

# Growing Sweet Potatoes

By H. R. NISWONGER, *Extension Horticulturist*

## INSTRUCTIONS FOR 4-H CLUB MEMBERS

NORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND ENGINEERING  
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RALEIGH

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1. Q. HOW LARGE ACREAGE SHOULD BE GROWN?
  - A. One-fourth acre. One-fourth acre measures approximately 210 feet by 52 feet.
2. Q. WHAT VARIETIES MAY BE GROWN?
  - A. Porto Rico or Nancy Hall. The N. C. No. 1 and the Louisiana strains of Porto Rico have proved superior to the common strains.
3. Q. WHAT KIND OF SEED OR SLIPS SHOULD BE USED?
  - A. Buy certified seed or certified slips. Or secure good seed stock selected at digging time from areas where diseases are not present. Medium sized potatoes ranging from 1½ to 3 inches in diameter are recommended for bedding.
4. Q. HOW MANY SLIPS WILL IT TAKE TO SET ONE-FOURTH ACRE?
  - A. When set 12 inches apart in rows it will require approximately 3,100 slips.
5. Q. HOW MUCH SEED SHOULD BE BEDDED TO GET 3,100 SLIPS?
  - A. One bushel of seed will give approximately enough slips if several pullings are made.
6. Q. HOW SHOULD THE SEED BE TREATED BEFORE BEDDING?
  - A. Submerge the seed for 15 minutes in a solution consisting of 1 ounce of mercuric chloride to 8 ounces of water, or dip for one minute in New Improved Semesan Bel solution (1 pound to 7½ gallons). Use wood or crockery container for solution. Spread out seed to dry before bedding.

7. Q. HOW SHOULD THE SEED BE BEDDED?

A. Bed in sand, sawdust or light sandy soil obtained from areas where sweet potatoes have never been grown. If stable manure is used for furnishing heat it should be placed three inches below potatoes—never above. Space seed potatoes around  $\frac{3}{4}$  inches apart, and cover three inches deep. The plant bed should be kept moist but not water logged.

8. Q. WHAT KIND OF LAND IS BEST SUITED FOR SWEET POTATOES?

A. Sands or sandy loam soils. Soils of this type produce potatoes of the finest quality and are less affected by diseases in storage, especially surface rot. Heavy soils, dark soils and rich garden soils produce potatoes of poor quality.

9. Q. WHAT KIND OF FERTILIZER SHOULD BE USED AND HOW MUCH TO USE ON ONE-FOURTH ACRE?

A. Use a 3-8-8 (N-P-K) fertilizer. This mixture contains 3 per cent nitrogen, 8 per cent phosphoric acid and 8 per cent potash. On sandy soil use 250 pounds on the  $\frac{1}{4}$  acre and on sandy loam soil use 150 pounds. Stable manure should not be used as a fertilizer in the ridge.

10. Q. HOW SHOULD THE FERTILIZER BE USED?

A. The fertilizer should be applied in the drill and thoroughly mixed with the soil a week or more before setting plants.

11. Q. HOW SHOULD THE PLANTS OR SLIPS BE SET?

A. The plants should be spaced 12 inches apart in rows  $3\frac{1}{2}$  feet apart. Plant on a ridge. Better stands are secured by planting on fresh ridges, unless plants are watered.

12. Q. WHEN AND HOW SHOULD SWEET POTATOES BE HARVESTED?

A. Sweet potatoes should be harvested before vines are killed by frost in order to reduce losses from soft rots. They should be harvested and put in slatted crates in such a way to prevent bruising. Grading should be done in the field at harvest time.

13. Q. SHOULD SWEET POTATOES BE CURED BEFORE STORING?

A. Yes. By placing the crates in a sweet potato curing house or tobacco barn or a brick brooder house which can be heated. The temperature for curing should be 80 to 85 degrees. When sprouts begin to appear the potatoes are cured. This takes about two weeks.

14. Q. HOW SHOULD THE POTATOES BE STORED?

A. They should be stored in crates in the same place they were cured. The potatoes should be kept at a temperature of 50° F. and should never be allowed to go below 40° F.

15. Q. HOW MAY SWEET POTATOES BE KEPT WHEN NO CURING HOUSE IS AVAILABLE?

A. They may be stored in banks. Disease in bank storage may be prevented by coating the potatoes heavily with hydrated lime dust immediately after harvest.

Records—Use the Garden Record Book.

This project is completed when the 4-H Club member, as far as possible, has followed the above recommendations in growing sweet potatoes and when the record book has been filled out and turned in either to the farm or home agent.

Reference—APPROVED PRACTICES FOR GROWING SWEET POTATOES. N. C. Extension Circular No. 250.