

# Business Newsletter . . .

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## **Black Leaf Shifts to Diamond**

Diamond Black Leaf Co. is the new firm being formed from what was Virginia-Carolina's Black Leaf Products Division. Diamond Alkali will hold the **major interest** and V-C a minority to be acquired by Diamond over the next five years. Office will continue in Richmond; manufacture and market of the **current line of products** will continue. New president will be Loren Scoville, head of Diamond's chlorinated products division.

## **Standard Goes for Western Ammonia**

Standard Oil of California board of directors has decided to construct a \$16 million, **300-ton-per-day** ammonia plant at Richmond, Calif. (see page 270). Plant will also produce nitric acid. Completion will make Standard a major ammonia producer in West, **second only to Shell**, leader with 450 tons per day from two producing plants; Brea is third with 235 tons per day; and Columbia-Geneva Division of U. S. Steel will be fourth with 200 tons per day. Columbia's plant is now under construction.

## **Ammonia Plant for Minnesota**

St. Paul Ammonia Products Co. will construct a **\$15 million ammonia plant** near St. Paul; has scheduled completion for spring or summer of 1956. Plant, first in area, will produce **200 tons per day** of ammonia to be sold as nitrate, anhydrous, and solutions. Central Farmers' Fertilizer Co. will handle marketing throughout the northern Midwest. Plant is being financed largely by Canadian capital; same group plans to construct a similar ammonia plant near Montreal.

## **A New Potash Producer**

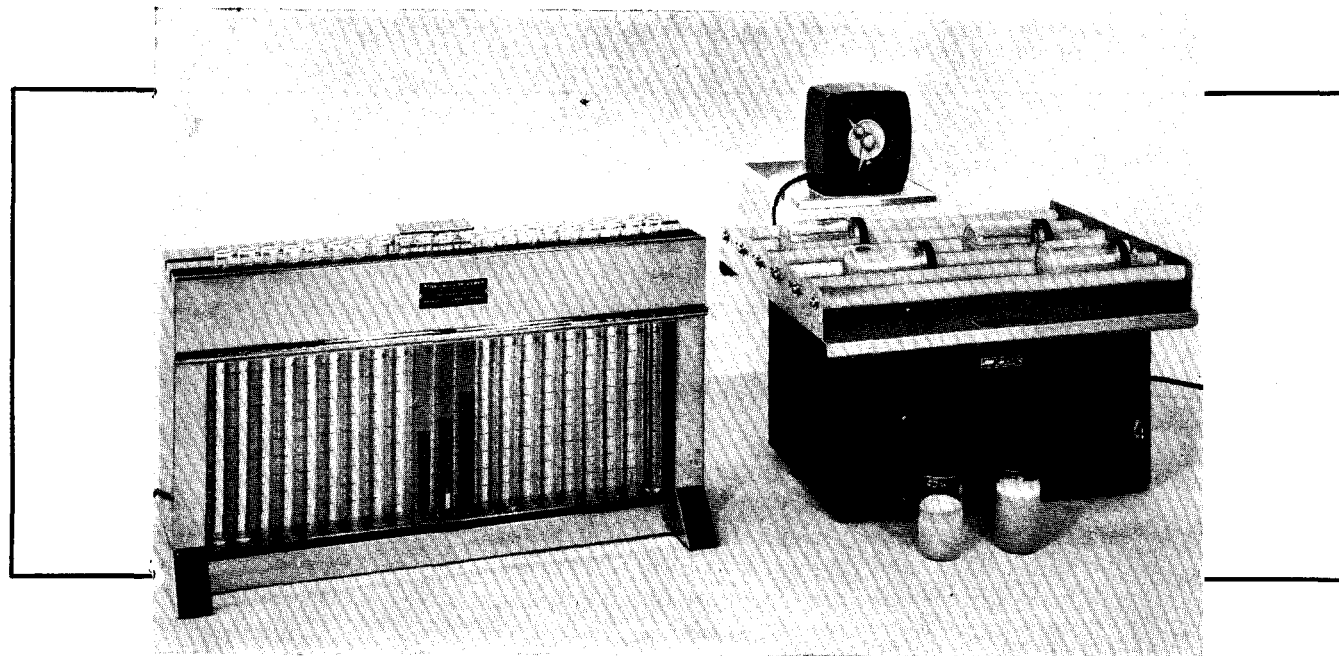
Freeport Sulphur and Pittsburgh Consolidation Coal are planning a joint \$19 million venture for the development of **potash deposits at Carlsbad**. The new organization, National Potash Co., will build and operate a plant costing about \$16 million with production goal of **250,000 tons K<sub>2</sub>O** equivalent within two years.

## **Record Fertilizer Year Predicted**

Another record year for chemicals in agriculture is predicted by U. S. Department of Commerce. Despite reduced farm income, total fertilizer consumption is expected to reach new peaks. **Return of seasonal buying**, noted last year, is expected to result in record disposition peak this spring, may tax transportation and storage facilities. Commerce says there will probably be **greater seasonal fluctuations** in fertilizer sales this year than in 1953-54.

