**Questions for Sept 6 - due September 11 - chapters 8-9**

1. In class, we discussed the idea of gene-for-gene interactions, also referred to as vertical resistance. For the following plant and pathogen genotypes, determine if the interaction results in compatible or incompatible interactions, is HR (+) or (-), and if disease will occur or not. Please make sure to review the power points if needed to refresh any of the above ideas.
   1. Pathogen (R1,A1,a2,s20,At1) : host (R2, a1, A2, s20, Av1)
   2. Pathogen (A1, At1) : host (R2, a1, A2, s20, At1)
   3. Pathogen (AA2, Q2, A1, J7) : host (A2, Q1, J1, F1)
   4. Pathogen (w1, G1, A1) : host (w1, W3, W5, g1, G1, a1, A7)
2. One method pathogens use to bypass plant defenses is to produce toxins. Name the three types of toxins that these pathogens produce, and an example of each (for type, think specificity of source and target).