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Bulletin of the International Union of Soil Sciences (IUSS)



Edited and published by:
International Union of Soil Sciences (IUSS)

Editor: Prof. Stephen Nortcliff
Department of Soil Science
The University of Reading
PO Box 233 Whiteknights
Reading RG6 6DW
United Kingdom
+44 (0) 118378 6559 phone
+44 (0) 118378 6666 fax
E-mail: iuss@reading.ac.uk

Co-Editor: Dr. Alfred E. Hartemink
ISRIC – World Soil Information
P.O. Box 353
6700 AJ Wageningen
The Netherlands
+31 (0) 317 471711 phone
+31 (0) 317 471700 fax
E-mail: Alfred.Hartemink@wur.nl

Book Review Editor: Drs. J. Hans V. van Baren
ISRIC – World Soil Information
P.O. Box 353
6700 AJ Wageningen
The Netherlands
+31 (0) 317 471711 phone
+31 (0) 317 471700 fax
E-mail: hans.vanbaren@wur.nl

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Orders to: Prof. Stephen Nortcliff
Department of Soil Science, The University of Reading
PO Box 233 Whiteknights, Reading RG6 6DW, United Kingdom
Subscribers are requested to notify Prof. Nortcliff of changes of address

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Editorial

This is the second Bulletin to be produced under the auspices of Alfred Hartemink and Stephen Nortcliff. In the Bulletin you will find a notice of the death of Wim Sombroek, together with a brief statement of his contribution to Soil Science, IUSS and its predecessor ISSS. I would like to begin this editorial by expressing my own sorrow at this very sad news, received just before Christmas 2003. Wim Sombroek will of course be remembered as a key player in the history of ISSS/IUSS, with his particular contribution as Secretary General, but also his contributions continued after he stepped down from that position. He was always willing to contribute to ensuring that Soil Science moved forward and achieved the level of awareness amongst politicians and administrators it deserved. It is with considerable gratitude that we are able to remember his considerable contribution to Soil Science. My memories of Wim go beyond the ISSS and IUSS and include the support and guidance offered to me when I first planned to go to study the soils of the Amazon Basin in 1977. Wim had produced some of the key work on the soils of the Amazon and this was essential reading before I left for the Amazon. This visit was the first of many over the next two decades, during which I got to know Wim personally rather than through his publications. We often discussed the soils of the Amazon and indeed the past and present conditions there. I found this contact stimulating and it was always a great pleasure to sit and recall our various experiences. I recall that only last year when I was in ISRIC we had the opportunity to chat, spending a fair amount of time discussing Terra Preta, something which seemed to have become a passion of Wim's in later years. I shall miss Wim as a friend and colleague; I send my condolences to his family and friends.

I have now found myself more established in to the role of Secretary General, and I thank those many people who have written giving me their best wishes. The activities of the secretary general are wide ranging and varied and involve both regional and global initiatives. On the regional scale Winfried Blum and I have, together with a number of other members been actively involved in the development of a European Strategy for Soil Protection. Winfried was elected to be co-chair of the Working Group addressing Research issues, I was elected co-chair of the Working Group on Soil Organic Matter and (latterly) Soil Biodiversity. The invitations to be involved in these activities arose from the European Commission's recognition of the role of IUSS as a representative of Soil Science, and whilst very time consuming and demanding Winfried and I believe that our involvement has been important. Whilst the focus is Europe we anticipate that many of the ideas being developed may have impacts further afield. Also on a European level we have recently established a Memorandum of Understanding with the European Society of Agricultural Engineers. The aim of this MOU is to promote collaboration and co-operation across mutual areas of interest.

On a global scale Don Sparks and I attend the Meeting of ICSU's (World Council of Science) Unions Meeting in Paris in February. 25 of the 27 ICSU Unions were present for the two days of meetings which served to review the progress being made on a series of initiatives and highlight new areas which should be considered by ICSU and its unions. One of the key areas on ICSU's agenda is 'capacity building'. This is focused both on the 'South' and on the young in the 'North'. In the South ICSU is establishing regional offices in Latin America and the Caribbean (Mexico City is the location), Africa (likely to be based in South Africa), Asia and the Arab world where no locations have been fixed. The meeting gave the opportunity for Unions to discuss possible co-operative ventures. For example a number of Unions discussed the possibility of holding training workshops in laboratory techniques in a country of the 'south' where the experts were 'imported from the 'North'. This theme of capacity building and sustainable development was developed by Walter Erdelen, Assistant Director-General of natural sciences at UNESCO, who also stressed the need to be able to communicate with parliamentarians and decision makers. A further theme which occurred regularly throughout the meeting is the need for scientists to collaborate with social scientists and engineers. There was a suggestion that we all talk about this need, but rarely do anything about it!



ICSU's membership comprises international scientific unions and national members (National Academies). There is a general feeling that the relationships between these two groups are not as good as it should be, although this varied. The rest of the meeting was spent discussing a range of possible initiatives some of which were discussed in associated meetings, such as the Health and Wellbeing Initiative promoted by IUBS, the Year of Planet Earth (promoted by IUGS with support from IGU, IUGG and IUSS). There was also a presentation on the International Polar Year. The topic of ICSU grants was briefly discussed an area that IUSS needs to consider for funding possible Division and Commission initiatives. Applications have to involve at least one other ICSU Union and require months of planning (start now for the call early in 2005).

In addition to the ICSU meeting I attended two meetings of groups of Unions. Prior to the meeting I attended a GeoUnions Meeting at which representatives from IUSS, IUGS, IGU and IUGG met to discuss matters of common interest and plans for future collaboration. IUGS are already well in to the planning of The Year of Planet Earth in 2006/2007, and following discussions we are now formally involved in this initiative, and may seek to enmesh within it our plans for the launch of a National Soils Day. The YPE has been endorsed by UNESCO and it is planned that China will present the proposal to the United Nations later this year. We plan to maintain these close ties with the other GeoUnions attending each others meetings and sending newsletters and similar to each other. The second of the meetings attended was after the ICSU Meeting and is part of the continuing discussions of the possible Union collaboration in the broad area of Health and Wellbeing. This involves a different group of Unions and different activities, and whilst nothing is fixed as yet, I shall keep the membership posted on this.

