

# Rotary microtome

A rotary microtome is a laboratory instrument used to cut thin slices of plant tissues for microscopic examination. It's a common tool in botany.

## How it works

The microtome uses a rotating blade to cut the specimen into thin slices. The thickness of the slices can be adjusted by changing the distance between the blade and the specimen or by changing the blade itself.

Uses -

- **Histological analysis:** Rotary microtomes are used to cut thin sections of plant tissue for histological analysis, which involves the study of the structure and composition of plant cells and tissues.
- **Microscopy:** The thin sections produced by rotary microtomes can be stained and mounted on slides for examination under a microscope.
- **Anatomical studies:** Rotary microtomes can be used to study the anatomy of plants, including the arrangement of cells and tissues in different organs.
- **Pathological studies:** Rotary microtomes can be used to diagnose plant diseases by examining the structure of plant tissues.
- **Research:** Rotary microtomes are used in a variety of research applications, such as studying plant development, genetics, and physiology.



Overall, rotary microtomes are essential tools for plant biologists, enabling them to study the structure and function of plant cells and tissues at a microscopic level.