

Ag and Food NEWSLETTER

Pasteurized Meat

COLD STERILIZATION of foods has been handicapped by the fact that massive doses of radiation were needed completely to eradicate bacteria, resulting in flavor changes and prohibitive expense. Researchers at the American Meat Institute Foundation have now reported an effective "pasteurization" of meat with relatively mild doses of radiation. They say that shelf life of refrigerated meats is increased fivefold following exposure to mild radiation from a cobalt 60 source. Mild radiation is said to inhibit, though not eradicate, bacteria responsible for early spoilage of refrigerated meats.

High Voltage-Cold Sterilization

TWO PARTICLE ACCELERATORS FOR COLD STERILIZATION are nearing completion in California. Applied Radiation Laboratories is constructing the machines which will have rated potentials of 20 million volts. ARL says its machines will have edge on resonance transformer's potential of 2 million volts and Van de Graaff generator's potential 4 to 5 million volts. They claim that linear particle accelerators will be capable of "pasteurizing" up to 200 tons of food per hour when operating at a 25,000 r.e.p. level. W. & F. John Barnes Co., Rockford, Ill., gets one of the machines to push research and development in cold sterilization. If and when technique proves feasible Barnes, manufacturer of food processing equipment, plans to add machines of this type to maintain complete coverage of food processors' needs.

Cooperatives Team Up on Ammonia

TWO FARMERS' COOPERATIVE GROUPS have teamed up on the 180-ton-per-day anhydrous ammonia plant under construction near Lawrence, Kans. A federation of midwestern farm cooperatives, Central Farmer's Fertilizer Co., has purchased a quarter of the stock of the Cooperative Farm Chemicals Association. Farm Chemicals Association started construction of the ammonia plant in the fall of 1952. Production is scheduled to start this summer, with portions of the ammonia output going into nitrate solutions.

More Ammonia Expansion

ALLIED CHEMICAL & DYE'S Nitrogen Division is making its second ammonia expansion in two years at the Hopewell, Va., plant—this time by 50,000 tons. Also expanded will be facilities for converting anhydrous ammonia to nitrogen solutions. Use of solutions in the Southeast is growing. For example, Shields and Co., of Scotland Neck, N. C., put five applicators into the field last week. Planters Cotton Oil of Rocky Mount, N. C., started this spring with sale and custom application. More than a dozen applicators are in action in eastern Virginia. Main crops getting solutions at present: corn, cotton, and pastures.

Atlas in Germany

A NEW GERMAN EMULSIFIER COMPANY, Atlas-Goldschmidt, GmbH., formed jointly by Atlas Powder and Th. Goldschmidt of Essen, Germany, may mean new products in both countries. Atlas will not import German products but will have use of Goldschmidt patents and processes in the American plants. They are now working toward new emulsifier materials for U. S. markets. Th. Goldschmidt's Essen plant will manufacture for sale by the new German Co., Atlas' line of fatty esters of sorbitol and their polyoxyethylene derivatives. Discussion is now in progress with German authorities relative to use of polyoxyethylene monostearate in food products.

Olin Mathieson Merger

ASSOCIATION OF OLIN INDUSTRIES AND MATHIESON CHEMICAL in hydrazine manufacture has led to a closer relationship—companies' boards have announced plans for a merger of the two companies to form Olin Mathieson Chemical Corp. Stockholders will vote on the proposal June 29. Both companies were organized in 1892, Mathieson as a heavy chemical producer and Olin as a black powder manufacturer. Expansion and diversification followed until Mathieson now produces over 400 chemical products and Olin makes arms and ammunition, paper, forest products, metals, film and, more recently, cellophane and polyethylene.

Fruit Fly Threat

MORE EVIDENCE—a second adult and three pupae cases—gathered since February (AG AND FOOD, FEB. 17, page 163) now indicates there is an active infestation of Mexican fruit fly just south of the California-Mexico border in the Tijuana River Basin area. U. S., California, and San Diego county officials have instituted an active eradication campaign on both sides of the border. On the U. S. side, control area includes a five-mile strip adjacent to the border for a distance of 25 miles inland from the Pacific. Federal Government is supplying supervision, chemicals, and equipment for application by Mexican workers south of the border in the entire river basin. Spray program may continue for several years until there is complete lack of evidence of the insects. Meanwhile, state entomologists have increased trapping activities to detect any possible outbreak on California crop lands.