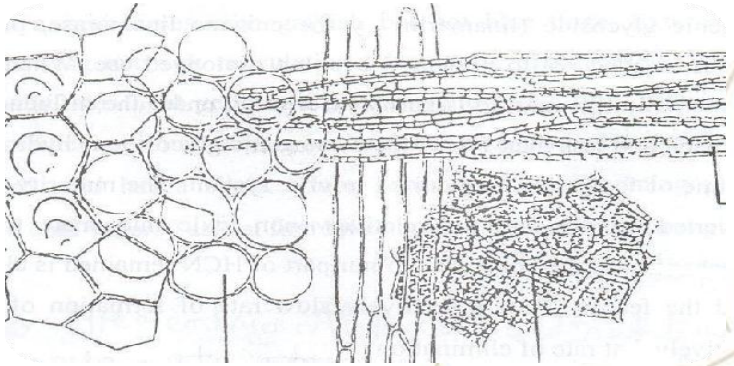
KOH

Powder

Boil 5-6 times

Then examined under microscope

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



Linseed

IF Buff Color



Mount in KOH:



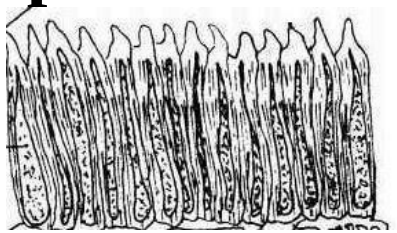
KOH

Powder

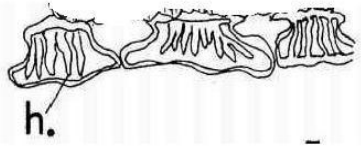
Boil 5-6 times

Then examined under microscope

- Palisade like epidermis



- Basket like hypodermis



Foenugreek

IF Yellowish green Color

Mount in KOH:



