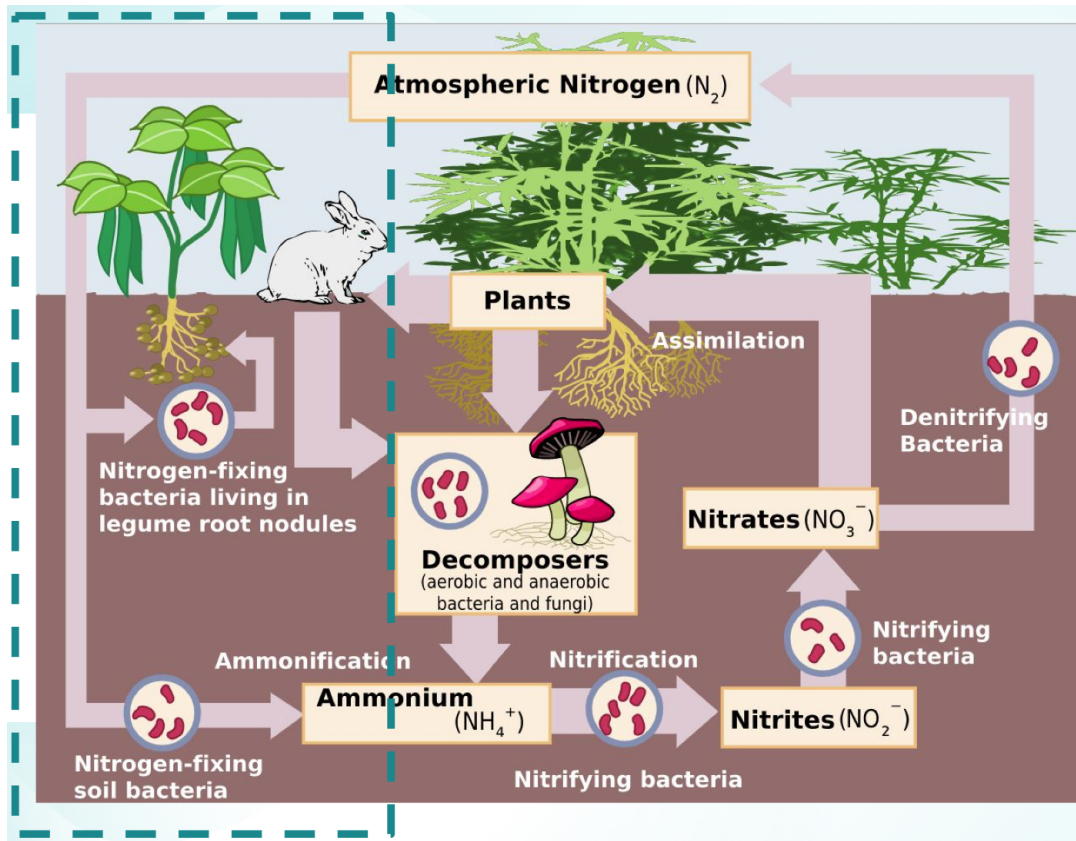


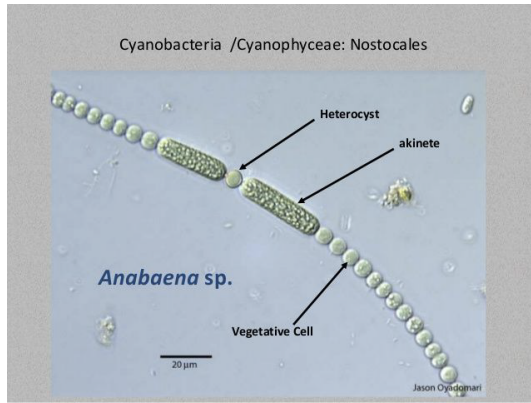
Natural nitrogen cycle



1. Biological fixation

