# News and Notes

## Ceylon Meeting of FAO

A REGIONAL conference on land utilization in tropical areas of Asia and the Far East was held in Ceylon, Sept. 15–29. Participating were 75 administrators, agronomists, economists, engineers, foresters, and soil scientists from FAO and from 14 countries, including Australia, Belgium, Burma, Cambodia, Ceylon, France, India, Indonesia, The Netherlands, Pakistan, Portugal, the United Kingdom, Vietnam, and the United States. Delegates from the U. S. were Tom Gill, of the Society of American Foresters, chairman; Milton H. Button, agricultural officer for Trust Territories of the Pacific Islands; Raymond H. Davis, ECA; Harold B. Donaldson, Natural Resources Section, SCAP; and Robert L. Pendleton and Roy W. Simonson, USDA.

The discussions, held in Nuwara Eliya, covered three main topics: (1) determining optimum use of tropical land resources, (2) achieving optimum and preventing undesirable uses, (3) improving and maintaining productivity of tropical lands.

Much emphasis was given to the need for proper classification and mapping of tropical lands as part of the process of determining optimum use. Mapping activities believed necessary range from aerial photography to detailed soil and forest surveys. The series of steps outlined to provide for appraisal of potentialities of tropical lands were, first, the delineation of broad regions generally similar in their patterns of vegetation, soils, and geology; second, more precise outlining of the kinds and distribution of soils; and, third, the determination of use-capabilities of soils from available experience and research findings. As a basic principle, it was urged that governments obtain comprehensive summaries of facts about land and water resources before plans for development are made, and that these fundamental facts should then be employed as essential tools in the planning process. It was recognized that additional research on fundamental properties of soils in tropical regions was essential for determining their best use. Experience with direct application of methods used successfully in temperate zones has not been happy generally. Special efforts seem necessary in some countries to correct the widespread practice of shifting cultivation, with its harmful effects on forest resources. The development of alternative means of obtaining a livelihood may be necessary to stop shifting cultivation.

The discussions during the eight days of the conference touched many other topics, which can be illustrated by mention of a few. Briefly considered were the effect of agricultural price policies on land use, better coordination of research on land and water utilization in the institutions of Asia and the Far East, the adoption by each country of a sound forest policy, the establishment and care of communal forest plots near villages, the control and eradication of *Imperata cylindrica,* the fragmentation of peasant holdings, and the possible use of *Sesbania speciosa* as a green manure crop on rice paddies. This list suggests the variety of topics involved in any comprehensive discussion of land utilization.

A four-day field tour, sponsored by the host government, gave delegates an opportunity to see irrigation and dry-farming development schemes in the "dry zone" of Ceylon, the ruins of cities and irrigation works that flourished centuries ago, and the production of tea in field and factory. In construction of present irrigation systems, the government of Ceylon is able to restore ancient dams and use parts of former canals. The old works thus reduce present costs and are of great value. Efforts to promote dry farming on soils akin to those of the Cross Timbers region of Texas seem a far cry from dry farming in the U. S. The annual rainfall in the dry zone of Ceylon ranges upwards from 40 in., but the comparatively high temperatures throughout the year and the long dry season make the rainfall far less effective than it is in our Great Plains. Much of Ceylon lies in the dry zone, now used only to a limited extent. In the tours, delegates saw plantations and factories producing the tea for which Ceylon is famous. Tea is widely grown on hilly lands at higher elevations, though a few slopes seem poorly adapted to any type of cultivation.

The meeting in Ceylon permitted men from various fields to compare present land utilization in their several countries, to exchange information on methods for improvement that had been successful, and to get acquainted with one another. The field tours provided some common reference points that will be helpful in future discussions and correspondence. Ultimately, the opportunity for a continuing exchange of ideas among men who now know each other may well be as helpful as will the FAO report summarizing discussions at the conference.

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## Scientists in the News

**Raymond B. Allen,** retiring president of the University of Washington, has been named chancellor of the University of California at Los Angeles. Dr. Allen was recently appointed to head the U. S. Psychological Strategy Board, a post he is expected to fill until he takes up his duties in Los Angeles next summer.

