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Peanuts

THE PEANUT is an important farm crop in Southeast Alabama. Enough peanuts for home use or for fattening hogs can be grown on every farm in Alabama. This leaflet is designed to give some suggestions concerning the production of peanuts.

Growing Peanuts

Soils.—Peanuts will grow on practically every kind of soil in Alabama. Large yields have been obtained in experiments on the red valley soils of the Tennessee Valley, on the sandy soils of Sand Mountain, on the sticky, reddish post oak soils of the Black Belt, and on the grey sandy soils of South Alabama. These yields show that peanuts grow well on most of the soils in the State. Although rich land will grow more peanuts than poor land, this crop will make a fair yield on land that is too poor for most other crops. For market this crop should be grown on light sandy soils. Dark colored soils discolor the hulls, thereby reducing their commercial value. For home use or for fattening hogs, peanuts may be grown on almost any soil.

Fertilizers.—Results of fertilizer experiments in various parts of Alabama showed that phosphate and lime usually increased the yields of peanuts. Although the yields have been increased to some extent by fertilizers, it is generally more profitable to fertilize peanuts indirectly by growing them in a cropping system with other fertilized crops. Probably the best place to grow peanuts is on land that was well fertilized with phosphate for the previous crop. On poor soils where no fertilizer was used for the previous crop, an application of 400 pounds of basic slag per acre should be used. This fertilizer contains both phosphate and lime. When fertilizer is used it should be applied at or before the time of planting.

Planting.—Peanuts should be planted on well-prepared soil. Good preparation reduces the cost of cultivation. For largest yields planting should be done from April 1 to May 15 in South Alabama and from May 1 to May 25 in North Alabama. Spanish peanuts have matured seed at Auburn when planted as late as July 1, but early planting is advisable.

Shelled seed at the rate of 50 to 75 pounds per acre, for a spacing of 3 to 4 inches in 2-foot rows, should be planted. For a spacing of 6 to 8 inches in 3-foot rows, 25 to 40 pounds should

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be planted. Seed may be shelled at any time before planting if kept dry and protected from rats and mice. Unshelled Spanish peanuts may be planted, but shelled seed germinate quicker and give a more uniform stand; unshelled runner peanuts should not be planted.

Thick spacing is essential for the production of large yields. Thick spacing without fertilizer has made larger yields than thin spacing with a complete fertilizer. Spanish peanuts should be spaced as close as is possible, and still permit hoeing, in rows as close as can be conveniently cultivated. Plants of the Spanish type are erect and produce the nuts in a cluster around the tap root; therefore, thick spacing in narrow rows gives the largest yields.

The runner types should be spaced 8 to 12 inches apart in 3-foot rows. Plants of this type produce runners and bear the nuts along these runners. For this reason the runners require wider spacing than do the Spanish varieties.

In Southeast Alabama it is a common practice to grow corn and runner peanuts in alternate rows from 3 to $3\frac{1}{2}$ feet apart. The corn is usually harvested and the peanuts either harvested or hogged-off. This method of planting could be used to advantage in other parts of the State to produce peanuts for home use or for hog feed; in North Alabama where runner peanuts do not mature, either Valencia or the Spanish varieties could be used. This system of planting, as shown by experiments at some of the sub-experiment stations, has given a fair yield of corn and 30 to 40 bushels of peanuts per acre. Although the peanuts reduced the yield of corn to some extent, the total amount of feed produced with this system was considerably larger than from corn alone.

Cultivation.—Peanuts should be cultivated frequently from the time the plants are up until they have almost covered the ground. Frequent cultivation while the plants are small will reduce hoeing—one of the most expensive operations in peanut production. When the plants begin to form pegs, cultivation should be done with an implement that works the soil toward the plants. After the pods begin to form they should not be disturbed; a narrow sweep should be used to keep the middles clean. When peanuts and corn are planted in alternate rows the two crops may be cultivated with the same implements.

Inoculation.—Since Alabama soils are naturally inoculated for peanuts, artificial inoculation is unnecessary.

Harvesting

When to Harvest.—Peanuts should be harvested when most of the pods are filled and when the inside of the hulls turn dark and show the veins. If harvested too early there will be a large percentage of pops, while if harvested too late many nuts of

the Spanish type will sprout and nuts of the runner types will be pulled off and left in the ground. At the proper stage for digging some of the bottom nuts of Spanish peanuts may have sprouted while some of those near the top of the cluster will be unfilled.

