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### Fertilizer Supply Expected To Increase about 5%

USDA says 45% of nitrogen will be applied as anhydrous or solution

THE TREND TOWARD high analysis and wet nitrogen is highlighted in the recent report on the "Fertilizer Situation" for 1954-55 issued by USDA. The preliminary report of the supply of plant nutrients forecasts that 45% of total nitrogen produced will be supplied as anhydrous ammonia or nitrogen solutions. Normal and concentrated superphosphate will account for about 87% of the total phosphate available in 1954, with tonnage of phosphate production expected to be about on the same level as last year. The supply of potash is expected to increase about 7.5%.

Reviewing the 1953-54 fertilizer year the report observes that fertilizer movement within the trade was exceedingly slow during the first half of the year. Total deliveries were up to 6.2 million

tons for the period, however, a favorable increase over the 5.9 million tons delivered in the 1952-53 season. Prices were irregular and averaged lower than the previous year. Prices are expected to remain steady for the current season.

USDA estimates that the supply of fertilizer chemicals for the current year will be about 5% above that of 1953-54.

#### Nitrogen

Nitrogen supplies are expected to increase about 9% to a total of 2.2 million tons, from 2.02 million tons in 1953-54.

The addition of 260,000 tons of urea capacity in three production units completed this year is expected to

stabilize the relationship between "wet" and dry nitrogen available in 1954-55. Dry nitrogen will account for about 55% of the total and wet nitrogen anhydrous ammonia and nitrogen solutions will account for 45%. This compares with 57% and 43%, respectively, last year.

#### Phosphates

Forecast of phosphate supplies for this season calls for about 2.3 million tons, little change from last year. Industrial capacity is capable of considerable increases in this supply if the demand should be greater than anticipated.

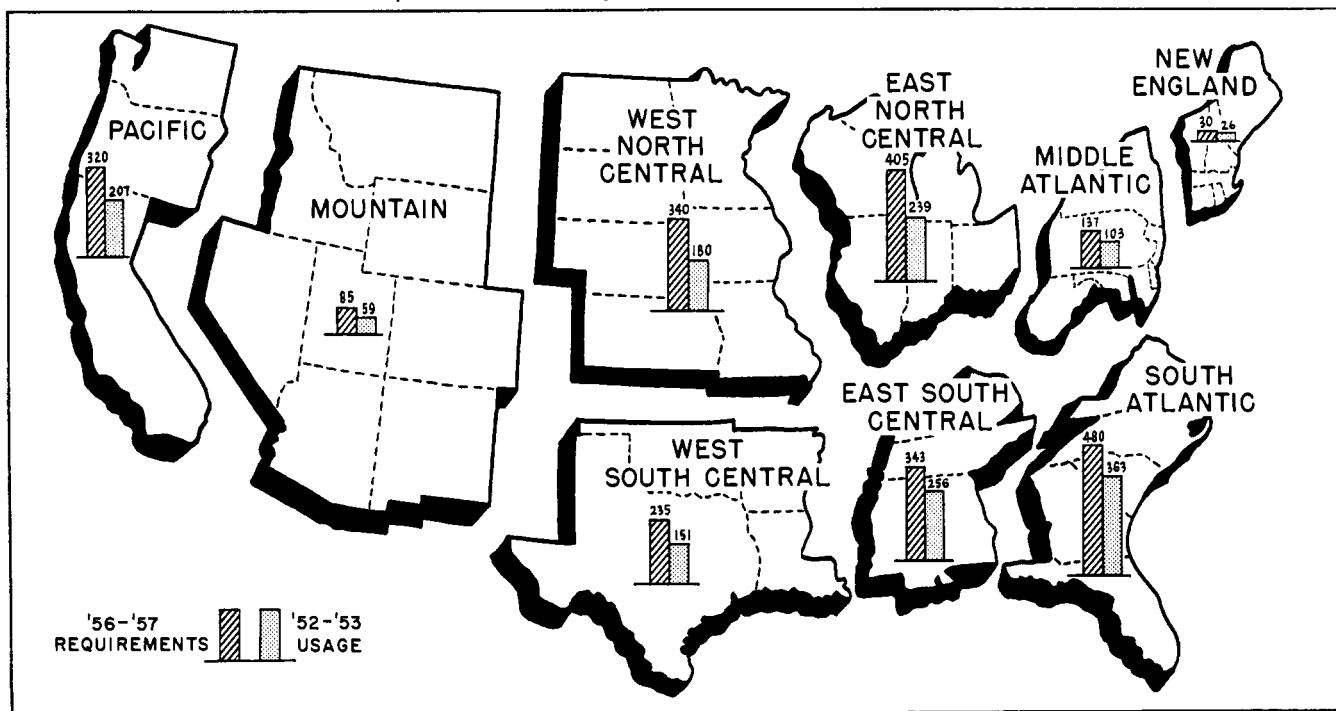
#### Potash

The estimate of potash supplies available for 1954-55 is 1.97 million tons, up about 7.6% over the supply for last year, 1.831 million tons. The forecast for potash is based on anticipated demand rather than industrial capacity.