As you will see the activities covered have been varied. I shall report on some of these activities to the meeting of Council in Philadelphia in April, and if you are not able to attend this meeting I shall post reports up on the website. If you have any ideas for promoting Soil Science, either within the established programmes or new initiatives, do not hesitate to contact me (iuss@rdg.ac.uk). Given the monetary and environmental cost of producing the Bulletin in paper format it is our aim to deliver this to the majority of our readership in electronic format; by CD, email attachment or downloaded from the IUSS website (www.iuss.org).

Stephen Nortcliff
IUSS Secretary General, Reading, June 2004

Message from the IUSS president

Greetings to all IUSS Members and Colleagues,

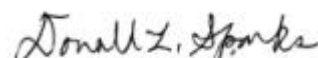
The last few months have been busy for me and the other officers of IUSS. In September 2003, I represented IUSS at the 26th Congress of the Polish Society of Soil Science in Krakow. It was a scientifically stimulating meeting as well as very enjoyable socially. Not only Polish soil scientists, but also soil scientists from Europe and the USA attended the meeting. In February of this year, Secretary-General Stephen Nortcliff and I represented IUSS at the International Council of Science (ICSU) meeting of Union Presidents in Paris. We had an opportunity to meet a number of colleagues from sister Unions, particularly the Geounions (IUGS, IUGG, IGU), and explored ways we could partner on initiatives of common interest. One opportunity that we are quite excited about is to join with the other Geounions in sponsoring the Year of Planet Earth (YPE) in 2006. The proposal for YPE will be taken to the UN this fall. We are also exploring the idea of organizing activities for a World Soil Day within the YPE. Associated with the YPE, the Geounions, including IUSS, have established five working groups on groundwater, desertification and erosion, hazards, cities, and health. IUSS will take the lead on the desertification and erosion group and participate in the other working groups. I am confident these types of activities will further enhance IUSS in the global community and the discipline of soil science.

The Inter-Congress meeting of IUSS was held in Philadelphia April 25-28. The detailed minutes of the meeting are contained in this Bulletin, but I wanted to summarize some of the highlights of the meeting. Over 50 scientists from 25 countries attended the meeting. The IUSS Council met throughout the meeting, and there were meetings of the Divisions and Commissions to discuss their plans for future activities and to organize symposia for the 18th World Congress of Soil Science, July 9-15, 2006 in Philadelphia. A number of important outcomes of the Inter-Congress meeting should be noted: (1) The financial health of IUSS, under the able leadership of Jim Gault, who was approved as Treasurer of IUSS, and Robin Harris, Chair of the Budget and Finance Committee, is very sound; (2) Roger Swift and Niel Menzies of Australia were formally approved as President-Elect and Vice-President-Elect of IUSS; (3) revised statutes and by-laws were approved by IUSS Council; and (4) several new Commissions were approved including Pedometrics and Paleopedology in Division 1 and Soil Interfacial Reactions in Division 2. Larry Wilding and Lee Sommers, Co-Chairs of the Organizing Committee for the 18th WCSS, worked with the Divisions and Commissions in planning symposia for the 18th WCSS. A large number of outstanding and cross-cutting symposia were proposed. These will be finalized in the next few months. One of the highlights of the Inter-Congress meeting was the election of 9 distinguished soil scientists as Honorary Members of IUSS. They will be formally recognized at the 18th WCSS. During the Inter-Congress meeting, we all enjoyed a delightful reception on Monday evening and an enjoyable cruise down the Delaware River on Wednesday evening.

The summer promises to be busy for many of us. I will be attending the EUROSIL 2004 meeting, September 6-12 in Freiburg, Germany and hope to see many of you there. We also will have a planning meeting in Madison, Wisconsin for the 18th WCSS. I can assure you that we will have a fabulous 18th WCSS in Philadelphia. I hope you are making plans to attend.

Please feel free to contact me if you have any concerns or suggestions.

