

# Business Newsletter . . .

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## **Coke Ovens Shift from Sulfate**

Answer to ammonium sulfate surplus may have been found by Colorado Iron & Fuel Corp. which has successfully switched **coke oven plant** to diammonium phosphate; says only relatively minor changes required to switch to high analysis 21-53-0 fertilizer. Diammonium phosphate will be marketed in dry form, readily water-soluble for irrigation or liquid spray. **Another major steel company** is reported interested in the process.

## **Nitrogen Consumption Accelerating**

Increasing off-season consumption of nitrogen products has resulted in low carry-over stocks of nitrogen fertilizers in Europe. Production through June 30 is now almost sold out. **European consumption** of nitrogen through the last half of 1954 was **up 150,000 to 200,000 tons** according to the annual Aikman report on the nitrogen industry. Aikman says if present rate of consumption increase continues, possibility of nitrogen **shortage looms** in 1957.

## **Italians Build Latin Fertilizer Plants**

Montecatini, Italy's chemical giant, has signed agreements with **Columbia and Venezuela** to build fertilizer plants in those South American countries. Venezuelan plant will produce 30,000 tons of **synthetic nitrates** per year. Montecatini will make its patents available to South Americans, probably supervise engineering of plants which will be equipped with Italian machinery.

## **Pesticide Inventories Down**

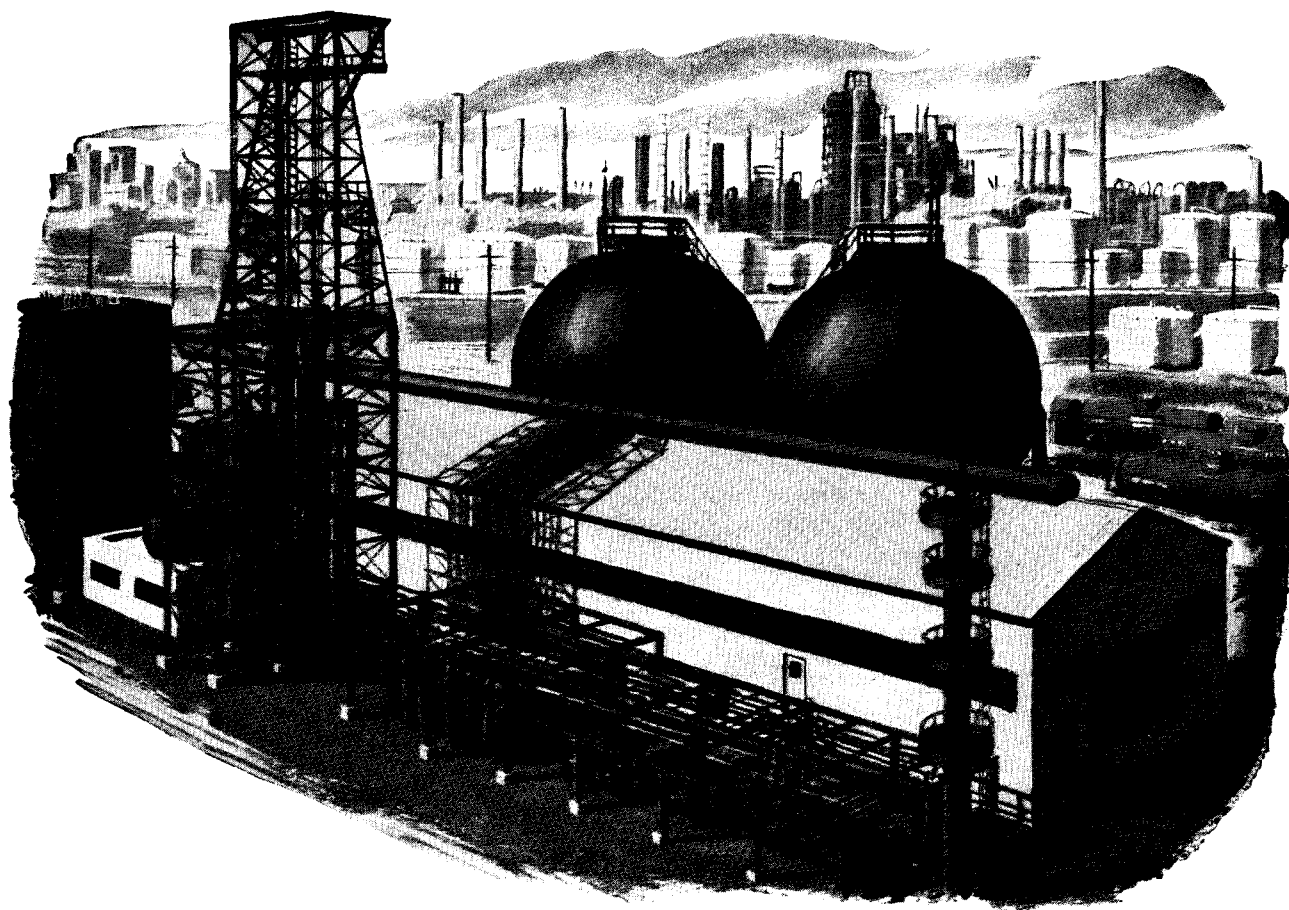
Carry-over stocks of pesticides are **down about 10%** from 1953 figures, according to results of a survey released by USDA. Manufacturers reported total stocks on hand of about **134 million pounds** for Sept. 30, 1954; 34% of this total was in formulations, mostly of the ready-to-use type. USDA officials say the drop in inventories indicates healthy readjustment from surpluses of 1952.

