

PLSC 731: Paper Review

Ozkan et al – A reconsideration of the domestication geography of tetraploid wheats

Questions (reference pages in parentheses)

1. What evidence suggests the Fertile Crescent is the center of origin of Western agriculture? (1052)
2. What is the evolutionary phylogeny of domesticated tetraploid wheat? (1052)
3. What is present distribution of tetraploid wheat? (1053)
4. Describe the current molecular theory based on AFLP data regarding the domestication of tetraploid wheat. (1053)
5. How does the chloroplast DNA theory of domestication differ from the AFLP based theory? (1053)
6. Why was the present experiment performed? (1053)
7. Describe the set of genotypes analyzed here. How was the data analyzed? (1053-1057)
8. Describe the topology of the NJ tree and how this tree supports theories regarding the domestication of tetraploid wheat. (1057)
9. What information can be supplied by principal component analysis (PCA)? (1057-1058)
10. What results regarding the domestication of tetraploid wheat can be drawn from the PCA (PC here) analysis? (1058)
11. With regard to diversity, why might results from nuclear (AFLP) and chloroplast DNA analyses differ? (1058)
12. What molecular evolutionary mechanism might explain the difference between nuclear and chloroplast DNA results? (1059)