Best wishes,



Don Sparks
President



Executive Summary IUSS Council Meetings April 2004

1. Council recorded the death of Wim Sombroek in December 2003, and paid respect to his major contribution to IUSS and Soil Science
2. The appointment of the new Treasurer Jim Gauld (Aberdeen, Scotland) was endorsed. Peter Luescher the retiring Treasurer was thanked for his considerable efforts on bringing the ISSS/IUSS Accounts to their current strong position over the past 12 years.
3. The Accounts for 2003 were approved.
4. The budget for 2004 through to 2006 was approved.
5. The Secretary General stressed that IUSS continued to be an active member of ICSU and in the last year had established much closer ties with a group of GeoUnions (IUGS, IUGG and IGU) and continued close links with IUBS.
6. The GeoUnions are now working together to support an initiative of IUGS to promote 'The Year of Planet Earth' in 2006-7. IUSS pledged its support to this initiative as a full partner. The ad hoc group of GeoUnions have also established five working groups to collaborate and identify potential initiatives for future collaboration. The five areas are: Environmental Hazards, Groundwater, Desertification, Health, Cities. Volunteers are needed to contribute to these Working Groups (communication will be electronic).
7. Roger Swift and Neal Menzies from Australia were elected President elect and Vice-President elect. Roger Swift made a brief presentation about the Brisbane Conference Centre and the delights of the local area including its soils and natural environment.
8. The broad outline of the outline programme for Philadelphia 2006 was discussed during the Council Meeting and more detailed developed in both Divisional meetings and meeting involving all Divisions.
9. Divisional Chairs presented reports of their activities, noting a high level of activity in all cases.
10. The 'fine tuning' of the Statutes and Bye Laws were discussed and approved.
11. Following a secret ballot the following were elected as Honorary Members of IUSS: - W.E.H. Blum, H-P Blume, J. Bouma, J. Glinski, M. Jamagne, D.R. Nielsen, Seong-Jin Cho, H. van Baren and L.P. Wilding
12. Council approved the broad outline of proposals for Leibig Award (applied Soil Science) and a Dokuchaiev (basic research in Soil Science) Award.
13. The following changes to the scientific structure were approved: SCB (Micromorphology) be merged in to Commission 1 of Division One and the Commission be renamed 'Morphology and Micromorphology'; WG PM (Pedometrics) become a Commission of Division One; WG PP (Paleopedology) become a Commission of Division One; WG MO (Mineral-Organic Interactions) become a Commission of Division Two. A late proposal for Commission status was submitted from the Sub-commission Forest Soils. Council requested that a fuller request be submitted to the next meeting of Council at least six months prior to the meeting.
14. A task Force was established to investigate how IUSS can develop its outreach to soil scientists in South and Central America and Africa (D.R. Nielsen as Chair).
15. Representatives from South Korea made a short but very informative presentation in support of their proposal to host the WCSS in 2014.
16. The S-G stressed that it was impossible for IUSS to function effectively if Members (National Societies) did not keep him informed of their changing addresses and offices.

Full Minutes of the IUSS Council Meetings April 2004

Meeting 1 – 25 April, 2004

Present: There were some 48 people present, comprising the Executive Committee, National Member representatives (24), Honorary Member representatives (3), Members of the US 18th WCSS Organising Committee, and observers from the Commissions, Sub-Commissions and Working Groups.

The Meeting, opened at 2.00pm, was chaired by the IUSS President, Donald Sparks

The President welcomed all present at the meeting, thanked them for their attendance and wished them a successful and productive series of meetings.

The President noted that in December 2003, Wim Sombroek, a Honorary Member and past Secretary General of ISSS had died. The meeting stood and observed a period of silence in his memory.

1. The President noted that during this transition phase as we adjusted to the new arrangements with respect to structure and membership fees, all National Member representatives would be eligible to vote. Those entitled to vote will be as follows:-

1. Executive Committee
2. One representative from each Member Country
3. Representatives of the Honorary Members (3)

2. The Secretary General (Stephen Nortcliff) requested comments on the Minutes of the Council Meeting in Bangkok – No comments were received, the Minutes were accepted as a correct record.

3. The Secretary General briefly introduced the Minutes of the Executive Committee Meeting held in London, April 2003. He highlighted two points from this meeting:-

a. With respect to the recommendation at the meeting that as Corresponding Journals indicated their collaboration with IUSS by displaying the IUSS logo prominently on their publications, a small fee (\$250 annually was suggested) should be payable to IUSS for the privilege. The S-G had written to all publishers of the Corresponding Journals and received only a single positive response and payment from the publishers of the Australian Journal of Soil Research.

b. During the London Meeting there had been lengthy discussion on whether Division One should be renamed and the term Pedology incorporated as part of the title. Following this discussion the Executive Committee accepted the proposal that there should be no change in the name of the Division until at least the next World Congress with one contrary vote. The Executive Committee hoped that Council would support this decision.

4. The President presented a brief report outlining the completion of the transition from ISSS to IUSS, paying particular attention to some of the uncertainties which had arisen in respect of some financial matters (see below B&F Committee Report). The President stressed that decisions had been taken to provide some financial support (\$5000 per year) to Divisions to assist the Chairs of the Divisions in promoting advancement of the Discipline of Soil Science, and increasing its visibility across a broad spectrum of contexts.

The President also thanked John Kimble and his colleagues on the Structure and Statutes Committee for the considerable efforts they had invested in producing Statutes and Bye-Laws appropriate to the operation of IUSS (see later items on Statutes and Bye-Laws).

The Year of Planet Earth (an initiative promoted by IUGS but supported by IUGG, IGU and IUSS) is potentially important for IUSS. Werner Janoschek (SG of IUGS) was welcomed to the meeting, and was invited to outline progress on the YPE when the Council next met on Tuesday 27th April.

Planning the 18th WCSS is an important part of the current activities of IUSS. Larry Wilding and Lee Sommers were thanked for their sterling efforts in this area, and were asked to pass on the Council's thanks to all members of their team.



A key task in the context of the revised structure of IUSS where National Bodies are the members rather than individuals as in the ISSS days is ensuring that individuals feel an affinity to IUSS and feel involved. This had already been raised in the discussion and is an item later on the agenda, but the President asked members of Council to consider ways in which this inclusiveness could be fostered.

5. The Secretary General presented his report, summarising activities during the two year period since the last Council Meeting in Bangkok.

a. During this period the transfer had taken place from Winfried Blum to Stephen Nortcliff. This transfer had progressed smoothly. Now the transfer was complete it was an opportunity to record the considerable debt that IUSS owed to Winfried Blum, who over a period of 12 years had guided the IUSS from its activities as ISSS to its stronger role as IUSS. During this time Winfried had been the key to the progress made. In particular the development to IUSS as a member of ICSU had been a major contribution made by Winfried Blum. The Secretary General personally thanked Winfried Blum for all his efforts and his substantial contributions to IUSS and Soil Science and this was endorsed by Council by a round of applause.

b. During much of the period when Blum was Secretary General Peter Luescher had been Treasurer. At the last Council Meeting Peter had indicated that he wished to step down as Treasurer and steps were taken by the Bureau to find a replacement (see below). As we shall be seen when the financial status of IUSS is reviewed we are currently in a strong financial position. This position is a result of the stewardship of Peter Luescher, who took over as Treasurer of ISSS when the assets were less than \$10000. The Secretary General recorded the considerable gratitude of IUSS for the excellent work done by Peter on their behalf and this was endorsed by Council.

