PLSC 731: Paper Review

Matsuoka et al – A single domestication for maize shown by multilocus microsatellite genotyping
Questions (reference pages in parentheses)

1. Discuss the theories about the origins of maize and the theories that support them. (6080)

2. Are the genotypes used in the study appropriate for this analysis? (6080)

3. Is the rationale for markers selection appropriate? (6080)

4. Is the phylogenetic approach appropriate for this analysis? If you don't understand the approach, what information would you need to decide that it is appropriate? (6080)

5. Is the dating approach appropriate for this analysis? If you don't understand the approach, what information would you need to decide that it is appropriate? (6081)

6. What is the purpose of the population structure analysis? (6082)

7. What evidence supports the conclusion regarding the number of domestication events? (6082)

8. What value is the PCA approach in this study? (6082)

9. How was the location of the domestication event determined? (6083)

10. Why is the date of the divergence considered an upper limit? (6083)

11. Describe the gene flow and early diversification data and how it may conflict with previous determination of the location of the domestication event? (6083)

12. What pattern of distribution of maize throughout the Americas is proposed? (6084)

13. How would you address the paradox questions raised in the "Perspective" section? (6084)