

FIELD SPRINKLER INTAKE RATE TEST

Date \_\_\_\_\_ Technician \_\_\_\_\_

Farm \_\_\_\_\_ SCD \_\_\_\_\_ County \_\_\_\_\_

Specific Location \_\_\_\_\_

Soil Series \_\_\_\_\_ Capability Unit \_\_\_\_\_ Mapping Symbol \_\_\_\_\_

Present Crop \_\_\_\_\_ Cover Conditions \_\_\_\_\_ Slope \_\_\_\_\_

Previous Crop History \_\_\_\_\_

Can No.	Time			Vol. of Water Caught (cc.)	Depth of Water Caught (Ins.)	Intake Rate (Ins./Hr.)
	Begin Test	End Test	Elapsed Time(Hrs)			
Average	XX	XX	XX	XX	XX	

Remarks \_\_\_\_\_

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## INSTRUCTIONS FOR PERFORMING FIELD SPRINKLER INTAKE RATE TEST

1. Select a field being irrigated in the normal manner by the farmer.
2. After irrigation has progressed long enough so that the soil has reached its basic intake rate, usually toward the end of the irrigation period, locate areas in the field where the water is absorbed in the same length of time as it takes for the sprinkler head to revolve and again spray the area. There should be no movement of water over the surface and more than the slightest ponding is generally unsatisfactory.
3. Place five each one-quart oil cans with the tops removed at the selected locations. On soils with little cover, dig the cans slightly into the ground to prevent overturning. Where heavy cover is present, mount the cans with heavy rubber bands on stakes so that they are just above the top of the cover.
4. Record the time, in hours and minutes, at which can is placed in position.
5. Not less than one hour later (a longer period is preferable) remove the cans and record the pertinent time for each can, in hours and minutes.
6. Measure, and record, the volume caught in cubic centimeters by each can. An inexpensive graduate for this purpose is an ordinary glass or plastic baby bottle calibrated in cubic centimeters.
7. Compute and record, the elapsed time for each can in hours to the nearest .01 hour. For example 1 hour 45 minutes = 1.75 hours.
8. Convert the volumes caught in cubic centimeters to depths caught in inches and record. An ordinary one quart oil can holds approximately 200 cc. per inch of depth so to make the conversion merely divide the volume caught in cc. by 200.
9. The intake rate of the soil is computed by dividing the depth of water caught in inches by the elapsed time in hours.
10. For each test be sure to record the following:
  - (a) Date and name of technician making test.
  - (b) Name of farmer, pertinent SCD, county and enough data on the specific location so that the approximate area tested could be relocated.
  - (c) Soils (Series Name, Land Capability Unit with subscripts, and National Coding Symbols.)
  - (d) Present crop and cover conditions and previous crop history.
  - (e) Approximate slope of land at test location.
11. Utilize the space under remarks to:
  - (a) Explain reason for omission of any data listed under item 10 above.
  - (b) Give a more detailed explanation on any item.
  - (c) Explain any unusual conditions observed at the site or occurring during performance of the test run.
  - (d) Indicate age, stand and status of growth of present crop.