



Maryland Department of Agriculture

Office of Resource Conservation
Nutrient Management Program

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Agriculture | Maryland's Leading Industry

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Nitrogen Mineralization: A Microbial Mediated Process (Course #2045_1 CEU)

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True (T) or False (F)

- _____ 1) Ammonium and nitrate are the dominant form of nitrogen taken up by plants.
- _____ 2) Ammonium and nitrate make up the majority of nitrogen in most soils.
- _____ 3) Soil microbes produce enzymes to break down organic nitrogen into simpler molecules.
- _____ 4) Most of the carbon consumed by bacteria goes into the productions and maintenance of their biomass.
- _____ 5) In a teaspoon of soil, there are more fungi cells than bacteria cells.
- _____ 6) If an organic nutrient source had a carbon to nitrogen ratio (C/N) of 18, one would anticipate immobilization.
- _____ 7) Nitrifying bacteria are aerobes.
- _____ 8) Given a choice, plants prefer the nitrate form of nitrogen over the ammonium form of nitrogen.
- _____ 9) The fates of ammonium in soil are many and varied.
- _____ 10) If there is a shortage of nitrogen in the soil microbes outcompete plants.

Email Tia.Randall-Murray1@maryland.gov or mail completed form to: **MDA Nutrient Management Program, 50 Truman Pkwy #201, Annapolis MD 21401**, no later than 5 business days after you view the program. Keep a copy for your records.

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