



Rainfall timing on poultry litter application rate effects on phosphorus loss in surface runoff

January Self-Study Examination

1. Principal components of agricultural non-point pollution include all of the following EXCEPT

- a. sediments.
- b. bacteria.
- c. phosphorus.
- d. potassium.

2. Most poultry litter in Georgia is spread on

- a. peanut and cotton fields.
- b. hay and pasture fields.
- c. corn and wheat fields.
- d. open woodland.

3. Compared to other animal manure, poultry manure is relatively high in

- a. nitrogen.
- b. phosphorus.
- c. potassium.
- d. soluble salts.

4. A purpose of this research was to

- a. assess different soil types for their ability to assimilate phosphorus.
- b. develop equations that could be used to predict phosphorus loss.
- c. test different manure sources for their environmental impact.
- d. determine the impact that eroding soil has on phosphorus transport.

5. The highest poultry litter rate used in this study was

- a. 2 Mg ha⁻¹
- b. 13 Mg ha⁻¹
- c. 6.6 kg ha⁻¹
- d. 23.98 g kg⁻¹

6. A characteristic of this study is that it included

- a. three different simulated rainfall scenarios.
- b. four rates of poultry litter.
- c. two north Georgia locations.
- d. four different field slopes.

7. The statistical method used to differentiate treatment effects in this study was

- a. nearest neighbor dependence.
- b. linear regression.
- c. chi square.
- d. least squares difference.

8. Characteristics of sample analysis included

- a. using field moist samples.
- b. Kjeldahl distillation to determine N content.
- c. colorimetric determination of P.
- d. collecting soil samples at incremental depths.

9. A reason why cumulative P loss was not different between treatments with and without small, non-runoff producing rainfall events could be the

- a. opposing effects of leaching and mineralization.
- b. heavy residue cover on the research plots.
- c. very low soil test P values of the plots.
- d. lack of field slope which negated runoff effects.

10. Highest amounts of P loss occurred when the runoff rainfall event was

- a. just prior to manure application.
- b. immediately after manure application.
- c. 7 days after application.
- d. 1 month after application.

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