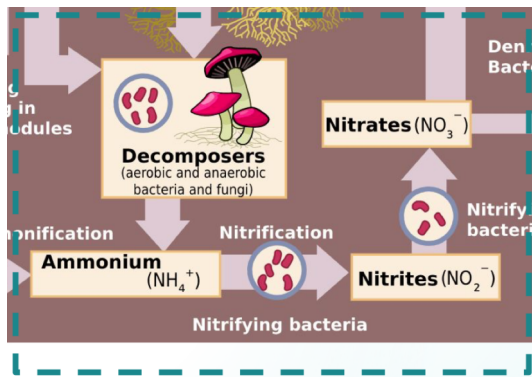


Actinomycetes



Cyanophyceae

2. Mineralization

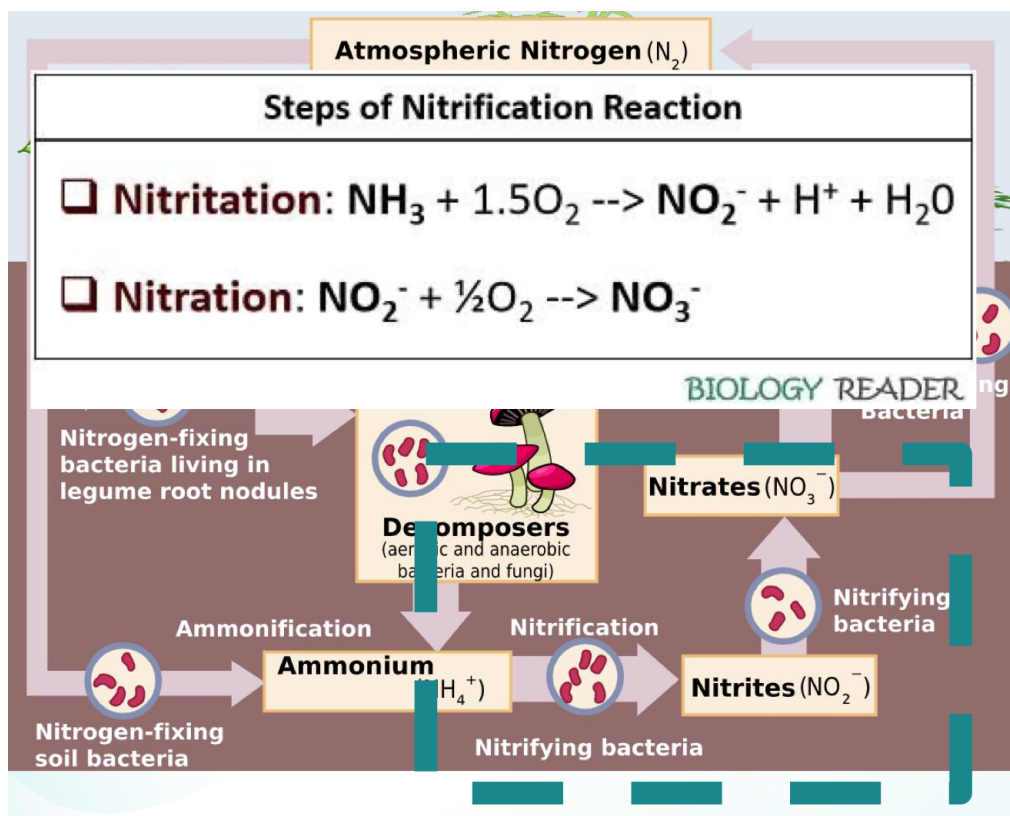


Aerobic and anaerobic conditions.

