



Peanut Manual

FOR 4-H
CLUB MEMBERS

DEC.-JAN.

Get ready
Select land
Take soil samples

MARCH

Measure 1 acre
Get best variety
Treat your seed

APRIL

Prepare seedbed
Use close spacing
Cultivate early and often
Control rootworms

JULY

Control leafspot
Control stemrot
Apply landplaster
(July 1-10)

OCTOBER

Dig when mature
Stack properly
Harvest separately
Grade, sell separately

4-H PEANUT MANUAL

Peanuts are North Carolina's third most important cash crop. They are grown commercially in only 18 Coastal Plain counties. You can increase the value of your peanut crop through proper soil management, adequate fertilization, controlling diseases and insects, and using the latest approved practices.

The following pages give you the latest recommendations for all peanut production practices by seasons. Follow these as closely as you can.



Select a good soil and measure off the right amount.

1. Selecting and Measuring Land

Pick a well drained soil that your father has found suitable for peanuts. If possible, select a field that has been in cotton, corn or small grain the past year and received high potash fertilization. Do not use soils that had tobacco, soybeans, or lespedeza on them the previous year since these crops build up the peanut nematode population.

The following table gives you an easy way to measure one acre. For example, with 3 ft. rows and with the field 24 rows wide the correct length to make the rows for a one-acre plot is 605 feet.

Row Width in Feet	Length to Make Rows if Field is:			
	12 rows wide	24 rows wide	36 rows wide	48 rows wide
2	1815 ft.	908 ft.	605 ft.	454 ft.
2½	1452 ft.	728 ft.	484 ft.	363 ft.
3	1210 ft.	605 ft.	403 ft.	303 ft.



Have your soil tested to see what plant nutrients you need.

2. Soil Test

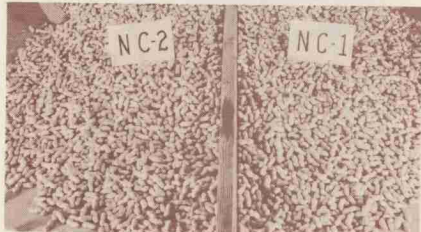
A soil test made by the Soil Testing Division, N. C. Department of Agriculture, is the only way you can be certain that your soil has enough of the plant nutrients to produce a good crop. Peanuts need a lot of calcium and potash.



Use soil test recommendations and apply fertilizer evenly.

3. Fertilization

Follow the recommendations of the soil test. If the soil is low in potash, broadcast and turn under 100-150 pounds of muriate of potash. This should be done in the early winter months. It is preferred, however, to grow peanuts on soils that test medium in potash. The soil pH should test between 5.8-6.2 for top production.



Apply landplaster uniformly in bands 12-16 inches wide.

4. Varieties

Several varieties of peanuts are available to you. Some perform better in certain areas than in others. You should select an outstanding variety that has performed well in your community. Your club leader has the latest information on how the varieties perform in your county. Varieties such as NC-2, NC-4x, and Va-56R (runner type) are exceptionally good varieties in their adopted areas.

Be sure to plant enough seed for an adequate stand. Try to space the seed about 4 inches apart in the rows. For 36-inch rows you will need about 70 lbs. of seed per acre, for 30-inch rows use 85 lbs. of seed, and for 24-inch rows use 105 lbs. of seed. Plant early, between April 25 and May 10 if possible.

5. Seed Treatment

If you did not buy seed that were already treated, treat with a recommended chemical. To do this, fill a tight drum one-half full of peanuts, put in the right amount of chemical, and rotate the drum for 20 complete revolutions. An easy way is to roll the drum over the ground until it has turned over 20 times.



Keep the grass and weeds down—cultivate early and often.

6. Cultivation

Cultivate early—kill grass and weeds as they come up. Use either a weeder or the rotary hoe. The first cultivation should be made just before the peanuts come up. Then cultivate every four or five days until the plants begin to bloom. Do not ridge the rows enough to cover the lower leaves, as this will increase damage by Southern stem rot.

7. Diseases

Peanut leafspot and Southern stem rot are the most serious peanut diseases in North Carolina. However, you can keep these diseases under control with good management practices. The following recommendations will help you reduce losses due to diseases:

LEAFSPOT: You can identify this disease by the small, round, dark-brown spots on the leaflets. It appears in late June on the oldest plant leaves.

It can be controlled by dusting with 20 pounds of 325-mesh sulfur plus 4 per cent copper, or by using the sulfur alone. Make the first application July 1-10, and repeat every two weeks for a total of three applications. If the dust gets washed off within 24 hours after applying, redust as soon as possible.