## Spotlight

- California, faced with a conflict between farming and industrialization, is developing agricultural zoning regulations, to reserve land for farming (p. 185)
- Indications are that there may be a surplus of nitrogen in 1956; however, expanding agricultural consumption could also lead to a shortage in 1960 (p. 187)
- There is general agreement that proposed chemical additives for food should be tested before they are accepted for use, but what is an adequate testing program? (p. 191)
- Cautious optimism dominates pesticides industry; management men say profit margins will be lower this year (p. 206)



4942-A.

## "ATLAB" EMULSION TEST APPARATUS

▶ For the examination and precise comparison of prepared emulsion formulations in accordance with a technique developed by Atlas Powder Company

The principal component of the assembly is the illuminated Emulsion Viewer (Patented) which permits definitive observation and percent-volume evaluation of 21 samples under standardized conditions. Of Stainless Steel, with movable masked light source in a slideway which permits accurate measurement of the extent of creaming, sedimentation or oil separation in test emulsions. Results are read as percent volume directly on the graduated glass scales on the front plate. The ruled plate is of photosensitive glass, 24 inches long x 8½ inches high, with protective glass cover. Illumination is restricted to one tube at a time to eliminate prolonged heating effects. The emulsion tubes are made of carefully selected colorless glass with plane flat bottom.

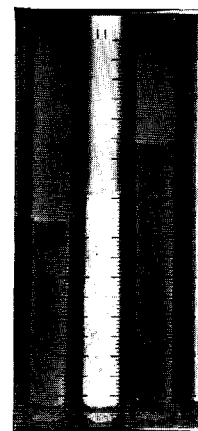
The Shaking Apparatus (Patented) is of the reciprocating type specially adapted for thorough mixing of emulsions under controlled conditions for evaluation in the Viewer. Glass jars containing the samples are laid on horizontal, rubber-covered metal rods, without clamping, permitting transfer in minimal time. Adjusted for shaking at the rate of 280 oscillations per minute, with hori-

zontal stroke of 1-inch, as specified by the authors, W. C. Griffin and R. W. Behrens, to provide most reproducible results.

**4942-A. Emulsion Test Apparatus, "Atlab",** as above described, complete as shown in illustration, consisting of Emulsion Viewer with 48 Emulsion Tubes 315 x 20 mm and lamp for use on 115 volts, Shaking Apparatus with removable carrier and motor for 115 volts, 60 cycles, a.c., Automatic Time Switch for control of 30-second shaking cycle, 48 Screw Cap Jars, 4 oz. capacity, and 192 plastic caps for same. . . . . 352.26

**4943-A. Emulsion Viewer, only,** with 24 Emulsion Tubes and Lamp for 115 volts. . . . . 170.00

**8919-G. Shaking Apparatus, Reciprocating Type, only** with removable carrier for twenty 4 oz. jars; with cord and plug for 115 volts, 60 cycles, a.c. . . . . 133.75



Showing appearance of illuminated central tube at time of reading percent volume of test emulsion.



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# Research Newsletter . . .

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## **Amino Acids Short in U. S. Diet**

A shortage of cystine and tyrosine **in all foods** is indicated in a preliminary report from a committee of the Food and Nutrition Board, NRC. The committee is surveying amino acid content of typical foods to determine if adequate levels are being consumed by the population. Committee's study of analytical values also indicates a **shortage of all amino acids** in such foods as flour, cereals, potatoes, fresh and processed vegetables, and infant foods.

## **DDVP—New Phosphate Insecticide**

The new insecticide DDVP (*O,O*-dimethyl 2,2-dichlorovinyl phosphate) was first reported at the New York ACS Meeting last fall (although the wrong structure was assigned). It has been reported **comparable to parathion** in housefly toxicity but is considerably less toxic to rats. While it has higher housefly toxicity than L 13/59 (Dipterex) it also has higher rat toxicity. High volatility should ease residue problems, but **much remains to be learned about hazards**. (Montrose Chemical has taken the lead in commercial development with research quantities readily available.)

## **Antibiotics a Crop Growth Stimulator?**

Agri-mycin not only controlled bacterial diseases of vegetable crops but also increased the **size of harvested fruit**, according to reports by three University of Florida plant pathologists. Reporting on control of bacterial spot of peppers and tomatoes with the antibiotic spray made of streptomycin and Terramycin, the Florida researchers said that yields from antibiotic treated test plots were **87% higher** than those from nontreated control plots.

## **\$11 Million for Cotton Research by '65**

Cotton research will need more than \$11 million annually by 1965 to maintain federal research program outlined by USDA's Advisory Committee on Cotton and Cotton Seed Research and Marketing. Present cotton research budget is **about \$4.35 million**. Advisory committee says funds should be increased almost \$4.5 million by 1960 and reach total of \$11 million by 1965. Projected 1956 budget: 85% to be spent for **production and utilization research**, remainder for market research.



- Decrease of particle size increases the ammonia absorption rate in ammoniation of superphosphate (p. 218)
- Slowly-soluble compounds could be added to standard fertilizer formulations for correcting boron deficient soils (p. 222)
- Ability to chelate and lipid solubility are important factors in the fungitoxicity of the copper oxine fungicides (p. 229)
- Growth stimulating effect of arsanilic acid alone or in combination with antibiotics is believed to be due to thorough control of harmful intestinal flora (p. 235)
- Meat from young steers is only slightly more tender than that from young bulls and bulls are more efficient in converting feed to meat. Slight difference in tenderness may not be worth the cost of production (p. 244)