**Paulo C. A. Antunes,** assistant director of the Pan American Sanitary Bureau, Washington, D. C., has resigned to become dean of the School of Hygiene and Public Health, University of São Paulo, Brazil. **M. G. Candau** has been named to replace him. **V. A.**

Sutter, of the WHO headquarters staff, will serve as acting assistant director of the bureau pending the arrival of Dr. Candau in March.

**Guy Camus,** research fellow in biology at Caltech, has been granted the first award of the Louis Rapkine Foundation of Paris for distinguished work in his specialty. The Rapkine Foundation was established in memory of the French biologist Louis Rapkine, who died in 1949 at the age of 42.

**Carl Djerassi,** of Syntex Laboratories, Mexico City, has been appointed an associate professor of organic chemistry at Wayne University. Dr. Djerassi was a member of the group of Syntex chemists who recently completed the total synthesis of cortisone.

**C. T. Elvey,** senior scientist and deputy head of research at the Naval Ordnance Test Station, China Lake, Calif., has been appointed director of the Geophysical Institute of the University of Alaska. Dr. Elvey is an astrophysicist and an authority on the light of the night sky.

**A. W. Friend** has been named director of engineering and development of Magnetic Metals Company, Camden, N. J. Dr. Friend has been on the staffs of West Virginia and Harvard universities, MIT, RCA, and Daystrom, Inc.

**Henry A. Imus,** head of the Psychophysiology Branch, Biological Sciences Division, ONR, and now on assignment to the London Branch Office of Naval Research, has recently been elected to membership in the Ergonomics Research Society and in the British Psychological Society.

The University of Louisville School of Medicine has appointed **U. Pentti Kokko** associate professor in child health research. Dr. Kokko will continue studies in poliomyelitis in the school's Kentucky Child Health Foundation Laboratory, which is under the direction of **Alex J. Steigman,** professor of child health.

**Oscar Lewis,** University of Illinois anthropologist, spoke at the International Congress on Mental Health in Mexico City on "Effects of Technical Progress on Mental Health in Rural Populations." He also led a discussion section on problems of mental health and technological innovations.

**D. E. Lindstrom,** for 22 years head of rural sociology work in the Illinois College of Agriculture, has been granted a three-year leave of absence to accept appointment in the newly organized International Christian University in Japan, starting in January 1953. He will serve as professor of rural sociology, member of the graduate faculty, and either director or cochairman with a Japanese staff member of a proposed rural community study project.

**D. A. A. Mossel,** microbiologist in the Central Institute for Nutrition Research, TNO, Utrecht, The Netherlands, is participating in an ECA project on food technology and hygiene and will be in the U. S. during January, February, and March.

**Karl S. Quisenberry** has been appointed assistant chief in charge of program planning and coordination for the Bureau of Plant Industry, Soils, and Agricultural Engineering, USDA. He succeeds **A. H. Moseman,** who recently became the bureau's chief. Dr. Quisenberry entered the Department of Agriculture in 1925, and from 1936 to 1946 was located at Lincoln, Nebr., in charge of the regional cooperative breeding program for hard red winter wheat and other work on oats, rye, and barley. Since 1946 he has been head of the Division of Cereal Crops and Diseases at Beltsville, Md.

Recent visitors at the ARA Eastern Regional Research Laboratory, Philadelphia, included **V. Ramakrishman,** Madras; **Roy Dru,** consulting chemist, Paris; **Alexander Meller,** Melbourne, Australia; **Ferdinand Sanchez,** Puerto Rico Agricultural Experiment Station, Río Piedras; **M. A. Himmet,** director, Egyptian Government Laboratory, Alexandria; and **Y. Nishisaka,** president, Nishisaka Industry Co., Osaka, Japan.

**Samuel Ray Scholes,** professor of glass technology in the New York State College of Ceramics, has been named last year's recipient of the Albert Victor Bleininger Award. Dr. Scholes is the fifth recipient of the Bleininger Award, which was established by the Pittsburgh Section of the American Ceramic Society with the purpose of conferring deserved recognition on distinguished men in ceramics.

