

## **PLSC 731: Paper Review**

### **Buckler et al – Molecular Diversity, Structure and Domestication of Grasses**

Questions (reference pages in parentheses)

1. What suggests that similar genes were selected in grasses? (213)
2. What does synteny mean and how does this relate to the grasses? (213)
3. What evidence suggests that synteny does exist among grasses? (213)
4. Discuss an example of what a mutants of paralogs have modified the phenotype of a domesticated species. (214)
5. Provide evidence of shared genes controlling similar phenotypes in grasses. (214)
6. What trends exist with regards to diversity in plants? Is diversity reduced in coding or non-coding regions? What examples might you cite? (214-215)
7. Cite examples of changes in diversity levels in grasses. (215)
8. In general, in grasses how much of a reduction in diversity is normally seen when landraces and wild germplasm are compared.
9. What were the goals for domestication in grasses? (216)
10. How do we know the improvements in grasses was due to genetics? (216)
11. What factors might be affected the response to selection? (216)
12. Why should we study diversity? (216)