Methods of Harvesting.—Peanuts should be plowed up while the plants are dry. Shake the soil from the roots and allow the plants to lie on the ground until the leaves have wilted. When the leaves are wilted (two or three hours after digging), stack around poles for curing. Stack poles about 3 inches in diameter and 9 feet long should be used. These should be set about 2 feet in the ground with two cross pieces about 3 feet long nailed to them about 18 inches above the ground to support the vines and to provide ventilation. Stack the plants around the pole with the roots toward the center. Keep the center of the stack higher than the edges. Bring the top of the stack up to a peak and cap with grass or straw to shed rain water. Before picking, leave the peanuts in the stack until they are well cured. Thorough curing usually requires from 4 to 6 weeks.

Picking.—Small lots of peanuts for home use may be picked by hand, though for large lots grown for market a mechanical picker should be used. Mechanical pickers remove the pods from the vines and remove a large portion of the dirt from the pods and the hay. Peanuts should not be planted on a commercial scale unless a picker is available.

Do not pick sound peanuts and damaged ones together. Damaged peanuts lower the price of the good ones if mixed with them. Damaged peanuts should be fed on the farm rather than marketed.

Peanut vines make valuable hay if handled properly. The hay should be either baled or stored loose in a dry place as soon after it leaves the picker as possible. Feed peanut hay either in racks or in wire-bottom mangers to allow the dirt to sift out.

Storage.—After picking, the peanuts should be either sacked or stored in bulk in a dry place in which there is free circulation of air. Protect stored peanuts, as far as possible, from rats and mice. Do not store in sufficient bulk to cause heating. If the peanuts are spread, rather than piled in one large stack, there is less damage from heating.

Hogging-Off.—Peanuts are the cheapest fattening feed for hogs that can be grown in Alabama. An acre of peanuts that will produce 1,000 pounds of nuts will make from 325 to 350 pounds of pork if grazed in the fall, or from 275 to 325 pounds if grazed in December, January, and February. An acreage of peanuts sufficient to fatten enough hogs for the farm meat supply might be profitably grown on most farms in the State.

Hogs should be turned on when peanuts are in the proper stage for harvesting—about September 15 for runner peanuts

planted the first half of April. Spanish peanuts should be ready for grazing two or three weeks earlier than runners. Spanish peanuts sprout and deteriorate if left in the ground until late in the fall. In North Alabama where the Spanish varieties are grown for hogs, they should be harvested and fed either from storage or from the stack.

It is generally known that hogs fattened on peanuts make softer pork and lard than those fattened on corn. This is not objectionable where hogs are slaughtered for home use.

Varieties

The Spanish varieties, White Spanish and Improved Spanish, are the ones principally grown for market in Alabama. Red Spanish, or Georgia Red, resembles Valencia and is grown to some extent. Improved Spanish resembles the regular Spanish variety, but has larger pods and more vigorous plants. The Spanish varieties are the highest yielding varieties on most soils of Alabama.

Valencia and Tennessee Red are erect, bunch varieties similar to Spanish, but have larger pods. These varieties produce long, medium-sized pods with from one to four peas per pod. They are good varieties for home use, but do not produce as large yields as Spanish.

North Carolina or Alabama runner is a running variety which is grown extensively for hogs. Nuts of this variety do not sprout in the fall and will keep in the ground all winter.

The large-podded varieties, such as Jumbo and Virginia, do not fill well and are not grown extensively in Alabama.

Peanuts for Soil Improvement

The peanut is a legume and, like other plants of this group, gathers nitrogen from the air. Where hogging-off is practical, the vines are left on the land and have considerable value in soil improvement. On the other hand, where peanuts are harvested, practically the entire plant is removed with the result that the soil is made poorer rather than improved by this crop.

Peanuts for Oil

There is considerable interest in the production of vegetable oils for industrial purposes. The peanut is an important source of oil. Dry-shelled Spanish peanuts contain approximately 52 per cent oil. The running varieties contain considerably less oil than Spanish; Virginia runners contain approximately 42 per cent. One ton of Spanish peanuts in the hull will yield approximately 600 pounds of hulls and trash, 630 pounds of oil, and 770 pounds of peanut meal. One ton of Virginia peanuts will yield approximately 800 pounds of hulls and trash, 430 pounds of oil, and 770 pounds of cake. It may be seen from these data that the Spanish type is the most valuable for oil production.