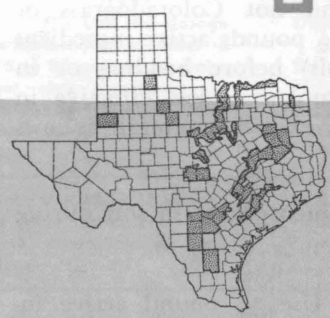


FACT SHEET

Revised 20,000-4-10-70
Revised - Ben Spears

L-777



Keys To Profitable Peanut Production

1. **CROP ROTATION.** This practice increases fertilizer efficiency, if previous crop is fertilized at optimum level, and helps control soil-borne diseases. In fields where root knot nematodes cause economic loss, rotate with crops such as pearl millet or grain sorghum. Avoid sorghum and corn rotations where the root lesion nematode is the major nematode problem.

2. **COVER CROP.** Plant a cover crop of small grain or small grain and winter legume each year after peanut harvest. This will help control wind and water erosion and also will help maintain the soil's organic content.

3. **FERTILIZER.** Use a soil test recommendation and apply broadcast before final land preparation. Peanuts require a high level of calcium in the pegging zone; therefore, lime acid soils to pH 6.3-6.6. For more information about zinc and iron, obtain copies of L-721 and L-723.

4. **LAND PREPARATION.** With moldboard plow, bury surface trash deep enough to avoid bringing it to the surface by later land preparation and cultivation.

5. **PLANT PARASITIC NEMATODE CONTROL.** Apply chemical nematicides in the row 2 to 3 weeks before planting in areas where nematode damage is a limiting production factor. Chlorine and bromine-containing materials may be used.

- Chlorine-containing nematicides:
Vidden D, Shell DD, Telone
- Bromine-containing nematicides:
Nemagon, Fumazone, Oxy BBC 12 and 12E

Bromine-containing materials may be applied at planting when care is given to proper chemical placement. Place the chemical under the seed zone, 8 to 10 inches below the finished bed surface. Do not exceed 8.6 pounds of active material on 12,400 linear feet of row.

Caution: Refer to label for restrictions on use. If bromine-containing materials are used, do not feed, sell or introduce into commerce hay or hulls taken from treated soil. Forage crops

grown on treated soil should not be used as feed for dairy animals or animals being finished for slaughter until 2 years after row treatment or 3 years after overall treatments.

6. **SEED.** Plant Starr, Dixie Spanish or Spantex variety treated with Arasan. Certified seed insures varietal purity. Use medium or larger size seed obtained from a reputable seedsman. Plant a minimum of 45 pounds on nonirrigated land and a minimum of 80 pounds with ideal irrigation.

7. **PLANTING.** Plant carefully to prevent seed damage. For nonirrigated production, plant on a slightly raised bed. Under irrigation, plant on 4-inch high beds. With chemical weed control, try planting some acreage as soon as soil temperature 3 inches deep reaches 75 degrees F., taken at 7 a.m.

8. **CHEMICAL CONTROL OF SOUTHERN BLIGHT.** Applying 10 pounds active PCNB per acre in the row (10 to 12-inch band) at planting time supplements cultural control methods and gives a favorable economic return when the following conditions exist:

Southern blight is a potential problem. Potential production exceeds 1,800 pounds per acre.

Sufficient rainfall occurs or irrigation is available to prevent drouth stress.

If the root lesion nematode is not a problem. Treatment with PCNB may increase root-lesion nematode populations and susequent damage from this pest.

Do not feed treated hay or hulls to livestock.

Caution: Use fungicides at recommended rates and apply as recommended. Refer to label for restrictions on use.

9. WEED CONTROL

Mechanical:

• Cultivate to avoid throwing soil to the plants. Use rotary hoe or other rotary devices with knives and sweeps carefully adjusted.

Chemical:

• Diphenamid (Enide or Dymid). Use 3 to 4 pounds active ingredient per acre (broadcast basis). Heavier soils require 4 pounds. Apply in 12 to 14-inch bands at planting time. Results are best when surface moisture is good. Diphenamid is less effective in extremely dry soil or if the application is followed by excessive rainfall. Shallow mixing may help in dry soils.

Do not:

—graze treated areas or feed treated plants to livestock.

—plant treated areas to crops other than those on the label.

Small grain cover crops may be injured.

• Trifluralin (Treflan). Use 1/2-pound active ingredient per acre (broadcast basis). Apply broadcast 3 weeks or less before bedding or in a band at planting. Thoroughly mix or incorporate in soil during application, deep enough to control weeds but no deeper than planting depth if possible. Safety margin is less than with Benefin on deep sands.

Do not use with any varieties except Spanish types.