KOH

Powder

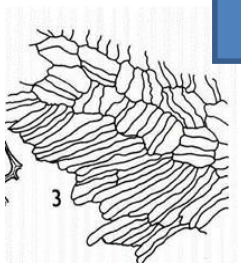
Boil 5-6 times

Then examined under microscope

- Simple vittea

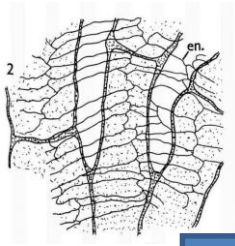


- Parquetory endocarp



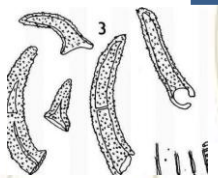
Fennel

- Branched vittea with non parquetory endocarp

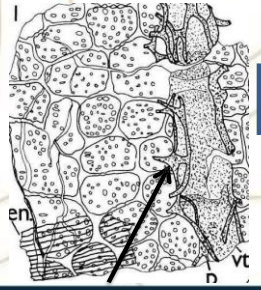


Anise

- Non- glandular hair



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



Ammi visnaga

IF Yellowish green Color

Khellin test



Filter paper

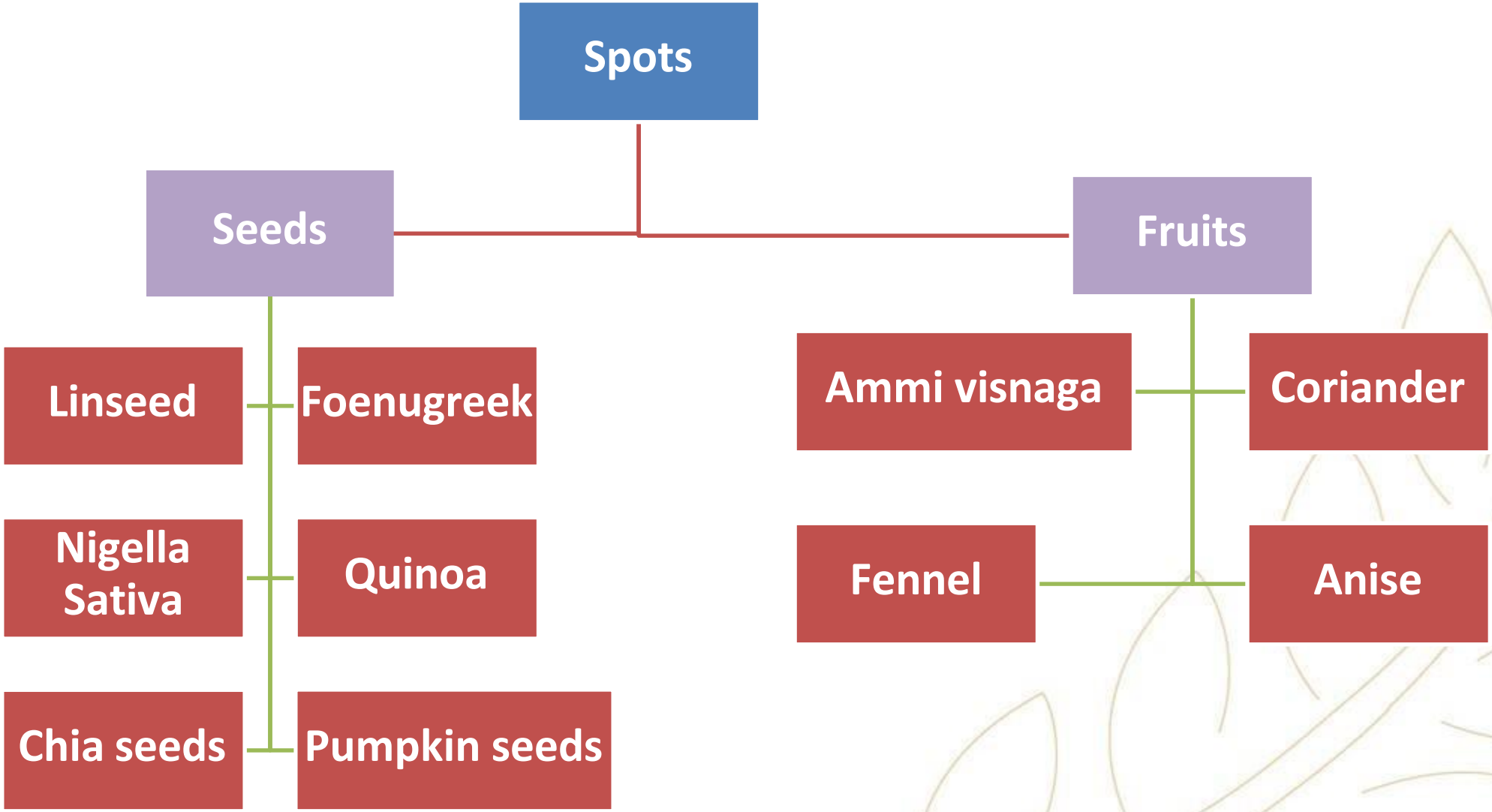
KOH pellets

Powder

Close Filter paper then
after 1-2 minutes open

Red color
Ammi visnaga

No red color
Fennel or Anise


Spots
Seeds
Fruits
Linseed
Foenugreek
Nigella Sativa
Quinoa
Chia seeds
Pumpkin seeds
Ammi visnaga
Coriander
Fennel
Anise

Seeds

Linseed

Uses

1. **Laxative**
2. **Anti-inflammatory**
3. **Heart protecting against angina pectoris**



Seeds

Foenugreek

Uses

1. **Hypoglycemic**
2. **Lactagogue**
3. **Hypocholesterolemic**



Seeds

Quinoa

Uses

1. **Antioxidant.**
2. **Treatment of Celiac disease.**
3. **Treatment of Obesity.**
4. **Treatment of Diabetes.**



Seeds

Chia

Uses

1. Treatment of obesity
2. Diabetes
3. Hypertension
4. Reducing cholesterol



Seeds

Pumpkin

Uses

1. **Anti-inflammatory.**
2. **Antiviral.**
3. **Analgesic in urinary disorders.**
4. **Anti-ulcer.**
5. **Antidiabetic.**
6. **Antioxidant.**



Seeds

Nigella sativa



Uses

1. **Enhance the immune system by treating respiratory tract diseases (allergy, cold, cough, bronchitis, flu and asthma).**

2. **Support blood circulation by decreasing the probability of arteriosclerosis and preventing thrombosis (due to the presence of unsaturated fatty acids (omega 3 & 6).**

Fruits

Coriander

Uses

1. **Spice & flavoring agent.**
2. **It has an anti-microbial activity**
3. **Spasmolytic and carminative activity**
4. **It has strong lipolytic activity.**



Fruits

Anise

Uses

1. Used to relieve cough
2. Carminative (relieve flatulence)
3. Mild expectorant
4. Lactagogue (promote milk production)



Fruits

Fennel

Uses

1. **Carminative (relieve flatulence)**
2. **Mild expectorant**
3. **Lactagogue (promote milk production)**



Fruits

Ammi visnaga

Uses

1. **Spasmolytic especially on the muscles of the bronchi, GIT, biliary tract, urogenital system and the coronary vessels.**
2. **Whooping cough and in bronchial asthma.**
3. **Treat cramp-like conditions of GIT, biliary colic, and painful menstruation.**




MSA
UNIVERSITY
THANK YOU!