

BULLETIN

OF THE INTERNATIONAL SOCIETY
OF SOIL SCIENCE

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BULLETIN

DE L'ASSOCIATION INTERNATIONALE
DE LA SCIENCE DU SOL

•

MITTEILUNGEN

DER INTERNATIONALEN BODENKUNDLICHEN
GESELLSCHAFT

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**INTERNATIONAL SOCIETY OF SOIL SCIENCE
ASSOCIATION INTERNATIONALE DE LA SCIENCE DU SOL
INTERNATIONALE BODENKUNDLICHE GESELLSCHAFT**

Office/Bureau: c/o Royal Tropical Institute, 63 Mauritskade, Amsterdam, Netherlands.

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- III. SOIL BIOLOGY. President: H. J. Jensen, 24 Lottenborgvej, Kongens, Lyngby, Denmark.
- IV. SOIL FERTILITY AND PLANT NUTRITION. President: I. V. Tiurin, Pyjevsky 7, Moscow 17, U.S.S.R.
- V. SOIL GENESIS, CLASSIFICATION AND CARTOGRAPHY. President: G. Aubert, 20 rue Monsieur, Paris 7, France.
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Australia: R. G. Downes, Soil Conservation Authority Victoria, 378 Cotham Rd, Kew E4, Victoria.		
Austria: Prof. Dr Ing. H. Franz, Gregor Mendelstrasse 33, Wien XVIII.		
Belgium: Prof. Dr R. Tavernier, Rozier 6, Gent.		
Bulgaria: Prof. Zw. Stalkoff, 9th September N. 136, Sofia-Pavlovo.		
Canada: Prof. Dr N. R. Richards, Agricultural College, Guelph, Ontario.		
Denmark: Prof. Dr H. C. Aslyng, Rolighedsvej 26, Copenhagen V.		
France: Dr. S. Hénin, Centre National de Recherches Agronomiques, Route de St. Cyr, Versailles.		
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India: Dr. J. N. Mukherjee, 10 Puran Chand Nahar Avenue, Calcutta-13.		
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Italy: Prof. Orfeo Turno Rotini, Ist. di Chimica Agraria, Via Crispi 20, Pisa.		
Japan: Prof. Dr S. Mitsui, University, Bunkyo-ku, Tokyo.		
Netherlands: Dr P. K. Peerlkamp, van Hallstraat 3, Groningen.		
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United Kingdom: G. V. Jacks, M. A., Commonwealth Bureau of Soils, Harpenden, Herts., England.		
U.S.A.: Dr. M. E. Russell, University of Illinois, Urbana, Illinois.		
U.S.S.R.: Prof. Dr I. V. Tiurin, Pyjevski 7, Moscow 17.		
Yugoslavia: Prof. Dr S. Nikolić, Faculté d'agronomie de l'Université, Belgrade.		

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No. 19

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NEWS OF THE SOCIETY

The Transactions of the Madison Congress

Although unexpected difficulties which had to be faced by the printers have caused a further delay in delivery of the various volumes of the Transactions, it now can be communicated that the volumes II and IV, containing the papers presented to the Commissions II and III, and V and VII respectively, have been forwarded to the members of the Congress and to the private persons and institutions who ordered a set. The shipment of the volumes I and III with papers in the realm of the Commissions I and VI, and Commission IV respectively, will follow within short.

Complete sets may be ordered with the Secretary General or directly with Elsevier Publishing Company, Spuistraat 110—112, Amsterdam, Netherlands, who handles the post-publication date sale. The price is \$ 25 for paid-up private members of ISSS and \$ 30 for institutional members, libraries and non-members of the Society.

NOUVELLES DE L'ASSOCIATION

Les Comptes Rendus du Madison Congres

Bien qu'à cause des imprévues difficultés rencontrées au cours du tirage, la date de livraison des divers volumes des Comptes Rendus ait dû être remise une fois de plus, il peut être annoncé maintenant que les tomes II et IV, contenant les communications présentées respectivement aux Commissions II et III, et V et VII, ont été expédiées aux membres du Congrès et aux personnes individuelles, instituts, etc. qui avaient passé commande. L'envoi des tomes I et III, contenant les communications des Commissions I et VI, et de la Commission IV, respectivement, suivra sous peu.

Des commandes sur l'oeuvre complet peuvent être adressées au Secrétaire Général ou directement à Elsevier Publishing Company, Spuistraat 110—112, Amsterdam, Hollande, qui se charge de la vente ultérieure. Le prix est de 25 US-dollars pour les membres individuels de l'A.I.S.S. et de 30 US-dollars pour instituts, librairies et non-membres de l'Association.

NEUES AUS DER GESELLSCHAFT

Die Verhandlungen des Madisonner Kongresses

Unerwartete Schwierigkeiten traten auf beim Druck und verursachten eine weitere Verzögerung in der Herausgabe der Verhandlungen. Jetzt kann aber doch mitgeteilt werden, dass die Bände II und IV, in welchen die Beiträge, resp. den Kommissionen II und III, sowie V und VII vorgelegt, enthalten sind, den Kongressmitgliedern wie auch den Privatpersonen und Institutionen, welche Auftrag dazu gaben, zugesandt worden sind.

Die Versendung der Bände I und III mit den Verhandlungen auf dem Gebiete der Kommissionen I und VI, resp. der Kommission IV, wird baldigst folgen.

Man kann noch vollständige Sätze zu 4 Bänden beim General-Sekretariat der I.B.G. bestellen, oder auch direkt bei der Elsevier Publishing Company, Spuistraat 110/112, Amsterdam, Niederlande, welche Firma den Verkauf nach der erstmaligen Herausgabe vertreiben wird. Der Preis beträgt \$ 25 für persönliche Mitglieder der I.B.G. und \$ 30 für Institute, Gesellschaften, Bibliotheken und nicht-Mitglieder unserer Gesellschaft.

Soil Map of the World

As a result of the discussions during the 7th International Congress of Soil Science, Madison, Wisc., 1960, on the publication of soil maps and notably the proposal as formulated by Commission V and adopted by the Council, an international project was launched by FAO/UNESCO in co-operation with ISSS.

The first meeting of an advisory group was held at FAO headquarters in Rome from 19 to 21 June, 1961. Professor V. Kovda, Director, Natural Sciences Department, UNESCO, acted as Chairman of the meeting. Dr. L. Bramao, Chief of FAO's World Soil Resources Office and appointed as Project Co-ordinator, was the Vice-Chairman, and Dr. R. Dudal of the Soil Survey Branch staff and Project Soil Correlator, the Technical Secretary.

As consultants, invited by FAO or UNESCO, participated in the meeting:

- Prof. G. Aubert, Director of Research, ORSTOM (France)
 - Mr. M. Camargo, Soils Commission of Brazil (Brazil)
 - Dr. J. D'Hoore, Director, SPI (CCTA)
 - Dr. E. Lobaeva, Dokuchaev Institute (USSR)
 - Dr. S. P. Raychaudhuri, Chief Soil Survey Officer, Indian Agricultural Research Institute (India)
 - Dr. Guy D. Smith, Director, Soil Survey Investigations, USDA Soil Conservation Service (USA)
 - Dr. C. G. Stephens, Division of Soils, CSIRO (Australia)
 - Prof. R. Tavernier, Directeur, Centre de Cartographie des Sols (Belgium)
 - Mr. Norman H. Taylor, Director, Soil Bureau (New Zealand)
 - Academician I. V. Tiurin, Director, Dokuchaev Institute (USSR)
 - Prof. F. A. Van Baren, Royal Tropical Institute, Amsterdam (Netherlands)
- Also assisted:
- Dr. M. Batisse, Chief, Natural Resources Division, UNESCO
 - Mr. F. George, Liaison Officer, Resources Surveys, FAO
 - Mr. G. V. Orloff, Translator, FAO

The purpose of the meeting was to consider ways and means for the publication of a Soil Map of the World. Mainly three aspects were discussed: (i) the organisation of the international cooperation without which no such map could ever be published. This implies the coordination of national or regional efforts and activities; (ii) the scientific basis of the map, i.e. the choice of mapping units and a universal legend; (iii) the financing of the project.