c. ICSU (International Council of Science) is important in co-ordinating and promoting global science. During recent years IUSS has become a full member of ICSU. In September 2002, the President, Vice-President and Secretary General attended the triennial meeting of ICSU in Rio. This was a valuable experience and we learnt a great deal about the workings of ICSU. IUSS has a history, in its short membership of ICSU, of active involvement and we hope to be able to continue this. In February of 2004 The President and Secretary General attended the triennial Meeting of ICSU Scientific Unions in Paris. This two-day meeting is an opportunity for the Unions to discuss common interests. The meeting gave the opportunity to meet scientists from the many fields in which our membership are active. IUSS is unusual in that it has scientific links to a majority of the member unions of ICSU. During this meeting in Paris the opportunity was taken to meet with other subsets of the Unions. The Secretary General attended a two day meeting of GeoUnions (IUGS, IUGG, IGU and IUSS) at which matters of common interest were discussed including the promotion of activities in the Earth and Environmental Sciences. A key activity is the Year of Planet Earth which will be reported later in the meeting. Linked to this YPE the group of GeoUnions have established 5 working groups in which it is hoped IUSS will participate, these were Groundwater, Desertification and Erosion (IUSS to take the lead on this group), Hazards, Cities and Health. These groups will meet 'electronically' and the Secretary General would welcome suggestions for names of individuals to participate.

A second grouping of Unions, principally those with a biological emphasis have been meeting for two years to discuss a programme entitled 'Health and Wellbeing'. The Secretary General attended a one day meeting of this group. The group involves a large number of Unions and has yet to formulate specific activities.

These links to other Unions are important because in addition to the benefits of scientific contact it also provides a means of applying for grants from the ICSU funds to promote scientific activity. Under new guidance applications for funds require more than one Union to be actively involved and ideally at least one National Academy. Details of ICSU are available on the ICSU website via our own website (www.iuss.org).

d. Education whether it be of children, college students, the general public or policy makers is a key activity to which IUSS must devote attention. This is one of the key activities of Division Four, but it must also be a focus for all members. The Bureau would welcome any suggestions on how we can continue to make progress in this essential area of our activities.

e. As Secretary General it is only possible to work effectively with the full support of the Member Bodies. It is essential therefore that Member Bodies continue to provide updated information on Officers and Contact Addresses. It is disappointing to receive returned mail indicating that our data base of information is incorrect.

f. A key activity of importance to Soil Science has been the recent work on the 'Thematic Strategy for Soil Protection' within the European Union. This is in response to the recognition by European politicians that soils are key to many activities in both urban and rural environments and that it is important to understand the functioning of the soil system. Whilst only regional in nature, it is a step of considerable importance for global Soil Science. A number of individuals from our European Member Bodies have been actively involved, with Winfried Blum and Stephen Nortcliff acting as co-chairs of two of the five Working Groups.

h. Finally the Secretary General recorded his thanks for the support of Alfred Hartemink the Deputy Secretary General.

The President thanked the Secretary General for his full report.

6. Following elections organised by The Australian Soil Science Society, Professor Roger Swift and Dr. Neil Menzies were proposed as President and Vice-President of the 19th WCSS to be held in Queensland in 2010. The meeting unanimously accepted this proposal (proposed by Dick Arnold seconded by John Kimble) and looked forward to working with them during the coming years. Roger Swift presented brief pen-pictures of himself and Neil Menzies.

7. The Bureau recommend to Council the appointment of Jim Gauld (United Kingdom) as Treasurer of IUSS. This recommendation was proposed by Ahmet Mermut and seconded by John Kimble and was accepted unanimously.

8. Jim Gauld (Treasurer) presented his summary of the Accounts for the year of 2003. The Chair of the Budget and Finance Committee (Robin Harris) presented the proposed budgets for 2004 and 2005 and also outlined some of the activities being undertaken to ensure that IUSS Membership dues are collected. Following discussion, chiefly over points of clarification, Dick Arnold proposed (seconded by Winfried Blum) that the accounts for 2003 and the Budgets for 2004 and 2005 be accepted. This was carried unanimously.

9. The Final item on this first meeting of Council was a presentation by Larry, Wilding, Gary Petersen and John Kimble on some of the proposals for the 18th WCSS. These proposals included arrangements for logistical matters, the scientific structure and the field trips. The efforts of the Organising Committee are substantial and the meeting welcomed the opportunity to review these activities and were encouraged to discuss these matters informally with members of the Organising Committee during the next few days.

The Congress will take place at the Pennsylvania Convention Center in Philadelphia from Monday 10 through Friday 14 July 2006. The Congress will be conducted through symposia and poster presentations on Monday, Tuesday, Thursday and Friday with one-day excursions on Wednesday.

It was proposed that each Division be allocated two symposia, with the broad aim of integrating the subject matter of its Commissions. The provisional plan was that each Commission will organise two symposia and each Working Group one symposia. Each symposia will last for 2 hours and there may be eight concurrent symposia. It is proposed that poster sessions will be a key element of the programme.

Detailed discussions of the planned symposia were undertaken during the time in Philadelphia and a near final outline was produced by Wednesday 28 April. Details are available at <http://www.colostate.edu/programs/IUSS/18wcscs/workroom/>

Following some lively discussion on this topic, the President thanked participants for their involvement in the afternoon's discussions and closed the meeting at 5.45 pm, reminding members that the next Meeting of Council was at 9.00am on Tuesday 27 April, 2004.



Meeting 2 – 27 April, 2004

Present: The Executive Committee, National Representatives (24), Representatives of the Honorary Members (3) together with a number of observers from Commissions and National Bodies (in total 54).

