



Maryland Department of Agriculture

Office of Resource Conservation

Nutrient Management Program

University of Maryland Extension/Maryland Department of Agriculture

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Course # 051021UWW

Post-Program Quiz for Professional Fertilizer Applicator (PFA) Credits

Complete this quiz with the information you learn from the webinar presentations. You must answer all the items **correctly** and submit this form to MDA to earn **2 credits** for renewal of your PFA certification. Please print your answers clearly. You must include your printed name and PFA number as shown on your certificate, your signature, date completed and your contact information.

Mail completed forms to Maryland Department of Agriculture, Nutrient Management Program, 50 Harry S. Truman Parkway, Annapolis, MD 20401, no later than 3 business days after you view the program. Keep a copy for your records.

Part 1 – A Good Balance is so Important for Nutrients

Circle the best answer.

1. Which of the following statements about potassium are true?
 - a) Potassium improves tolerance to stress, such as heat and drought.
 - b) Potassium is a growth catalyst.
 - c) Potassium helps nitrogen do its job.
 - d) All of the above.

2. Which of the following can be used to lower soil pH?
 - a. Gypsum
 - b. Lime
 - c. Sulfur
 - d. Boron

3. True or False?

In very low pH soils, phosphorus will bind with iron, aluminum, and manganese to form insoluble compounds.

4. Where are you most likely to find micronutrient deficiencies?
 - a. In clay soils
 - b. In sandy soils
 - c. In soils with a high CEC
 - d. In soils with > 10% organic matter

5. Which soil testing methods work best for Maryland soils?
 - a. Melich and Bray
 - b. Melich and Barnes
 - c. Cornell and Ames
 - d. Cornell and Bray

6. Von Liebig's **Law of the Minimum** is illustrated by
- A bowl of spaghetti
 - A pyramid
 - A barrel
 - A snake

Part 2 – PFA Recertification

Circle the best answer.

- Where should questions about fertilizer renewals and requests for reprints of your cards be sent?
 - Timothy.Zang@maryland.gov
 - Nminfo.mda@maryland.gov
 - cfs@umd.edu
 - PestReg@maryland.gov
- What is the most common mistake applicators make in keeping records?
 - Not recording the date
 - Not recording the rate
 - Not writing in blue or black ink
 - Not recording the applicators name
- What is the latest date that P2O5 may be applied to turf?
 - December 1
 - November 15
 - November 30
 - P2O5 can't be applied to turf at all
- Athletic field turf may require more nitrogen than home lawns because
 - The turf needs to recover quickly
 - The turf gets a lot of wear
 - The field is used when the grass is dormant
 - All of the above
- Which of the following forms of nitrogen might you see on a fertilizer label
 - Ammoniacal nitrogen
 - Uraldahyde nitrogen
 - Water encapsulated nitrogen
 - Free nitrogen
- True or False?

Water soluble nitrogen can sometimes be so slowly available that it is considered a slow release source of nitrogen.

I certify that I have viewed this program and am entitled to receive continuing education credits toward renewal of my Professional Fertilizer Applicator certification. I understand that this form may not be copied or distributed to persons who did not watch the program, that online presentations for viewing may be withdrawn without notice, and that quizzes submitted after that time will not be accepted for credits.

Printed Name _____

Signature _____

Date _____

PFA number _____

Daytime Phone _____

Email _____