



Lion Oil's Barton plant near New Orleans has annual nitrogen capacity of 90,000 tons. Part of the anhydrous ammonia (300 tons per day) is sold; the rest is converted into pelleted ammonium nitrate

plained that the Tarrytown site was selected because it was the most desirable of many considered, being accessible to institutions of higher education in the New York area and located in a suburban region favorable to research.

Lion to Make Ammoniating Solutions at Barton Plant

Anhydrous ammonia and pelleted ammonium nitrate production is now running at full capacity, Lion Oil officials indicated during plant dedication ceremonies on Oct. 25 at Luling, La. A new unit to manufacture ammoniating solutions will be operating in February, they say. The plant addition is estimated to cost \$250,000.

When Lion started production earlier this year, its carbon dioxide unit hadn't been completed, but the unit is now turning out 42 tons daily of the solid and liquid product. Located 14 miles upstream from New Orleans the Barton Plant has been at its rated capacity since midyear, 300 tons of anhydrous ammonia per day. Part of the ammonia is sold for agricultural and industrial use, the rest is converted into ammonium nitrate.

The Barton Plant has increased Lion's production of elemental nitrogen by more than 50%. Output at Luling (90,000 tons) brings the total company production to almost 250,000 tons annually.

Davison Fertilizer Plants Grouped; New Appointments

Plants of the mixed fertilizer division of Davison Chemical Co. Division of W. R. Grace & Co., have been grouped into three districts, with managers reporting to W. N. Watmough, Jr., Davison vice president, at Baltimore headquarters, it is announced.

Mr. Watmough announced appointments as follows:

B. C. Manker to be central district manager at Lansing, Mich. He has been responsible for sales and operations of Davison's plants at Lansing and at Alliance and Columbus, Ohio. He now has assumed, in addition, responsibility for plants at New Albany, Ind., Nashville, Tenn., and Findlay, Ohio.

John W. Ground, III, to be western district manager, with headquarters at Joplin, Mo., where he has been located. He will be responsible for sales and operations at plants in Trenton, Mo., Tulsa, Okla., Perry, Iowa, and New Orleans, La., as well as at the Joplin plant.

Joseph F. Stough, former general sales manager for International Minerals & Chemical at Chicago, will join Davison Nov. 1 as southeastern district manager with headquarters at Charleston, S. C. He will have the responsibility for sales and operations, in addition to Charleston, for plants located at Wilmington, N. C., Spartanburg, S. C., Ft. Pierce and Jacksonville, Fla., and Savannah, Ga.

George Klein, for a number of years district manager at Nashville, Tenn., under the former set-up, is now general sales manager of the mixed fertilizer division, with headquarters in Baltimore.

W. P. Stansbury is promoted from operations manager to director of branch plant operations, mixed fertilizer division. His headquarters will continue at Baltimore.

Joseph E. Reynolds, Jr., formerly at Joplin, Mo., is transferred to Baltimore as operations manager of the division and E. L. Carnell, superintendent at Savannah, is transferred to Baltimore as production planning supervisor.

In Mr. Manker's district, John Detgen is made assistant manager at Columbus, Ohio, where M. C. Evans is manager,

with responsibility for sales in the territories served by Alliance, Columbus, and Findlay, Ohio, plants, and E. S. Jackson, assistant manager at Nashville, is made manager at that plant.

Under Mr. Ground at Joplin, A. C. McCall is appointed manager with responsibility for sales and operations at Joplin and Trenton, Mo., and Tulsa, Okla. He was formerly assistant branch plant manager at Columbus, Ohio.

Under Mr. Stough, U. S. Aaron is promoted from sales manager at Savannah to manager for sales and operations at Charleston and Spartanburg, S. C., and sales at Savannah, Ga.

Chandler Smith is promoted from manager at Ft. Pierce, Fla., to assistant manager in charge of sales for Charleston and Spartanburg, S. C., and Savannah, Ga. He will also be located at the Charleston district office headquarters. A. C. Gordy will be branch plant manager at Ft. Pierce, Fla. R. L. Johns will be branch plant manager at Jacksonville, Fla.

Foreign

Fertilizers in South Africa

The rapid development of agriculture in South Africa has resulted in a number of peculiar problems for the fertilizer industry in that area. Superphosphate has been the principal ingredient of most fertilization programs. However there seems to be trend developing, now, toward more balanced application of plant nutrients. When the virgin grasslands were first broken there was a pressing need for phosphate fertilizers, in 1949-50 about 60% of the total tonnage applied on South African farms was phosphate. However with the continued farming in the area it has now become apparent that something in addition to phosphate is needed on this relatively new land.

One major difficulty to any sound fertilizer program is the lack of basic work on soil fertility and crop response to various nutrient ratios. However with the trend toward more intensive farming on a large scale the government has announced plans to undertake basic studies on soil fertility.

D. Meredith of African Explosives and Chemical Industries has recently completed a survey of fertilizer usage in South Africa for the 25 year period 1924-1949. He reports that the ratio of application of plant nutrients in Africa has been: 1 N - 5 P₂O₅ - 1.2 K₂O. The removal of nutrients according to Dr. Meredith has been in the ratio of 3 N - 1 P₂O₅ - 1.5 K₂O. Consumption of fertilizer is reportedly on the increase in the area and he says there is a definite trend toward balanced fertilizers.

