He said that "fertilizer is one of the most effective 'tools' that farmers have in fighting the so-called price-costsqueeze and neither they nor the fertilizer industry can stand further freight rate increases under present economic conditions.'

ASSOCIATIONS

Ag and Food Division to Present 2 Symposia, 47 Papers

The Division of Agricultural and Food Chemistry begins its four-day program for the 129th AMERICAN CHEMICAL SOCIETY meeting on Monday April 9 with a symposium on relation of environment to nutritive quality of crops. Another symposium, on food and agriculture with H2O-plus, is to be held on Wednesday. The ACS meeting begins on April 8 in Dallas, Tex., and continues through April 13.

In addition to the Ag and Food Division's program there are papers and symposia of interest in other divisions. In the Division of Biological Chemistry, there are symposia on recent studies in carbon dioxide fixation, metal ions in biochemistry, and a series of papers on plant biochemistry.

The program of the Ag and Food Division follows.

Monday Morning and Afternoon (April 9)

Symposium on Relation of Environment to Nutritive Quality of Crops

Walter J. Peterson, Presiding

WALTER J. PETERSON. Introductory Remarks.

Kenneth C. Beeson. Soil and Environmental Factors Affecting the Nutritional Quality of Plants-Historical Aspects.

G. Fred Somers. The Vitamin Composition of the Plant in Relation to its Nutrition.

JOHN F. THOMPSON. Factors Affecting the Amino Acid Composition of Plants.

ROBERT VAN REEN AND ALVIN NAson. Role of Minerals in Enzyme Systems.

EDGAR R. LEMON. Soil Physical and Meterological Interrelationships Involved in Plant Nutrition.

Ruth Reder, Presiding

HENRY L. LUCAS, JR. Designs and Procedures for Relating Soil, Climate, and Nutritive Composition.

EDWARD J. THACKER. The Use of the Rabbit in Evaluation of Forages in Soil-Plant-Animal Studies.

MARY Speirs. The Relation of Soil and Weather Factors to the Organic

Constituents of Plants as Found in a

Regional Study.

LUTHER R. RICHARDSON. The Relation of Soil and Weather Factors to the Inorganic Constituents of Plants as Found in a Regional Study.

ALVIN L. MEXON. Problems Con-

cerned with Mineral Elements in Animal Nutrition.

Tuesday Morning and Afternoon (April 10)

W. O. Lundberg, Presiding

ORLAND A. KROBER AND ROBERT W. HOWELL. Relation of Sulfur Level to Nutritional Value of Soybeans.

CARL W. BONHORST AND IVAN S. PALMER. Metabolic Interactions of Selenate, Sulfate, and Phosphate. L. J. TEPLY AND R. F. PRIER. A

Nutritive Evaluation of Coffee, Including Niacin Bioassay.

HAROLD SALWIN, MARY D. DEVINE, AND J. H. MITCHELL, JR. Determination of Choline in Noodles as a measure of Egg Yolk Content.

VIRGINIA R. WILLIAMS AND E. A. FIEGER. Investigation of Factors Influencing the Amylose Content of Rice Starch.

JULIUS W. DIECKERT AND NELLE J. MORRIS. Chromatography of Sugars on Glass Paper Impregnated with Silicie Acid.

JANET L. C. RAPP AND PHILIP C. ANDERSON. The Roles of Essential Amino Acids and Available Hydrogen

in the Feeding of Urea to Ruminants.
C. F. Krewson, T. F. Drake, J. W.
MITCHELL, AND W. H. PRESTON, JR. Growth Regulators. VI. Amino Acid Derivatives of 2-(2,4-Dichlorophenoxy)-Propionic Acid and Their Plant-Regulating Effects in Preliminary Screening Tests.

Divisional Luncheon. ROGER J.

WILLIAMS. The Wisdom of the Body —To Eat.

A. L. Elder, Presiding

A. Laurence Curl and Glen F. Bailey. Comparison of Xanthophylls from Leaves and Orange Juice.

Lyle James Swift. Composition of Commercial, Segment, and Peel

Juices of Florida Oranges.

TORSTEN HASSELSTROM AND MAL-COLM C. HENRY. The Effect of High Energy Radiation on the Carboxyl Group in Small Molecules.

