**Snap Bean Pathology**

1. You observe severe root rot in a bean field and with the help of a plant disease diagnostician you determine it is due primarily to *Aphanomyces euteiches*. Which of the statements below is most correct:
   1. The disease in the bean field was most likely exacerbated by a drought
   2. Instead of beans next season you could plant Peas
   3. You should not plant peas next year before testing to make sure that the pathogen present in that field is not virulent on peas
2. The survival of inoculum (the pathogen) in the soil is due to
   1. Presence of zoospores of the pathogen in the soil
   2. Presence of sporangia of the pathogen in the soil
   3. Occurrence of moderate winter temperatures
   4. Presence of oospores of the pathogen
   5. Presence of sclerotia of the pathogen
3. You observe a bean field with severe root rot even though you planted a variety of beans with resistance to *Pythium ultimum*. This might best be explained by
   1. Selection for strains of *Pythium ultimum* that are virulent in the presence of the resistant variety
   2. Heavy rain during the season
   3. The presence of other root rotting pathogens
   4. Both B and C are likely possible explanations
4. Two important fungal plant pathogens that cause bean root rots are:
   1. *Pythium ultimum* and *Phytophthora infestans*
   2. *Aphanomyces euteiches* and *Pythium myriotilum*
   3. Fusarium spp. And the rust pathogen *Albugo candida*
   4. *Rhizoctonia solani* and Fusarium spp.
   5. None of the above
5. Which cultural practices are most important for avoiding severe bean root rot?
   1. Watering to soil saturation immediately after planting so seeds germinate quickly
   2. Avoiding prolonged periods of saturated soil in the root zone
   3. Selecting bean varieties with resistance or tolerance to root rot
   4. Fungicide seed treatments
   5. B, C, and D are all good practices