

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 DA LA SCIENCE DU SOL
INTERNATIONALE BODENKUNDLICHE GESELLSCHAFT**

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No. 15

1959

7th
International
Congress of Soil Science 1960

IMPORTANT DATES, SEE BULLETIN No. 14

- January 1, 1960 — Final date for receipt of Congress working papers
May 1, 1960 — Final date for receipt of pre-Congress Registration fee (non-refundable)
July 1, 1960 — Final date for receipt of complete manuscripts

DATES IMPORTANTES, VOIR BULLETIN No. 14

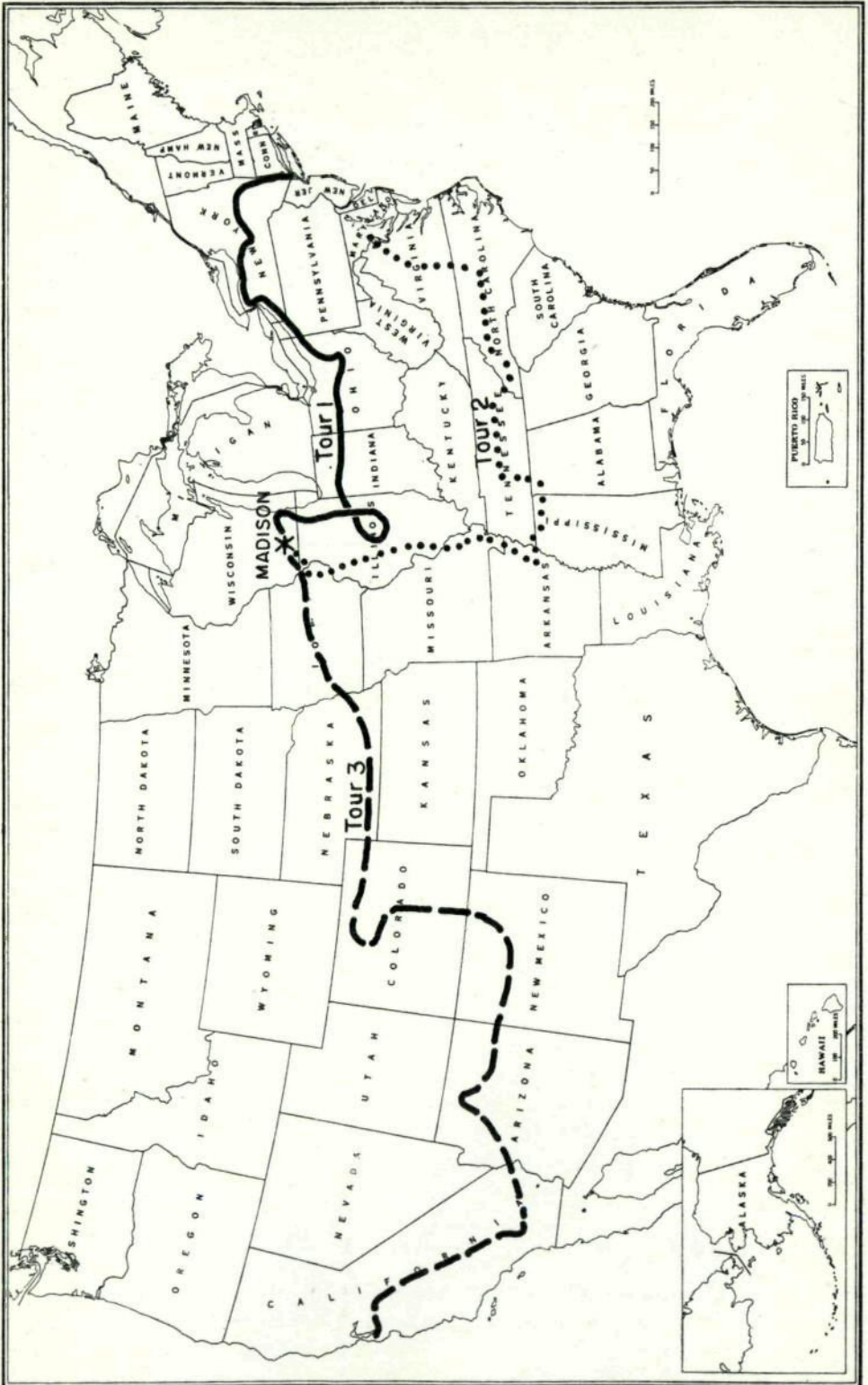
- Janvier 1, 1960 — Date extrême pour la réception des résumés étendus
Mai 1, 1960 — Date extrême pour la réception des frais d'inscription (non remboursable)
Juillet 1, 1960 — Date extrême pour la réception des communications complètes

WICHTIGE DATEN, SEHE BULLETIN No. 14

1. Januar 1960 — Letztes Einreichungsdatum der Kongress-Arbeitsunterlagen
1. Mai 1960 — Letztes Datum der vorzeitigen Einschreibungsgebühr (nicht restituierbar)
1. Juli 1960 — Letztes Empfangsdatum der vollständigen Manuskripte.

LATEST NEWS

Owing to pressure of work Mr. L. G. Monthey felt obliged to resign as Congress Manager. All communications regarding **general information** should from now on be sent to Professor Emil Truog, Congress Manager, Department of Soils, University of Wisconsin, Madison 6, Wisconsin, U.S.A.



Map of Congress Tours. Carte des Excursions. Exkursionskarte.

THE SEVENTH INTERNATIONAL CONGRESS OF SOIL SCIENCE

Although interest in this international event is very satisfying, a review of the tours to be organized may be another proof of the very great importance of this congress, allowing participants to study on a very large scale all sorts of activities and problems in the domain of soil science.

Three tours are offered. Tour 1 is offered both before and after the Congress. Tour 3 is offered after the Congress and will be offered before also if enough register for it. Tour 2 is offered only as a post Congress tour. The outlines of the tours given below are tentative in some details. Approximate routes are shown on the map.

Participants will travel in air conditioned busses. Overnight accommodations in hotels or college dormitories are mostly two to a room, but with individual beds. Mid-day meals will usually be box lunches. Facilities will be provided for ladies. Estimated costs include transportation, bed, and meals. Participants should pack all necessary belongings for the tour in a single piece of luggage. No receptions requiring dress clothes are planned.

Tour 1.

August 5 to August 13, and August 24 to September 1, between New York City and Madison, Wisconsin. A nine-day trip covering approximately 1700 miles. Cost, approximately \$ 110. The post Congress tour is scheduled tentatively, depending on interest.

This trip is planned to demonstrate the soil research work, the soils and the agriculture of the Northeastern and Cornbelt States. Experimental stations will be visited in New York, Ohio, Pennsylvania, Indiana, and Illinois. At Ithaca, New York and Urbana, Illinois two separate one-day trips are planned, one primarily for those interested in soil management and another for those mostly concerned with soil morphology and genesis. In Ohio a hydrologic experiment station will be visited.

En route stops will be made to see the organization and operation of representative farms, including production of fruit, use of organic soils, production of maize and hogs in the "Cornbelt". Soil stops will include representative profiles of the Sol Brun Acide, Gray-Brown Podzolic and Brunizem or Prairie soils, Planosols, and related Gley soils. Relationships between the present classification and the new classification being developed will be discussed.

A stop will be made to see Niagara Falls.

Tour 2.

August 24 to September 4, between Madison, Wisconsin and Washington, D. C. via the Southern States. A 12-day trip covering approximately 1600 miles. Cost, approximately \$ 130. This trip is planned to demonstrate the soils and the agriculture of the Cornbelt and Southeastern States.

Stops en route include visits to study the soil and water conservation work in small watersheds, operation of representative farms, including a dairy farm, a delta plantation with mechanized cotton and rice production, and a bluegrass farm. Visitors will see forest management in the area, the agriculture of the mountains and Piedmont, and tobacco and peanut production on the Coastal Plain. Soil stops will include representative profiles of Gray-Brown Podzolic soils, Brunizem or Prairie soils, Planosols, Red Yellow Podzolic and Reddish Brown Lateritic soils, Alluvial soils, and related Gley soils. Relationships between the present classification and the new classification being developed will be discussed.

Wilson Dam and the TVA fertilizer plant will be visited, as well as a margarine factory and a cigarette factory.

Tour 3.

