Fungal Sex Lab write-up

– 1 page of text, single spaced plus drawings, diagrams, tables, stats, references etc

1) **Intro /Purpose (2marks) –** In one or two sentence the students should summarize the purpose of this lab. Students should also provide some brief background information with a cited journal.

2) **Hyphae growth comparison –** table of measurements from lab (rough copy is fine).
   a) **Table 1. (1 mark)**

	Time (mins)					
	15	30	45	60	75	90
Strain						
fl A						
fla						

   b) **T-Test and Results (2 marks)**
   - state your statistical hypothesis, the type of test used, include an SPSS screenshot.
   – state the result of the t-test, whether you are accepting or rejecting the hypothesis and one or two sentences interpreting the biological meaning of the growth data.

3) **Life cycle using drawings from lab. (4 marks)** Can use online cycle as reference (Used in the example below).Include notes on observations made each week.

Week 1

Observations

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Week 2

Observations

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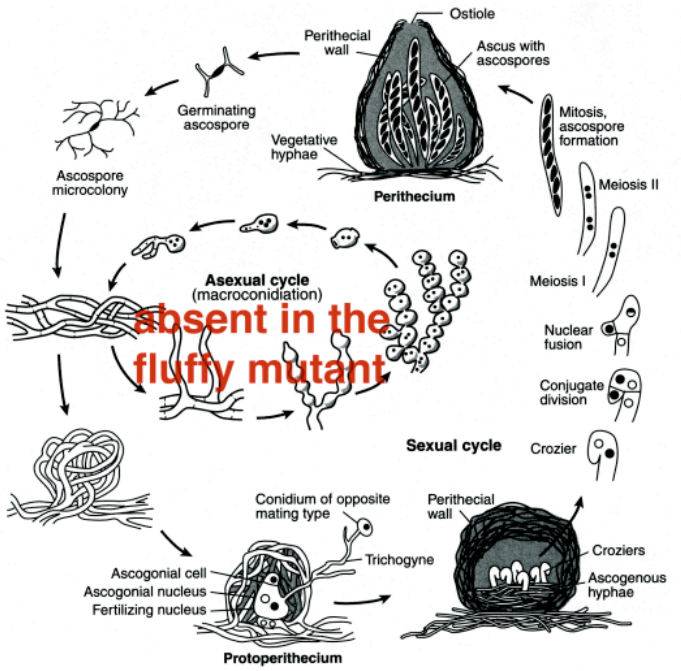
Life Cycle of the Ascomycete *Neurospora crassa*.

Note that the fluffy mutant does not have the asexual cycle (in which conidia spores are produced).



From: Rowland H. Davis (2000) Neurospora. Contributions of a model organism. Oxford University Press, New York, New York.

Week 4

Observations

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Week 3

Observations

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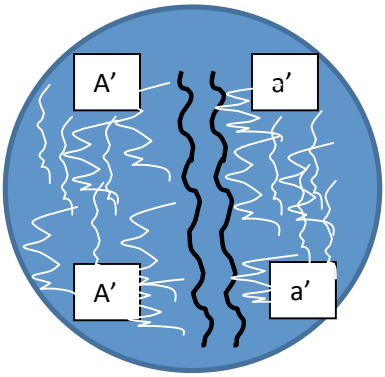
4) **Plate Diagram (1mark)**
- Include a drawing of the entire plate (arrangement of Fluffy A' and a' and hyphal growth pattern)
Ex.



5) **Discussion (4 marks)**
- Describe and explain the pattern of protoperithecium observed in the dish
- Briefly compare and contrast the fungal life cycle and the c-fern life cycle
- Suggest why these life-cycles might be important to the ecology and evolution of the organism
- Include a peer reviewed literature citation

6) **Bibliography (1 mark)**
– reference at least 2 peer reviewed literature sources

Total: 15 marks