As a result of the deliberations the meeting recommended amongst others that:

- a) The Soil Map of the World be based both on compilation of existing material and on additional field correlation work. This correlation was entrusted to the Project Soil Correlator with full assistance from Continental Correlators.

In close co-operation and with the assistance of the project centre, each Continental Correlator will have the responsibility of contacting the soil scientists in charge of national surveys within his region and of organizing correlation of the material available in the different countries. To this effect the FAO/UNESCO project centre should provide facilities for Correlators, and where necessary for their collaborators, to travel within their regions, to other regions and to attend

the meetings of the Advisory Group. These facilities may be extended to consultants specialized in certain fields. The results of the consecutive stages of the work should be forwarded to the Project Soil Correlator.

b) the Project Soil Correlator, in consultation with Continental Correlators, should prepare a table comparing the different elements of mapping units used in relevant existing maps. For this purpose he should collect descriptions of the central concepts of the soils dealt with, together with analytical data and information on the *range of variability of the different units*. The *equivalence of terms and concepts* should be checked by field correlation. Successive approximations of the table, together with related information, should be circulated to all members of the Advisory Group. The Project Soil Correlator should also put on record the terminology used in different areas for the description of soils.

c) the form of publication for the Soil Map of the World be an atlas, probably of the loose-leaf type, so that sheets can be progressively attached as they are issued. The atlas should be accompanied by a text comprising the following items:

Composition of mapping units;

Description of morphology and general properties of central concept of the soil units;

Range of variability;

Distribution (including the areal extent in square miles/kilometers);

Environment;

Phases;

Use, management, amelioration and productivity.

Phenomena correlating with soil conditions, such as endemic diseases and plant and animal deficiencies, should be recorded. Schematic climatic and vegetation maps should be included in the publication. An outline for the text should be prepared by the project centre taking into account the suggestions made at the meeting.

d) the languages of publication be English, French, Spanish and Russian. For the preparatory work, however, all four languages need only be used for such essential documents as the approximations of the legend. Other documents might be in English only.

During the meeting the Project Soil Correlator reported that the Centre now had a collection of about 800 maps, of which 230 were at a scale of 1 : 100,000 or less. The Centre also had about 650 publications relating to major soils of the world. Thus some information was available on about 85 different countries. This information had been recorded on 1,600 cards with cross reference to countries and major soil groups.

It was recommended that a list of maps and other relevant information available at the Centre be circulated to the members of the Advisory Group. In response they would list additional material which they could make available to the Centre or which was available from other sources, relating not only to soils but to land use, geology, climate, vegetation, etc.

The meeting further recommended that:

e) a first collection of continental and regional maps be presented at the 8th Congress of the I.S.S.S. in 1964 and hoped that a first draft of the Soil Map of the World could also be presented. To achieve this, it was recommended that the preparation of an integrated world legend be given high priority. A second draft of the Soil Map of the World could then be prepared for 1966 with a view to publication in 1968.

The meeting felt that the map should be based on major soil groups to be shown in single units or in associations. It should be constructed on a scientific pedological basis and the legend should be arranged to obtain the maximum clarity of interpretation (e.g. according to climatic zones). In addition to soil units, it was recommended that important environmental factors influencing land use and agricultural productivity, such as relief and stoniness, be shown on the map. These factors might be shown by symbols overprinted on the soil units.

Associations should not be used merely from a lack of knowledge but only where soils are geographically associated according to a well-defined pattern for which the percentage distribution of each soil is known. While attention will be drawn to the dominant soil of an association, it must be remembered that sub-dominant soils may be of greater importance in agriculture. In some areas, minor inclusions, the boundaries of which cannot be shown at the scale of the map, but which are of paramount importance for the agriculture of the region (e.g. valley bottoms in desertic areas) should be shown by special symbols. In all cases a full explanation of the composition of the associations used should be given in the text.

The meeting finally adopted the following resolution: The Advisory Group, in consideration of the request made by the President of the I.S.S.S. in his letter of 27 September 1960 to FAO, reflecting the resolution adopted by the General Assembly of the I.S.S.S. on the occasion of the 7th International Congress of Soil Science, that full support be given to the publication of soil maps for the purpose of evaluating agricultural potentialities, expressed the desirability that as much financial and/or technical support as might be possible be given by FAO and UNESCO to assist in the editing and publication of the continental or regional maps which were now nearing completion.

NEWS OF THE COMMISSIONS

Joint Session Commissions I and VI

Dr L. D. Baver, President of Commission I, officially informed the Secretary-General that he and Dr R. M. Hagan, President of Commission VI, had come to the decision that it would not be feasible to hold a joint session of the commissions during 1962, primarily because of competing scheduled meetings in related fields.

Both Presidents look forward to have a strong joint session at the regular meeting in Bucharest in 1964.

Special meeting of Commission III

It was approved of by the General Assembly of the 7th International Congress of Soil Science that Commission III organizes a symposium on Soil Zoology, late summer 1962 in Oosterbeek (Netherlands). The following information is now available.

It was decided at the first Colloquium of the Soil Zoology Committee of the International Society of Soil Science at Harpenden, July, 1958, to devote the next colloquium to: the Relationships between soil fauna and soil microflora.

This colloquium will take place at the Conference Centre "Pietersberg" at Oosterbeek, Netherlands from 10th to 16th September 1962.

Oosterbeek is 6 kilometers W. of Arnhem.

The purpose of this colloquium is to bring together soil microbiologists and soil zoologists to give them an opportunity to become acquainted with each other's results and problems and to exchange ideas.

There are only a few workers active in the narrow field of the relationships between soil fauna and microflora and so the theme of this colloquium cannot be strictly limited to these relationships. But many workers, both microbiologists and zoologists working on soil communities (synecological view) or on biological processes in the soil (functional view) have obtained results which are of much interest to workers in the other field. It is hoped that by this colloquium a closer cooperation between soil zoologists and soil microbiologists will arise and that this will result in a clearer understanding of the soil community as a whole.

Papers

Only papers related to the theme of the colloquium can be admitted. They have to be written in English, French or German and must be preceded by a short summary in English. Only in exceptional cases they may exceed the limit of 4 pages print i.e. about 2000 words.

All manuscripts must be sent to the secretary before June 1st 1962, in their definite form, that is ready for printing. Manuscripts received after this date cannot be accepted. The papers received in time will be printed or mimeographed immediately and distributed to all participants at least four weeks before the opening of the Colloquium.

With the exception of a few introductory papers no papers will be read at the sessions; this is to save as much time as possible for the discussions. Each author, however, will have a few minutes to explain his paper, to show slides etc.

Time table (preliminary)

Monday	10th September	evening	Reception
Tuesday	11th September	morning	Introductory papers
		afternoon	Papers and discussion on soil fauna and soil microflora, synecological view
Wednesday	12th September	morning	Papers and discussion on soil fauna, functional view
		afternoon	Papers and discussion on soil microorganisms, functional view
Thursday	13th September	morning	Papers and discussion on interrelations: soil fauna and soil microflora
		afternoon	Visit to laboratory Itbon and to experimental area

Friday	14th September	morning	Visit to various laboratories at Wageningen
		afternoon	Recorders Papers and Closure
Saturday	15th September		Excursion to reclaimed polders in the former Zuiderzee
Sunday	16th September		Touristic tours

Lodging

The participants will be lodged in the building of the Conference Centre in which the sessions will be held as well. Also meals will be served in the Conference Centre.

Rooms are available for meetings of discussion groups.

Bedrooms are for 2—3 persons.

The costs will be approximately D.fl. 15,— per person per day, meals, tea and coffee included. A limited number of single bedrooms are available.

Excursions

After the meeting an excursion by coach will be made to the reclaimed polders of the Zuiderzee and on Sunday a touristic tour in the Western part of Holland will be made.

Inscription fee

There is a registration of D.fl. 50,— (payable in advance) which entitles the member to receive the proceedings.

