

## Questions about seeds and seedlings

- 1) These leaves were collected from the same individual plant (*Malosma laurina*, laurel sumac). Which leaf was collected from the bottom of the plant, not the top? What is the adaptive advantage of “leaf folding” in this particular species? How would you test this hypothesis?
  
- 2) These leaves were collected from the same individual plant (*Heteromeles arbutifolia*, Hollywood). Which leaf was collected from the bottom of the plant, not the top? What is the adaptive advantage of an increased leaf angle on this particular species? How would you test this hypothesis?
  
- 3) These two branchlets with leaves come from neighboring plants, experiencing the same microclimate, soil and moisture environments. The species are very close relatives, within the same genus, *Ceanothus spinosus* (green bark Ceanothus) and *Ceanothus megacarpus* (big pod Ceanothus). Which leaf type is most drought-tolerant? Why do you suspect this might be the case? How would you test your hypothesis?
  
- 4) These two branchlets with leaves come from neighboring plants, experiencing the same microclimate, soil and moisture environments. The species are very close relatives, within the same genus, *Salvia mellifera* (black sage) and *Salvia leucophylla* (purple sage). Which leaf type is most drought-tolerant? Why do you suspect this might be the case? How would you test your hypothesis?
  
- 5) The terminal leaves on the *Malosma laurina* plant (laurel sumac) are reddish in color. What is the adaptive advantage? How would you test this hypothesis?