

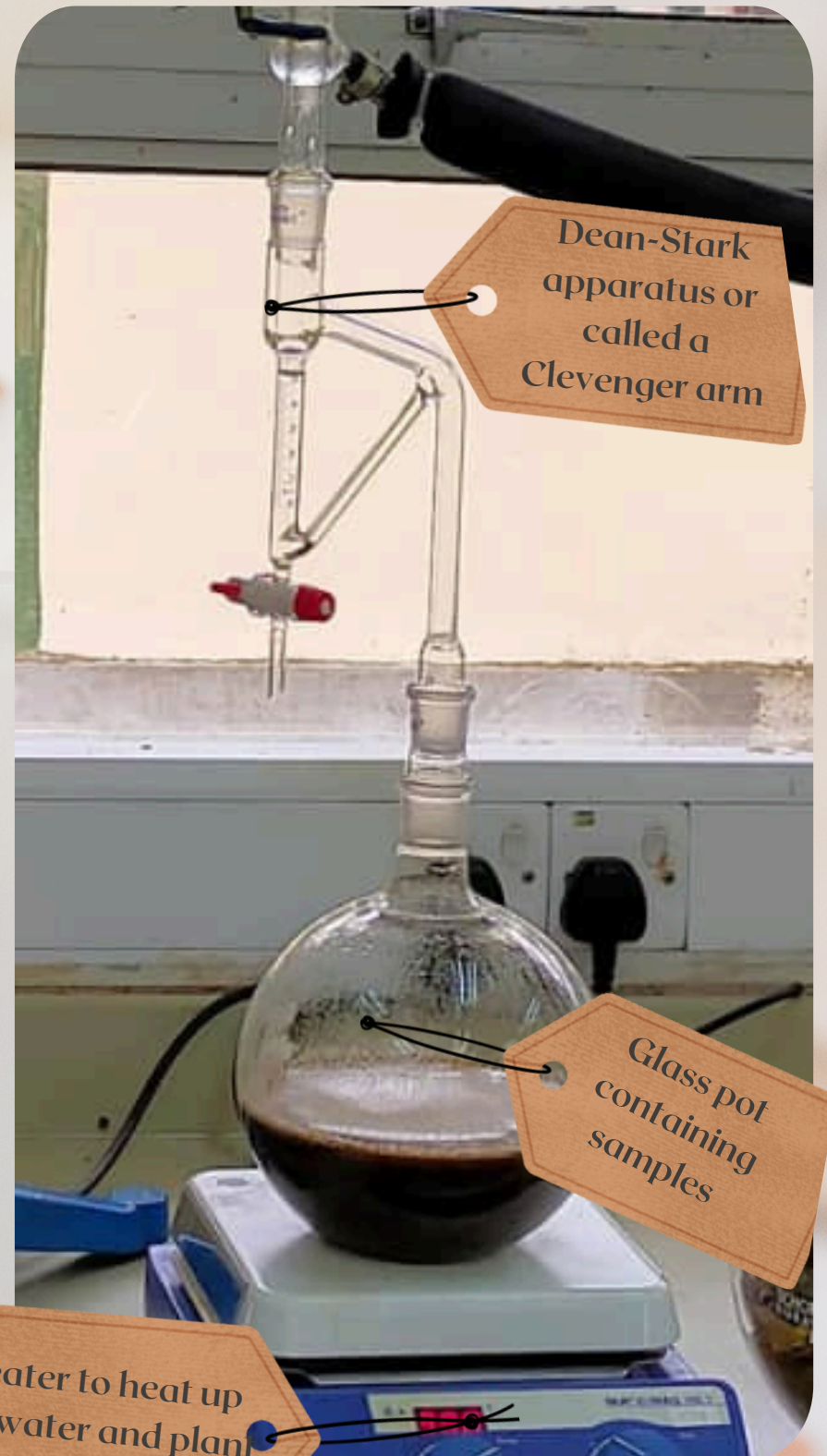
Essential Oil from H y d r o D i s t i l l a t i o n

Essential oils comprise intricate volatile aromatic compounds categorised as terpenoids, benzenoids/ phenylpropanes, and fatty acid derivatives, produced by plants. These secondary metabolites serve as a protective shield against predators and pests, forming the plant's defense system.

Plant scents also attract pollinators, enhancing their reproductive success. These aroma compounds are stored in various plant parts such as leaves, bark, roots, rhizomes, flowers, and fruits.

Hydrodistillation remains the most efficient and environmentally friendly method for producing high-quality essential oils.

The display showcases a mini hydrodistillation apparatus setup, illustrating the process of heating plant materials immersed in water. The resulting steam, laden with essential oils, is then cooled to yield condensate containing essential oils mixed with water. The essential oil separates from water and is collected in airtight bottles for storage.



Dean-Stark apparatus or called a Clevenger arm

Glass pot containing samples

Heater to heat up the water and plant material