Application

Those interested in the colloquium are requested to send in their application to:

Institute for Biological Field Research (ITBON)
 Dr. J. van der Drift
 Secretary, Organizing Committee
 Kemperbergerweg 11
 ARNHEM, Netherlands.

Commission VII Soil Mineralogy

The following communication has been received from the President of Commission VII on this Commission's program of activity in relation to the 8th International Congress of Soil Science:

As a prelude to the activity of this Commission and with the purpose of serving as a reference for the planning of the next Congress, it is deemed desirable to have recent informations from soil mineralogy workers with respect to the items mentioned in the following questionnaire at the earliest convenience.

Questionnaire: (1) Name, (2) Address, (3) Title, (4) Scope of interest in soil mineralogy, (5) Any suggestions re the program of Commission VII for the forthcoming Congress in Rumania.

It is requested that this information be sent to Professor T. SUDO, Geological and Mineralogical Institute, Faculty of Science, Tokyo University of Education, Otsuka, Bunkyo-ku, Tokyo, Japan.

NOUVELLES DES COMMISSIONS

Réunion conjointe des Commissions I et VI.

Le Docteur L. D. Bayer, Président de la Commission I, a adressé au Secrétaire Général la communication officielle que le Docteur R. M. Hagan, Président de la Commission VI, et lui ne le jugeaient pas faisable d'organiser en 1962 une réunion conjointe de ces commissions, principalement en raison des réunions prévues déjà dans les domaines affiliés. Les deux Présidents comptent plutôt sur une jointe session bien serrée pendant le Congrès à Bucarest en 1964.

Réunion spéciale de la Commission III

L'Assemblée Générale du 7^{me} Congrès International de la Science du Sol approuvait que la Commission III organisera un symposium sur la Zoologie du Sol à Oosterbeek (Pays Bas) vers la fin d'été 1962. Les renseignements suivants ont été reçus:

Il fut décidé, lors du premier Colloque du Comité de Zoologie des Sols de l'Association Internationale de la Science du Sol tenu à Harpenden, Juillet, 1958, de consacrer le Colloque suivant à l'étude des relations existant entre la faune et la microflore des sols.

Ce Colloque se tiendra au Centre de Conférences "Pietersberg" à Oosterbeek, Pays-Bas, du 10 au 16 septembre 1962. Oosterbeek se trouve à 6 km. à l'ouest d'Arnhem.

Le but de ce Colloque est de réunir les microbiologistes et les zoologistes du sol, afin de leur donner l'occasion de connaître leurs problèmes, les résultats de leurs travaux et d'échanger des idées.

Il existe peu de chercheurs qui se consacrent actuellement à l'étude de ces relations entre les deux grands groupes d'organismes du sol, aussi le thème de ce Colloque ne pourra-t-il être strictement limité à ce problème. Cependant beaucoup de chercheurs, tant microbiologistes que zoologistes, travaillant sur les communautés édaphiques (point de vue synécologique) ou sur les processus biologiques (point de vue fonctionnel) ont obtenu des résultats du plus haut intérêt tant pour les uns que pour les autres. On peut espérer qu'un tel Colloque pourra susciter une meilleure collaboration qui ne peut que résulter en une compréhension plus profonde des communautés édaphiques.

Communications

Seules les communications entrant dans le thème du Colloque seront admises. Elles devront être rédigées en français, anglais ou allemand et doivent être précédées d'un court résumé en anglais. En principe, elles ne pourront dépasser 4 pages imprimées, soit environ 2.000 mots.

Tous les manuscrits doivent parvenir au Secrétaire avant le premier juin 1962 et cela dans leur forme définitive, c'est-à-dire prêts à l'impression. Les manuscrits qui parviendraient au Secrétaire après cette date devront être refusés. Les communications reçues à temps seront immédiatement imprimées et distribuées aux participants un mois au moins avant l'ouverture du Colloque.

Afin de réserver plus de temps aux discussions et aux échanges d'idées, aucune communication ne sera lue aux réunions, sauf quelques rares exposés destinés à introduire le thème de la séance. Il sera cependant possible d'accorder aux auteurs un peu de temps afin de leur permettre un court résumé du sujet de leur communication (éventuellement aussi démonstrations, projection de diapositives).

Programme (préliminaire)

Lundi	10 septembre	Soir	Réception
Mardi	11 septembre	Matin	Introduction des thèmes du Colloque
		Après-midi	Exposés et discussion sur la faune et la microflore des sols, point de vue synécologique
Mercredi	12 septembre	Matin	Exposés et discussion sur la faune des sols, point de vue fonctionnel

		Après-midi	Exposés et discussion sur la microflore des sols, point de vue fonctionnel
Jeudi	13 septembre	Matin	Exposés et discussion sur les relations entre faune et microflore des sols
		Après-midi	Visite au Laboratoire Itbon et aux champs d'expériences
Vendredi	14 septembre	Matin	Visite de divers laboratoires à Wageningen
		Après-midi	Synthèses des exposés et conclusions
Samedi	15 septembre		Clôture du Colloque
			Excursion aux terres rédimées du Zuiderzee
Dimanche	16 septembre		Excursion touristique en Hollande

Logement

Les participants seront logés dans le bâtiment du Centre de Conférences où se tiendront les réunions. Les repas seront également servis dans le même bâtiment. Des salles de réunion seront disponibles pour des réunions de groupes particuliers. Les chambres à coucher sont des chambres à deux ou trois personnes; le prix sera d'environ 15 fl. par jour et par personne, repas, thé et café inclus. Quelques chambres à une personne pourront être réservées.

Excursions

Après la clôture du Colloque, une excursion d'un jour sera faite aux terres rédimées du Zuiderzee et le dimanche une excursion touristique dans l'ouest de la Hollande.

Cotisation

Le droit d'inscription (payable par avance) est de 50 fl.; ce droit comprend la réception du volume de Comptes-Rendus qui sera publié après le Colloque.

Inscription

Les personnes intéressées à ce Colloque sont priées d'adresser le formulaire à:

Dr. J. van der Drift
 Secrétaire Comité Organisateur
 Centre expérimental de recherches biologiques appliquées (ITBON)
 Kemperbergerweg 11
 ARNHEM (Pays-Bas)

Commission VII - Mineralogie du Sol

Par rapport au 8^{me} Congrès International de la Science du Sol, la communication suivante sur le programme d'activité de la Commission VII a été reçue du Président de cette Commission:

Comme un prélude à l'activité de la Commission VII et dans le but de servir de référence lors du planning du prochain Congrès, il est estimé désirable d'obtenir des minéralogistes pédologiques des données récentes concernant les points suivants:

Questionnaire: (1) Nom, (2) Adresse, (3) Titre, (4) A quel point intéressé dans la minéralogie du sol, (5) Suggestions quelconques au sujet du programme de la Commission VII pour le prochain Congrès en Roumanie.

L'envoi de l'information demandée au Professor T. SUDO, Geological and Mineralogical Institute, Faculty of Science, Tokyo University of Education, Otsuka, Bunkyo-ku, Tokyo, Japan, sera bien apprécié.

NEUES AUS DEN KOMMISSIONEN

Gemeinsame Sitzung von Kommission I und VI

Der Präsident der Kommission I, Dr L. D. Bayer, berichtete den General Schriftführer dass er, gemeinsam mit Dr R. M. Hagan, Präsident der Kommission VI, zum Entschluss gekommen war dass eine gemeinsame Tagung 1962 dieser beiden Kommissionen nicht geeignet sei und wohl hauptsächlich wegen schon programmierten internationalen Sammlungen ähnlicher Arbeitsgebiete.

Beide Präsidenten vertrauen dagegen, einer wertvollen gemeinsamen Konferenz gelegentlich des 8.ten Internationalen Kongresses, Bucharest, 1964, entgegenzusehen zu dürfen.