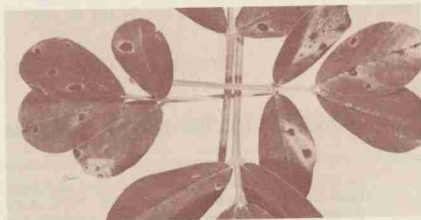
SOUTHERN STEM ROT: You can recognize this disease by the white mold (fungus) at the base of the stem and by the small dark bodies in the mold that look like mustard seed.

Flat cultivation in which none of the lower leaves are covered with soil is an excellent way to reduce losses from Southern stem rot. A good rotation program with such crops as corn, cotton and small grains is also effective in reducing losses from this disease. Fifteen pounds of Terrachlor mixed with 385 lbs. of land plaster and applied the first week in July has aided materially in control of stem rot.

NEMATODES: The peanut root knot nematode is a small worm-like animal so small you can barely see it with the naked eye. It causes small knots or galls to form on the roots causing a much branched, matted root system.

The peanut root knot nematode is best controlled by following a good rotation that does not include susceptible crops such as tobacco, soybeans or lespedeza.

The sting nematode has been found affecting peanuts in Bertie, Chowan, Northampton, Hertford and Pitt Counties. It appears that heavily infested fields will have to be fumigated. See your county agent for instructions if needed.



Peanut leafspot (above) and other diseases can cut yields.



Southern corn rootworm caused the damage shown on right.

8. Insects

Thrips and Southern corn rootworm are the most serious insect pests of peanuts. Here's how you can identify and control these insects to get higher yields and better quality peanuts.

SOUTHERN CORN ROOTWORM: This worm is cream colored with a dark head and tail, and may be up to one-half inch long. It tunnels into the pegs and pods causing considerable damage.

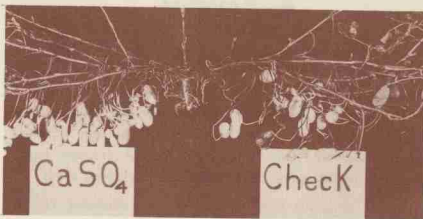
Use a recommended insecticide to control the Southern corn rootworm. For example, Aldrin at the rate of 2 lbs. per acre (40 lbs. of a 5% formulation) gives good control of rootworms. If used just ahead of the first cultivation, good thrip control is also obtained. Cultivate immediately after applying the recommended insecticide.

1. ALDRIN—2 lbs. per acre (40 lbs. of 5% dust)
2. TOXAPHENE—20 lbs. per acre (100 lbs. of 20% dust)

THRIPS: This insect is a minute, slender, agile bug, rarely as long as 1/8 inch. It feeds primarily on flowers and young, unfolded leaves.

Thrips can be controlled by granular formulations of aldrin if applied for rootworms just before the first cultivation. If no rootworm control is used, 3/4 lb. actual DDT per acre (15 lbs. of 5% dust) will control them.

Leafhoppers may be controlled by applying one lb. of actual DDT or Methoxychlor per acre at about the same time leafspot applications are made. Peanut hay which has been treated with DDT should not be fed to dairy



Landplaster made the difference above.

animals or animals being fed for slaughter. Other insects such as fall armyworm and corn earworms may cause trouble in the latter part of the season. Use 1-1½ lbs. of actual DDT or 2-2½ lbs. actual toxaphene per acre to control these insects. Begin treatment when these worms are first noticed.

9. Landplaster

Peanut soils need large amounts of calcium for top yields. To insure adequate amounts of calcium apply landplaster when the plants first begin to bloom at the following rates: (1) On average peanut soils use 400-600 lbs. per acre, (2) on soils that test 2% or more in organic matter apply 600-800 lbs. per acre, (3) on light sandy soils apply 300-400 lbs. per acre at the early bloom stage. Then follow with a second application of 300-400 lbs. per acre three to four weeks later. On all soil types where heavy rains wash or leach the landplaster from the pod zone make a second application of landplaster as soon as possible.

10. Harvesting

Harvest your peanuts when the greatest number of pegs are mature. This should be about five to five and one-half months after planting. Pods are mature when the white inside the hull begins to show brown flecks. Dig up some plants at harvest time and count the number of mature pods to tell when the largest number are mature.

After digging, let the vines wilt before stacking. Stack the vines on poles having two cross bars 12 to 18 inches above the ground.

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