August 1 to August 13 and August 24 to September 8, between Madison Wisconsin and San Francisco, California. A 13-day trip from West to East, and a 16-day trip from East to West, covering approximately 3200 miles. Cost, approximately \$ 200. The pre-Congress tour is scheduled tentatively, depending on interest. This trip is planned to show soil research work, soils, farming, grazing and forestry in the Cornbelt, Great Plains, and Far Western States. Six experiment stations in agriculture and forestry will be visited in Iowa, Colorado, and California. Stops en route will be made to see the organization and operation of a typical

Cornbelt farm producing maize, soybeans and hogs, a dryland farm producing wheat, a cattle ranch, irrigated farms producing cotton and dates, and grape and wine production. Soils stops will include a Gray-Brown Podzolic soil, a Brunizem or Prairies oil, Humic-Gley, Chernozem, Planosol, Brown or Chestnut, Desert, Grumusol, and Noncalcic Brown soils with and without hardpans. The relation of the present classification to the new system being developed will be discussed. The soil and water conservation work in small watersheds will be studied.

Places of general interest will include Rocky Mountain National Park, Painter Desert, Meteor Crater, and the Grand Canyon.

LE SEPTIEME CONGRES INTERNATIONAL DE LA SCIENCE DU SOIL

Bienque l'intérêt pour cet événement international soit assez satisfaisant, un aperçu des excursions à organiser présentera une autre épreuve de la grande importance de ce congrès, qui donnera aux participants l'occasion d'étudier à une grande échelle toutes sortes d'activités et problèmes dans le domaine de la pédologie, Le croquis sur page 2 montre les routes des tours.

Trois tours sont offerts. Tour 1 est offert tant avant qu'après le congrès. Tour 3 est offert après le congrès et sera offert également avant si le nombre des inscriptions est suffisant. Tour 2 est seulement offert après le congrès. Les tours sont décrits ici en grandes lignes et certains détails ne sont projetés que provisoirement. La carte représente les routes approximatives.

Les participants feront le voyage dans air conditioned autobusses. En général, le logement à l'hôtel ou au dortoir de collège sera dans des chambres à deux lits. Les déjeuners consisteront le plus souvent de paquets de lunch. Des facilités seront prévues pour les dames. L'évaluation des frais comprend transport, lit et repas. Les congressistes devront emballer tous les bagages nécessaires au tour dans une seule valise. Des réceptions demandant tenues de soirée ne sont pas projetées.

Tour 1.

Du 5 au 13 août, et du 24 août au 1 septembre, entre New York City et Madison, Wisconsin. Une excursion de 9 jours couvrant environ 1700 miles. Frais approx. \$ 110. Le tour après le congrès est projeté provisoirement, dépendant de l'intérêt.

Ce tour est projeté pour démontrer les travaux de recherche pédologique, les sols et l'agriculture des Etats du Nord-Est et du "Cornbelt". Des stations expérimentales seront visitées à New York, Ohio, Pennsylvania, Indiana et Illinois. A Ithaca, New York et à Urbana, Illinois, deux tours d'un jour chacun sont projetés, l'un en premier lieu pour les intéressés à la technique du sol et l'autre pour ceux se préoccupant surtout de morphologie et genèse du sol. A Ohio une station expérimentale hydrologique sera visitée.

En route il y aura des arrêts pour voir l'organisation et le fonctionnement des farms représentatifs, comprenant production de fruits, emploi de sols organiques, production de maïs et de pourceaux dans le "Cornbelt". Le voyage sera interrompu de temps en temps pour l'étude du sol, comprenant des profils représentatifs du Sol Brun Acide, Gray-Brown Podzolic et Brunizem ou Prairie sols, Planosols, et Gley sols y reliés. Une comparaison entre la présente classification et la nouvelle classification qui est en voie de développement fera l'objet d'une discussion.

L'occasion pour voir les Niagara Falls sera également utilisée.

Tour 2.

Du 24 août au 4 septembre, entre Madison, Wisconsin et Washington, D.C. via les Etats du Sud. Une excursion de 12 jours couvrant environ 1600 milles. Frais, approx. \$ 130. Ce tour est projeté pour démontrer les sols et l'agriculture du "Cornbelt" et des Etats du Sud-Est. Les arrêts en route se feront pour étudier les travaux de conservation de sol et d'eau dans petits bassins hydrographiques, le fonctionnement des farms représentatifs, y compris une ferme laitière, une plantation de delta avec production mécanisée de coton et de riz, et un "bluegrass" farm. Les visiteurs verront la technique forestière dans le rayon, les agricultures des montagnes et Piedmont, et la production de tabac et d'arachide sur le Coastal Plain. D'autres arrêts permettront l'étude de profils de Gray-Brown Podzolic sols,

Brunizem ou Prairie sols, Planosols, Red-Yellow Podzolic et Reddish Brown Late-ric sols, Alluvial sols et Gley sols y reliés. Des comparaisons entre la présente classification et la nouvelle classification en voie de développement feront l'objet d'une discussion.

Une visite est projetée pour Wilson Dam et à la fabrique d'engrais du TVA, ainsi qu'à une margarinerie et à une usine de cigarettes.

Tour. 3.

Du 1 au 13 août, et du 24 août au 8 septembre, entre Madison, Wisc. et San Francisco, California. Une excursion de 13 jours de l'Ouest à l'Est, et une excursion de 16 jours de l'Est à l'Ouest, couvrant environ 3200 milles. Frais, approx. \$ 200. Le tour avant le congrès est projeté titre provisoire, dépendant de l'intérêt. Le but de ce tour est de faire voir travaux de recherche pédologique, sols, fonctionnement des farms, pâturage et culture forestière dans le "Cornbelt", Great Plains et Far Western States. Six stations expérimentales d'agriculture et de culture forestière seront visitées en Iowa, Colorado et California. Des arrêts auront lieu pour observer l'organisation et le fonctionnement d'un caractéristique Cornbelt farm cultivant maïs, fèves de soya et pourceaux, la cultivation du blé dans les terrains secs, l'élevage de bétail, des fermes irriguées cultivant coton et dattes, et viticulture. Les arrêts permettront aussi l'étude d'un Gray-Brown Podzolic sol, un Brunizem ou Prairie sol, Humic-Gley, Chernozem, Planosol, Brown ou Chestnut, Desert, Grumusol et Noncalcic Brown sols avec et sans couche durcie. Une comparaison de la présente classification avec le nouveau système actuellement en développement fera l'objet d'une discussion. Les travaux de conservation de sol et d'eau dans petits bassins hydrographiques seront étudiés.

Places d'intérêt général comprendront Rocky Mountain National Park, Painted Desert, Meteor Crater et le Grand Canyon.

DER SIEBENTE INTERNATIONALE BODENKUNDLICHE KONGRESS

Obwohl das Interesse für diesen Internationalen Kongress sehr befriedigend ist, so ist doch eine Uebersicht der zu organisieren Exkursionen ein weiterer Anweis für die grosse Wichtigkeit dieses Kongresses, welcher den Teilnehmern die Gelegenheit bietet allerhand Aktivitäten und Probleme im Grossen zu studieren. Die Skizze auf Seite 2 zeigt die verschiedenen Routen der Exkursionen.

Es sind drei Exkursionen geplant worden; die erste sowohl vor wie nach dem Kongress. Die dritte soll stattfinden nach dem Kongress, aber auch vorher, wenn genügend Anmeldungen dafür zeitig einlaufen. Die zweite ist allein für nach dem Kongress geplant worden. Die Hauptroute der Exkursionen ist untenstehend angegeben, etwas versuchsweise in manchen Unterteilen. Annäherend sind die Routen auf der Karte ausgesetzt.

Die Teilnehmer werden in "airconditioned" Autobussen reisen. Uebernachtet wird in Hotels oder Schlafsälen von Colleges, meistens zu zweit in einem Zimmer, aber in 1 P. Betten. Mittags wird in der Regel mit Lunchpacketen gegessen. Alles ist vorgesehen um es den Damen angenehm zu machen. Der Kostenanschlag schliesst Reisen, Mahlzeiten und Uebernachten ein. Den Teilnehmern wird geraten alle persönlichen Benötigungen für die Exkursion in ein einziges Stück Gepäck zusammenzupacken. Es sind keine Empfänge in Abendkleidung geplant.

Exkursion No. 1

Von 5. August bis 13. August, und dann von 24. August bis 1. September, zwischen New York City und Madison, Wisconsin. Eine 9-tägige Tour von annähernd 1700 Meilen. Kosten ungefähr \$ 110.—.

Diese Tour beabsichtigt, ausser der Vorführung, wo und wie die Bodenuntersuchung in den USA stattfindet, die Böden und die Landwirtschaft der Nord-östlichen und der Cornbelt Staaten zu zeigen. Man wird Versuchsstationen in New York, Ohio, Pennsylvania, Indiana und Illinois besichtigen. Von Ithaca, New York, und von Urbana, Illinois, aus sind zwei verschiedene, eintägige Ausflüge geplant, einer hauptsächlich für diejenigen, die sich für Bodenbehandlung interessieren, der andere für diejenigen, welche sich besonders auf Bodenmorphologie und Bodengenese richten. In Ohio wird eine hydrologische Versuchsstation besucht.