Sondersitzung der Kommission III

Die General-Versammlung des 7.ten Internationalen Bodenkundlichen Kongresses genehmigte, dass im Spätsommer 1962 Kommission III ein Symposium über Bodenzoologie organisiere in Oosterbeek (Niederlande). Folgende Nachricht wurde darüber erhalten:

Beim 1. Kolloquium des Komitees für Bodenzoologie der Internationalen Bodenkundlichen Gesellschaft, welches im Juli 1958 in Harpenden abgehalten wurde, ist beschlossen worden das nächste Kolloquium den Wechselbeziehungen zwischen Bodenfauna und Bodenmikroflora zu widmen. Dieses Kolloquium wird im Konferenzzentrum „Pietersberg“ in Oosterbeek, Niederlande, in der Zeit vom 10. bis 16. September 1962 stattfinden.

Oosterbeek liegt 6 km von Arnhem entfernt.

Der Zweck dieses Kolloquiums ist, den Bodenmikrobiologen und Bodenzoologen die Möglichkeit zu geben sich gegenseitig über ihre Forschungsergebnisse und Probleme zu unterrichten und ihre Gedanken auszutauschen.

Es sind nur wenige Forscher auf dem engeren Gebiete der Wechselbeziehungen zwischen Bodenfauna und Bodenmikroflora tätig, so dass das Thema dieses Kolloquiums nicht streng auf diese Wechselbeziehungen begrenzt werden kann. Viele Forscher, sowohl Bodenzoologen wie Mikrobiologen, die über Bodenbiozösen (synökologische Betrachtungsweise) oder biologische Prozesse im Boden (funktionelle Betrachtungsweise) arbeiten, haben jedoch Ergebnisse erzielt, die für die auf dem anderen Gebiete tätigen Forscher von grossem Interesse sind. Es ist zu hoffen, dass durch dieses Kolloquium eine engere Zusammenarbeit zwischen Bodenzoologen und Bodenmikrobiologen in die Wege geleitet und daraus eine klarere Einsicht in die Bodenbiozönose als Ganzes gewonnen wird.

Beiträge

Es können nur Beiträge angenommen werden, die sich auf das Thema des Kolloquiums beziehen. Sie sind in deutscher, französischer oder englischer Sprache zu verfassen und es muss ihnen eine kurze englische Zusammenfassung vorangestellt sein. Nur ausnahmsweise dürfen sie mehr als 4 Druckseiten umfassen, was etwa 2000 Wörtern entspricht. Alle Manuskripte müssen in endgültiger Form, d.h. druckreif, vor dem 1. Juni 1962 an das Sekretariat eingesandt werden. Manuskripte, die später einlaufen müssen abgewiesen werden. Die rechtzeitig einlaufenden Manuskripte werden sofort gedruckt oder vervielfältigt und an alle Teilnehmer mindestens vier Wochen vor Beginn des Kolloquiums zugesandt.

Mit Ausnahme der Einführungsvorträge werden die Beiträge in den Sitzungen nicht verlesen werden, um möglichst viel Zeit für Diskussionen zu gewinnen. Etwas Zeit wird für die Erläuterung der Beiträge zur Verfügung stehen (Demonstration von Material und Projektion von Diapositiven).

Vorläufiges Programm

Montag	10 September	abends	Empfang
Dienstag	11 September	vormittags nachmittags	Einführungsvorträge Beiträge und Diskussion zur Bodenfauna und Bodenmikroflora, synökologische Probleme

Mittwoch	12 September	vormittags	Beiträge und Diskussion zur Bodenfauna, funktionelle Probleme
		nachmittags	Beiträge und Diskussion zur Bodenmikroflora, funktionelle Probleme
Donnerstag	13 September	vormittags	Beiträge und Diskussion über Wechselbeziehungen zwischen Bodenfauna und Bodenmikroflora
		nachmittags	Besichtigung des Laboratoriums Itbon und der Versuchsflächen
Freitag	14 September	vormittags	Besichtigung verschiedener Laboratorien in Wageningen
		nachmittags	Vorträge der Berichterstatter und Schlus des Kolloquiums
Samstag	15 September	vor- und nachmittags	Exkursion in die Polder in der früheren Zuidersee
Sonntag	16 September		Ausflug

Quartier

Die Teilnehmer werden im Gebäude des Konferenz-Zentrums untergebracht werden, wo auch die Sitzungen stattfinden sollen. Es stehen Räume für Sitzungen von Diskussionsgruppen zur Verfügung.

Die Schlafräume sind für 2—3 Personen eingerichtet. Die Kosten betragen etwa 15 holl. Gulden pro Person und Tag, Mahlzeiten, Tee und Kaffee einbegriffen. Eine begrenzte Zahl einbettiger Zimmer steht zur Verfügung.

Exkursionen

Nach der Tagung wird eine Tagesexkursion mit Autobus nach den Poldern in der Zuidersee gemacht werden und Sonntag ein Ausflug nach Westholland.

Teilnehmergebühr

Es ist eine Teilnehmergebühr von 50 holl. Gulden im Voraus zu entrichten, welche zum Bezug der Tagungsberichte berechtigt.

Voranmeldung

Am Kolloquium Interessierte werden gebeten eine Anmeldung einzusenden an:

den Sekretär des Organisationskomitees
 Dr. J. van der Drift
 Institut für angewandte Freilanduntersuchungen (ITBON)
 Kemperbergerweg 11
 ARNHEM, Niederlande.

Kommission VII — Bodenmineralogie

In Bezug auf den 8.ten Internationalen Bodenkundlichen Kongress wurde vom Präsidenten der Kommission VII folgende Mitteilung empfangen, das Arbeitsprogramm dieser Kommission betreffend:

Als ein Vorspiel zur Arbeit dieser Kommission und mit der Absicht, für die Planung des nächstfolgenden Kongresses als Auskunftquelle dienen zu können, wird es wünschenswert erachtet, baldigst von den Bodenmineralogen Angaben zu erhalten, die sich beziehen auf die 5 Punkte folgender Fragenliste: (1) Name, (2) Adresse, (3) Titel, (4) In wiefern in der Bodenmineralogie interessiert, (5) Irgendwelche Suggestionen für das Programm der Kommission VII zum bevorstehenden Kongress in Rumänien.

Wenn man die erwünschten Informationen richtet an: Professor T. SUDO, Geological and Mineralogical Institute, Faculty of Science, Tokyo University of Education, Otsuka, Bunkyo-ku, Tokyo, Japan, so wird das dankbar anerkannt werden.

NEWS OF THE NATIONAL SOCIETIES
NOUVELLES DES SOCIÉTÉS NATIONALES
NEUES DER GESELLSCHAFTEN IN EINZELNEN LÄNDERN

Australian Society of Soil Science

The Third Australian Conference on Soil Science will be held in Canberra from February 15—21, 1962. The general theme is "The Interpretation of Soil Characteristics in Relation to Plant Production". The sessions will be arranged round the following review papers:

Soil development in relation to geomorphology, B. E. Butler.

Significance of field studies of soil morphology to plant production, C. G. Stephens.

Definition of the soil as a physical system, D. McIntyre.

Influence of physical and mechanical soil characters on production, N. Collis-George.

Implications of the double layer theory in soil research, J. P. Quirk.

Influence of chemical features of soil on plant production, G. W. Leeper.

Changes in nutrient availability as a result of biological activity, Colin Williams.

The response of soil research to developments in plant research, Arnold Martin.

(copied from New Zealand Soil News, no. 3, 1961)

Sociedade Brasileira de Ciência do Solo

This Society organized the 8th Brazilian Congress of Soil Science from 15 to 30 July 1961, in the Instituto Agronomico do Norte, Belém, Para. It is interesting to note that most of the time, viz. from 18—28 of July, was devoted to field studies and discussions of profiles in the Belém area. Listed are such types as: Latosolo Amarelo Avermelhado, Terra Preta do Indio, Latosolo de rochas básicas, etc.

British Society of Soil Science

The British Society of Soil Science held its 1961 meeting from September 8—12, with a two days post meeting tour, in Dublin and Wexford, Ireland. Two paper reading sessions alternatively with field studies guaranteed for a harmonious programme of the meeting.

