



G R O W
NEXT GEN

Quiz: Biological Nitrogen Fixation and Legumes

1. The air is composed of almost 80% molecular nitrogen (N_2), meaning that all terrestrial plants are surrounded by nitrogen. Why is this source of nitrogen unavailable to higher plants?
2. Nitrogen fixation is the process in which N_2 is converted into the useable compounds
 - a. ammonium (NH_4^+) and nitrate (NO_3^-)
 - b. nitric oxide (NO) and nitric acid (HNO_3)
 - c. amides and ureides
 - d. water vapor and nitric acid (HNO_3)
3. Rhizobia provide the host plant with fixed nitrogen, list three items or advantages that the host plant provides the rhizobia:
4. Explain the difference between *nod* proteins and nod factors:
5. In the space below, walkthrough the developmental steps root hair and rhizobia undergo during nodulation and infection: