

Divergent Trends in South's Sales

T wo treends in fertilizer sales appeared this season in the South, depending on the particular section considered. In the Southwest, sales officials expect consumption of all plant nutrients to rise about 5 to 10% over the 1955–56 season. Even brighter is the picture in nitrogen consumption, which is expected to increase a solid 10% over last season. And the more optimistic people in the Southwest look for a further increase in consumption during 1957–58.

But in the Southeast and the Midsouth sections, fertilizer consumption will drop about 8 to 10% this year. Soil Bank effects account largely for the decline in fertilizer consumption there. In some sections of the Southeast as much as 50% of cotton acreage, heavily fertilized in previous years, was put into the Soil Bank.

Crop control quotas also were responsible for some declines in fertilizer consumption in the Southeast. For example, tobacco acreage was reduced through crop control 8% for the 1955 season, 12% for the 1956 season, 20% for the 1957 season. And estimates in Georgia indicate that almost 30% of the remaining acreage is going into the Soil Bank. Corn acreage also decreased as land went into the Soil Bank. Thus, some manufacturers expect that their sales in Georgia may drop as much as 20% from last season.

In the Southwest the effect of the Soil Bank on fertilizer sales is much less pronounced. Companies are working hard at more advertising, more dealer and farmer educational meetings, more training for salesmen, and more demonstrations to increase sales. Only in certain areas do price cuts seem necessary to maintain sales.

The Nitrogen Picture

In the Southwest, use of anhydrous ammonia continues to grow. However, some expect the growth rate to be substantially reduced in the future. In the Southeast solid nitrogen fertilizers continue to grow fast—in some areas at the expense of anhydrous ammonia.

Mississippi Valley farmers are paying lower prices for nitrogen fertilizers this season than last. Anhydrous ammonia delivers to the farmer for \$115 per ton and ammonium nitrate delivers for about \$70 per ton.

Ammonium nitrate demand during late March and April became surprisingly strong in the lower Mississippi Valley. Previous to this time there was some farmer resistance to buying, which some manufacturers attributed to delay of farmers in making financial arrangements. Weather also influenced fertilizer purchases this year more than usual. A temporary shortage developed in ammonium nitrate, urea, and to a lesser degree ammonium sulfate in parts of Louisiana.

Addition of new nitrogen capacity in the South continues to cause strong competition. Larger manufacturers of ammonia push hard to develop more extensive direct application of anhydrous ammonia. Export markets for ammonium nitrate are being tapped as fully as possible by some southern producers to make maximum use of available capacity. Still, there are persistent rumors of the use of questionable marketing practices to capture anhydrous ammonia business.

Newer Materials and Processes

Field testing continues on newer fertilizer materials such as diammonium phosphate and urea-formaldehyde. As yet these products find only limited use in the South. According to one extension official, these fertilizers are so new that it may be some time before farmers and planters use them. There is a natural lag between developing recommendations and convincing farmers and planters that new materials are better than those already available.

Generally, throughout the South, use of diammonium phosphate-urea combinations is quite small. Limited comments point to possible use in fertilizing pastures by means of sprinkler application.

Interest in use of pesticide-fertilizer mixtures increased in several sections of the South this year. In Texas, where the mixtures are considered contrary to public interest and are not registered for sale, some farmers are reported to be making their own mixtures after taking deliveries of fertilizers and of pesticides. In Alabama, pests such as the fire ant were the major cause of livelier interest in pesticide-fertilizer mixtures.

Farmers continue to experiment with use of minor and trace elements. The more progressive farmers do use mixtures containing definite amounts of elements other than N, P, and K, points out one formulator, and they are apparently satisfied with the results obtained.

Use of neutral solutions makes little gain in the South as yet. The trend toward wider use of granulated fertilizers does continue strong. Demand for pelletized material, however, is small. In Texas, granular products will probably account for 80 to 85% of total mixed goods consumption this season.

Throughout the South no important changes in placement recommendations occurred. In the Southeast a minor trend to more broadcasting has developed as a result of the continued labor squeeze.

No one reports an early commitment to use the TVA process for fast curing of superphosphate fertilizers. Some smaller manufacturers report a lack of information on the details of the process.

Nutrient Build-up

Each year more farmers adopt soil testing as a regular practice. Along with the greater use of soil tests comes recognition of the phenomenon of nutrient build-up. In some areas of the South, phosphorus build-up is noted. But several agronomists report a greater trend toward accepting fertilizer recommendations which take into account any carry-over indicated by the tests. With or without soil tests, nutrient carry-over would bring the farmer only a moderate improvement in crop yield, since, with few exceptions, farmers use far less fertilizer than is recommended by agronomists, says one state official.

Soil testing finds perhaps its most pointed use in minor element and trace element investigations. In some areas of the Southeast, liming has dropped off badly and magnesium deficiencies have become more apparent. In the Southwest, however, minor element deficiencies have not been regarded as a significant problem. Nowhere in the South have there been any major new developments in trace element use.

