Maryland
Department of Agriculture

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Office of Resource Conservation

Nutrient Management Program

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Maryland Department of Agriculture/University of Maryland Extension

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Course # 3996

Post-Program Quiz for Nursery/Greenhouse/Controlled Environment Certified Farm Operator (CFO) 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 **1 credit** for renewal of your CFO certification. Please print your answers clearly. You must include your printed name and CFO 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.

Circle the best answer.

1. Distribution uniformity is defined as:
   a. Water lost from a plant by transpiration and media surface by evaporation
   b. Amount of water applied during a given time
   c. Consistency of distribution of water over a given area
   d. Ration of excess irrigation water that leaches out of the bottom of a pot to the total irrigation applied
2. T/F Determining your irrigation rate only by the amount of time water was applied is considered best management practices.

3. T/F For calculating irrigation rate you use the following formula: (average of all gauges/area of container opening)/time.

4. T/F Irrigation rates are affected by differences in elevation.

5. T/F You can measure distribution uniformity and irrigation rate at the same time.

6. What is the formula for measuring lower quarter distribution uniformity?
    a. Average of bottom 25% of all gauges/average of top 25% gauges
    b. Average of bottom 10% of gauges/ average of all gauges
    c. Average of all gauges
    d. Average of bottom 25% of gauges/ average of all gauges
7. T/F 60-80% distribution uniformity is considered an “acceptable” range for overhead irrigation.

8. Why is it important measure plants in the morning to calculate the evapotranspiration rate?
    a. So you don’t forget about it.
    b. Because plants are as wet as possible and haven’t started to actively transpire.
    c. It’s the point in the day when plants are as dry as possible.
    d. Because plants are actively transpiring.
9. T/F The formula for calculating Evapotranspiration is (wet weight – dry weight)/ circumference of container.

10. Why might a low leaching fraction be undesirable?
    a. Excess water is being leached from the container.
    b. Could cause a buildup of salts in the container.
    c. The plant might overheat.
    d. None of the above.
11. Which of the following are true about pH when considering water quality?
    a. pH of growing media affects nutrient availability
    b. pH of irrigation water typically does NOT impact media pH much.
    c. pH of irrigation water does impact the efficacy of sanitation practices and pesticides
    d. All of the above
12. Why is pH important when considering pesticide application?
    a. Many pesticides display a reduction in the half-life of the chemical as water pH increases.
    b. Many pesticides display a reduction in the half-life of the chemical as water pH decreases
    c. Many pesticides display an increase in the half-life of the chemical as water pH increases.
    d. none of the above.
13. The term alkalinity is often interchangeable with
    a. pH
    b. EC
    c. CEC
    d. Buffering capacity
14. T/F Low alkalinity in irrigation water can be an issue because there is essentially no buffering capacity in your irrigation water.
15. T/F A high pH will always be associated with high alkalinity.