Unterwegs wird mehrfach gehalten werden um die Organisation und Arbeitsweise von repräsentativen Bauerhöfen, den Obstbau, die Benutzung organischer Substanz-reicher Böden, den Maisbau, und die Schweinezucht im "Cornbelt" zu besichtigen. Auch wird gestoppt bei repräsentativen Profilen von "Sol Brun Acide", "Gray-Brown Podzolic soils", "Brunizem" oder Prairieböden, "Planosols" und damit verbundenen Gleyböden. Dabei werden der Vergleich und die Beziehungen zwischen dem gegenwärtigen und dem neuen, in Entwicklung begriffenen Klassifizierungssystem wo möglich in einen regen Gedankenaustausch bezogen werden.

Unterwegs wird ein Aufenthalt bei den Niagara Fällen, die Gelegenheit bieten, sich diese anzusehen.

Exkursion No. 2

24. August bis 4. September, von Madison, Wisconsin, bis Washington, D.C., via die südlichen Staaten. Eine 12-tägige Tour von ungefähr 1600 Meilen. Kosten annähernd \$ 130.—. Zweck dieser Exkursion ist, die Böden und die Landwirtschaft des "Cornbelts" und der südöstlichen Staaten zu demonstrieren.

Aufenthalte unterwegs betreffen das Studium des Bodens und der Wasserkonservierungswerke in kleinen Stromgebieten, die Arbeitsweise massgebender Farmen, einschliesslich einer Milchwirtschaft, eine Delta-Plantage mit mechanisierter Baumwolle- und Reis-Erzeugung, und eine "Bluegrass" Farm. Die Teilnehmer werden sich ferner eine Waldwirtschaft in diesem Gebiet, die Landwirtschaft in den Gebirgsgebieten und Piedmont, und Tabakbau und Erdnussbau der Küstenebenen ansehen können. Für repräsentative Profile von "Gray-Brown Podzolic"-Böden, "Brunizem" oder Prairieböden, "Planosols", "Red-Yellow Podzolic" und "Reddish Brown Lateritic"-Böden, Alluvialböden und damit verbundenen Gley-Böden wird man Halt machen und im Vergleich die Beziehungen zwischen dem gegenwärtigen und dem neuen, sich in Entwicklung befindenden Klassifizierungssystem wo möglich in regen Gedankenaustausch durchsprechen.

Bei "Wilson Dam", bei der TVA-Düngemittelfabrik, bei einer Margarinfabrik und einer Zigarettenfabrik wird man speziell anlegen.

Exkursion No. 3

1. August bis 13. August, und dann 24. August bis 8. September: zwischen Madison, Wisc., und San Francisco, Cal. Eine 13-tägige Tour von West nach Ost und eine 16-tägige von Ost nach West. Die Strecke beträgt ungefähr 3200 Meilen. Kosten annähernd \$ 200.—. Die Exkursion vor dem Kongress findet nur statt, wenn genügend Interesse dafür besteht.

Für diese Exkursion beabsichtigt man zu besichtigen, Bodenforschungsarbeit, spezielle Böden, Ackerbau, Weidenbau und Forstwirtschaft im "Cornbelt", den "Great Plains" und den "Far Western" Staaten. Sechs Versuchsstationen für Land- und Forstwirtschaft in Iowa, Colorado und California werden besucht. Unterwegs wird man halten um die Organisation und Arbeitsweise einer typischen "Cornbelt farm", welche Mais, Soyabohnen und Schweine ausbringt, kennen zu lernen; ferner um eine Trockenland-Weizenfarm, eine Vieh-ranch, gutbewässerte Baumwolle- und Dattel-farms, sowie auch Weinland zu besichtigen.

Ein "Gray-Brown Podzolic Soil", ein "Brunizem" oder Prairie-Boden, "Humic-Gley", "Chernozem", "Planosol", Braun- oder Kastanienbraunerde, Wüste, "Grumusol", und kalkfreie Braunerde, mit oder ohne Bankbildung kommen alle an Profilen zu Gesicht. Auch die Wasserregulierungswerke innerhalb kleiner Stromgebiete wird man studieren und diskutieren können. Dabei wird der Vergleich der heutigen Bodenklassifikation mit der neuen, jetzt in Entwicklung stehenden, Anlass geben zu regen Gedankenaustausch.

Schliesslich sei bemerkt, dass man schöne Punkte von allgemeinem Interesse, wie Rocky Mountain National Park, Painted Desert, Meteor Crater und dem Grand Canyon nicht unbeachtet lassen wird.

NEWS OF THE SOCIETY

50 YEARS OF SOIL SCIENCE

At the occasion of the meeting of the German Society of Soil Science at Berlin, August 30 to September 2, 1959 the President, Prof. Dr. Dr. h. c. F. Scheffer, at a lunch offered to the foreign participants in the meeting, commemorated the fact that fifty years ago the first International gathering of Soil Scientists took place in Budapest, Hungary.

This 50th anniversary is a good reason to comment briefly on the history of organized soil science as it started in 1909 and ultimately resulted in the foundation in 1924 of the International Society of Soil Science. The photograph below gives a picture of the participants in this first meeting.

A year later a second conference was held at Stockholm, Sweden and it was decided to elect an Organizing Committee for each future congress. St Petersburg (now Leningrad) was chosen as the seat for a conference in 1914, but this plan did not materialize owing to World War I. In the intervening four years, however, for the first time separate commissions were organized (A) Classification of the Soil Particles by means of Mechanical Analysis, (B) Preparation of Soil Extracts for Chemical Analysis, (C) Nomenclature of moraine soil types in West Europe, names to be changed in 1913 into Commission for Physical and Mechanical Properties of Soil and Commission for Chemical Analysis of Soil. The third commission (C) did not meet due to circumstances.

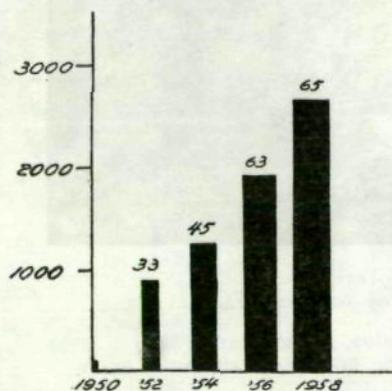
Eight years elapsed till in 1922 in Prague, Czechoslovakia, a third conference was convened, this being the first Post-War I international gathering of soil scientists. At that occasion five Commissions were established, to which a sixth was added when on May 19th, 1924 a fourth Conference was held in Rome under the patronage of the King of Italy and under the auspices of the International Institute of Agriculture. These six Commissions viz: I Soil Physics; II Soil Chemistry; III Soil Biology; IV Soil Fertility and Plant Nutrition; V Soil Genesis, Classification and Cartography; VI Soil Technology, formed the structure of the International Society of Soil Science which then was founded. The first President was Dr. J. L. Lipman (USA) with Finland, Germany, Italy, the Netherlands and Spain represented in the board, the international character being, supplementary, demonstrated in the presidencies of the six Commissions, in which also Szechoslovakia, Hungary and Switzerland were represented.

With the scope of organization so materially enlarged it was decided to hold a world-wide conference. As a result the First International Congress of Soil Science was organized in Washington D.C., U.S.A. from June 13-22, 1927. At that time the Society counted 934 members from 43 countries, whereas since 1925 an own review was edited in five languages, English, French, German, Italian and Spanish, under the name of "Proceedings of the International Society of Soil Science".

In between the years 1924-1927 Commission meetings were held in Great Britain (Soil Physics), the Netherlands (Soil Chemistry), Germany (Soil Biology and Soil Fertility) and in Hungary (Commission V on Soil Classification).

A good start was made, international congresses and special meetings were convened at more or less regular intervals. The congresses were held at Moscow (1930), Oxford (1935), Amsterdam (1950), Leopoldville (1954), Paris (1956).

