

# **PHARMACEUTICAL BOTANY PRACTICE**

Lab Number 12  
**“HERBAL TEAS”**



The word "tea" generally refers to the somewhat bitter, aromatic beverage made from infusions (pouring freshly boiled water over the leaves and steeping) or to the dried and prepared leaves of the **Thea sinensis** (**Theaceae family**) shrub.

The word «Tea» is also used as a general name for infusions made in the same way as tea, usually from the **leaves, blossoms**, or other parts of plants mostly **used medicinally and sometimes as ordinary beverages.**

Herbs which are **flowers or leaves** are usually prepared by **infusion** (pouring freshly boiled water over the leaves and steeping) while herbs used in the form of **root, bark, or seeds** are usually prepared by **decoction** (boiling the herb itself in water).

Herbal teas are most commonly marketed in a form similar to that of traditional teas, that is, as dried substances sold in **teabags** or in **loose form.**

# MICROSCOPIC EXAMINATION of POWDERED HERBAL DRUGS

## –preferred and prepared as tea-

### 1)D.N.: Folia Theae

Family: Theaceae

**P.N:** *Camellia sinensis* (Syn: *Thea sinensis*)

Common name: Tea, Çay

- The tea plant is thought to have originated near the Yunnan region of China.
- Due to its connection with the beverage, this plant is commonly referred to as a tea plant, tea bush, or tea tree.
- *Camellia sinensis* is an evergreen shrub tree that thrives in forest areas.
- The leaves are a glossy green with serrated edges and are very similar in shape and size to a bay leaf.

- The plants are grown for their leaves and harvesting must be done by hand. Rather than take all of the leaves, only the prime, top leaves are collected.
- It includes **caffeine, theophylline** ve **theobromine** alkaloids and **tannin**.
- *Camellia sinensis* is stimulant and diuretic due to its alkaloid content.

## 1. D.N.: **Folia Theae**

P.N: ***Camellia sinensis*** (Syn: *Thea sinensis*)

I.M.: **Sartur**

M.M.: **10x40**

## 2)D.N.: Flos Chamomillae

Family: Compositae (Asteraceae)

P.N: *Matricaria chamomilla*

Common Name: **Chamomile**, Mayıs papatyası

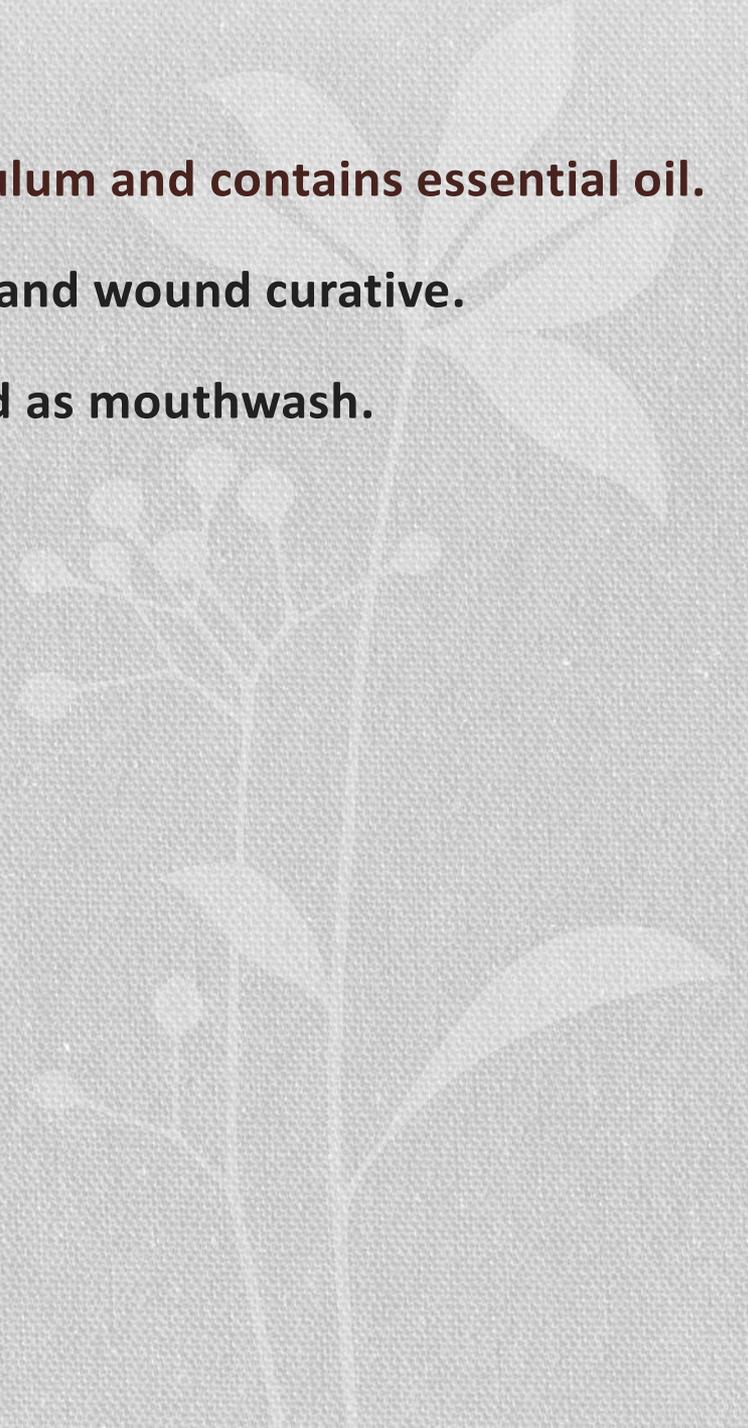
- An annual plant blooms in May,
- 20-30 cm in length.
- Flowers are at a terminal capitulum; outer flowers (ray flowers) ligulate, white and female; inner flowers (disk flowers) tubular, yellow and hermaphrodite.
- Capitulum is conical and hollow.



