Name _____

Unveiling the Mystery of Ammonification

Short Answer Key

1. Ammonification is the process by which decomposer organisms break down organic nitrogen compounds into ammonium in soil ecosystems, replenishing the pool of nitrogen available for plant uptake.
2. Examples of decomposer organisms involved in ammonification include bacteria (e.g., Bacillus) and fungi (e.g., Aspergillus). They decompose organic matter and release ammonium as a byproduct.
3. The availability of organic matter influences the rate of ammonification in soil ecosystems, with higher amounts of organic matter leading to increased rates of ammonification due to the greater abundance of substrate for decomposer organisms.
4. Ammonification provides plants with a readily available source of nitrogen (ammonium) for growth and development, contributing to their overall nutrition and productivity in terrestrial ecosystems.
5. Human activities such as composting and waste recycling contribute to ammonification in soil by providing additional organic matter for decomposer organisms to break down into ammonium.