1. Dr. Hsiao showed a general linear (straight-line) relationship between total seasonal crop transpiration and biomass production. Can you give two reasons why such a proportional relationship is expected.

a. 

b. 

2. List three mechanisms by which the plant can adjust to overcome water stress.

a. 

b. 

c. 

3.a. What was the most surprising result of Dr. Shackel’s prune tree study that he presented in class on Monday, May 7? Explain.

3.b. What method does he recommend to monitor tree water stress during the irrigation season, and why?
4.a. Describe two different mechanisms by which severe water stress affects the harvest index (HI)

b. Can you give an example of a crop that increases its harvest index when subjected to mild water stress.

c. What is the name of the irrigation management practice that induces mild water stress?