Canadian Society of Soil Science

The executive of the Canadian Society of Soil Science for the next year is as follows:

President: J. R. Wright, Director, Research Station, Canada Department of Agriculture, Kentville, Nova Scotia.

Treasurer: J. E. McCannel, Agricultural Institute of Canada, 176 Gloucester Street, Ottawa 4, Ontario.

Secretary: R. L. Halstead, Soil Research Institute, Central Experiment Farm, Ottawa, Ontario.

Deutsche Bodenkundliche Gesellschaft

The German Society of Soil Science, in conjunction with the Austrian Society of Soil Science, organized its annual meeting in Vienna from 17 August—1 September, 1961. In total 68 scientific papers were discussed covering the following main themes:

Comm. I: soil physical methods.

Chairman: H. Kuron, Giessen

Comm II and IV: plant nutrients: potash.

Chairman: E. Rauterberg, Berlin-Dahlem

Comm. V: fossil soils and soils derived from specific rocks.

Chairman: F. Vogel, München

- Comm. I, V and VI: mechanical analysis.
Chairman: *F. Blümel, Petzenkirchen*
- Comm. V: soil geography and -cartography.
Chairman: *E. Mückenhausen, Bonn*
- Comm. II, III and IV: humus research.
Chairmen: *W. Flaig, Braunschweig*
H. Deuel, Zürich
- Comm. I and VI: soil structure, structure stability and technological effects.
Chairmen: *E. v. Boguslawski, Giessen*
H. Frese, Braunschweig
- Comm. II and V: clay minerals, influence of groundwater.
Chairmen: *P. Schachtschabel, Hannover*
D. Schroeder, Kiel
- Comm. IV: plant nutrients: nitrogen, minor elements, isotopes.
Chairmen: *W. Wittich, Hann. Münden*
H. Kick, Bonn
- Comm. III: soil biology.
Chairmen: *H. Franz, Wien*
G. Müller, Leipzig
- Comm. V: soils derived from löss, lessivation.
Chairmen: *E. Ehwald, Eberswalde*
J. Fink, Wien
- Comm. II and IV: plant nutrition.
Chairmen: *H. Linser, Giessen*
G. Michael, Stuttgart/Hohenheim

Pre- and post-congress tours contributed to make this meeting, which was perfectly organized by our Austrian colleagues, a most important event.

Irish Society of Soil Science

This Society was formally established on April 14, 1960 with the general objective to promote and foster soil science to the betterment of agriculture in Ireland. There were three officers elected on that date:

- President: The Director of An Foras Taluntais (The Agricultural Institute),
Dr. T. Walsh
- Vice-President: The Head of the National Soil Survey, Mr. Pierce Ryan
- Secretary: Mr. P. McDonnell.

The Irish Society were hosts to approximately 130 members of the British Society of Soil Science from September 8 to September 12 this year. Proceedings were opened by the Minister for Agriculture and the President of the Irish Society. There were 2 half-day paper reading sessions at Dublin and an extensive field trip which included the study of soils and agriculture in several counties and visits to the headquarters of the Soils Division and other research centres of the Institute of Agriculture. A three-day post-meeting tour was also arranged and the majority of the guests participated. The visit was considered by the visitors as a highly successful one and stimulating.

Israel Society of Soil Science

Corrected information (see Bulletin no. 18 page 12).

- President: Dr. N. E. Nissim, National & Univ. Instit. Agri., Rehovot
- Secretary: Mr. S. Gairon, National & Univ. Inst. Agri., Rehovot
- Treasurer: Mr. E. Halevy, Weizmann Institute of Science, Rehovot
- Members: Dr. D. Yaalon, Hebrew University, Jerusalem
Dr. D. Zaslavsky, Technion-Israel Institute Tech., Haifa.

Portuguese Society of Soil Science

The meeting scheduled to take place earlier this year has been postponed till spring 1962. The running year's activities will also include a discussion on the rules of the Society and its relationship to the Port. Society of Agronomic Sciences, discussion on soil analytical methods, contribution to the New Zealand Soils Conference and general discussion on soil problems.

FORTHCOMING INTERNATIONAL CONGRESSES OF ALLIED SCIENCES
PROCHAINS CONGRES INTERNATIONAUX DE SCIENCES CONNEXES
ZUKÜNFTIGE INTERNATIONALE KONGRESSE VON
VERWANDTEN WISSENSCHAFTEN

Symposium on Photo Interpretation

The International Society for Photogrammetry organizes a symposium on photo interpretation, to be held from August 30th to September 5th, 1962 under the auspices of the Netherlands Society for Photogrammetry at the International Training Centre for Aerial Survey, Delft, The Netherlands.

Steering Committee

President: Prof. Dr. C. H. Edelman

Secretary: Dr. H. Th. Verstappen

Working Groups:

1. Photography, equipment and techniques:
2. Geology, incl. geomorphology, hydrology:
3. Soils, incl. land classification, soil conservation:
4. Vegetation, incl. forestry, plant ecology:
5. Regional geography and planning:
6. Ice:
7. Archaeology:
8. Oceanography and coastal research:
9. Engineering:

Chairman:

Ir. D. A. Stellingwerf
Drs. J. F. M. Mekel
Dr. Ir. A. P. A. Vink
Ir. D. A. Boon
Dr. S. Schneider
R. E. Frost, Eng., M. Sc.
J. K. S. St. Joseph, M.A., Ph. D.
Prof. F. Ruellan
Prof. R. D. Miles

The address of the Secretariat is:

International Training Centre for Aerial Survey (I.T.C.), 3, Kanaalweg, Delft, Netherlands. (telegrams: Aersur).

Admission fee is dutch guilders 50.—. Provisional registration closes January 1st, 1962.

Symposium on the Use of Radioisotopes
in Soil-Plant Nutrition Studies

The Directors General of the International Atomic Energy Agency and the Food and Agriculture Organization of the United Nations have the honor to announce that the two organizations are jointly making arrangements to convene a scientific symposium on the subject of the "Use of Radioisotopes in Soil-Plant Nutrition Studies", which will be held, at the invitation of the Government of India, from 26 February to 2 March 1962 at either New Delhi or Bombay. The exact location of the Symposium will be announced later.

Participants will be designated by Member States and by the international organizations invited. Nominations by Governments should be sent to the Joint IAEA/FAO Symposium Secretariat, International Atomic Energy Agency, Vienna, through the national authorities that Member States designate for this purpose, or in the case of international organizations invited to participate, direct to the Joint Symposium Secretariat. The sponsoring organizations are not able to cover travel and other expenses of the participants.

The program will include discussions on the use of isotopes and radiations in studies of chemical reactions of inorganic ions in the soil and their uptake and translocation by plants; the transformations of organic matter in the soil and their importance to plant growth; the physical conditions of the soil, including irrigation practices; and the usage of fertilizers.

It is hoped that scientists and research workers in universities, research institutes and industry will submit abstracts and papers on the topics to be discussed.

A tentative list of topics to be covered is given below. On the basis of abstracts submitted, a selection of papers for oral presentation will be made.

List of topics to be covered by the Symposium

Use of isotopes and radiation in

- (a) Soil chemistry of inorganic ions and/or fixation (ionic exchange diffusion and effects of flooding)
- (b) Organic matter nitrogen and sulfur transformations (carbon, nitrogen, sulfur and phosphorus cycles and their relationship to plant growth and composition)
- (c) Soil physics
(soil moisture supply and movement through soil and into the plant, irrigation practices, soil atmosphere and soil density)
- (d) Ion uptake and translocation
(uptake, losses, interactions and translocation of ions absorbed through roots and leaves)
- (e) Fertilizer usage
(fertilizer sources and methods, times and rates of application; production of labeled fertilizers; root activity)

Participation

Participants can be accepted only when nominated by their governments (Member States of one of the two sponsoring organizations) or by invited international organizations. The two sponsoring organizations do not pay the travel and other expenses of the participants.