The Meeting, opened at 9.00am, was chaired by the IUSS President, Donald Sparks

The President welcomed all present at the meeting, thanked them for their attendance. One or two minor adjustments were proposed to the agenda.

1. The President welcomed Werner Janoschek (S-G of IUGS) to give a presentation on the Year of the Planet Earth.

By way of introduction he first provided information about the organisational structure of IUGS, including the substantial support from Norwegian Geological Survey for a secretariat based in Norway together with support for institutional infrastructure. The scientific activities and current priorities of IUGS were outlined; this included the recently established consortium of GeoUnions (IUSS, IUGS, IUGG and IGU).

The Year of Planet Earth focuses on both an outreach and a scientific programme. This is strongly supported through UNESCO and it is probable that China will provide diplomatic support the proposal at the UN for the formal establishment of 2006 as the Year of Planet Earth, with activities in both 2005 and 2007. (There is additional political support from Argentina, Brazil, Italy, Jordan, Russia, Mexico and India.) There is still a need to generate further political support from further countries.

The outreach programme is developing rapidly and there are already well established contacts with the International Society of Natural History Museums to plan outreach programmes.

The key focus areas identified so far: Groundwater, Hazards, Earth and Health, Climate, Resources, Megacities, Deep Earth, Oceans

One of the major aims of the programme is to increase the visibility of earth sciences and through this increased visibility attract more people to the study of earth sciences and possibly increase the public and private funding of earth sciences.

The 'logo' of the 'year' was highlighted and it was suggested by Council members that, if it were possible, there was the need to indicate the Pedosphere (possibly in brown) on the logo.

The contact address for the Year of Planet Earth is www.esfs.org

During discussion it was identified that there was evidence that the National Year of Geosciences in Germany had resulted in increased applications at many German Universities. If we are to make this investment in promoting soil and earth sciences we have to ensure that the University sector is able to meet the demand from the 'revitalised' applications by providing courses appropriately. It may be that the traditional sector based approach of Geology, Soil Science, etc. within the University curriculum may not be the most appropriate manner in which to meet the student demand. We must ensure however that in making these changes we do not 'dilute' the science base of the subject matter and approaches when teaching this material.

2. The Secretary General then briefly summarised how we anticipated embedding our the IUSS proposals for the World Soil Day into the Year of Planet Earth. The plans of how this proposal had progressed since Bangkok 2002 were briefly outlined. There was still a very specific indication that the King of Thailand was strongly in favour of financially supporting such an activity, particularly if the Day chosen was December 5 which is his birthday. The plans for The President, Secretary General and Past Vice-President to develop a brief document to submit to the representatives of the King of Thailand and relevant Ministries in Thailand was outlined. The provisional plan is that the President and Secretary General would personally present this proposal to the King of Thailand or his representatives. There was strong support from Council for these activities. Don Nielsen proposed (seconded by John Kimble) the following 'Council asks the Bureau to establish a small committee to take the

necessary action to support the development of the proposal for the World Soil Day'. This motion was accepted unanimously.

3. Lee Sommers on behalf of the Organising Committee of the 18th WCSS asked if the Division Committees would consider holding a meeting after the Council Meeting of Tuesday 27 to discuss the proposals for symposia together as a group. It was stressed that such a meeting would greatly assist in the development of the Congress proposal.

4. John Kimble (Chair of the Statutes and Structures Committee) outlined that since the establishment of the Statutes and Bye-Laws there was a need to make some changes to ensure that Statutes and Bye-Laws were operational.

A number of small sections were removed from the Statutes to the Bye-Laws to make the system operationally more effective.

e.g. for Statutes

B7 Honorary Members – change in number allowed

C5a. providing a longer lead time for Congresses

C6 allows Council to take action without meeting

H2 'Secretary' changed to 'Second Vice-Chair'

There was considerable discussion on the Statutes and some of the details contained therein. Some items were modified by agreement others were debated at greater length and then modifications determined by the result of the discussions.

It was suggested that 'Reference should be made to the principle of the payment of a sum arising from the profits of the World Congress in the Statutes and the details of the amount (\$10 000 may be an appropriate sum) or proportion specified in the Bye-Laws.' This was proposed by Karl Stahr (Germany) and seconded by Irb Kheoruenromne (Past Vice-President).

The motion was carried by 17 votes in favour and 13 votes against, which did not achieve the necessary 2/3 majority.

Roger Swift (President elect) proposed that Statute O2 be worded in the following manner 'The IUSS shall share in the profits arising from the IUSS World Congress of Soil Sciences with the host country.' This motion was seconded by Irb Kheoruenromne. The motion was carried by the necessary 2/3 majority.

The motion 'The statutes be accepted' proposed by Don Nielsen (US) and seconded by Emmanuel Frossard (Chair of Division 4) was carried with the necessary 2/3 majority.

With respect to Bye-Laws Nicola Senesi (Chair of Division 3) proposed (seconded by W.E.H. Blum Chair of the Committee on Prizes and Awards) that Bye Law 16 should read 'The proportion of the profit paid to IUSS should be determined by negotiation between the Local Organising Committee and the Treasurer and the Chair of the Committee on Budget and Finance, not including the repayment of front end costs provided by IUSS.'

This motion was carried 20 votes for the motion 9 votes against.

During the debate on this motion it was considered that a figure of 20% of the profit made or \$20 000 would be an appropriate sum to be contributed to IUSS by the host country in respect of the profit of WCSS, but that this should not be specified in the Bye-Laws.

The discussion on Bye-Laws was wide ranging and included comments on the voting procedures and the means with which information was transmitted from IUSS to National Members and thence to the individuals within the country. It was stressed that the communications were principally between IUSS and National Members rather than individuals. A number of modifications were made to the Bye Laws and approved from the floor.