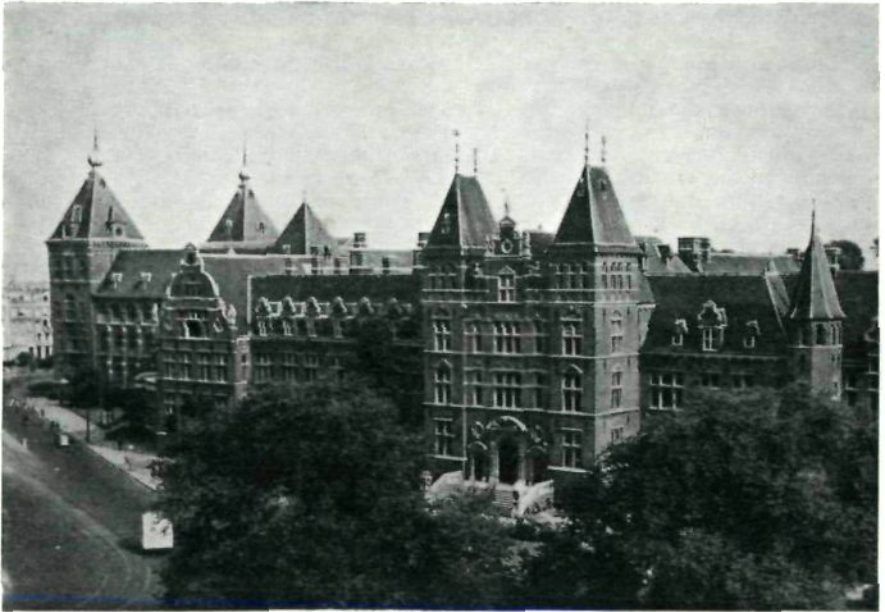
Between 1935 and 1950 there was a lapse. World-War II had ruptured all contact and it was the late Acting President and Secretary-General of the Society since its foundation in 1924 (Dr M. J. Hissink, Netherlands), who was the first to think of reestablishing the broken ties. His activities resulted in the Amsterdam-Congress 1950. At that occasion 107 soil scientists became members of the refounded Society. The adjacent graph shows the increase in membership and countries of residence which is proof of the growing need for international contact in the field of soil science.



Growth of membership of the I.S.S.S.



Budapest 1909



*The Royal Tropical Institute, Amsterdam.
Seat of the International Society of Soil Science.*

*Institut Royal des Régions Tropicales, Amsterdam.
Siège de l'Association Internationale de la Science du Sol.*

*Königl. Institut für die Tropen, Amsterdam.
Sitz der Internationalen Bodenkundlichen Gesellschaft.*

It is finally to be expected that the forthcoming 7th International Congress to be held in 1960 in the U.S.A. will further promote interest in the Society's activity.

International cooperation steadily develops and it is a gratifying thought that the International Society of Soil Science shows all signs of a healthy growth which will make it possible to pursue its most human object: to make available a more plentiful and better balanced nutrition to an ever increasing world population.

NOUVELLES DE L'ASSOCIATION

50 ANS DE SCIENCE DU SOL

A l'occasion de la réunion de l'Association Allemande de la Science du Sol à Berlin, du 30 août au 2 septembre 1959, le Président, le Prof. Dr. Dr. h. c. F. Scheffer, au cours d'un déjeuner offert aux congressistes de l'étranger, commémorait le fait qu'il y a 50 ans que la première Conférence Internationale de Pédologues a eu lieu à Budapest, Hongrie.

Ce cinquantenaire est une bonne raison de donner ici un aperçu de l'histoire de la pédologie organisée telle qu'elle commençait en 1909 et finalement entraînait, en 1925, la fondation de l'Association Internationale de la Science du Sol. La photo sur page 8 montre les participants à la première réunion.

L'année après, une seconde conférence se tenait à Stockholm, Suède, et la décision fut prise de choisir un Comité d'Organisation pour chaque futur congrès. St. Petersburg (de nos jours, Leningrad) fut assigné comme siège d'un congrès en 1914, mais la première guerre mondiale mit obstacle à la réalisation de ce projet. Dans les quatre années intermédiaires, la création avait lieu, pour la première fois, des commissions séparées (A) Classification de Particules de Sol au moyen de l'Analyse Mécanique (B) Préparation d'Extraits de Sol pour l'Analyse Chimique (C) Nomenclature de types de sol morainique en Europe Occidentale, dénominations modifiées en 1913 dans Commission de Propriété Physiques et Mécaniques du Sol et Commission d'Analyse Chimique du Sol. Par suite de certaines circonstances, il n'y avait pas une réunion de la troisième commission (C).

Huit ans s'écoulaient jusqu'à ce qu'en 1922 à Prague, Tchéco-Slovaquie, une troisième conférence fut convoquée, la première réunion internationale de pédologues d'après-guerre no. I. A cette occasion cinq Commissions étaient constituées, auxquelles une sixième s'ajoutait lorsqu'au 19 mai 1924 un quatrième Congrès se tenait à Rome sous le haut patronage du Roi de l'Italie et sous les auspices de l'Institut International d'Agriculture. Ces six Commissions, à savoir: I Physique du Sol; II Chimie du Sol; III Biologie du Sol; IV Fertilité du Sol et Nutrition des Plantes; V Genèse du Sol, Classification et Cartographie; VI Technologie du Sol, formaient la structure de l'Association Internationale de la Science du Sol, fondée alors. La présidence incombait au Dr. J. L. Lipman (U.S.A.) et représentants de la Finlande, l'Allemagne, l'Italie, la Hollande et l'Espagne siégeaient au Comité. Le caractère international se manifestait aussi dans les présidences des six Commissions, parmi lesquels figuraient la Tchéco-Slovaquie, Hongrie et la Suisse.

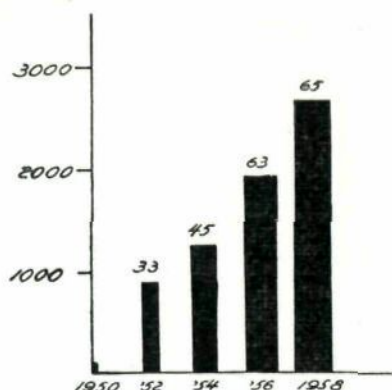
Le domaine d'activité étant tellement élargi, il fut décidé de convoquer une réunion mondiale. C'est ainsi qu'en 1927, du 13 au 22 juin, le Premier Congrès International de la Science du Sol avait lieu à Washington, D.C., U.S.A. A cette époque l'Association comptait 934 membres provenant de 43 pays. Depuis 1925 une revue était publiée en cinq langues (anglaise, française, allemande, italienne et espagnole) sous le nom de „Proceedings of the International Society of Soil Science”.

Pendant les années 1924-1927, des réunions de Commissions se tenaient en Grande Bretagne (Physique du Sol), aux Pays-Bas (Chimie du Sol), en Allemagne (Biologie du Sol et Fertilité du Sol) et en Hongrie (Commission V sur Classification du Sol).

C'était bien débuté et par intervalles plus ou moins régulières suivaient des congrès internationaux et des réunions spéciales. Les congrès avaient lieu à Moscou (1930), Oxford (1935), Amsterdam (1950), Léopoldville (1954), Paris (1956).

Entre 1935 et 1950 il y avait un arrêt. La deuxième Guerre Mondiale avait rompu tous les contacts et c'était feu le Président adjoint et Secrétaire-Général de l'Association depuis sa fondation en 1924, le Dr. M. J. Hissink (Pays-Bas), qui le

premier pensait à un renouement des liens brisés. Le Congrès Amsterdam 1950 était le résultat de ses activités. A cette occasion 107 pédologues s'inscrivaient comme membre de l'Association redressée. La graphique ci-contre fait voir l'accroissement du nombre de membres et de pays de résidence et met en évidence le croissant besoin de contact international dans le domaine de la science du sol.



Aussi, tout porte à croire que le prochain 7ème Congrès International se tenant en 1960 aux Etats-Unis, stimulera davantage l'intérêt dans l'activité de l'Association.

Coopération internationale est en constant progrès et il est réconfortant de constater que l'Association Internationale de la Science du Sol donne tout signe d'une saine croissance qui rend possible de poursuivre l'objectif le plus humain: mettre une nutrition plus abondante et mieux balancée à la portée de la population toujours plus vaste de l'univers.

Accroissement du nombre des membres de l'A.I.S.S.

NEUES AUS DER GESELLSCHAFT

50 JAHRE BODENKUNDE

Gelegentlich der Tagung der Deutschen Bodenkundlichen Gesellschaft zu Berlin, vom 30. August bis zum 2. September 1959, brachte der Präsident, Prof. Dr. Dr. h. c. F. Scheffer, während eines Déjeunés, den ausländischen Kongress-Teilnehmern angeboten, in Erinnerung, dass vor gerade 50 Jahren die erste internationale Zusammenkunft von Bodenforschern zu Budapest in Ungarn stattfand.

In diesem Gedenken liegt eine gute Veranlassung zu einer kurzen historischen Uebersicht über die Zeit, in welcher sich die Organisation der bodenkundlichen Wissenschaft seit dem Beginn in 1909, über die Stiftung der Internationalen Bodenkundlichen Gesellschaft im Jahre 1924, bis auf die Jetztzeit, entwickelt hat.

