

Business Newsletter . . .

Stepping up Pyrethrins Activity

New synergist for natural pyrethrins, developed by Morton Beroza of USDA, Beltsville, (AG AND FOOD, January 1956, page 49) is going commercial. Chemical Division of Shulton, Inc., will produce and market the compound, as Sesoxane. It is reported to be **more economical**—for same degree of knockdown and kill—than any synergist previously available. Chemically the 2-(2-ethoxyethoxy) ethyl 3,4-methylenedioxyphenyl acetal of acetaldehyde, Sesoxane is soluble in kerosine, Freons, and other solvents, and has a faint, pleasant odor and low acute oral toxicity . . . New source of pyrethrin extracts has gone into operation in Belgian Congo, where Chimiphar's newly completed plant at Bukavu is set to process 2.7 million pounds of pyrethrum flowers a year. Extraction near point of growth will cut shipping costs by eliminating long-distance movement of baled flowers.

More Ammonia in California

Plans are far along for **100-tons-per-day ammonia plant** at Huron, Calif., to be built by Ammonia Chemical Corp. of Fresno. Possible partnership arrangement would bring in Monterey Oil Co., Los Angeles, with Ammonia Chemical as operator. To cost about \$5 million and use pipeline **natural gas**, plant will serve chiefly the west side of the rich agricultural San Joaquin Valley . . . Best Fertilizers Co. of Oakland and Lathrop, **moving further into basic chemicals**, is polishing plans for an affiliated company to own and operate an anhydrous ammonia plant with **captive market** for its entire output.

L-Lysine via Fermentation

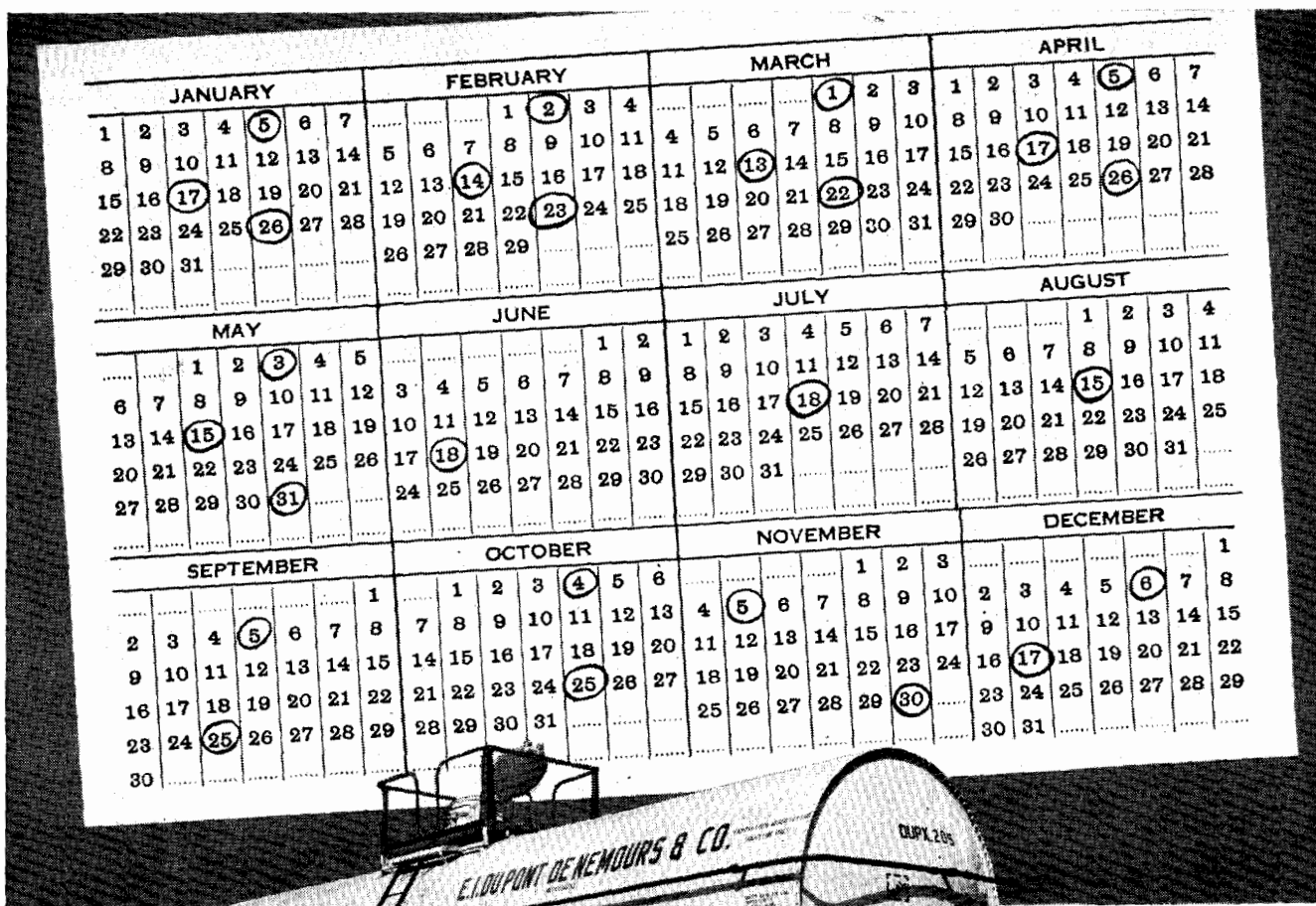
Chas. Pfizer & Co. has acquired exclusive patent rights on fermentation process for manufacturing L-lysine, one of eight **amino acids essential for human nutrition**, and a potential additive for animal feeds. Pfizer will market the product in monohydrochloride form at \$12 per pound (50-pound lots). The process, first commercial route to lysine by fermentation, gives high purity product free of inactive isomer D-lysine.