• Diphenamid plus Dinoseb (Enide or Dymid plus Premerge or Chemox PE) or (Enide plus Dinitro E.C.) Use 3 to 4 pounds diphenamid plus 1 1/2 pounds Dinoseb active ingredient per acre (broadcast basis). This treatment may be considered where an earlier preemergence application has failed to control crabgrass and broad-leaved weeds. Apply in 12 to 14-inch band when seedlings crack the soil surface. It may not kill all emerged Coloradograss.

Do not:

—graze treated areas or feed treated plants to livestock.

—plant treated areas to crops other than those on the label.

Small grain cover crops may be injured.

• NPA plus Dinoseb (Dyanap). Use 3 pounds NPA plus 1 1/2 pounds Dinoseb active ingredient per acre (broadcast basis). This treatment may be considered where an earlier preemergence application has failed to control crabgrass and broad-leaved weeds. Apply in 12 to 14-inch band when seedlings crack the soil surface. It may not kill all emerged Coloradograss.

• Vernolate (Vernam). Use when nutsedge is the major problem and not Coloradograss or *Brachiaria* sp. Apply 2 1/2 pounds active ingredient per acre (broadcast basis) before bedding or in bands at planting. Vernolate is less effective in extremely dry soil or if excessive rainfall follows application.

Thoroughly mix or incorporate in soil during application.

• Benefin (Balan). Use 3/4 pound active ingredient per acre (broadcast basis). Apply broadcast 3 weeks or less before bedding or in a band at planting. Benefin has more safety margin on deep sands than trifluralin.

Thoroughly mix or incorporate in soil during application and deep enough to control weeds but not deeper than planting depth if possible.

• Vernolate plus Benefin (Vernam plus Balan). Use when both nutsedge and Coloradograss or *Brachiaria* sp. are a major problem. Apply 2 1/4 pounds Vernolate plus 3/4 pound Benefin active ingredient per acre (broadcast basis). Vernolate delays sprouting of 60 to 70 percent of the nutsedge tubers until peanut plants are usually well established. It is less effective in extremely dry soil or if excessive rainfall follows application.

Thoroughly mix or incorporate in soil during application, deep enough to control weeds but not deeper than planting depth if possible.

Caution: Use herbicides at recommended rates and apply as recommended. Refer to label for usage restrictions.

10. LEAF SPOT CONTROL. Peanut leaf spot can be prevented effectively by proper application of suggested fungicides.

Dryland recommendations:

Begin spray or dust applications when the first evidence of leaf spot occurs or when prevailing weather conditions favor leaf spot development. Continue applications at 7 to 14-day intervals through the remainder of the season depending on weather conditions.

Irrigated recommendations:

Begin spray applications 35 to 40 days after planting and continue at 7 to 10 day intervals depending on weather conditions and irrigation schedule.

AMOUNT	SUGGESTED MATERIALS*
Spray**: Use the dosage recommended on label in 15 to 25 gallons of water per acre depending on vine size. Use at least three nozzles per row.	Organics—Dithane M-45, Polyram, Manzate 200 Sulfur Combinations — Sperlox, Fungisperze, Oxy Cosanil Coppers—Kocide, For-Cop 80***, Oxy-Cop 8L***, Copper Count ***
Dust: Use 15 to 35 pounds of dust formulation per acre depending on vine size.	Sulfur dust—(325 mesh) or combination of sulfur dust with other approved fungicides.

*Use organic type fungicides where true leaf rust is a potential problem.

**Lower water rates may be used with aerial application, but care must be taken to achieve good coverage of all leaf surfaces.

***These materials should be used only in spray systems that do not contain brass, bronze, or copper.

Do not feed treated hay or hulls to livestock if materials other than sulfur or copper are used.

(Exception: When Dithane M-45 or Manzate 200 are used, hay or hulls may be fed to livestock when certain label uses are met.)

Caution: Use fungicides at recommended rates and apply as recommended. Refer to label for usage restrictions.

11. INSECT CONTROL. Thrips control generally does not increase yields but will produce noticeable improvements in foliar growth and appearance during early stages. Apply carbaryl (Sevin) at the rate of 1.5 pounds active ingredient per acre soon after plants emerge, or as needed. Lesser corn stalk borer causes important damage; effective control depends upon early detection. Make frequent, careful inspections of peanut plants, including the roots and adjacent soil. Control can be accomplished with sprays when full-grown larvae are observed in the soil or with granular material applied in a 12 to 14-inch band mixed thoroughly in the soil just before pegging. Apply at least 10 gallons per acre of spray with two cone nozzles per row directed to cover the lower stems and a 6 to 7-inch band of soil on each side of the row. Repeat insecticide spray applications at 3 to 4-week intervals as needed. Recommended insecticides include:

- Parathion. Use ½ pound active ingredient as a spray or 2 pounds active ingredient in granular form per acre of peanuts in a 12 to 14-inch band.

Do not use within 15 days of harvest or grazing.

- Diazinon. Use ½ to 1 pound active ingredient as a spray or 2 pounds active ingredient in granular form per acre of peanuts in a 12 to 14-inch band.