## **FDA Starts Grain Inspection**

Food and Drug Administration has started its **long delayed** wheat sampling and inspection program. Enforcement program against rodent and insect infestation in grain **was suspended** in May 1953, by agreement between Secretaries Hobby and Benson. Statement that program is now being resumed was made only by Secretary Hobby; USDA has said nothing officially on it.



- Fertilizer manufacturers installing granulating facilities to meet farmer demands for free flowing product (p. 97)
- Colombo Plan, program for economic development of free Asia, has placed emphasis on agriculture (p. 101)
- Mexican government invites American fertilizer manufacturers to help develop fertilizer production facilities (p. 102)
- Rigid quarantine and chemical control slow pink bollworm, one of most dangerous threats to cotton in recent years (p. 105)
- Demand growing for amioca, high grade starch from waxy maize, new form of corn yielding premium to farmers (p. 105)



## New Anhydrous Ammonia Plant

**Atlantic puts first plant of its type in operation  
in growing Delaware Valley area**

Atlantic has now put into production its new anhydrous ammonia plant. New in conception, it uses high-purity hydrogen from the refinery catalytic reformer. Output from this unit will be available for chemical and agricultural use . . . ranging from the manufacture of synthetic fibers to fertilizers.

This new unit is one more step in Atlantic's modernization program designed to meet the expanded needs of industry for petrochemicals. For detailed information on the constantly growing family of Atlantic petrochemicals, write to any of The Atlantic Refining Company offices listed below or use the coupon.

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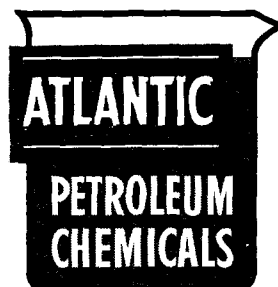
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# Research Newsletter . . .

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## Budget Increases Agricultural Research

Increased expenditures for agricultural research are called for in the new budget presented to Congress in January. Estimates for 1956 call for expenditure of \$84 million, about **\$9 million increase**. President estimates **price supports** will cost about \$968 million in 1956, almost **12 times** cost of agricultural research.

## NRC Reports on Artificial Sweeteners

Report on artificial sweeteners by the National Research Council recommends use of Sucaryl in soft drinks **be restricted**. Report says that harmlessness of Sucaryl has not been established. **Abbott Laboratories**, producer of Sucaryl **objects**, says it has a research study completed in which volunteers consumed up to 7 grams of Sucaryl per day with no ill effects.

## Photosynthesis Outside Living Plant

First complete photosynthesis of sugars and starch outside plant cell has been accomplished at University of California, Berkeley. A **phosphate photosynthesis** paralleling that of carbon dioxide is also reported. Work adds significantly to understanding photosynthetic mechanisms which could eventually result in **utilization of solar energy**.

## Triazine Fungicides Being Tested

Potential fungicides derived from arylamino-*s*-triazine are now being field tested. A report in *Science*, Jan. 14, suggests effective control of **apple scab, potato late blight, leaf diseases of ornamentals, and diseases of turf**. In general **no damage to foliage** of beans, corn, and tomatoes resulted from application of 1% sprays.

## New Cotton Defoliant

Amino triazole may be latest in the cotton growers arsenal of defoliant. Discussed at recent defoliation conference of National Cotton Council, amino triazole apparently gives faster and more complete leaf shed, **limiting second growth** for three to six weeks when applied at rate of 1 pound per acre.

## Spotlight

- A calorimetric assay technique for pyrethrum synergists is found sensitive enough to follow these compounds in insect metabolism (**p. 102**)
- Presence of specific  $\beta$ -oxidase enzyme systems in tissues of different species of plants may imply development of herbicides with biochemical species specificity (**p. 128**)
- Use of surface active agents in phosphate rock acidulation increases both rate and degree of conversion to phosphorus pentoxide (**p. 131**)
- Storage time and temperature of sweet potatoes affect the quality of dehydrated products derived from the potatoes (**p. 151**)
- A chemical method for determining the digestibility of protein supplements should prove valuable to feed manufacturers (**p. 159**)



Meet The Demand For High Analysis

Use

# DAVISON'S TRIPLE Superphosphate

State Agricultural Experiment Stations and other authoritative sources are recommending fertilizers with ever-increasing plant food units per ton. High analysis fertilizers are in demand because they give more for each fertilizer dollar. Meet this demand by incorporating Davison's New Triple Superphosphate in your formulation.

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