



**PRACTICE-4  
TO STUDY ABOUT DISEASES OF  
CUCURBITES**

Practice-4

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# Identification of Cucurbites Disease in field Condition



**Downymildew of Cucurbites**



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**Powdery mildew of Cucurbites**



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# Procedure of slide preparation

- Place a drop of fluid(Cotton blue or Lactophenol) in the center of the **slide**.
- Position sample(Thickness of 5mm) on liquid, using tweezers.
- At an angle, place one side of the cover slip against the **slide** making contact with outer edge of the liquid drop.
- Lower the cover slowly, avoiding air bubbles.
- Remove excess water with the paper towel.

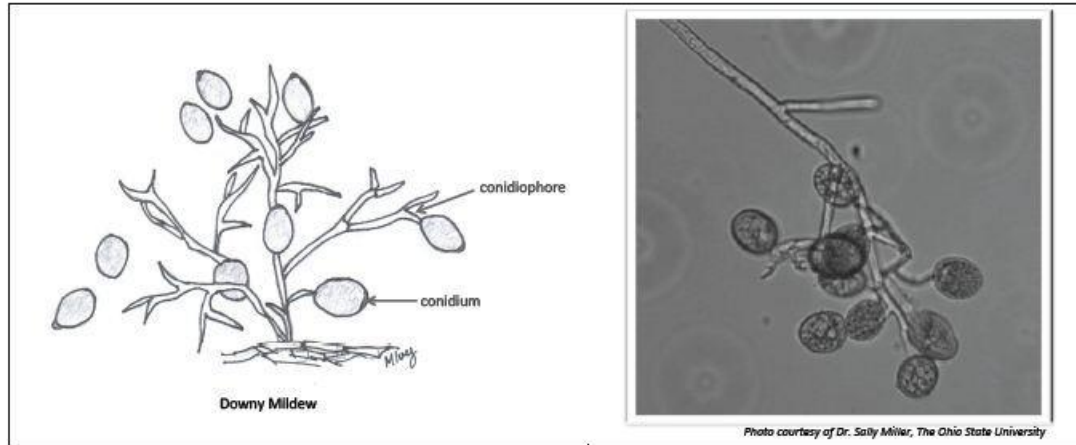


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# Identify the conidia

## Downy Mildew (cucumber) Pathogen



**Conidia of *Pseudoperonospora cubensis***





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# Identify characteristic of pathogen

Sporangiophores  $120\text{--}480 \times 5\text{--}10 \mu\text{m}$ , non-septate, branching dichotomously 3–5 times in upper third, terminating in a sharp tip on which the hyaline sporangia are borne,

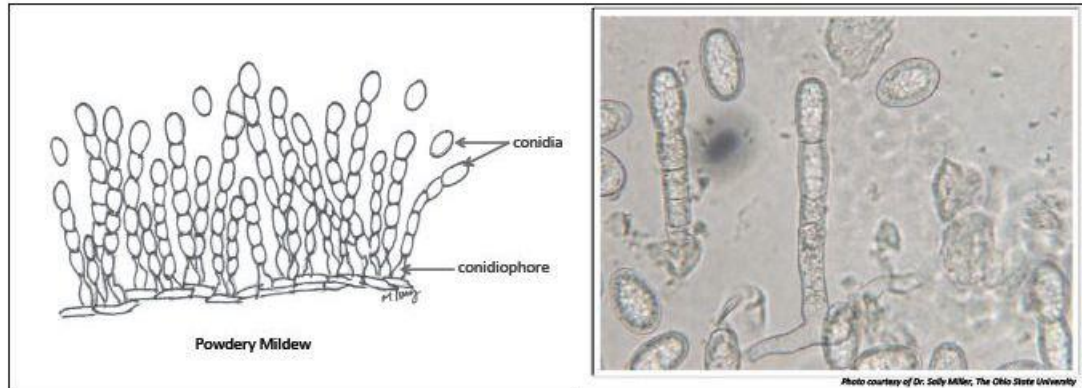


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# Identify the conidia

## Powdery Mildew Pathogen



Conidia of

***Erysiphe cichoracearum***



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# Identify characteristic of pathogen

- Mycelium branched, hyaline, superficial, septate, haustoria lobate.
- Conidia hyaline, unicellular, elliptical, borne singly or rarely in chains of two, conidiophores simple, erect with two or more basal cells.