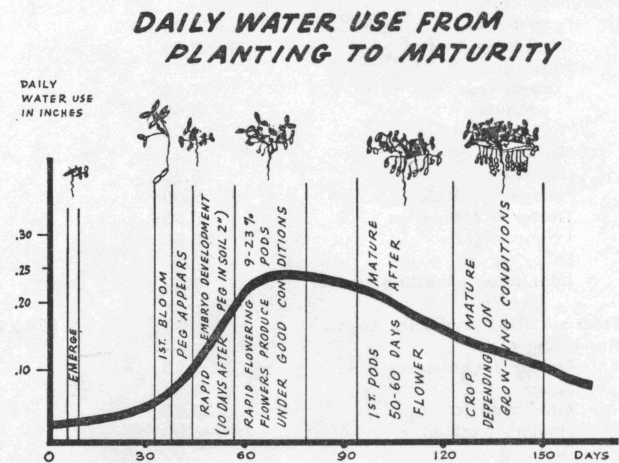
Do not:

—feed treated forage to livestock within 7 days after treatment.

—feed treated hay or hulls to livestock within 21 days after treatment.

Caution: Use insecticides only at recommended rates. Refer to label for usage restrictions. For more detailed information on insect pests, recommended insecticides and their use, see Extension publication L-704.

12. IRRIGATION. Do not allow plant to suffer from drouth. However, excess irrigation may increase certain types of pod rotting and should be avoided. After plants begin to bloom, apply water when 50 percent of the available moisture has been used from the top 2 feet of soil. Apply 2 to 3 inches



of water every 7 to 10 days (longer interval and larger amount of water for heavier soils) unless rainfall supplies an equivalent amount. Use the following chart to help you estimate when the soil contains 50 percent available moisture. Be sure to examine a soil sample from several depths throughout the root zone.

FEEL CHART FOR 50 PERCENT AVAILABLE MOISTURE

Sand	Sandy Loam	Loam
Appears dry; will not form a ball with pressure	Tends to ball under pressure, but seldom holds together.	Forms a "plastic" ball; will sometimes stick slightly with pressure.

13. HARVESTING AND CURING. Prompt curing reduces the chance of mold damage. Harvest when most of the kernels are mature.

Adjust combine picking components as weather and humidity conditions change throughout the day.

Refer to combine operator's manual for recommended picker clearances and cylinder speeds.

FIELD CURING Combine when kernel moisture is less than 15 percent.

ARTIFICIAL CURING: Combine when kernel moisture is less than 30 percent, preferably less than 20 percent.

14. **ECONOMICS OF PRODUCTION.** Increased efficiency in peanut production is possible

through rapid adoption of improved production practices developed by research and result demonstrations. Decisions to adopt improved production practices are made with the use of an economic analysis of added costs versus added returns resulting from the change in practices. All practices used are important to efficient production. Some practices, however, have more effect on costs and income than others. These should receive more attention and consideration in the production process. Adequate records and accounts are necessary to determine the profitability of peanut production.

ESTIMATED YIELD, PRICE, INCOME, PRODUCTION COSTS, HARVESTING COSTS AND INCOME OVER SPECIFIED COSTS FOR IRRIGATED AND DRYLAND PEANUT PRODUCTION

	IRRIGATED	DRYLAND
Yield—Pounds per acre	3,000	1,200
Price—Cents per pound	11.8	11.8
Income—Per acre		\$354.00
Income—Per acre		\$141.60
Production costs^{1,2}		
Peanut seed	\$24.00	\$15.00
Cover crop seed	2.50	2.50
Fertilizer:		
cover crop	9.60	7.40
peanuts	4.60	4.60
Soil fungicide	14.00	
Herbicide	4.25	4.25
Insecticide	6.00	
Foliage fungicide	9.00	4.50
Tractor & equipment	8.95	5.30
Irrigation costs	30.00	
Labor	27.50	7.50
Interest on operating capital	5.62	2.04
Total specified production costs:	\$146.02	\$53.09
Harvesting costs:		
Tractor & equipment	3.85	3.05
Labor	3.35	2.40
Combining (custom)	30.00	12.00
Hauling (custom)	6.00	2.40
Drying (custom)	12.00	4.80
Total specified harvesting costs:	\$ 55.20	\$24.65
Total specified costs:	\$201.22	\$ 77.74
Income over specified costs:	\$152.78	\$ 63.86

1. Costs do not include unallocated overhead costs, such as interest on farm real estate and machinery, depreciation on farm buildings and machinery, pickup expense, insurance and taxes.
2. A nematicide may be necessary, but only when nematodes are a limiting production factor. Soil fungicides also may be used in areas where rainfall is adequate and moisture is not a limiting factor.
3. Insect control may be necessary on peanuts produced under dryland situations.