

## **PLSC 731: Paper Review**

### **Tanksley et al – High density molecular linkage maps of the tomato and potato genomes** (reference pages in parentheses)

1. When and by whom were RFLP analyses proposed? (1141)
2. What three purposes do high density maps serve? (1141)
3. Describe the tomato and potato mapping populations. (1142)
4. Describe the probes used for mapping the tomato and potato genomes. Are they appropriate? (1142)
5. Describe the marker distribution on the tomato map relative to density across chromosomes and within a single chromosome. (1142-1155)
6. Was there a bias toward expressed or random probes observed? (1142-1155)
7. Where is the greatest density of markers observed? Explain how this might have occurred. (1145-1153)
8. What is linkage drag? Why is it important for practical applications of molecular markers? (1155)
9. Compare the potato molecular linkage map relative to the tomato map. (1156)
10. What is the value of breakpoint analysis in mapping? (1156)
11. What is the value of a high-density molecular map and how does this relate to the ultimate goal of molecular mapping? (1158)