Gerard Heuvelink proposed (seconded by Winfried Blum) that the revised Bye-Laws be accepted. This was accepted.

5. Following a brief introduction from the Secretary General about the activities of the Working Groups and the patchy responses received from them in response to a request for reports about their activities, the Secretary General reminded Council that the Executive Committee recommended that Working Groups which showed no evidence of activity be deleted. Reports were received from the following Working Groups; Land Degradation and Desertification, Paleopedology, World Reference Base, Organic Fertilisers and Amendments,



Pedometrics, International Soil Conventions, Soil and Groundwater Pollution, Rhizosphere and Soils and Geomedicine.

Following discussion the following motion was proposed by John Kimble (seconded by Winfried Blum) 'At the next Council Meeting we review all Working Groups and dissolve all the Working Groups that are not active (based on documentation)'. This was agreed unanimously.

6. Changed status of Sub commissions and Working Group.

- a. Proposal from the Executive Committee that SCB (Micromorphology) be merged in to Commission 1 of Division One and the Commission be renamed 'Morphology and Micromorphology'. There followed wide ranging discussion on this topic, with discussion focusing both on the general principle of the change of status and the inclusion of the word 'Micromorphology' within the title of the Commission. The motion that 'The Executive Committee recommendation be accepted' was proposed by John Kimble, seconded by Ahmet Mermut and was accepted unanimously by Council.
- b. Proposal from the Executive Committee that WG PM (Pedometrics) become a Commission of Division One. Gerard Heuvelink Chair of the Pedometrics WG made a short very informative presentation about the activities of this very dynamic group. Irb Kheoruenromne proposed (seconded by John Kimble) that 'WG PM become a Commission (Pedometrics) in Division One', this was accepted unanimously.
- c. Proposal from the Executive Committee that WG PP (Paleopedology) become a Commission of Division One. Ahmet Mermut proposed (seconded by Winfried Blum) that WG PP become a Commission (Paleopedology) in Division One. This proposal was agreed unanimously.
- d. Proposal from the Executive Committee that WG MO (Mineral-Organic Interactions) become a Commission of Division Two. P. Ming Huang made a presentation. Winfried Blum proposed (seconded by John Kimble) that WG MO be established as a Commission in Division Two under the title 'Soil interfacial reactions'. Agreed unanimously.
- e. Forest Soils sub-commission had submitted a very late and rather brief report and request to be considered a Commission. This request was noted and the S-G was asked to write to the Sub-commission requesting a full proposal be submitted to the S-G well in advance of the next meeting of Council for consideration at the Council Meeting in July 2006.

There was some concern expressed about the need to evaluate the Commission structure at some time in the next few years and not automatically increase the number of Commissions. There was a view within the meeting that the Divisions should review their Commission structure and remove Commissions and rename Commissions following appropriate analysis and consideration in collaboration with the Committee on Structure and Statutes.

7. Honorary Members

Each of the thirteen candidates nominated was briefly introduced and reviewed by the Council.

The following were elected to Honorary Membership of IUSS in a secret ballot (Scrutineers: Stephen Nortcliff and Lois Peterson, National Academy of Sciences). *Note: Members of Council were asked to vote in favour or against each candidate. A candidate was elected if the majority of the votes cast were in favour.*

W.E.H. Blum, H-P Blume, J. Bouma, J. Glinski, M. Jamagne, D.R. Nielsen, Seong-Jin Cho, H. van Baren, L.P. Wilding

7. Council approved that the Statutes incorporating the changes made today at the Council Meeting, April 27, 2004 be operative immediately. Proposed by John Kimble, seconded by Nicola Senesi.

8. The suggestion that the President and Vice-President be elected and not be linked directly to the WCSS was discussed by Council. The matters discussed included the job description of the position, the responsibilities and the funding required to support these individuals. It was indicated that for many countries the Presidency attached to the WCSS was an important part of the attraction for countries bidding for the right to host the WCSS. It was concluded that this should probably be a matter which should be laid on the table for consideration rather than move towards a decision one way or another at this early stage in the development of IUSS.

The meeting closed at 17.25

Meeting 3 – 28 April, 2004

Present: The Executive Committee, National Representatives (24), Representatives of the Honorary Members (3) together with a number of observers from Commissions and National Bodies (in total 42).

The Meeting, opened at 11.15am, was chaired by the IUSS President, Donald Sparks

The President welcomed all present at the meeting, thanked them for their attendance, and suggested one or two minor adjustments to the agenda, which were accepted.

1. Alfred Hartemink presented a report on the IUSS Bulletin and the website. The production of Bulletin 103 was the first to be produced by the new DSG and SG. In addition to the paper version of the Bulletin CD copies were dispatched to Libraries and individual and Honorary Members. The website is well visited and seems to play an important part in the communication of IUSS with the global Soil Science community. The website is freely accessible to anyone; the view of the Bureau is that this policy should not change. The discussion on this item was continued in to the more general communication between IUSS – National – Individuals. Plans are in progress by the SG and DSG to produce 'promotional' documentation (Posters, brochures, etc.) to emphasise the role of IUSS in supporting soil science at local, national and regional levels. The Division chairs have a key role in this, and perhaps we need to tell meeting organisers that the Division Chairs and others are key components of the IUSS structure. In this context we need to develop an 'IUSS ambassadorial' role for the Bureau. The Executive Committee must ensure that it establishes clear links between IUSS and local liaison officers, particularly in countries categorised as II and III in our membership categories. The concept of local liaison officers seems to be a concept which IUSS should seek to develop in the very near future. We must establish this set of relationships and ensure that the contacts between Members and IUSS are maintained. We are working towards a 'warning system of news flashes' to all Member Bodies, these for example, might include a warning that the Bulletin is just published, or there is some new issue in news media of particular relevance to soil scientists.