Für ein Bild der Teilnehmer an der Zusammenkunft 1909 sehe Seite 8.

Ein Jahr später wurde in Stockholm, Schweden, eine zweite Konferenz abgehalten, in welcher zur Wahl eines Organisations-Komitees für alle folgenden Kongresse beschlossen wurde. St. Petersburg (jetzt Leningrad) wurde als Ort einer Konferenz im Jahre 1914 auserwählt, aber dieser Plan kam nicht zur Verwirklichung durch Weltkrieg I. In den zwischenliegenden 4 Jahren wurden jedoch zum ersten Male Spezial-Kommissionen organisiert: (A) zur Klassifizierung der Bodenteilchen durch die mechanische (d.h. die granulometrische) Analyse, (B) zur Herstellung von Bodenextracten für die chemische Analyse, (C) zur Nomenclatur der Typen von Moraineböden in West-Europa. Diese Namen wurden in 1913 umgeändert in: (A) Kommission für physische und mechanische Bodeneigenschaften und (B) Kommission für die chemische Bodenanalyse. Die dritte Kommission kam durch gelegentliche Umstände nicht zu einer Zusammenkunft.

Acht Jahre vergingen bis in 1922 zu Prag, Tschechoslovakei, eine dritte Konferenz zusammentraf, die erste internationale Zusammenkunft von Bodenkundlern nach dem Isten Weltkrieg. Bei dieser Gelegenheit wurden fünf ständige Kommissionen gegründet, zu welchen noch eine sechste wurde hinzugefügt, 19. Mai 1924, während einer vierten Konferenz zu Rom, unter dem Patronat des Königs von Italien und der Beihilfe des Internationalen Landwirtschaftlichen Instituts. Die so formierten sechs Kommissionen sind folgende: I Bodenphysik; II Bodenchemie; III Bodenbiologie; IV Bodenfruchtbarkeit und Pflanzenernährung; V Bodengenese, — Klassifizierung und — Kartierung; VI Bodentechnologie. Zusammen bilden sie das Gerüst der „Internationalen Bodenkundlichen Gesellschaft“, die dann darauf gegründet wurde. Dr. J. L. Lipman (U.S.A.) war der erste Präsident; Deutsch-

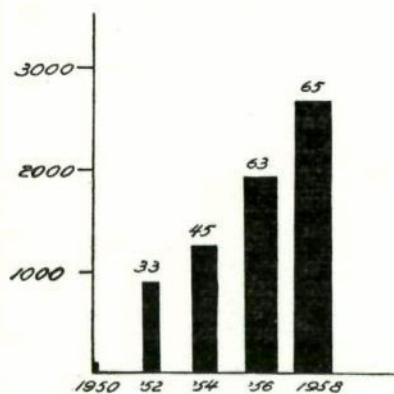
land, Finland, Italien, Niederland und Spanien hatten Vertreter im Vorstand; überdies wurde der internationale Charakter noch durch die Vorstände der sechs Kommissionen, in welchen die Schweiz, die Tschechoslowakei und Ungarn vertreten waren, noch besonders benachdruckt.

Nachdem nun die Organisation dermassen erweitert und ausgebaut war, wurde beschlossen eine die ganze Welt umfassende Konferenz ab zu halten. Daraus ging hervor: der „Erste Internationale Bodenkundliche Kongress“ zu Washington, D.C., U.S.A., 13. bis 22. Juni 1927. Dazumal zählte die Gesellschaft 934 Mitglieder aus 43 Ländern. Indessen war seit 1925 schon eine eigne Zeitschrift unter dem Namen "Proceedings of the International Society of Soil Science" herausgegeben worden, in den 5 Sprachen: Englisch, Französisch, Deutsch, Italienisch und Spanisch.

Zwischen 1924 und 1927 fanden verschiedene Zusammenkünfte der Kommissionen statt, namentlich von: I Bodenphysik, in Gross Brittanien; II Bodenchemie, in den Niederlanden; III Bodenbiologie und IV Bodenfruchtbarkeit, in Deutschland; und V Bodenklassifizierung, in Ungarn.

Nach dem erfreulichen Beginn von 1927 folgten etliche Kongresse und Spezialversammlungen zu mehr oder weniger regelmässigen Zwischenzeiten. Die allgemeinen Kongresse fanden statt zu: Moskou (1930), Oxford (1935), Amsterdam (1950), Leopoldville (1954), Paris (1956).

Zwischen 1935 und 1950 liegt eine Zeit der Verkümmern der Gesellschaft. Weltkrieg II hatte alle internationalen Kontakte zerrissen. Aber zum zweiten Male — denn auch nach Weltkrieg I hatte er die Initiative genommen, die Brocken wieder zusammenzuleimen — war es Dr. M. J. Hissink (Niederland), Stellvertretender Präsident und Generalschriftführer der I.B. Gesellschaft, der als erster daran dachte die zerrissenen Banden wieder anzuknüpfen. Resultat seiner Bemühungen war der Amsterdamer Kongress 1950. Bei dieser Gelegenheit wurden 107 Bodenkundler Mitglied der aufs Neue gegründeten Gesellschaft. Unterstehende graphische Darstellung, in welcher der



Anwachs der Mitgliederzahl der I.B.G.

Anwachs der Mittgliederzahl, sowie der beteiligten Nationalitäten ist angegeben, zeigt deutlich wie gross auf dem Gebiete der Bodenkunde das Bedürfnis an internationalem Kontakt ist.

Und so darf man erwarten, dass der bevorstehende 7. Internationale Kongress, 1960 in den Vereinigten Staaten abzuhalten, das allgemeine Interesse an dem Wirken unserer Gesellschaft noch weiter fördern wird.

Internationale Zusammenarbeit entwickelt sich fortwährend und es ist ein erfreulicher Gedanke, zu bemerken dass die Internationale Bodenkundliche Gesellschaft alle Zeichen eines gesunden Wachstums offenbart, was die Verfolgung eines der schönsten menschlichen Ziele ermöglicht, nämlich eine reichlichere und besser ausbalanzierte Ernährung der immerfort zunehmenden Bevölkerung der Welt.

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

Argentine Section of the I.S.S.S.

The first Argentine meeting of soil science was organized in Buenos Aires from September 7-12, of this year. About a hundred scientific reports were read. 32 Persons were listed as new members of the ISSS. As officers serving on the Board of the Argentine Section were re-elected:

President: Ing. Agr. Antonio J. Prego, Instituto de Suelos Y Agrotecnia, Cerviño 3101, Buenos Aires.

Secretary: Ing. Agr. Oscar J. Guedes, *ibid.*

Representative on the Council of the I.S.S.S.: Ing. Agr. Jorge I. Bellati, *ibid.*

Seven advisory committees, corresponding with the seven Commissions of the Society were established.

Australian Society of Soil Science

At a meeting, early this year, of the Federal Council of the Australian Society of Soil Science, Mr. J. K. Taylor, Chief of the Division of Soils, C.S.I.R.O., Adelaide, South Australia, was elected Australian representative on the Council of the International Society of Soil Science.

Membership of the Australian Society of Soil Science now totals 234.

British Society of Soil Science

At the Annual General Meeting, held at the University of Nottingham, School of Agriculture, Sutton Bonington, the following officers were elected for 1960.

President: Dr. R. K. Schofield (Oxford University)

Vice-Presidents: Dr. H. Greene (Rothamsted Experimental Station)
and Dr. W. T. H. Williamson (Gezira, Sudan)

Secretary: Mr. D. V. Crawford (Nottingham University)

Treasurer: Dr. W. E. Chambers (Beverley, Yorks)

Editor: Mr. G. V. Jacks (Commonwealth Bureau of Soils, Harpenden)

It was decided to hold the next meeting from 8th—11th April, 1960, in Edinburgh, and at these meetings we are glad to welcome visitors. If any members of the I.S.S.S. would like to attend they are invited to communicate with the Secretary, School of Agriculture, Sutton Bonington, Loughborough, Leics.

The Society of the Science of Soil and Manure, Japan

President: Ishizuka, Yoshiaki (Hokkaido University, Sapporo)

Vice-Presidents: Yamanaka, Kinjiro
Harama, Shinsaku

Secretary: Kosaka, Jiro (National Inst. of Agric. Science, Nishigahara, Kitaku, Tokyo)

Treasurer: Matsuo, Kenichi

Member: Kishimoto, Kikuo

Representative on the

Council of the I.S.S.S.: Prof. Dr. Ishizuka, Yoshiaki (Hokkaido University, Sapporo)
Seat of the Society: c/o National Institute of Agricultural Sciences, Nishigahara, Kita-Ku, Tokyo.