**Gerald Wendt** has accepted appointment as head of the Division of Teaching and Dissemination of Science in the Department of Natural Sciences of Unesco. His job at Unesco will entail responsibility for many world-wide programs of public education in science, including traveling exhibits, stimulation of international amateur science clubs, and informational aid to local science organizations scattered around the world. Dr. Wendt will also edit Unesco's quarterly journal, *Impact.*

**M. S. White,** USAF (MC), formerly air surgeon for the USAF in Europe, was recently appointed air surgeon for the Tactical Air Command. Colonel White served a three-year tour of duty in Europe before his arrival at TAC headquarters at Langley Air Force Base, Va. The post of USAFE air surgeon is now filled by **William H. Powell,** formerly chief of the Directorate of Professional Services, Office of the Surgeon General, USAF. New chief of Preventive Medicine for the Professional Services Division is **Richard L. Schwartz.**

**Charles R. Wilke,** associate professor of chemical engineering at the University of California, Berkeley, has been chosen by the American Institute of Chemical Engineers as last year's winner of its Junior Award, for outstanding contributions to the literature of chemical engineering.

## Education

The **Air Force School of Aviation Medicine** will institute a special course for sanitary and industrial hygiene engineers at Gunter AFB, Montgomery, Ala. Instruction will be provided for both Air Force engineers and civilian consultants. The program begins in February.

**Johns Hopkins** has begun a course in its adult education branch entitled "The Family's Approach to Investment Securities," designed to teach the small investor how to get the most out of his money, how to protect his savings, and how to increase his capital as safely as he can under the new tax laws. Thirty-eight per cent of the total registration in the new course consists of women.

**Lehigh University** has appointed two new department heads, effective Feb. 1. Alan S. Foust, professor of chemical engineering at the University of Michigan, will become head of the Department of Chemical Engineering, and Earl J. Serfass, Lehigh professor of chemistry, will become head of the Department of Chemistry.

Robert O'Connor, Leo Weinschel, and George Collentine, Jr., will function as chairmen of the spring clinics of the **Marquette University Medical School,** Milwaukee, scheduled for Mar. 29. The clinics will be sponsored by the Alumni Association of the Medical School.

The **Social Science Research Center** at Cornell is making a study of a thousand patients in tumor clinics and cancer detection centers in New York state to determine what types of people seek early diagnosis of cancer and what types put it off. Data, which will be made available to the state Department of Health Bureau of Cancer Control, will be used to determine type and focus of educational material. Edward A. Suchman, Robin M. Williams, Jr., and Rose K. Goldsen are project directors.

The Medical Units of the **University of Tennessee** have added these new members to the staff: Robert L. Bacon, of Stanford University; Sidney A. Cohn, who recently received his Ph.D. from Brown University; Lew S. Cunningham, former American Cancer Society research fellow at Stanford; and James S. Davis, Ph.D., from the University of Wisconsin.

**Wagner College,** Staten Island, has established a Department of Bacteriology and Public Health under the chairmanship of Natale Colosi, adding courses to the curriculum and transferring the courses in medical technology to the new department.

The semiannual **Wayne University** "Frontiers in Chemistry" lecture series will open Feb. 18 with Terrell L. Hill as the speaker. Other lecturers will be: Feb. 25, Allen T. Gwathmey; Mar. 10, Wallace R. Brode; Mar. 17, M. S. Newman; Apr. 7, Philip W. West; Apr. 28, Karl Paul Link; May 5, Robert C. Elderfield; May 12, Hans Boogh Jonassen.

## Grants and Fellowships

Funds for a **Geer Fellowship** have been given to Cornell by William C. Geer, alumnus who recently established the Laboratory of Rubber and Plastics in the School of Chemical and Metallurgical Engineering (SCIENCE, 114, 313 [1951]). The two-year graduate fellowship will deal with the biochemistry and biophysical chemistry of the eye.

An annual $4,000 **McGill–Arctic Institute Carnegie Fellowship** has been established at McGill University for senior candidates who have engaged in suitable arctic or subarctic field projects. Applications for 1952–53 should reach Montreal by *May 1* and should be submitted to the secretary of the Carnegie Arctic Program, Arctic Institute of North America, 3485 University St., Montreal, P. Q.