GEORGE P. DATEO, RICHARD C. CLAPP, KURT S. KONIGSBACHER, DON-ALD A. M. MACKAY, ERIC J. HEWITT, AND TORSTEN HASSELSTROM. Flavor. I. Identification of the Vola-tile Sulfur Flavor Components of Cooked Cabbage and the Nature of the Precursor in the Fresh Vegetable.

SAMUEL R. HOOVER. Award in the Chemistry of Milk Address.) Studies in Water Adsorption of Proteins.

E. R. IBERT, F. T. FISHER, AND J. F.

FUDGE. Partial Fractionation of Water Soluble Nitrogen in Coastal Bermuda grass.

James E. Webster and Frank Davis. The Effect of Weathering Upon Dry Standing Sorghum Forage. S. S. BLOCK AND GEORGE TSAO. Mushrooms from Sawdust.

Business Meeting.

Wednesday Morning (April 11)

Symposium on Food and Agriculture with H₂O-Plus

Louis Koenia, Presiding

Louis Koenig. Introductory Re-

marks.
L. V. Wilcox. Irrigation with

JAMES A. MCMILLAN AND VERNICE C. Cook. A Trace Element Food Supplement from Sea Water.

ARNOLD E. SCHAEFER.

Properties of Sea Salt.
ROBERT C. MERZ. Irrigation with
Sewage Effluent for Agricultural Purposes.

CLARENCE G. GOLUEKE, W. J. Os-WALD, AND HAROLD B. GOTAAS. Animal Food Production from Waste Waters.

ROBERT A. CANHAM. Current Developments in Spray Irrigation of Food Canning Waste.

Thursday Morning and Afternoon (April 12)

Pesticides Subdivision

Hobart O. Thomas, Presiding

J. A. Noone. Introductory Remårks.

W. F. PHILLIPS. Announcements. MERVIN E. BROKKE, ULO KIIGE-MAGI, AND L. C. TERRIERE. A Modified Colorimetric Method for the Determination of Aramite Residues.

IRWIN HORNSTEIN. Colorimetric

Analysis for Toxaphene.

L. C. Terriere and Ulo Kiigemagi. A Simplified Bioassay for Insecticide Residue.

PAUL A. GIANG AND R. L. CASWELL. Polarographic Determination of 0,0-Dimethyl 2,2,2-Trichloro-1-Hydroxyethyl Phosphate (Bayer L 13/59).

S. S. BLOCK. Is 8-Quinolinol Fungitoxie?

MARSHALL A. MALINA, ARTHUR GOLDMAN, LEO TRADEMAN, AND PERCY B. POLEN. Deactivation of Mineral Carriers in the Preparation of Stable Heptachlor Formulations.
J. F. Les Veaux. Methods of Mak-

ing Calcium Arsenates.

W. F. Phillips, Presiding

J. A. Noone. Introductory Remarks.

THOMAS G. BOWERY, ROBERT L. RABB, FRANK E. GUTHRIE, AND ROBERT J. MONROE. TDE and Endrin Residues on Tobacco.





Dept. O, P. O. Box 998

Tallahassee, Florida

R. W. Fogleman. Residue Studies in the Development of New Agricultural Chemicals.

THOMAS H. HARRIS. Opinion on Residue.

Frank A. Vorhes, Jr. Requirements of Analytical Data Supporting Pesticide Residue Tolerances.

NAC Program Announced

George P. Larrick, U. S. Commissioner of Food and Drugs, will be the featured speaker at the spring meeting of the National Agricultural Chemicals Association meeting this month. The meeting is to be held at the Hollywood Beach Hotel, Hollywood, Fla., March 14 through 16. Mr. Larrick's subject is the effect of food and drug legislation on farmers and growers.

Other speakers on the program include: J. Wayne Reitz, president of the University of Florida, speaking on the part land grant colleges play in developing new agricultural chemicals; J. A. Field, vice president of Carbide and Carbon, on the marketing of pesticide chemicals; and S. B. Hendricks, USDA Agricultural Research Service, reporting on atomic energy in agriculture.

Also on the program are: George L. McNew, Boyce-Thompson Institute, on the future of fungicides in agriculture; H. L. Haller, USDA, on USDA programs affecting pesticides; H. G. Johnston, National Cotton Council, on research and economics in the cotton industry.