Proposals to shift from oxide to elemental guarantees have received mixed receptions. Industry opinion, as reported by state officials who have held preliminary talks with manufacturers, seems to be against the proposed shift. There appears to be some disagreement between larger companies, who generally favor elemental guarantees, and smaller companies who do not. Southern state legislatures had under consideration at spring meetings no new proposals to change label guarantees, and few were

Prospecting for phosphorus in Tennessee. Power rig can remove only the earth cover. When phosphorus bed is reached, hand augers are used to take samples



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studying any legislation which would affect fertilizers in any way.

Profit and Service Problems

Declining profit margins have emerged as the major problem facing the fertilizer industry in all sections of the South. The problem of satisfactory profits to allow the industry to move forward in finding better fertilizers and in giving better service has several facets.

Creating sufficient market demand to absorb the increased production capacity completed in the past three years, or due on stream in the next two years, is a major requirement for obtaining satisfactory profits. Overhead on unused capacity adds to the difficulty of overcoming rising costs.

To a point, extra productive capacity proves valuable; it enables the industry to cope with the increasing tendency of farmers to wait until they actually need fertilizer to purchase it. Farmer financing of fertilizer as well as equipment, seeds, and pesticides, becomes more abrupt in the South each year, say some company sales managers.

An additional factor in financing

and credit extensions which may affect fertilizer sales in the future is the possibility of further decline in farm income. Although money has eased slightly in the drought areas of the Southwest, many operators have had difficulty in getting money to buy fertilizers to go with the favorable weather experienced this spring.

Service of many kinds by manufacturers continues to expand as part of efforts to elevate or maintain sales levels. Many of these services-demonstrations, special application recommendations, and in a surprising number of cases, soil testing-are expected on a regular basis by farmers. These services contribute further to the cost squeeze as the need for more sales training and equipment goes up.

Freight rate increases will have the expected results. More fertilizer will be moved by privately owned trucks and by barges. Increased freight rates are thought by some manufacturers to cause more imports of high analysis foreign fertilizers.

On the technological side, development of new fertilizer materials brings the manufacturer more problems in mixing, processing, and sampling.

To overcome declines in demand

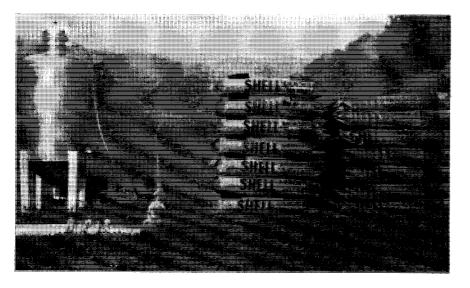
Narrowing Margins in the West; Tonnage Will Be Up, Profits Down

 $\mathbf{F}_{\text{in the West this year, but profit}}$ margins are narrowing. In California tonnage passed the 1-million mark for the first time in 1956 and most observers in the industry expect the

figure to top 1.1 million in 1957. In spite of steadily increasing consumption, the West is an area of fertilizer surplus and will continue to be so as new plants come on stream.

Since last season, over 2600 tons

Recently developed equipment injects soluble fertilizer into sprinkler irrigation system in California pasture. Ammonium sulfate and diammonium phosphate were used to meet the plant food requirements of this particular field



or to speed rising demand, manufacturers and distributors put more emphasis on pasture fertilization. A qualification made by some is that meat prices must hold firm or improve to justify increased use of fertilizers on pastures. Occasionally mentioned along with pasture fertilization as a potentially large use is forest fertilization, especially in pine.

For the southern market as a whole, nitrogen in the form of granular materials or in solutions of several types is expected to grow fastest in the next two years. Anhydrous ammonia is expected to continue to grow, but at a slower rate. In Texas some dislocations may have occurred in the phosphorus and potassium picture through use of very heavy quantities of nitrogen, says a state official. There more stress is being placed on the importance of a complete fertilizer program.

Throughout the South, weather and farm prices will be the big factors in future fertilizer sales. By now Soil Bank effects have been pretty well determined—little effect in the Southwest and a decline in the Southeast. Regardless of these influences, the "hard sell" is on to make use of expanded capacities.

per day of basic fertilizer manufacturing capacity has been added in the West (see box) and the resulting competitive pressure is expected to depress profits. Seasonal shortages, which are usual in the West, have been local and temporary this year and confined to special situations.

Tonnages will continue to rise with a normal or better growing season expected throughout most of the West Water shortages in some areas, particularly Southern California and Arizona, may have some local effect, but this will not be significant in the over-all picture. The Soil Bank program is not expected to have any serious impact on the western fertilizer industry this year, although here again some local situations may be exceptions. Withdrawal of acreage under this program will be counterbalanced by more intensive use of fertilizer on land remaining under cultivation. And the general western trend toward more fertilizer usage will help.

The profit squeeze is coming not so much from lower prices, but from increased costs of manufacturing, selling, and distribution. Anhydrous ammonia prices declined early this year, but further decreases now appear to be unlikely. Solid fertilizer prices have held steady and several observers believe that phosphate prices will increase by midyear or early fall.