#### Expansion Program

The five-year plan for expansion of fertilizer production facilities was initiated by the USDA in 1951 under the

Requirements and Usage of Nitrogen in Thousands of Tons



provisions of the Defense Production Act. To establish goals for this plan the USDA undertook a study with the objective of determining the requirements for the three major plant nutrients. The USDA's estimates of agriculture's requirements were then forwarded to the Office of Defense Mobilization for consideration in establishing industrial expansion goals.

The regional requirements projected by the USDA study are depicted on the outline map. In August 1953, the USDA estimated that total agricultural requirement for nitrogen in 1956-57 would be 2.435 million tons. Subsequently the ODM established an expansion goal of 2.93 million tons of nitrogen for 1955. Various companies promptly filed for certificates to construct the facilities needed to meet this production goal. The expansion program was opened up for review again last winter when government groups expressed their doubt that the planned production goals would be satisfactory to meet the demands of a national mobilization. Another survey of nitrogen capacity was undertaken, and a new expansion goal was established by the Government, over the objection of industry representatives. The new goal was set at 3.5 million tons of nitrogen by 1957. Despite the fact that the industry had expressed opposition to increasing production capacity, applications for tax amortization certificates exceeding the new goal were filed almost immediately.

Under the Certificate of Necessity program (see AG AND FOOD, March 3, page 227; June 7, page 603) rapid amortization advantages were granted for construction of facilities capable of producing 3.78 million tons of nitrogen per year. If all the certificates are used and the production facilities are completed by the target date, Jan. 1, 1957, there may be more than an ample supply of nitrogen available in 1957. It seems certain that the original goal of 2.185 million tons, for 1955 based on the USDA's estimates, will be met, the current estimate of supply predicting 2.2 million tons.

Many observers believe that the revised goal of 3.5 million tons by 1957 will also be met. This upward revision of the original goal is apparently based on an estimate of more than "normal" requirements. If the extra tonnage is available there may be about a half million tons of nitrogen capacity in excess of predicted requirements. Since the original government-subsidized expansion program was closed several additional companies have expressed interest in the high nitrogen boom. Standard Oil of Ohio, and Standard of Indiana combined with Sinclair Oil have announced plans for construction of nitrogen production facilities.

### U. S. Fertilizer Supply

	1954-55	1953-54	1952-53
<b>Nitrogen (Supply thousands of tons)</b>	2,200	2,020	1,804
	<i>Distribution, %</i>		
Ammonium nitrate, all grades	23	24	24
Ammonium sulfate & ammonium sulfate nitrate	18	20	22
Other solids	13	12	14
Natural organics	2	2	2
Ammoniating solutions	18	18	20
Ammonia for ammoniation	5	5	5
Ammonia for direct application	18	17	12
Solutions for direct application	3	2	1
<b>Phosphate (Supply thousands of tons)</b>	2,350	2,364	2,414
	<i>Distribution, %</i>		
Normal superphosphate	65	68	71
Concentrated superphosphate	22	20	19
Other	13	12	10
<b>Potash (Supply thousands of tons)</b>	1,970	1,830	1,739
	<i>Distribution, %</i>		
50-60% Muriate	91	90	91
Sulfate	7	7	6
Miscellaneous	2	2	2

## Gnat Eradication Project at Clear Lake, Calif., Called Success

20,000 gallons of insecticide used to relieve plagued residents in resort area

CALIFORNIA's largest fresh water lake was recently the scene of the largest larva control project of water infesting insects for the second time in six years. Renowned as a resort and fishing area, Clear Lake is located north of San Francisco, has an area of 41,000 acres,

and ranges from shallow to fifty feet in depth. The Clear Lake gnat (*Chaoborus astictopus*, C. and S.) has been an economic problem to local residents and tourists in the area for many years and size of the infested area proposed many problems in eradication.

Six barges such as the one below were used to apply 20,000 gallons of insecticide over the 853,624 acre feet of water in clear lake. The skipper of each barge had two helpers