There will also be reports from L. S. Hitchner, executive secretary of the association, and W. W. Allen of Dow Chemical, the association's president.

Farm Research Association to Meet in Tenn. in July

The American Farm Research Association has anounced that its research conference will be held this year at the University of Tennessee at Knoxville. The dates are July 11 through 13. Feeds and fertilizers are among the subjects to be up for discussion.

CALENDAR

National Agricultural Chemicals Association. Hollywood Beach Hotel, Hollywood, Fla. March 14–16.

Symposium on Physics in the Food Industry. Plaza Hotel, San Antonio, Tex. March 15-16.

American Chemical Society, 129th National Meeting. Dallas, Tex. April 8-13.

PEOPLE

Tishler Named Director of Merck's New Research Division

Max Tishler has been appointed vice president and executive director of the newly formed research division of Merck. It is to be called the Merck, Sharp & Dohme Research Laboratories. Randolph T. Major has resigned as scientific vice president but will remain with Merck on a part-time basis in an advisory capacity. Dr. Tishler has been serving as vice president for scientific activities of the chemical division.

John C. Anderson, president of Agriform, his been elected to the board of directors of the California Fertilizer Association, subject to membership approval at the annual meeting next November. His term will expire in November 1958.

William S. Vaughn has been elected president and a member of the board of directors of Eastman Chemical Products, Inc. He succeeds James C. White, who has resigned the presidency to become board chairman.

Malcolm H. McVickar is to become chief agronomist for California Spray-Chemical on April 1. He has been chief of the agronomic education division of The National Plant Food Institute.

Roderick Murray has been appointed director of the Division of Biologics Standards of the Public Health Service. He replaces Carl L. Larsen, who has been serving as acting director since the division was established last year.

James C. Pearson has been named director of the Division of Federal-State Relations of the Food and Drug Administration. Replacing him as chief of the Atlanta district of FDA is John W. Sanders, who has been chief analyst of the Division of Field Operations since 1951.

Raymond Wynkoop has left National Distillers Products Corp. to become manager of the general engineering department of International Minerals & Chemical Corp.

Arthur K. Doig, formerly with Shulton, Inc., has joined Michigan Chemical Corp., as a member of the organic research staff.

Samuel L. Nevins, vice president for the plant food division of Olin Mathieson Chemical Corp., has received an honorary doctor of laws degree from the University of Arkansas. He was cited for his contributions to the welfare of Arkansas agriculture and industry.

George V. Dupont has been promoted from manager of manufacturing operations to general manager of Diamond Black Leaf Co. He succeeds John W. Kennady, who is to become sales manager of agricultural chemicals for Diamond Alkali. Kennady, in turn, replaces L. J. Polite, who becomes sales manager for a group of organic chemicals having diverse industrial uses.

Alfred A. Mulliken, has joined the staff of the Chemical Specialties Manufacturers Association in the newly created position of assistant secretary. He has been with the Creamery Package Mfg. Co. as sales engineer.

Donald L. Fuller has left American Cyanamid to become director of research for Grace Chemical Research & Development Co., division of W. R. Grace & Co. He has been technical director for Cyanamid's petrochemicals plant at New Orleans.

R. M. Ludwig has been named director of the chemical control department of American Agricultural Chemical Co.

Donald R. Fischer, formerly plant superintendent of the Ralston Purina feed mill in Charlotte, N. C., has joined Monsanto Chemical as technical service representative. He will be concerned with technical service in the field of animal feed supplements, particularly with regard to phosphate and Monsanto's recently introduced phosphate feed solution.

Thomas M. Means has left Purdue University to join Eli Lilly in the agricultural research department where he will be doing research in animal nutrition.

Glenn Fite has joined Victor Chemical to fill the newly created position of manager of sales to the milling industry. For the last four years he has been sales vice president of Birdsey Flour & Feed Mills at Macon, Ga.

Deaths

Edgar S. McFadden, agronomist at Texas A&M Agricultural Experiment Station, and developer of the first rustresistant variety of wheat, died Jan. 5 at 64 years of age. He was awarded the John Scott medal from the City of Philadelphia on Dec. 28.