3. Assimilation by plants



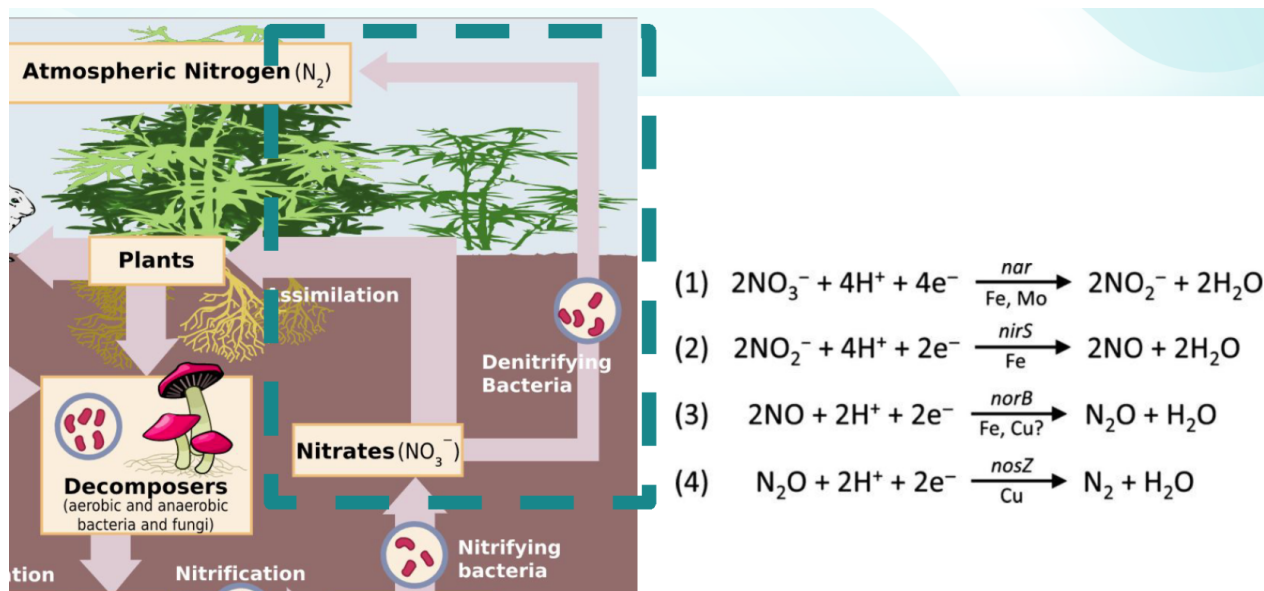
4. Nitrification



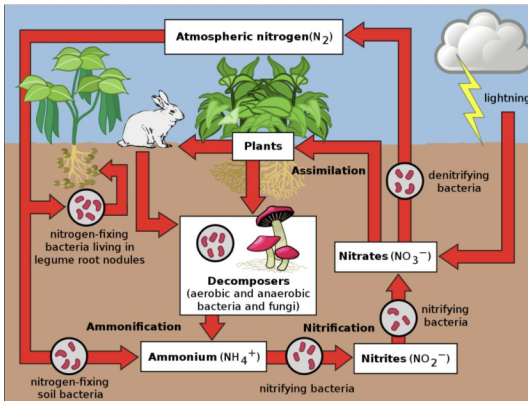
Takes place under aerobic conditions.

The activity of the microflora is optimal for pH 6.9 to 9 and temperatures between 20 and 36 °C.

5. Denitrification



6. The role of lightning



1. Energy from lightning breaks apart N_2 into N and O_2 into O.
2. They bond to form nitrogen oxides (NO_x).
3. They react with rain water to form nitrates.

7. QCM

- 1) What is the name of the process that oxidizes ammonium (NH_4^+) to produce nitrite (NO_2^-) and then forms nitrate (NO_3^-)?
 - Denitrification
 - Biological fixation
 - **Nitrification**
- 2) Thanks to their roots, plants are able to absorb atmospheric nitrogen (N_2).
 - True
 - **False**
- 3) What are the functions of nitrogen on the planet ?
 - Participate in photosynthesis
 - **Produce the nitrogenous bases of DNA**
 - Doing cellular respiration
 - Transporting Oxygen (O_2) molecules
 - **Making proteins**

8. Medias

[cf. EV14_NitrogenCycle_Video2.mp4]

[cf. EV14_NitrogenCycle_Video2.mp3]