The Society held its annual meeting in Tokyo on April 5-7, 1959. 362 Papers were read. Prizes were awarded to Ogata, Tamotsy of the Ehime Univ. (Studies of the Oxamid and its related gradually available nitrogenous fertilizer) and to Tanaka, Akira of the Hokkaido Univ. (Studies on the characteristics of the physiological function of leaf at definite position on stem of rice plant).

Prize of the Society of Agriculture of Japan was awarded to Dr. Kamoshita, Yutaka, member of the I.S.S.S. and Head Department of Soil and Fertilizer of the Nat. Inst. of Agricultural Sciences (Soils of Japan with general map of Soil Types).

Allunion Society of the Soil Scientists of the U.S.S.R.

The Allunion Society of Soil Scientists is a scientific-public institution uniting private persons and organisations of the U.S.S.R. working in the field of pedology and allied sciences. The Society has 15 branches in various republics, 30 departments in different towns and 13 sub-departments in Moskow itself. The total personal membership is more than 2600 and 19 organisations are collective members.

The First delegate Congress of Soil Scientists held at Moskow, May 12-16, 1958, was organized by the Society. The meeting was attended by 242 delegates, more than 700 guests and 12 scientists from abroad. On the plenary sessions the following reports were presented:

Prof. I. V. Tiurin "The adjacent and actual problems of soil science in the U.S.S.R."

N.N. Rozov "The conditions and development of the soil classification problems in soil science"

P. A. Letunov "Subdivision into soil geographical regions"

Prof. S. S. Sobolev "The evaluation of soils"

Prof. A. V. Sokolov "Soil factors determining the effectivity of fertilizers"

Prof. S. S. Sobolev "Fighting soil erosion in the U.S.S.R."

There were technical sessions that dealt with soil physics, soil fertility and chemistry, genesis and classification (with subcommissions a. evaluation of soils and b. subdivision of areas into soil-geographical regions) and soil amelioration (with a subcommission on soil erosion). In the technical session meetings 220 reports on actual problems of soil science from members of the Society as well as from 12 foreign scientists were presented.

Along with scientific problems a number of questions on the organisation of the Society were solved. Thus the Central Council and the Inspection Committee were elected. New rules of the Society were adopted. As President of the Society was elected Professor I. V. Tiurin.

Five permanent commissions of the Council of the Society are now at work. Their chairmen being leading soil scientists:

Soil physics — chairman Prof. A. A. Rode

Soil chemistry — chairman Prof. I. N. Antipov-Karataev

Soil biology — chairman Prof. E. E. Mishustin

Soil fertility — chairman Prof. O. K. Kedrov-Zichman

Soil genesis and classification — chairman Prof. I. V. Tiurin

Soil amelioration — chairman Prof. A. N. Rozanov

Soil mineralogy — chairman Prof. N. I. Gorbunov

Scientific papers from soil scientists of Moskow and other towns are presented and discussed at the meetings of the commissions. The departments and branches of the Society are the scientific centers and help to increase the knowledge in various fields of soil science for the members of the Society, and their creative intercourse propagates the knowledge of soils and as well as realizes the scientific help for agriculture.

In the course of the last years in a number of branches and departments regional conferences took place. Questions concerning soil genesis and classification, subdivision into agricultural regions, detailed soil mapping and the use of fertilizers were discussed. Many members of the Society published in the journal "Pochvovedenie" and local periodicals.

A number of Soviet soil scientists are members of the I.S.S.S. They took an active part in the meeting of Commissions II and IV in Hamburg. Thus Prof. I. V. Tiurin made a general report "Soil types and the efficiency of fertilizers". Eleven reports were presented to the technical sessions. A general report "The bases of the theory and practice of amelioration and reclamation of saline soils in the arid zone" was presented by Prof. V. A. Kovda to a symposium in Iran. Eight reports were presented to the technical sessions.

INTERNATIONALE ZUSAMMENARBEIT BEI DEN FELDUNTERSUCHUNGEN BETREFFS BODENFRUCHTBARKEIT.

3 Jahre Arbeitsgemeinschaft für Bodenfruchtbarkeit in der IV. Kommission der Internationalen Bodenkundlichen Gesellschaft.

Nachdem Direktor Dr. Bruin, Groningen, vor dem Plenum der IV. Kommission auf dem VI. Kongress der Internationalen Bodenkundlichen Gesellschaft dazu eingeladen hatte, fand die Gründung der Arbeitsgemeinschaft auf dem gleichen Kongress in Paris (1956) statt. Zum Präsidenten wurde Dr. Bruin gewählt, später erfolgte die Wahl von Dr. Ferrari (ebenfalls Groningen, Instituut voor Bodemvruchtbaarheid) zum Geschäftsführer. Die Arbeitsgemeinschaft stellte sich die Aufgabe, akute Probleme der Bodenfruchtbarkeit durch gemeinschaftliche internationale Experimente zu klären, welche entsprechend grosse Standortunterschiede (Boden und Klima) einschliessen. Obwohl zunächst auch Wissenschaftler anderer Erdteile interessiert waren, konzentrierte sich die Gemeinschaftsarbeit aus Gründen der Problematik und Methodik zunächst auf Europa. Bei der Gründung lagen 2 Vorschläge für gemeinschaftliche Experimente vor, nämlich für eine Stickstoffversuchsreihe I.N.V. (Vorschlag Bruin) und eine Dauerversuchsreihe mit verschiedener Düngungsintensität und fixierter Fruchtfolge (Vorschlag v. Boguslawski, Giessen).

Auf der ersten Arbeitstagung vom 18.—20. Dezember 1956 in Groningen konnte zunächst das Programm für die auf 10-jährige Dauer vorgesehene I.D.V. — Serie (Dauerversuchsreihe) festgelegt werden, so dass die Versuchsreihe 1957 erstmalig durchgeführt wurde und mit der Ernte 1959 3-jährige Ergebnisse vorliegen. 1957 wurden gleichzeitig Versuche über die zweckmässige Sorten- und Herkunftswahl durchgeführt. Nachdem im Laufe von 3 Jahren noch weitere Versuchsansteller hinzutraten, werden zur Zeit 24 Versuchsreihen unter Beteiligung von Wissenschaftlern der Länder Belgien, Deutschland, Frankreich, Jugoslawien, Niederlande, Österreich, Schweiz durchgeführt, so dass aus diesem kurzen Zeitraum bereits Ergebnisse von rund 50 Versuchsreihen vorliegen.

Auf der 2. Arbeitssitzung vom 18./19. September 1957 in Giessen wurde neben ergänzenden Untersuchungen innerhalb der I.D.V.-Reihe vor allem das Programm für die erstmalige Durchführung der I.N.V.-Reihe (Stickstoffversuchsreihe) beschlossen, welche 1958 in grossem Rahmen einmalig realisiert wurde. Unter Beteiligung der Länder Belgien, Deutschland, Jugoslawien, Niederlande und Österreich wurden innerhalb 9 Boden-(Anbau-) Gebieten Versuchsreihen von im Mittel 30 Versuchen durchgeführt. Die Versuchspflanze war Hafer, die Zahl der Varianten betrug jeweils 7.

Sowohl im Zusammenhang mit der I.N.V. — wie der I.D.V. — Reihe wurden an 5 Standorten vergleichende Gefässversuche durchgeführt. Diese sollen vornehmlich dazu dienen, die Analyse des Faktors "Standort" in "Klima" und "Boden" zu erreichen.

In beiden Versuchsreihen erfolgt die laufende Registrierung bzw. Sammlung der Witterungs- und Klimadaten der Anbauorte. Neben Pflanzenanalysen werden regelmässig vielseitige und vergleichbare Bodenuntersuchungen (physikalische, chemische und biologische) durchgeführt. Aufgrund der einmaligen Möglichkeit der Vergleichbarkeit des Materials haben sich weitere kleinere Arbeitsgruppen gebildet; so eine Gemeinschaftsuntersuchung über die chemische Bodenanalyse. Da von gleichem Versuchssaatgut ausgegangen wird, gestattet das Erntegut von den verschiedenen Standorten die Untersuchung des Herkunftswertes von Saatgut. Von allen Ernten können Proben für Qualitätsuntersuchungen Verwendung finden.

So ist die Arbeitsgemeinschaft ein vitaler Organismus geworden. Inzwischen hat Direktor Dr. Bruin auf der Internationalen Tagung der II. und IV. Kommission in Hamburg am 24. August 1958 einen Bericht gegeben. Gleichzeitig fand anlässlich dieses Kongresses die 3. Arbeitstagung statt.