The **National Association for Mental Health,** 1790 Broadway, New York 19, will award a prize of $1,000 for the best report of clinical research that will advance knowledge and understanding of adolescents and of the ways in which they can be helped in their social and emotional adjustment. The award committee consists of George E. Gardner, chairman; Abraham Z. Barhash, Othilda Krug, Fredrick C. Redlich, and Exie E. Welsch. Entries will be due on *June 30,* and the prize will be awarded in February 1953.

Nineteen research and teaching fellowships have been awarded by the **National Tuberculosis Association,** bringing to 43 the number granted since the initiation of the program in 1948. Graduate, undergraduate, and teaching-resident fellowships are included in the program, which is supported by the sale of Christmas Seals, except for three, which have been made possible by memorial gifts.

**Playtex Park Research Institute** has awarded a three-year grant to the Children's Hospital of Michigan, in Detroit, for the purpose of aiding research in iron metabolism, prevention of iron-deficiency anemia, the anemia of infection in early life, and other phases of hematology. Wolf W. Zuelzer, director of laboratories, will be in charge, and Julius Rutzky will carry on the research.

The **Textile Research Institute** offers four fellowships for graduate study at Princeton University, three in the Department of Chemistry and one in the Department of Chemical Engineering. The institute is a cooperative, industry-supported organization engaged in fundamental research in the physics and chemistry of fibrous materials and other high polymers. Full information may be obtained from J. H. Dillon, Director, Box 625, Princeton, N. J.

The **Van Meter Prize Award,** offered by the American Goiter Association for the best essays concerning original work on problems related to the thyroid gland, will be given at the annual meeting of the association in St. Louis May 1–3. Further information concerning the contest, which closes *Mar. 1,*

may be obtained from George C. Shivers, 100 E. St. Vrain St., Colorado Springs.

## In the Laboratories

**Armour Research Foundation** of Illinois Institute of Technology has appointed Cecil Schwartz, stress analyst, as associate engineer in the heat-power research department. Albert Wienstock, chemist for the Quartermaster Subsistence Testing Laboratory, has been appointed an associate chemist in the chemistry and chemical engineering research department.

**Arthur D. Little, Inc.**, has added Charles McGee, chemist and electrical engineer, formerly of the National Chemistry Laboratory, Poona, India, to its staff. Under a Point IV program the Cambridge research and engineering firm is making an extensive study of raw materials available in Egypt for low-cost housing. Charles G. Harford and Earl Stafford are making the survey.

Construction of the $8,000,000 addition to **Roswell Park Memorial Institute** at Buffalo, N. Y., begun last summer, is expected to be completed in July 1953. The state-owned institution for diagnosis, treatment, prevention, education, and research is one of the four U. S. hospitals approved for a full three-year residency in x-ray therapy.

**Schwarz Laboratories, Inc.**, of New York, is investigating the biochemical properties of glutathione, under an ONR contract. Previous studies have indicated that this compound may have a prophylactic action against radiation in certain animals.

## Meetings and Elections

Newly elected officers of the **American Anthropological Association** are: Wendell C. Bennett, president; William Lessa, secretary; J. O. Brew, treasurer; and B. Irving Rouse and Gordon Willey, Executive Board members.

The **American College of Surgeons,** meeting in San Francisco in November, chose Harold L. Foss as president-elect, succeeding Alton Ochsner, who became president. Henry W. Cave is retiring president. Robert H. Kennedy and Thomas F. Mullen were elected vice presidents, William L. Estes, Jr., was re-elected chairman of the Board of Governors, and Robert M. Zollinger was elected vice-chairman.

The **American Society of Anesthesiologists** elected the following officers at its meeting in Washington, D. C.: president-elect, Ralph Knight; vice presidents, B. B. Sankey and Clayton Wangeman. C. Walter Metz was installed as president, succeeding Urban H. Eversole, and J. Earl Remlinger, Jr., and Moses H. Krakow were re-elected secretary and treasurer, respectively.

