

# FERN PHYTOGRAPHY

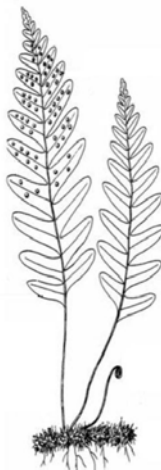
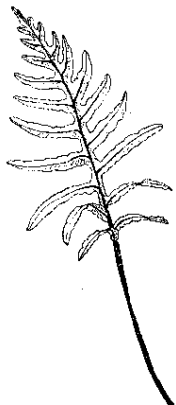
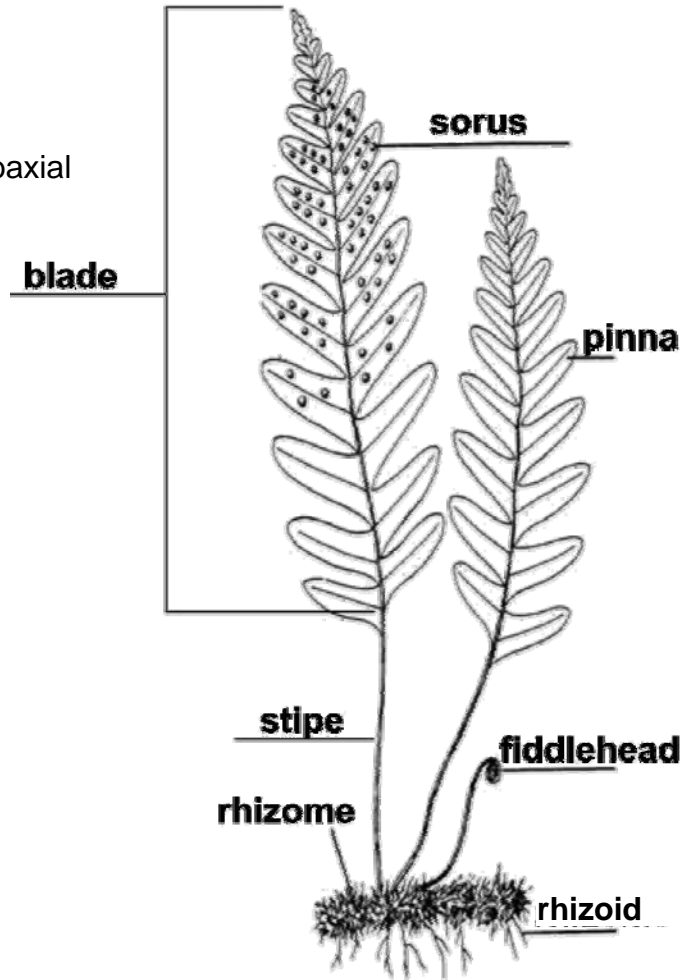
Identification and study of vascular plants first involves an observation of their morphological attributes. Communication about these characters is facilitated by the use of technical terms that describe the plants precisely. This handout is meant to resource for each individual to become acquainted with the general organization of members of the phylum Pteridophyta and the terms used to describe its features.

## Basic Organization

- frond
- blade
- stipe
- rhizome with adventitious roots
- sori: cluster of sporangia on the abaxial (bottom) surface or margins

## Blade dissection

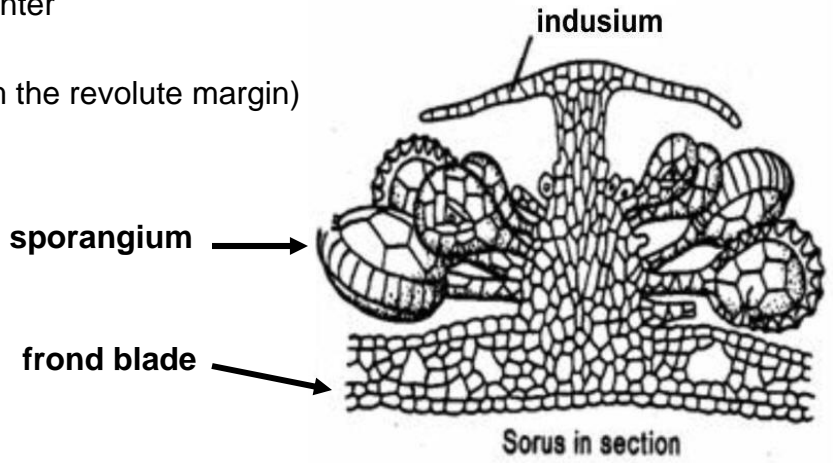
- fronds simple
- fronds simple-pinnatifid
- fronds 1-pinnately compound
  - rachis
  - pinnae (ultimate segments)
- fronds 2-pinnately compound
  - pinnae
  - pinnules (ultimate segments)
  - rachis
  - costae (secondary axis)
- fronds 3-pinnately compound
  - pinnae
  - pinnules
  - pinnulets (ultimate segments)
  - rachis,
  - costae
  - costule (tertiary axis)



Indusia: an enclosing membrane that covering the sorus of a fern

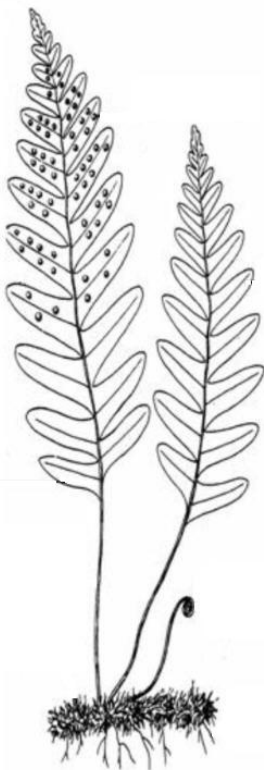
Indusia Position

- indusia attached on margin
- indusia attached underneath on all sides or on one side
- indusia attached in the center
- indusia absent
- false indusia (formed from the revolute margin)

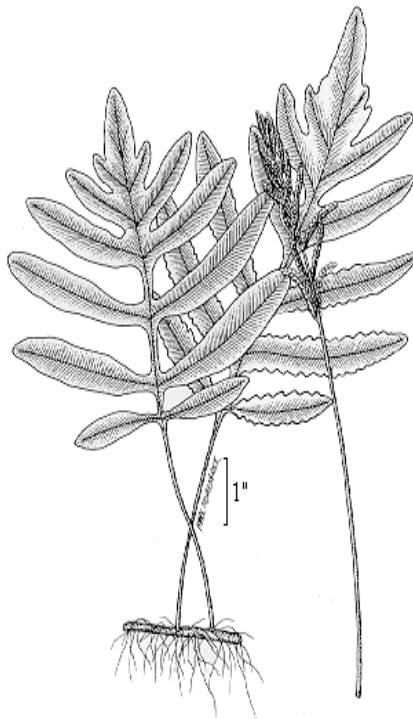


Frond types

- monomorphic (fronds of one-type)
- dimorphic (fronds of two types-sterile and fertile different)



monomorphic



dimorphic