Die 4. Arbeitstagung, zu welcher Direktor Dr. Bruin am 21. und 22. Oktober 1959 nach Groningen eingeladen hat, soll sich erstmalig mit der Auswertung des schon jetzt umfangreichen Materials beschäftigen.

Prof. Dr. v. Boguslawski

**MISCELLANEOUS NEWS — INFORMATIONS DIVERSES —
VERMISCHTE MITTEILUNGEN**

The International Institute for Land Reclamation and Improvement

Starting 1958 the International Institute for Land Reclamation and Improvement, Wageningen, the Netherlands, edits two series of publications, worth to be mentioned in this Bulletin because a new series of soil research periodicals is introduced. In the "Publications" various subjects will be dealt with, such as drainage, irrigation, desalinization, reclamation methods, crops on new soils, problems of soil science, layout and settlement of new areas, land consolidation, and other objects of importance to temperate, subtropical and tropical regions. Generally the publications will be printed in English, French, German or Spanish, with a fairly extensive summary in one or more of the other languages mentioned.

The aims of the Institute, summarized as follows:

- + to collect information from all over the world with regard to land reclamation and improvement and to exchange this with interested parties working in the same field;
 - + to disseminate knowledge of these subjects by means of publications and other methods of enlightenment;
 - + to contribute — by supplementary research work — towards a more accurate appreciation of the problems of land reclamation and improvement,
- may appear from the titles of the first numbers of the Publication mentioned above, viz.:

1. Physical Planning in Connection with Land Reclamation and Improvement.
2. Subirrigation in the Zuiderzee-polders.
3. Land Consolidation in Europe.
4. Soil Survey and Landclassification as applied to Reclamation of Sea Bottom Land in the Netherlands.
5. Waterdeficiencies in European Countries (a climatological survey).

The Annual Report 1958 contains two interesting general papers:

1. The role of land and water development in world food and agricultural progress.
2. Agrarian reconstruction in Europe.

Moreover the Institute issues another series to be known as "Bulletins" which will deal mainly with subjects of a more specifically technical nature relating to land reclamation and improvement, e.g. instructions on research methods. The start was made by:

1. The Auger Hole Method. A Field Measurement of the Hydraulic Conductivity of Soil below the Watertable (1958).
2. Some Aspects of Sprinkler Irrigation in Tropical Regions (1959).

We hope this series will meet a good response among other investigators working on these and allied subjects of more than local importance and stimulate them to publications in both series mentioned above. On the other hand, this Bulletin will always be glad to announce other new periodicals dealing with soil science subjects of international significance.

OBITUARY — NECROLOGIE — NEKROLOGIE



Aleksander Aleksandrovitch Zavalishin (1902—1959)

The 23rd December, 1958, in Leningrad, after a long and wearing illness passed away the 57 years old doctor of agricultural science, Professor Aleksander Aleksandrovitch Zavalishin — a leading soil scientist of the U.S.S.R.

A. A. Zavalishin graduated at the Leningrad Agricultural Institute in 1924 and entered the field of soil science.

From 1928 up to 1945 A. A. Zavalishin worked in the Dokutchayev Soil Institute of the Academy of Sciences of the U.S.S.R. (Moskow). In this period he carried out investigations in Kuzbas, watershed of Mologa and Sheksna rivers, Lenkoran district of Azerbaidzan, Moskow region and Northern Ural.

Beginning from 1945 A. A. Zavalishin lived in Leningrad and worked in the Soil Museum and the State Leningrad University where he was chief of the soils department till his death.

The scientific contributions of A. A. Zavalishin consist of 48 papers. In the first place are to be recorded his studies dealing with the genesis and geography of podzolic soils.

Of these may be mentioned "The characteristics of the main subtypes of soils from the forest zone of the European part of the U.S.S.R." published in 1945. Besides attention was paid to the question of gley formation as well as to general soil science problems. A paper that deals with these themes, is his last work "The Dokutchayev's teaching on soil-forming factors".

A. A. Zavalishin was a leading investigator, a talented teacher. Many have also been his activities in the social field. The death of A. A. Zavalishin is a very severe loss for Soviet Soil Science.

I. V. TIURIN, Moskow



Nikolai Aleksandrovitch Dimo (1873—1959)

On March 15, 1959 died after a wearing illness the leading soil scientist and agronomist — academician of the Allunion after Lenin, Agricultural Academy (VASHNIL), director of the Soil Institute of the Moldavian branch of the Academy of Sciences of the U.S.S.R., Professor of the Kishinev University — Nikolai Aleksandrovitch Dimo.

He entered the field of soil science at the end of last century, working at that time under the leadership of V.V. Dokutchayev and N. N. Sibirzev. To the end of his life, N. A. Dimo was full of energy and creative plans. During 60 years of activity he took interest in a number of soil science problems. He published more than 200 papers, many various scaled soil maps of different territories.

He started his field work in 1899, investigating soils of the Saratov, Pensa and Chernigov states. For a long time he worked in Middle Asia, being the head of the agronomy department of the Middle Asia State University. During this period soil maps on various scales were compiled and published, among these a general soil map of the Middle Asia republics (1927, scale 1:1,000,000). This map was exhibited at the First International Soil Congress at Washington. The soil maps of the Middle Asia regions were of great practical importance for subdividing the area into natural-historical regions and the development of irrigated agriculture.

N. A. Dimo was the first to distinguish cultivated soils of the oasis and discovered the process of progressive clayfication, characteristic of the soils. This process is the result of clay accumulation from irrigation waters and of intensive chemical weathering.

Outstanding work was carried out when investigating soils and sub-soils of Azerbaidjan and Kolhid lowland.

N. A. Dimo and B. A. Keller were the first to investigate the soil and vegetation complexity and published a widely known monograph "In the semi-desert area" (1907) that, up to now, has great scientific significance.

His wide mental outlook and fundamental knowledge made it possible to contribute successfully to the solution of various soil science problems. Mention be made of the paper "Complexity and brokenness of soil cover in the flat areas on the right bank of the Alazan river" and "Main types of soil fauna" (1945), etc.

From 1945 N. A. Dimo resides in Moldavia where he organized a Soil Science chair at the Kishinev University, a Soil Institute at the Moldavia branch of the Academy of Sciences of the U.S.S.R. and a soil science working group at the Ministry of Agriculture of Moldavia.

Under the leadership of N. A. Dimo a large and fruitful work on soil investigation of Moldavia was conducted. It resulted in a number of soil maps of collective and state farms and of various regions of the republic. He published a textbook "Soils of Moldavia, aims of their investigation and their main peculiarities".

Among scientists he was known as a constructive and inventive personality. Wide and manysided were the activities of N. A. Dimo in soil science and social fields. He was deputate and member of the presidium of the Supreme Council of the Moldavia republic, an honorable member and president of the branch of the Allunion Society of Soil Scientists.

ALLUNION SOCIETY OF SOIL SCIENTISTS OF THE U.S.S.R.

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

**IIIème Symposium International de „AGROCHIMICA” sur problèmes
d'azote dans l'Agriculture - Séville, 17-22 octobre 1960**

Siège du Comité organisateur: Instituto di Chimica Agraria della Università di Pisa - Via S. Michele degli Scalzi 2

De concert avec les Collègues espagnoles qui font part du Comité de Rédaction, la revue "Agrochimica" organisera le IIIème Symposium international à Séville du 17 au 22 octobre 1960.

Le Symposium s'occupera des problèmes d'azote dans l'agriculture. Dans ces journées d'étude les discussions se porteront particulièrement sur les sujets suivants:

- a) Le métabolisme de l'azote dans la terre
- b) Le métabolisme de l'azote dans la plante
- c) La nutrition azotée des végétaux
- d) L'urane dans l'alimentation des ruminants (journée zootechnique)
- e) La consommation azotée (journée agronomique)

Pendant le Symposium il y aura aussi une réunion pour la discussion de problèmes d'enseignement agronome dans l'Université et dans l'Institut d'Instruction Supérieur.

Les communications traitant des sujets du Symposium devront parvenir au Comité organisateur avant le 30 janvier 1960, accompagnées d'un bref résumé (150 paroles) pour la traduction dans la langue officielle du Symposium.

Les lecteurs seront les invités du Comité organisateur dans les six jours du Symposium. La participation des dames, pour qui des excursions touristiques seront organisées, sera très appréciée. Les conférences générales doivent se limiter à 45 minutes au maximum (env. 15 pages dactylographiées de trente lignes); les autres conférences à 25 minutes (env. 9 pages) et les communications à 10 minutes (4 pages).