The **Bureau of Biological Research,** Rutgers, will hold its eighth annual Protein Conference in New Brunswick, N. J., Feb. 1–2. General theme will be the relationships between protein metabolism and the endocrine system. The conference is open to all registrants, and reservation blanks may be secured from William H. Cole, of Rutgers.

George L. Drake has been elected president of the **Society of American Foresters** for a two-year term, succeeding Charles F. Evans. Elwood L. Demmon was elected vice president.

## Miscellaneous

Under the Point IV program, the **Caribbean Commission** is sponsoring a vocational training program in Puerto Rico. Thirty students from various Caribbean areas will take one-year courses at the Metropolitan Vocational School in San Juan. Educational expenses of the trainees are being met with the help of a $38,000 grant from the Technical Cooperation Administration.

The **Chekhov Publishing House** has been established by the East European Fund of the Ford Foundation to publish books in Russian for exiles of all Soviet nationalities. These will include prerevolutionary classics and works by contemporary Soviet authors that have been suppressed in the USSR; books by recent exiles and earlier *émigrés*; and translations of books in other languages that best represent Western thought and ways of life. Nicholas Wreden, executive vice president of E. P. Dutton, has been appointed director, and Lilian Plante associate director.

The **National Research Council** has set up in its Division of Biology and Agriculture a Committee on Developmental Biology for a study of development and growth in the broadest sense and to assist in bringing together the many branches of biology bearing on this area, including agricultural sciences, anatomy, physical anthropology, biochemistry, biometrics, cytology, embryology, endocrinology, genetics, histology, microbiology, nutrition, orthopedics, pathology, pediatrics, cellular and general physiology, plant physiology, and radiology. The committee plans to carry out its operations, for which it has received a sizable initial grant, in consultation with investigators, educators, administrators, and societies concerned, and in close liaison with related NRC committees and other agencies. Members of the committee are Paul Weiss, chairman; T. C. Byerly, W. W. Greulich, I. C. Gunsalus, T. M. Sonneborn, K. V. Thimann, and B. H. Willier.

The Office of Scientific Information of the **National Science Foundation** is prepared to support a limited number of carefully selected studies on information needs of scientists and on the effectiveness of present methods and techniques for disseminating information and organizing it for reference purposes. Better understanding of the needs of scientists for information and of the ways in which they use it is a prerequisite to planning effective measures for solving some of the most pressing problems in the field. Inquiries about the program should be submitted to

Robert Tumbleson, Chief, Office of Scientific Information, National Science Foundation, 2144 California St., N.W., Washington 25, D. C.

## Recent Deaths

**Russell I. Baker** (59), chemist, Linden, N. J., Dec. 11; **Thomas H. Bissonnette** (66), biologist, Hartford, Conn., Nov. 30; **Beatrice H. Brickett** (87), physician, Newton, Mass., Dec. 10; **Peter H. Buck** ("Te Rangi Hiroa") (71), anthropologist, Honolulu, Dec. 1; **Arthur E. Davis** (74), cancer specialist, Pittsford, N. Y., Dec 7; **Samuel H. Derickson** (—), biologist, Reading, Pa., Nov. 27; **George E. Doke** (74), mechanical engineer, Yonkers, N. Y., Dec. 6; **James E. A. Eggleson** (72), chemical engineer, Essex Fells, N. J., Dec. 14; **Benjamin K. Fletcher** (83), pediatrician, Philadelphia, Dec. 17; **Edmond Fleutiaux** (94), coleopterist, Nogent-sur-Marne, France, Nov. 25; **W. Wallace Fritz** (81), neuropathologist, Lansdale, Pa., Nov. 24; **Edward T. Grandlienard** (72), civil engineer, Drexel Hill, Pa., Nov 27; **Edgar A. Groves** (69), civil engineer, New York, Nov. 25; **Gene W. Hall** (53), civil engineer, Rockville Centre, N. Y., Nov. 29; **William L. Higgins** (84), physician and civic leader, Norwich, Conn., Nov. 19; **Kirke K. Hoagg** (62), engineer, Scarsdale, N. Y., Dec. 11.