Correspondence

All correspondence should be addressed to:

Joint IAEA/FAO Secretariat of the Symposium on the Use of Radioisotopes
in Soil-Plant Nutrition Studies

International Atomic Energy Agency

Kaerntnerring 11

Vienna I, Austria.

NEW EDITIONS — NOUVELLES EDITIONS — NEUE AUSGABEN

Entstehung, Eigenschaften und Systematik der Böden der Bundesrepublik Deutschland

von

Prof. Dr. Dr. E. Mückenhausen, Bonn.

Der bodensystematische Teil in Zusammenarbeit mit der Kommission für Bodensystematik der Deutschen Bodenkundlichen Gesellschaft (F. Vogel als Vorsitzender, F. Heinrich, W. Laatsch, E. Mückenhausen).

Format DIN A 4, ca. 160 Seiten Text, 14 Abbildungen, 60 Farbtafeln, ca. DM 60.—, DLG-Verlag, Frankfurt am Main, Zimmerweg 16.

Erscheint Dezember 1961.

Vor acht Jahren hat die Deutsche Bodenkundliche Gesellschaft eine Kommission für Bodensystematik gewählt und diese beauftragt, eine Systematik der Böden der Bundesrepublik Deutschland auszuarbeiten. Das Ergebnis dieser Arbeit liegt in dem obengenannten Buch vor. Die vorliegende Systematik ist fundiert auf der Entstehung und den Eigenschaften der Böden, und zwar wurden dabei alle Eigenschaften einbezogen, die für eine Systematik wichtig sind. Damit wird die Forderung einer echten Systematik erfüllt; sie geht über das Wesen einer Klassifikation hinaus, welche die Objekte nur nach einem Merkmal (oder nach einigen Merkmalen) gliedert. In diesem Buch werden 46 Bodentypen und 153 Subtypen beschrieben.

BOOK REVIEWS

Soils of Palestine, A. Reifenberg, Israel. Translated by C. L. Whittles, Thomas Murby & Co., London, 1947, pp. 180, 18 plates, tables, graphs, bibliography.

It is not customary to review a textbook 14 years after the appearance of the last (2nd) revised edition. It is however in a sense a tribute in the honour of our late friend and colleague Professor Reifenberg whose death in August 28, 1953 was deeply regretted by many soil scientists who like him devoted their interest to the study of soils of semi-arid and arid zones.

As his book on the soils of Israel apparently did not sufficiently receive the attention of the pedologists who so progressively strive to increase their knowledge of one of the world's most basic resources, the soil, a brief survey of its contents may serve to prevent that Dr Reifenberg's book will fall entirely into oblivion.

After a brief introduction on geology, moisture conditions and climate, the soil formation processes in Palestine (Israel) are discussed, special attention being given to colloidal silicic acid. Considerations re the protective role of this colloid lead to the author's theory of the evolution of Terra rossa, as advanced in the section on soils of the humid region, preceded by a discussion of the arid, semi-arid and semi-humid regions. A special chapter is devoted to the soil formation under mediterranean climate as compared with that under other climates. In the section on soils and agriculture, Dr Reifenberg's observations on salinization as resulting from irrigation still are of practical importance for crop growing in arid zones. A dramatic historic review of the devastating effect of centuries of erosion closes the pedological part of this book which ends with a discussion of the colonization problem and of the Jordan Valley Authority plan as put forward by Dr. Lowdermilk. Good photographs of soils, landscapes, buried cities, etc. clearly illustrate the contents of this booklet on the soils of a historically so interesting country.

F. A. van Baren.

Current trends in scientific research

In 1960, the General Assembly of the United Nations decided that a survey should be made on current trends of enquiry in the fields of the natural sciences and the dissemination and application for peaceful ends of such scientific knowledge. The Secretary-General of the United Nations and the Director-General of

Unesco jointly appointed Professor Pierre Auger, a leading physicist, formerly head of the Unesco Natural Sciences Department, to collect data and draft the report. Twenty-nine intergovernmental organisations, sixty-six international non-governmental organisations and scientific unions, and the national research organisations of forty-two countries were consulted. The list of experts consulted in their individual capacity contains the names of leading scientists in all countries of the world.

Professor Auger faced a number of difficulties. These is the first place resulted from the essentially transitory nature of the required information. If the content of scientific knowledge is undergoing fairly rapid changes, the types of current enquiry are likely to change even more swiftly, since they are subject to influences of all kinds, whether material or intellectual, empirical or theoretical. Furthermore, it is difficult to gain access to this type of information, which as a general rule is not made known by scientists and laboratories, who prefer to publish only the results obtained. Then the problem arose of the method to be adopted. It was deemed wise to consider not only the factors responsible for the multiplication of specialized discipline but also the opposite movement towards synthesis. Nor could one forget that any description of scientific research which draw a hard and fast line between pure and applied science would distort the natural interplay between knowledge and action. Eventually, the actual plan adopted in the body of the report broadly follows the classification of Auguste Comte, but groups together subjects from various parts of this classification where such a grouping, for instance, corresponds to a major concern of mankind.

The proposed measures with which the report concludes relate as much to the scientific policy of governments as to the fields which deserve broader action or better coordination. To quote from Professor Auger: "When a ship reports its position, it gives first its latitude and longitude, and then adds: steaming north at 12 knots".

The general outline of the survey is based on a functional division of scientific research rather than on a purely academic classification of sciences. A classification of this type, as prepared by the Special Advisory Committee, reflects man's needs and accordingly corresponds to the institutional structures usually adopted for scientific research at the national and international level. The topics covered can thus easily be divided among the different institutions engaged in applied research, whose work depends to a great extent on the use to be made of the research results. This applies, for example, to medical and agricultural research, research on nuclear energy, etc.

The book is divided into three parts: Part One, "Trends of scientific research", has six main chapters: I — Fundamental sciences; II — The earth and space sciences; III — Medical sciences; IV — Food and agricultural sciences; V — Fuel and power research; VI — Industrial research. Part Two deals with the main trends affecting the organisation of scientific research and the dissemination of results, and Part Three, general and special recommendations concerning scientific research, the dissemination of scientific knowledge and the application of such knowledge to physical needs. These three parts are preceded by a long introduction by Professor Auger.

This book is not only the first of its kind, but is also likely to be one of the most important basic scientific works of the coming decade. It will be of exceptional interest to science research institutions, universities, government science officers, science teachers, and also to state- and privately-owned industry and to all who are interested in the history and development of science.

Documents and Publications Service,
UNESCO, Paris.

MISCELLANEOUS NEWS — INFORMATIONS DIVERSES

VERMISCHTE MITTEILUNGEN

Freedom from Hunger Campaign.

The Freedom from Hunger Campaign, which the Director-General of FAO launched on 1 July 1960, is not an isolated spearhead of modern man's struggle against hunger. There is a deepening awareness that, unless changes in agriculture and the production of food are drastic and prompt, the world cannot support a population that is likely to be doubled at the close of this century.

At its 1960 meeting, and for the first time in its history, the British Association for the Advancement of Science brought all its sections together to discuss World Food and Population. The two thousand scientists who took part in this full day's symposium agreed to form a committee to consider how to focus attention on the problem. Nor are the religious leaders less anxious than the scientists. In July 1961, to mention a conspicuous example, the Pope issued an Encyclical Letter, **Mater et Magistra** in which, after calling the condition of agriculture "the most important problem of modern times", he referred boldly to the relationship between Food and Population. "Considered on a world scale" he wrote, "the relationship between the population increase on the one hand and the availability of food supplies on the other does not seem — at least for the moment and in the near future — to create a difficulty".

Here the Pope's words correspond with the official view of FAO. The outlook — "at least for the moment and in the near future" — is very far from hopeless. None the less, it is a challenge to our intelligence and our good will. We must be really resolute and active if economic development and the availability of food supplies are to keep pace with a world population that will be doubled in less than 40 years' time. With a full sense of urgency, therefore, the Director-General presented the case for a Freedom from Hunger Campaign to the Economic and Social Council of the United Nations.