2. Winfried Blum (Chair of Prizes and Awards Committee) gave a presentation on the developments made towards the establishment of two prizes – IUSS Dokuchaiev Award (basic research in Soil Science) and IUSS Liebig award (applied research in Soil Science). These awards are to be made for outstanding contributions and performance in the two broad areas of Soil Science. The award will comprise a Certificate and a Honorarium of \$1000 to each recipient.

During discussion it was suggested that 'improved food security' rather than 'increased food production' be included in the criteria of the Liebig Award.

It was suggested from the floor that consideration be given to establishing an award for considerable achievement from a Young (<35 years) Soil Scientist (IUPAC have a number of prizes for post-docs at their biennial Congresses). During discussion it was suggested that this might be more appropriately done at a National or Commission level, but there was no agreement on this opinion.

Other discussion included suggestion that a 'certificate' should be replaced by a 'medal' and that in addition to the monetary prize of the award, support should be given to providing support for the recipient to attend the WCSS.



It was stressed that in addition to the quality of the scientific contribution of the potential prize recipient, the 'impact' of their contribution should also be considered in the evaluation.

The motion 'We accept the principal of these two Awards and incorporate the suggestion that an engraved medal be awarded together with \$1000 and financial support to attend the presentation at the WCSS' was proposed by Nicola Senesi seconded by Irb Kheoruenromne. The motion was accepted unanimously.

The motion 'The Committee on Prizes and Awards is invited to consider the possibility of establishing two awards to 'junior' scientists, and report at the next Council Meeting in 2006 in Philadelphia' was proposed by Nicola Senesi, seconded by John Kimble. Approved with two contrary votes.

There was discussion about the idea of awarding Poster Prizes at the 19th WCSS. The meeting considered this was most probably a matter which should be dealt with at the level of Divisions and Commissions not at the level of the Bureau, Executive Committee or Council.

Arising from this discussion the President informed the meeting that together with the Secretary General he was in discussion with the representatives from Thailand about the possibility of the King of Thailand providing funds to generate sufficient funds to institute a 'World Soil Prize' with a monetary value of \$250000. The President and Secretary General are in the process of developing a proposal for the prize to be presented to the Thai authorities in the next few months.

3. Lois Peterson from NAS presented some brief comments on the visa requirements to enter the USA. It was indicated that by 2006 every visitor to the USA will require a machine readable passport. From summer 2003 everyone applying for a visa has had to have an interview, as a consequence the waiting time for a visa is long (often a minimum of three months delay may be experienced). The National Academies website provides information on the current situation with respect to visas (this is frequently updated); there is also the possibility to send information and request guidance through electronic forms available on the website at www.nationalacademies.org/visas.

4. Roger Swift (President elect) made a brief presentation about the 19th WCSS in Brisbane in 2010, provisionally during the period 11th to 17th July 2010. The presentation included some general information on Australia including distribution of agricultural activities, continent-wide drainage, broad soil management problems, problems of manmade landscapes as a result of mining, urban and industrial contamination problems, water and wind erosion, and the distribution of saline and sodic soils. The information on Australia, soils and soil related problems was followed by a little information on Brisbane, Australia's fastest growing city. It is anticipated that there will be an emphasis on providing support for young soil scientists to make presentations at the Congress.

The President thanked Roger Swift for his most interesting presentation and the group in Australia were wished well by the meeting in their planning of the Congress.

5. Dr. Jae-E Yang from Kang-Won National University, Korea presented a short PC-video presentation which provided background material about Korea, its culture and the Convention Centre. This was supported by a PowerPoint presentation outlining the importance of soils and soil science in the development of Korean culture and the economy and brief details of the potential sources of financial support from a wide range of industrial, governmental and scientific organisations. There was evidence of widely based support within Korea for the proposal from the Korean Society of Soil Science and Fertilizers to host the 19th WCSS. Professor Sparks indicated that it was the proposal for the Council to make a final decision on the location of the 19th WCSS at the next Council Meeting in Philadelphia 2006.

It was recommended by Council that proposals to host the 20th WCSS in 2014 should be requested from Member Bodies late in 2004. These proposals should be circulated to Council in advance of the next meeting in 2006 where a decision on the location of the 20th WCSS will be taken. The Executive Committee should draw up guidelines and requirements for hosting

the World Congress of Soil Science and circulate these requirements with the call for proposals.

6. Reports from Divisions had been previously circulated; the Division Chairs provided brief updates of their activities presented in the reports. There is strong evidence that the decision to place much of the responsibility of the development of the science at Division level has resulted in considerable inter-Congress activity. It was stressed that the Divisions should keep the S-G and DS-G informed of changes in the Division and Commission Officers.

A motion was proposed by Ahmet Mermut (seconded by John Kimble) that where Working Groups had been changed to Commissions at this meeting of Council the Chairs and Secretaries of these Working Groups be designated interim Chair and Vice-Chair respectively of the new Commissions (this should not be considered a 'term of office'). This was approved unanimously.

7. As an item of any other business John Kimble requested that we revisit the matter of Honorary Members. It was proposed by John Kimble (seconded by Nicola Senesi) that the Statutes should be changed to 'We elect no more than 15 new Honorary Members during every four year periods (the voting is at the Inter-Congress Meeting).' This motion was carried with two contrary votes.

8. Don Nielsen asked Members of Council to contribute suggestions to the Executive Committee on how IUSS can maintain and develop its outreach to soil scientists in South and Central America and Africa. Obtaining current and accurate addresses is a continuing task facing the Bureau. Members of Council were asked to provide contact addresses for members in these countries when they made contact. It was suggested from the floor that we should not focus our attention on collecting dues, but give more attention to providing soil scientists in these areas with support to promote Soil Science.

