

## CASE STUDY SHEET

**Investigators:**




\_\_\_\_\_

\_\_\_\_\_

**Date:**

\_\_\_\_\_

### CHAIN OF EVIDENCE TABLE

	<b>Completed</b> 	
<b>A. Collect and label forensic evidence.</b>		
1. Locate evidence (numbered envelopes) taken from suspects.		
2. Obtain a sample of evidence from <b>one</b> of the numbered envelopes and place in container labeled with the word “Suspect” and the envelope number.		
3. Locate evidence (envelope) from victim and place a piece of “Murder Victim” evidence in a <b>separate</b> container labeled “Murder Victim.”		
4. Proceed to work station with labeled evidence from suspect and victim.		
	<b>Suspect</b> 	<b>Victim</b> 
<b>B. Examine forensic evidence.</b>		
1. Water droplet placed on slide		
2. Evidence examined with dissecting microscope		
3. Small piece of clean tape obtained		
4. Speck-like chasmothecia on evidence secured on tape		
5. Tape with chasmothecia pressed over water drop on slide		
6. Checked for successful evidence transfer to tape		
7. Evidence examined with compound microscope		
<b>C. Identify forensic evidence.</b>		
1. Type of appendages (arms) on chasmothecia identified with key, using compound microscope		
2. Chasmothecia gently smashed to observe number of asci (sacs) inside.		
3. Information and drawings recorded on <b>Forensic Evidence Data Table</b> below.		

### Forensic Evidence Data Table

	Characteristics of Chasmothecia		Powdery Mildew Genus
	Type of Appendages	Number of asci (sacs) per chasmothecium (one or several)	
Murder Suspect (YOU) # _____			
Murder Victim			

### Forensic Conclusions: Innocent or Guilty?

- 1) Compare the forensic plant pathology observations you have recorded for the two different samples. Are the appendages observed on the two different samples the same or are they different? \_\_\_\_\_
  
- 2) 2) If the appendages you observed on the chasmothecia found on the plant material taken from your shoelaces (murder suspect) are **different** from appendages on the chasmothecia found on the plant material taken from the murder victim, what does this evidence suggest? \_\_\_\_\_
  
- 3) If the appendages on the chasmothecia found on the plant material taken from your shoelaces (murder suspect) are **the same** as the appendages on the chasmothecia found on the plant material taken from the murder victim what does this evidence suggest? \_\_\_\_\_
  
- 4) Do you need an alibi as to where you were when the murder took place? Explain