The Economic and Social Council endorsed the Campaign. So, in the autumn of 1959, did the FAO Conference. A year later — on 27 October 1960 — the General Assembly of the United Nations, unanimously endorsed the Campaign and urged all members of the United Nations and the specialized Agencies to support it in every practicable way. "The long-run problem of giving adequate diet to an ever-growing population", said the United States' representative, "is perhaps the most serious which confronts our world today. My country wholeheartedly approves the Freedom from Hunger Campaign."

The Campaign is thus openly supported by the United Nations and all its Specialized Agencies. The United Nations family, however, is primarily a family of governments. From the start, it was recognized that, for so urgent and wide-spread a Campaign, something more than the support of governments is needed. In 1959, therefore, the FAO Conference agreed that all the Intergovernmental and International Non-Governmental Organizations that have a consultative relationship with the United Nations, with FAO and with the other Specialized Agencies should take part in the Campaign.

An Ad Hoc Committee of International Non-Governmental Organizations met in Rome in January 1960. This meeting was followed, four months later, by a full NGO Conference under the chairmanship of the Secretary-General of the World Federation of United Nations' Association. The 70 representatives who attended the conference included the Secretary-General of the International Society of Soil Science. At this conference, the NGOs appointed their own advisory committee, which has met twice — in Rome, in September 1960; and in Paris, in February—March 1961. There has also been a very useful meeting of those NGO officers chiefly concerned with informational and educational facilities.

It is not only at the international level, however, that the NGOs have an important part to play in the Campaign. There is also ample room for the participation of their national affiliates and representatives. Early in the Campaign, the Director-General of FAO invited each Member Government to establish a National Campaign Committee, and he asked that on each National Campaign Committee the NGOs and other citizens' groups should be well represented. A large number of Member Governments have since responded to his invitation not

only be creating a National Campaign Committee, but also by making its membership largely, if not predominantly, non-governmental. In this way a National Campaign Committee promotes an active partnership between government and people in the fight against hunger.

Some countries have chosen an outstanding figure to be Patron-in-Chief. In Iran, for example, the Patron-in-Chief is the Shahinshah; in France, India and Italy, he is the President of the Republic; and in the United Kingdom, he is the Duke of Edinburgh. Each country contributes to the Campaign in its own way and some justly claim that their own plans for agricultural development are an integral part of a world-wide Campaign against hunger.

There is, however, a natural divergence of attitude between the developed countries and the less developed countries. In the developed countries Campaign supporters expect to give; in the less developed countries, they expect to receive. In the developed countries, they are looking for the right action projects to sponsor; in the less developed countries, their task is to make known the projects for which they need sponsors.

The number of projects already launched or planned under the Campaign is now steadily increasing. Not a few have been due to the initiative of Non-Governmental Organizations and other industrial, cultural or religious groups. Through FAO, the international agencies of the Fertilizer industry have been invited to undertake a \$ 2,000,000 Fertilizer Program which operates for five years and includes large-scale demonstrations in the underdeveloped countries and, where necessary, experimental work. The Fertilizer Advisory Panel of fertilizer industry representatives have in principle pledged to support the Fertilizer Program for the first two years. The German Catholic Bishops sponsor a project to improve the production of grain legumes in Eastern Nigeria. Meanwhile, the German Evangelical Churches sponsor a similar project in Northern Nigeria, and they also sponsor a swamp rice project in Liberia. The World Council of Churches, together with the local churches in Rhodesia, are financing a project intended to employ surplus labour in the Copperbelt area of Rhodesia in small-scale farming. The very active Oxford Committee for Famine Relief has decided to make £ 500,000 available for Campaign projects.

Though this list can be greatly extended, it does not exhaust the field for Non-Governmental Organizations; for they will also have a part to play in the World Food Congress, which takes place in 1963. This is the first World Congress ever to be held on the subject of food. Scientists and publicists alike can do much to focus the people's attention on the Congress and to make them more fully aware of the dimensions as well as the urgency of the food problems.

That problem is now attacked in many different ways. At the request of the General Assembly of the United Nations, the Director-General of FAO has presented to the Economic and Social Council of FAO a report on making available the largest practicable quantities of food "as a transitional measure against hunger". The President of the United States has made large stocks immediately available. He has also called for a Peace Corps and launched a Food for Peace movement which, as he has recognized, complements FAO's Freedom from Hunger Campaign.

Campaigns seldom end as they were originally planned, but whatever the developments of the next four years may be the Freedom from Hunger Campaign will keep intact its central purpose. It aims not at the temporary alleviation of suffering or want, but at promoting projects and agricultural reforms with a lasting value.

Charles H. Weitz,
Coordinator Freedom from
Hunger Campaign
F.A.O. Rome.

Dr Charles E. Kellogg

On the occasion of the 100th anniversary of the Institut Agronomique de l'Etat at Gembloux, Belgium, Dr. Charles E. Kellogg received an honorary degree of Doctor of Science from this Institute.

(copied from New Zealand Soil News, no. 3, 1961)

World Meteorological Organisation

The Commission for Hydrological Meteorology of the World Meteorological Organisation held its first session in Washington, D.C., from 12-25 April 1961. Dr. A. C. Orvedal of U.S.D.A.-Soil Conservation Service at Beltsville, represented I.S.S.S. at this meeting. He reported that of the items discussed, only a few are of concern. The following is of interest:

- (i) The Commission on Hydrological Meteorology, in its First Session, decided to concentrate its activities in the next four years on surface water and balance, particularly in connection with hydrological forecasting.
- (ii) A "Guide on Hydrological Meteorology" is to be prepared. Effort will be made to attain international standardization of terminology, codes, and units; success in this will make the data easier to use.
- (iii) From the attention to kinds of meteorological data needed for better hydrological forecasting, more data on size and frequency of rainstorms and some other meteorological phenomena are likely to become available.
- (iv) Land use was recognized as important in river regimes, and soil moisture was included on a list of observations for hydrological meteorology.

LETTERS TO THE EDITOR

Dear Editor,

The comprehensive system of soil classifications prepared by the United States Soil Survey and known as the 7th Approximation is an important contribution to the literature of Soil Science. A great deal of concerted effort has gone into its preparation and it contains a vast amount of useful reference data for the soils of the United States which will be of the utmost value to all pedologists. This information has not hitherto been conveniently accessible. For this reason the 7th Approximation will be a most valuable work of reference.

It will, however, be received by most practising pedologists with mixed emotions, for it is doubtful if all pedologists will be equally happy with the principles underlying the system of classification and with other aspects of the system. The classification is, in effect, a morphological classification, and this strictly limits its usefulness as an international system. A soil classification is only a means to an end, and it is more important that it should be an easily comprehensible system and equally useful to both the pedologist, the chemist, and the agriculturist, than that it should, at the cost of simplicity, accommodate all known soils in innumerable categories. It should, moreover, show with the utmost clearness the genetic relationships between soils, and should relate the genetic relationships between soils to the causative elements in the environment. It should show in the clearest manner how the inherited characters of the soil, those derived from the parent material, become acquired characters under the influence of the environment. A classification should make it possible to trace the increasing impress of environment on the soil characters acquired from the parent material, the inherited characteristics. It should be possible to see how contrasting parent materials may give rise to markedly different soils in temperate regions, and how the same parent materials may give rise to soils that much more closely resemble each other in a tropical environment. A classification should show with the utmost clearness the relationship between parent material, weathering, and leaching, and it should be possible to view these in a time framework. All these considerations are becoming increasingly important as the part played by trace elements in both animal (including human) and plant nutrition is being more clearly understood. The vast number of trace element analyses that has already been accumulated is of only limited value unless these analyses can be interpreted in terms of a genetic soil classification.

It is therefore unfortunate that in the 7th Approximation the emphasis has been placed on a morphological classification. On this account it will be so much less useful as a research tool than a much simpler classification in which the emphasis was placed on genetic considerations.