**Max Immanuel** (61), economist, New York, Dec. 9; **Robert B. Irwin** (68), former executive director, American Foundation for the Blind, Bremerton, Wash., Dec. 12; **Herbert Jackson** (68), botanist, Toronto, Dec. 14; **Carl O. Lampland** (78), astronomer, Flagstaff, Ariz., Dec. 14; **Walter B. Lancaster** (88), ophthalmologist, Boston, Mass., Dec. 9; **John I. Lauritzen** (67), plant physiologist, Riverside, Calif., Nov. 27; **S. G. Law** (49), neuropsychiatrist, Minneapolis, Sept. 3; **N. J. Lennes** (77), mathematician, Missoula, Mont., Nov. 21; **Samuel Levine** (69), internist, Brooklyn, N. Y., Nov. 29; **Andrew F. Lippi** (71), chemist, Philadelphia, Dec. 13; **David McCoach, Jr.** (64), civil engineer, Washington, D. C., Dec. 15; **Carl J. Moroney** (65), engineer and sugar official, San Mateo, Calif., Nov. 27; **Paul H. Musser** (59), educator, Philadelphia, Nov. 21; **Charles F. Noll** (73), agronomist, State College, Pa., Dec. 18.

**Charles D. Parfitt** (80), of Toronto, tuberculosis specialist, Brookline, Mass., Nov. 20; **Todd M. Pettigrew** (64), geophysicist, Washington, D. C., Dec. 13; **Cesar U. Piedrahita** (64), expert on tropical medicine, Bogota, Colombia, Dec. 17; **Henry S. Raper** (69), physician, Manchester, Eng., Dec. 12; **Jerohn J. Savitz** (85), educator, Westfield, N. J., Dec. 5; **Marc Schuman** (—), inventor, Philadelphia, Nov. 22; **Lemuel F. Smith** (78), chemist, Richmond, Va., Nov. 24; **Angelo L. Soresi** (69), surgeon, Brooklyn, N. Y., Dec. 11; **Leo Spiegel** (72), dermatologist, New York, Dec. 17; **John W. Thomas** (71), chemist and rubber company official, Akron, Ohio, Nov. 26; **Benjamin F. Tillson** (67), mining engineer, Montclair, N. J., Dec. 4; **Theodore P. Walker** (69), industrialist, New York, Nov. 29; **Carl N. Webb** (51), chemist, Oxford, Ohio, Dec. 14; **Archer E. Young** (78), mathematician and research engineer, Mamaroneck, N. Y., Nov. 28.

# *Technical Papers*

## The Site of Nitrogen Absorption in Rats Fed Raw and Heat-treated Soybean Meals

R. W. Carroll, G. W. Hensley, and W. R. Graham, Jr.[1]

*The Quaker Oats Company Research Laboratories, Chicago, Illinois*

It is well known that moderate heat treatment improves the nutritive quality of the proteins of soybeans. Several heat-labile fractions which inhibit tryptic hydrolysis *in vitro* have been obtained from raw soybeans. Some of these have been shown to retard the growth of chicks, rats, and mice. This work has been comprehensively reviewed by Liener (*1*), Laskowski (*2*), Almquist (*3*), and Griswold (*4*).

We have studied the effect of heating on the digestibility and growth-promoting value of the proteins of soybean meal for the rat. Our results, like those of other investigators (*5–7*), indicate that properly heated meal has only slightly higher digestibility than raw meal and that this digestibility difference is so small it can hardly account for the observed marked difference in growth-promoting value. This was true when digestibility estimations were based on fecal nitrogen excretion. When contents of progressive segments of intestine were studied, it became apparent that with properly heated meal, all, or nearly all, of the nitrogen that is ultimately to be absorbed is absorbed during passage of the meal through the small intestine. However, with the raw meal, much of the nitrogen appears to be absorbed from the large intestine.

Digestibility estimations were made by the chromic oxide indicator method described by Schürch *et al.* (*8*). Briefly, the method involves incorporation of a known amount of a completely indigestible material ($Cr_2O_3$) in the feed, determination of its concentration in the feces, and determination of the nitrogen content of the feed and of the feces. A coefficient of digestibility for the nitrogen of the feed may then

[1] With the technical assistance of P. R. Stout in statistical interpretation.