Stable is the Word for Prices

Steadiness marks prices for agricultural chemicals generally. Changes occurring in fertilizer quotations are automatic in accordance with previously issued schedules. The only noteworthy recent price revision in **pesticides** was for aldrin, advanced 10 cents effective Jan. 1 to 90 cents per pound for carloads, 95 cents for less than carloads. Nitrogen solutions, moved up to \$1.14 per unit as of Oct. 1, probably will stay at that level until the start of 1957, when the price goes to \$1.20. While supplies of anhydrous ammonia and ammonium sulfate are at high levels, prices for these and other nitrogen fertilizers are unchanged.



- Choice of carrier and diluent for dust formulations can make difference between good and poor field performance of insecticides (p. 985)
- Pesticide industry looks to large acreage crops as chief growth potential (p. 986)
- Now that three coke oven operators have switched from ammonium sulfate to DAP, others will be watching closely to see if it pays off (p. 988)
- Enabling farmer to operate at satisfactory profit is sufficient to assure chemical fertilizers of continuing growth (p. 990)



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Research Newsletter . . .

New Herbicides Here and Abroad

Stauffer Chemical's new herbicide EPTC (ethyl-*N-N*-di-*n*-propylthiolcarbamate) has given excellent control of **all grassy weeds and many major broad leaf weeds** when applied before weed emergence. In both pre- and post-emergence application tests during past two years, clover, alfalfa, corn, tomatoes, carrots, sugar beets, and many other **crops have proved resistant**. EPTC is still experimental; Stauffer will test it extensively in 1957 . . . In England, Fisons Pest Control Ltd.'s new herbicide CP.1815 shows great promise for use in **cereal crops**. In trials to date it has been effective against all weeds controlled by MCPA and DNOC, giving no indication of crop depression and in some cases improving crop yields. Big advantages are **low toxicity** (about same as that of MCPA or 2,4-D, permitting safe handling without elaborate precautions), **ease of application**, and **lower cost** in comparison with sprays it will replace. Extensive field testing is scheduled for 1957.

Victory in Sight in War against Medfly

Progress to date indicates the **Medfly** should be eliminated from Florida within the next **six months**, according to Loren F. Steiner of USDA. Already 600,000 acres of 750,000 infested have been found free of the pest for two months or more. Some recurrence may be expected in a limited part of that acreage, requiring further treatment; eradication program on the remaining 150,000 acres is progressing satisfactorily. Total cost so far: **\$8 million**—with perhaps several million dollars required to finish the job. Estimated annual crop losses if the pest were not eradicated: \$20 million.

Biological and Chemical Control of Weeds

Possible new weapons for **biological control of weeds** are a root-boring beetle and a gall fly which attack goatweed, and a small weevil which destroys gorse. Washington State College reports all three **established on a limited basis** in Pacific coast states, and says Cinnabar moth is under study as a possible control for ragwort. (Australia led the way in extensive use of biological control agents against noxious weeds; American researchers are proceeding carefully to make sure that any insect import will attack only the plant to be controlled.) . . . Serious **weed pests of alfalfa**, says Oregon State College, are controlled by application of three pounds of Karmex DW per acre. At cost of \$12 per acre, treatment keeps fields fairly free of cheatgrass, Canada bluegrass, and foxtail barley for three years, increasing yields of alfalfa up to 100% in early cuttings. FDA clearance indicates **no carryover** in either milk or meat of animals fed hay from treated plots . . . University of California, Riverside, reports that monuron at two pounds per acre controls **common orchard weeds** for as little as \$16 per acre. Control is effective for two to eight months where there is **sufficient rain to work the chemical into the ground**.



- Experiments in poultry processing plants throughout the country show that Aureomycin keeps poultry fresh longer (p. 1030)
- Method for determining captan in natural products is based on its reaction with alkaline resorcinol under reducing conditions (p. 1035)
- Oxygen-containing chemicals such as diethylene glycol prevent degradation of heptachlor in dust formulations (p. 1038)
- New evidence on loss of fungitoxicity of copper oxinate under some conditions supports theory that equilibrium and cell penetration relationships are responsible (p. 1042)