NEW EDITIONS — NOUVELLES EDITIONS —
NEUE AUSGABEN

International Symposium on Soil Structure

In May 1958 (see Bulletin no. 12, page 10) an International Symposium on Soil Structure was held in Ghent, Belgium. The Proceedings are now available as a special issue of the Communications of State Agricultural University at Ghent.

Professor Mohr, Honorary Member of the ISSS, was willing to discuss this contribution to Soil Science in the present number of the Bulletin. His review reads as follows:

In 52 papers (421 pages) much experience and results of experiments regarding soil structure and its influence on productivity is made available to the student in soil physics, both theoretical and practical. After the technical papers containing the sound and thorough work follows in a final chapter (p. 422-434) the "Discussions and Conclusions" which, however, are in a certain sense more disappointing than satisfying as they show how little our knowledge on an important soil feature in reality is.

1. There was a general agreement on the fact that the terms "good" and "bad" structure have only a relative meaning. What may be good for one plant or crop, may be bad for another.
2. What is a "good" or a "bad" structure should not be judged after one year, but one should look for the general picture of the soil fertility over a number of years. There was a general agreement that "weather" is a factor of very great importance.
3. Further it was remarked that up to now soil structure has mostly been analysed in its status at a given moment, although it might be necessary to express the dynamics of structure by sampling in different times of the year.
4. In session 2 the application of materials to improve poor structure (soil conditioners-chalking-organic matter) was discussed. Attention was drawn to the importance of local circumstances; particular stress was laid on the moisture and salt content; and on the side effect of the soil improvers.... A special point was made of the lack of papers dealing with the application of natural organic matter. The result may be "good" or "bad". But, a single experiment is not enough... etc.
5. In session 4 the president started with a general, indeed essential statement. When one wants to study soil structure, one can look at the problem from at least two points of view: the point of view of the physicist and that of the physician. The former measures first the properties and then deduces the effects he expects to get from the data. The latter first makes a general diagnosis and then tests the factor of property which "looks sick" in his opinion.
The attitude of the soil physicist should be a combination of the two: he should be able to evaluate soil structure in the field, to investigate the factors and test the properties involved; lastly to improve both soil structure and his own diagnosis. He should... yes, but soil workers mostly incline either to the strictly analytical, or to the intuitive point of view, and those who combine both mentalities are few....
6. Quite some time was devoted to a discussion on the definition of soil structure. There are elaborate and very simple definitions. Result: it was proposed that national work groups or committees" be established to develop suitable concepts of the term "soil structure"; these groups should report through the International Society of Soil Science.
Indeed, here the question arises: what was the object of the conference as such vital points are referred to national committees.
7. Passing over the answer to this question, it was proposed to accept a few common methods for measuring the main soil structure properties and to correlate the results with yields. It was pointed out how careful one should be with these correlation studies of soil structure versus crop production, as there exists an interrelationship between the physical, chemical and biological properties of the soil.

It seems not unlikely that the participants of the conference knew that, before taking part in the meeting.

8. Follow some special sessions on: sampling for soil structure; soil structure determinations in the laboratory; specially on aggregate stability measurements (the "wet-sieving method"). Ample discussion, but no convincing experiments yet.
9. The end of the discussion was "the remark that we all know that it is not soil structure as such which is the cause of better plant growth, although we use it on the abscissa of our graphs; instead it is one or more of the properties, directly related to the structure as 1) water economy, 2) air economy, 3) temperature propagation and 4) mechanical impedance". We are not sure there might not be added some other factors 5), 6), 7)....
10. At the end of the last session the president formulated some general conclusions:
 - 1) In our papers inaccurate terms should be avoided, and well explained what really was measured in the laboratory or observed in the field. (Regarding the only single value "aggregate stability" was the conclusion)
 - 2) Aggregate stability, whatever the method of measure may be, should be expressed as a difference between an initial or a reference status and a final status. When a wet sieve method is used and when a wet aggregate distribution is given, this distribution should be compared with the initial dry aggregate distribution. (The initial or reference status is no more defined)
 - 3) A restricted committee, composed of one representative of Austria, Belgium, England, France, Germany, the Netherlands and Switzerland, will come together (when? — where?) in 1959 in order to set up a modus operandi of the two main (!) determinations in soil physics:
 - a) pore size distribution determination
 - b) aggregate stability determination by wet sieving.This committee will present its conclusions for discussion at the VIIIth International Soil Science Congress in 1960. If this way of working turns out to be the right one, the committee will continue setting up modus operandi for other important physical measurements.

This review has, so far, pointed to a lack of definite results. This does not mean that the papers presented do not contain valuable information. To the contrary, the results and considerations presented are the only means to inventory our knowledge, and as a source of up-to-date information re the stage of developments of the structural part of Soil Physics, the Proceedings merit a place in a soil scientist's library.

E. C. J. MOHR

Copies of the Proceedings are to be held from Dr. L. de Leenheer, State Agriculture Research Station, Ghent, Belgium, by paying Belg.Frs. 250.— to the "Kredietbank N.V. Kouter, Gent", account no. 400/55.688/13, mentioning "Special issue Soil Structure Symposium May 1958".

ARAKERI, H. R., et al. Soil management in India.

Asia Publishing House, Bombay - Calcutta - New Delhi - Madras, 1959. 584 p. Photos. Tables. Map. Figs. Refs. Price sh. 60/—.

The present work is a result of the first Indo-American effort to produce a text-book on agriculture for use in India and indeed, Indian philosophy and American practical approach of problems are going happily hand in hand throughout the book. In the first place written for Agriculture colleges in India, many subjects are discussed which are also of value for extension workers, progressive farmers and all those interested in tropical agriculture in general.

In the first part, containing 13 chapters general information is given on the fundamentals of soil- and plant-relationship, soil management including mechanization and tillage cropping systems, weeds and their control, fundamentals of fertilizers and their use, irrigation and drainage. Being a textbook, the different

subjects are only shortly discussed, but after each chapter references are given to literature, mostly Indian and American, for the more industrious and critical students. As in many of the American students textbooks, the most important parts of each chapter are summarized in the form of questions.

In chapter 2 the use of soil and tissue tests are discussed and the difference explained between the concepts of "soil fertility" and "soil productivity". Further the organisation of the soil testing service in India is described. The soil testing laboratories are strategically located throughout the country, with at the moment 22 centres and two more to come. Practical directions are given for the taking of soil samples; in these directions only the top soil layer is taken into consideration and in the "record sheet" we missed a description of the soil profile. In tropical agriculture a study of the soil profile is important even for annual crops with a rooting system only in the top soil layer; the properties of the lower horizons may be of influence on the properties of the top soil.

The problems of mechanization in India (which are the same for other tropical countries with availability of cheap labour) are well understood (chapter 3). Attempts have been made, and some of them successful, to adapt bullock-drawn equipment to tractors.

The climate which determines to a large extent the type of native vegetation and the possibilities of cultivating crops is discussed in detail (chapter 5) with interesting maps of rainfall distribution in the different monsoons and tables with weather informations. The conservation of organic matter is one of the greatest problems in Indian agriculture not only because of climate conditions, but also of customs of the villagers. On page 79 six of the most important defects in handling manure in the vilage are described; point no 1 states: "Much of the dung is used for preparing dung cakes for fuel rather than used as fertilizer, 40% is used for fuel, 40% as manure and 20% is wasted. Extensive directions are given for handling manure, including "night soil", compost and the use of mulch. Green manuring is treated in a special chapter (chapter 6) with very useful tables of green manuring crops rotation schemes. This last subject is discussed in more detail in the following chapter (7).

Irrigation and drainage were practised in India already two thousand years ago, but it seems that "the efficiency of the methods leaves much to be desired". In the chapters 11, 12 and 13 the problems of irrigation, drainage and soil and water conservation are amply discussed, and practical directions are given of water and soil management with graphs and tables of irrigated acreage in India with the sources of water, total and daily water requirements for different crops, etc.

In the following chapters 14-24 inclusive, the managing of soils for a specific crop or groups of crops, are discussed. Chemical data seem to be still lacking for most of the soils, for in the paragraph of soils in each chapter we missed information on the nutrient states of the soils, only for coconuts a table with a description of typical soil profiles and a table with the analysis of typical soils in Kerala state (the main coconut producing area) are given. In the chapter "rice" too much stress is laid on the importance of pH.

Besides with maps, graphs and drawings, the book is illustrated with many interesting photographs giving a good picture of landscapes, crops and working conditions. A colour photo of deficiency symptoms in maize is included.

We may congratulate the authors with the result of their work which will not only be of value for Indian circumstances, but will also be of interest for other tropical regions concerned with the same problems.

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SUPPLEMENTARY DATA FOR LIST OF MEMBERS
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