Acerola Juice Ready for Commercial Production

MASS PRODUCTION METHODS have been developed for the richest source of natural vitamin C known. A six-ounce glass of the juice of a small Puerto Rican fruit contains as much of this essential food element as 15 quarts of orange juice, declares its producer, the Bib Corp. Samples of acerola fruit have assayed as much as, 80 times richer in vitamin C than orange juice, which averages 50 mg. per 100 cc.

Acerola juice will be marketed in blends with apple, pear, pineapple, and other juices as a natural protective food for infants and children. Advantage over fortification with synthetic vitamin C is that the American Medical Association does not grant its seal of approval to foods containing synthetic materials.

The acerola tree grows wild in Puerto Rico; domestication required eight years of effort. The tree is an extremely poor germinator. When ripe the fruit is red and the juice reddish orange; both have a pleasant tart flavor. However, the green fruit and juice have much more vitamin C.

Vitamin content drops sharply soon after picking the fruit. Because the acerola is very perishable, a canning pilot plant has been built in Puerto Rico. Fruit often is juiced and canned within an hour from the time it leaves the tree. High ascorbic acid content make ordinary cast iron canning equipment

Picking the acerolas at the moment just before the green fruit turns red assures that vitamin C content will be at its maximum



unsuitable; stainless steel must be used to prevent corrosion.

Puerto Rico's government is encouraging cultivation of acerola trees on family plots and use of the fruit by the islanders. The government hopes it will be a new cash crop. Scheduled crops can now be guaranteed on a scale large enough for commercial value. Trees have been planted in schoolyards everywhere in the island, and teachers are instructed to give two acerolas daily to each child.

Vitamin C is synthesized by all plants and many animals. During wartime in England the seed-bearing fruit of the rose was a prime source of ascorbic acid. Thousands of volunteers collected the fleshy, budlike structure that forms below the flower, called rose hips, for processing into national rose hip sirup.

Volcanoes Endanger Mountain-Grown Coffee

Central American volcanoes, now increasing in their activity, are jeopardizing "mountain grown" coffee.

So, far, farmers have been unable to grow the famed beans anywhere except on mountain sides in Nicaragua and Costa Rica. Since 1947, thousands of acres in the mountain-side plantations of Nicaragua have been devastated by the Santiago volcano.

Both the Poas and Irazu volcanoes are erupting in Costa Rica; two others are active in Nicaragua. Many Central American volcanoes are larger and potentially more explosive than more famous vents in other parts of the world. A severe eruption in a Central American vent probably would produce little lava, but could be extremely devastating because of gas fumes and heavy ash falls.

Fred M. Bullard, University of Texas geologist, surveyed volcanoes in both countries as a preliminary move to establish observation posts near more active vents (the two countries have more than 30 volcanoes which have erupted in historic times). Working under the auspices of the Pan American Institute of Geography and History, Dr. Bullard has conferred with government officials and scientists in both countries for a coordinated study of volcanic activity.

People

Wheaton Named VP in Charge Of American Potash Eston Div.

George S. Wheaton, formerly assistant vice president of American Potash &

Chemicals Eston Chemical Division, has been promoted to vice president in charge of that division. He is also active in Western Electrochemical, a company in which American Potash has a substantial interest, and American Lithium Chemicals, recently formed company controlled by American Potash. **Thomas F. Edson**, former assistant vice president of research and development, has been promoted to the newly created position of vice president in charge of special engineering projects. He will be in charge of construction and initial production of the American Lithium plant near San Antonio. **Richard J. Hefler**, secretary of the company, has been named to another newly created post, assistant to the president, and will also continue his duties as secretary.

Gerald A. Fitzgerald, recently returned from a two-year tour of duty in Iran as chief of the food processing branch, Foreign Operations Administration Mission to Iran, will set up a consulting practice in product research, development, and quality control. Previous to Point Four work, he was chief chemist in the Birds Eye Laboratories and director of the Frozen Food Foundation.

Edwin J. Pinigis has left the agricultural chemicals division of Pittsburgh Coke & Chemical to join the agricultural chemicals division of American Potash & Chemical as a technical service representative in Los Angeles.

Sylvan Cohen, formerly chief chemist of Gallowhur Chemical, has been named vice president of the company in charge of research. His headquarters will be Ossining, N. Y.

W. T. McLaughlin has been promoted to manager of special account sales for the agricultural chemicals division of Pittsburgh Coke.

Deaths

James T. Jardine, 72, former chief of the USDA office of experiment stations and director of research, died Oct. 24 in Washington, D. C. Born in Idaho on a ranch, Mr. Jardine earned his way through Utah College as a cowpuncher, later teaching there and at the University of Chicago. He joined the Forest Service in 1907 and headed forest and range investigations for 10 years, during which time he did early work on erosion. From 1920 to 1931, he was director of the experiment station at Oregon State College. He retired from his position as chief of the office of experiment stations in 1946.