







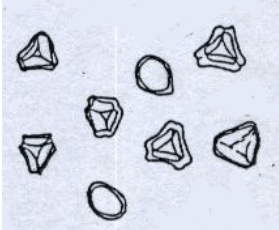
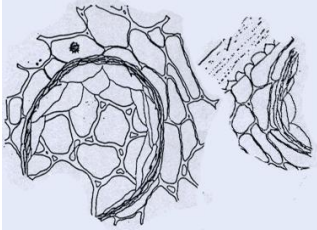
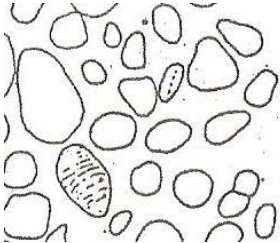

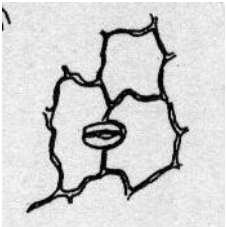

Analysis of market samples containing volatile oils

Lab No. 6

Examples:

	Clove	Ginger	Mentha	Thyme
Figure				
Origin	Dried flowers of <i>Eugenia caryophyllus</i>	Dried roots of <i>Zingiber officinalis</i>	Dried leaves of <i>Mentha piperita</i>	Dried leaves of <i>Thymus vulgaris</i>
Family	Myrtaceae	Leguminosae	Labiatae	Labiatae
Color	Dark brown	Yellow	Green	Grayish green
Taste	Agreeable	Pungent	Astringent	Agreeable
Odor	Aromatic	Aromatic	Aromatic	Aromatic
Volatile oil	Eugenol	Gingerol	Menthol	Thymol Carvacrol
Chemical test	+ FeCl_3 ► deep blue color			

Microscopical Examination:

Clove	
Triangular pollen grains	Oil gland
	
Ginger	
Starch granules	Septate fiber
	
Mentha	
Diacytic stomata	Labiaceous hair
	
Thyme	
Covering hair	Glandular hair