- **Flos Chamomillae consists of the plant capitulum and contains essential oil.**
- **Drug is antispasmodic, stomachic, stimulant and wound curative.**
- **It is used for abdominal pain, throat pain and as mouthwash.**

**I.M.: Sartur**

**M.M.: 10x40**



# 3)D.N.: Flos Tiliae

Familya: Tiliaceae

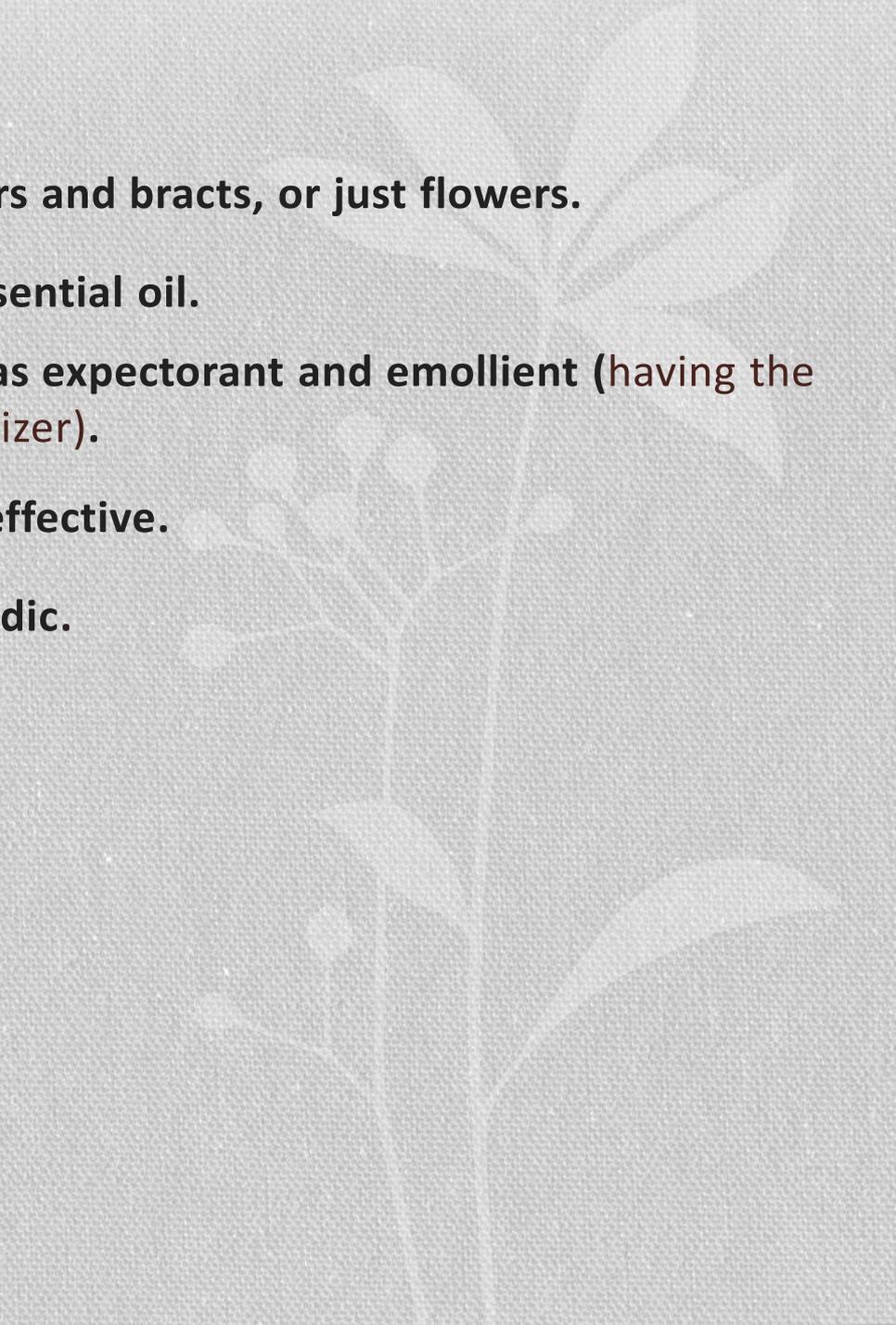
P.N: *Tilia sp.*

Common name: **Lime tree, Ihlamur**

- Plants are in the form of trees.
- Flowers bloom from June to July.
- Inflorescens is attached to the bract with a stalk.



# Flos Tiliae

- **Flos Tilia is mostly composed of flowers and bracts, or just flowers.**
  - **It contains mucilage, flavonoid and essential oil.**
  - **Due to its mucilage content it is used as expectorant and emollient (having the power of softening or relaxing, moisturizer).**
  - **Due to flavonoids; Diuretic, sudorific effective.**
  - **Due to volatiles; Sedative, antispasmodic.**
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**Flos Tiliae** (Microscopic work)

**I.M.: Sartur**

**M.M.: 10x40**

- Morphological Work

Inflorescens type: **Rasemose**

Flower Formula: **a.  $K_5 C_5 A_\infty \underline{G}_{(5)}$**

#### 4. P.N: *Wisteria sinensis* (Microscopic work)

Fam: **Fabaceae**