Probably the most controversial aspect of this system of classification will be the proposed new system of nomenclature. When an existing currency is replaced by a new coinage it is almost invariably because the previous coinage has been debased. The proposal to jettison the traditional soil nomenclature must also carry the implication that the names in current use have become, in a scientific sense, debased. This is simply not true. At least it is not true of the terms in current use in Europe, Great Britain, Australia and New Zealand. These denote well defined soil groups about whose identity there is no dispute. Perhaps the 7th Approximation is an expression of a schism between the European and Australian and New Zealand approach to soil classification on the one hand, and the United States approach on the other. This schism is not a recent manifestation. It began when the first steps were taken to depart from Marbut's approach to the problems of soil classification.

The 7th Approximation proposes to abolish all the established names in current use and to replace these with a completely new system of names arbitrarily compounded of Greek, Latin, German, English and in some cases, nonsense roots. This proposal will be viewed with serious misgivings by many pedologists. The current terms have been in use for more than half a century, some of them for longer, and they have become part of the vocabulary of other disciplines. Most of them are perfectly comprehensible to foresters, ecologists, geologists, geographers, engineers, agronomists and others, as well as to pedologists, and in some countries they are becoming part of the farmer's vocabulary. It is doubtful if all these users will take kindly to mastering and committing to memory the hundreds of new names. This task would be a formidable one for a pedologist. The writer would agree with the statement in the introduction to the classification that existing

names need some refinement and perhaps in a few cases redefinition, but he can see no reason why new terms should be coined for concepts for which there is already a perfectly satisfactory word. Why, for example, should we have to burden ourselves with the word "cumulic" when there is a perfectly satisfactory word "deep"? Why for that matter should we discard chernozem, podzol, solonetz and so on? It is unfortunate that a completely new system of nomenclature should be proposed just when soil courses are being introduced into other professional courses, and when a knowledge of existing terms is spreading rapidly, and more especially when many farmers are beginning to grasp the simple logic of a genetic system of classification. Most farmers, for example, can readily appreciate that soils are formed by the transformation of parent material by weathering and the further transformation of the weathered product by leaching, and can appreciate a soil system presented on genetic principles. But it is difficult to see how the 7th Approximation could possibly lend itself to simplification on such principles. Burdened with a heavy load of new names, it is likely to be restricted to a small minority of specialists.

It seems inevitable that soils that do not exactly fit the existing categories of the 7th Approximation will have to be accommodated by creating fresh categories and inventing still more new names. Already the effort required to master the system is a formidable one for a student. This added complexity will not be offset by a better understanding of the formation or origin of soils.

It could be argued that the new terms are largely ill-chosen. Although pedology is rapidly becoming accepted as an established discipline, that is as an independent earth science, and becoming less and less looked on as an appendage to agriculture, it is still not sufficiently mature to risk its credit by such bizarre adventures in philology. It is difficult to see what could conceivably be gained by disregarding the principles of word construction, and it is doubtful if the system of new words as a whole will do much to help the comparatively new discipline of Pedology to gain a reputation for scholarship. The new words both look and sound ugly, and obviously little thought has been given to considerations of euphony. They lie awkwardly on the tongue, and have unfortunate overtones of science fiction and Lewis Carroll. It is only a short step from "cryaqueptic haplaquoll, haplic calcatoll, plintaquultic thermoquod, and glossudalfic typaqualt" to „brillig and borogoves, and gyring and gimbling in the wabe" and the mad tea party. "That barbarisms should exist is a pity; to expend much time in denouncing those that do exist is a waste; to create them is a grave misdemeanour; and the greater the need of the word that is made, the greater its maker's guilt if he miscreates it."

In spite of these objections it is certain that the 7th Approximation will give a great impetus to the study of soil classification and it will undoubtedly prompt pedologists to look again in a critical and constructive manner at their own local and regional systems of classification. It is also a vast storehouse of information about the soils of the United States. From these standpoints it will be a welcome addition to the literature of soil science.

James D. Raeside,
DUNEDIN, New Zealand.
September 1961

Prof. Dr M. Górski † (1886—1961)



Le 25 Août 1961 est mort subitement le Professeur Dr. Marian Górski, qui était pendant de longues années le très mérité Président de l'Association Polonaise de la Science du Sol, un des plus éminents hommes de science, pionnier de la science agricole polonaise, membre titulaire de l'Académie Polonaise des Sciences.

Le Prof. Dr. Marian Górski est né à Varsovie en 1886. Il a fait ses études en chimie à Leipzig et y obtint le titre de docteur en 1911. Dans la même année il fut nommé assistant à la Station Chimico-Agricole à Dublany, en poursuivant simultanément ses études à l'Académie d'Agriculture à Dublany. Il a fait son diplôme en 1917 et en 1919 il fut nommé Chef de la Station Chimico-Agricole à Dublany et professeur suppléant de chimie agricole et de la science du sol à l'École Polytechnique de Lwów.

En 1923 il fut nommé Professeur titulaire de la chaire de la culture et de fumure du sol à la Faculté d'Horticulture de l'École Supérieure des Sciences Rurales

SGGW à Varsovie. Il était le fondateur de l'Institut avec un champ expérimental à Skierniewice, où fut concentré le matériel unique en Pologne, étant le résultat de 40 ans d'expérimentations sur l'influence des engrais minéraux et organiques sur les récoltes des plantes.

Dès 1937 le Prof. Górski dirigeait la chaire de chimie agricole et d'agriculture. Outre son travail scientifique et pédagogique il s'occupait de l'organisation, en contribuant au développement de la SGGW pendant ses plusieurs cadences de doyen et de recteur.

Le Prof. Dr. M. Górski était membre actif de l'Académie des Sciences Techniques et membre titulaire de la Société Scientifique de Varsovie, en même temps que Président de l'Association d'Horticulture de Varsovie.

Après la guerre il a réactivé la SGGW. En 1950 il fut nommé Chef du Département d'Alimentation et des Engrais à l'Institut de Culture, de Fumure et de la Science du Sol.

Le Prof. Dr. M. Górski était le popularisateur ardent de la science agricole et sut créer un lien entre la science et la pratique. Il a organisé un réseau de Stations Chimico-agricoles en Pologne et s'intéressait à son oeuvre jusqu'à la fin de ses jours.

Il était le premier en Pologne d'introduire l'eau ammoniacale en caractère d'engrais liquide.

Il est l'auteur de plus de 100 publications scientifiques et manuels. Ses oeuvres fondamentales traitant sur les engrais de potasse, de phosphore et sur l'eau ammoniacale sont largement connues. Son livre „Les engrais et la fumure” est paru en huit éditions. Le Prof. Górski a élevé et instruit un groupe nombreux de cultivateurs-chimistes et de scientifiques. Parmi les élèves du Prof. Górski compte un nombre de professeurs, d'agrégés et de docteurs.

Dès 1949 jusqu'à ses derniers jours le Professeur Górski occupait le poste du Président de l'Association Polonaise de la Science du Sol, où il a accompli l'importante oeuvre en organisant l'édition de deux périodiques: „Annales de la Science du Sol” / *Roczniki Gleboznawcze* / et „Revue de la Littérature Scientifique Agricole” / *Przegląd Naukowej Literatury Rolniczej* /, traitant sur la science du sol, la chimie agricole, la culture des champs et des plantes et les sciences forestières. Il remplissait la fonction du Président du Comité de Rédaction de ces deux périodiques.

Outre cela il s'intéressait aux différents travaux des commissions, qui étaient occupées à l'unification des méthodes expérimentales dans la science du sol et dans la chimie agricole.

Il participait souvent à différents congrès organisés par l'Association Internationale de la Science du Sol, en prononçant d'intéressants discours. Récemment il a participé au Congrès de la Science du Sol à Paris.

Pour ses éminents mérites il fut accordé au Prof. Dr. Marian Górski le Prix de l'Etat du II degré, la Croix de Commandeur Polonia Restituta et la décoration de l'Etendard du Travail de II classe. La mort du Professeur Dr. Marian Górski est une perte inoubliable pour la science polonaise.

Hommage à sa mémoire.

L. Królikowski, Président,
Société Polonaise de la Science
du Sol, Varsovie.

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