9. Rudi Dudal asked for clarification on the position with respect to co-operating Journals. He considered that for global publishers their response (an unwillingness to make any contributions) was very surprising. There was wide-ranging discussion on this topic. It was stressed that in seeking financial contributions from the publishers of co-operating Journals we should not jeopardise the reduced subscription prices enjoyed by members (it was difficult however to know how many members took advantage of these special rates). The Secretary General was requested to pursue this further, liaising with members who have close links with the publishers through, for example, membership of Editorial Boards.

10. Winfried Blum following from his experience as the previous Secretary General briefly reviewed the International Conventions where he considered Soil Scientists should have an active involvement. It was considered by the meeting that it is important that IUSS takes an active role in the development of these conventions. It was agreed that the ex-Secretary General should liaise with the current Secretary General on this topic, to draw up a list of actions related to specific conventions.

11. Following from the previous item Karl Stahr (Germany) asked if there was any progress on the International Soil Convention.

Following discussion on this topic Nicola Senesi proposed (seconded by John Kimble) that the Executive Committee establishes an ad hoc Committee (S-G, President, W. Blum, K. Stahr, Rabah Lahmar (France)) to investigate relations between IUSS and the International Conventions, other Unions and ICSU.' This motion was approved unanimously.

12. The President raised a small number of 'housekeeping' matters, and then closed the meeting at 3.52pm.

Stephen Nortcliff
Secretary General
May 2004



The Working Groups

Since the reorganisation of the Scientific Structure of IUSS the Executive Committee have been reviewing the activities of the Working Groups. Below is information concerning Working Groups abstracted from the Statutes and Bye-Laws.

Statutes

11. Working Groups are part of one or more Division(s)/Commissions. Members with common interests in specific topics may propose establishment of a Working Group. If endorsed by the Division(s), the proposal shall be sent to the Executive Committee, which will confirm or deny the proposal.

12. Working Groups will elect a Chairperson and a Vice Chairperson as officers. The IUSS and the Division(s) to which they belong will give reasonable support for their activities. The Working Group will continue as long as it maintains an active program of scientific work.

13. The activities of each Working Group shall be reported yearly to the Division(s) to which it belongs.

14. The Working Group Officers shall serve a 4-year term and can be reelected. The period for the term of office will be at discretion of the Working Group (K8)

Bye Laws

Duties and functions of Chairpersons and Vice Chairpersons of Working Groups.

These are defined in Statute I1 and I2. The duties and functions are to ensure that each Working Group is properly established and has membership of at least one Division. Each Working Group should hold at least one meeting between consecutive Congresses of Soil Science, and show an appropriate level of scientific activity. It should provide an annual report on its past and future activities to the Divisional Chairperson(s) before December 30.

The Executive Committee are currently reviewing Working Groups to see if they are active with a view to discontinuing those Working Groups that show little sign of activity. As a first step in 2003 I made a request to all Working Groups for a report of their activities since Bangkok, so that these reports could be tabled at the Inter-Congress Meeting in Philadelphia. I received reports from the following Working Groups: Land Degradation and Desertification, Paleopedology, World Reference Base, Organic Fertilisers and Amendments, Pedometrics, International Soil Conventions, Soil and Groundwater Pollution, Rhizosphere and Soils and Geomedicine. Of these Palaeopedology and Pedometrics were redefined as Commissions in Division One.

The response from Working Groups has been poor. This suggests to the Executive Committee that there is a need to discontinue Working Groups that are showing little or no sign of activity. A proposal to this effect will be presented to the next meeting of Council.

Stephen Nortcliff
Secretary General IUSS

IUSS has a new treasurer

The new IUSS treasurer is Dr Jim Gauld who took over the position from Dr Peter Luescher. Dr Luescher has been treasurer since 1990 and the bureau is greatly thankful to all contribution he has made to the functioning of the IUSS. Thank you Peter! For those whom might not know him so well here is a short biographic sketch of our new treasurer. Welcom Jim!

Jim Gauld was born in Aberdeen, Scotland where he undertook most of his early education. After a period at Aberdeen Grammar School, he completed a BSc (Hons) in Soil Science at the University of Aberdeen before being awarded a PhD at the same University in 1969. His PhD was carried out under the supervision of Dr E.A. Fitzpatrick and comprised a micromorphological study of four characteristic West Malaysian soils with soils collected during a years study at the University of Malaya, Kuala Lumpur as a Royal Society Leverhulme scholar. Employment with the Soil Survey of Scotland, part of the Macaulay Institute for Soil Research, followed and he remained a member of the Institute (now the Macaulay Land Use Research Institute) for 35 years until his retirement in early 2004.



As a soil surveyor, Dr Gauld worked extensively throughout Scotland with special emphasis on Northern and Central Scotland during periods of secondment in Grantown-on-Spey and Perth. Early studies focused on the applied aspects of soil survey, breaking new ground with surveys for road re-alignment, soil drainage and opencast coal mining along with routine studies on forestry, land use for agriculture and land capability studies. Using this experience, he was appointed in 1991 to lead the soil survey and land evaluation component of the Macaulay Research and Consultancy Services, the commercial arm of the Institute. Latterly, he used his field experience on a range of new contracts, including monitoring of the Environmentally Sensitive Areas of Scotland, land cover topics and vegetation monitoring.

In early 1991, he was appointed Hon. Treasurer of the British Society of Soil Science later to become their first administrator, a post which he continues to hold in his retirement. He is also administrator to the Institute of Professional Soil Scientists, the professional arm of the British Society of Soil Science. He has been a Senior Lecturer in Soil Science at Aberdeen University since 1994.

Address: Dr. J H Gauld, The Macaulay Institute, Craigiebuckler, Aberdeen AB15 8QH , UK, Tel (44) 01224 498200 ext 2002, Fax (44) 01224 208065, j.gauld@macaulay.ac.uk

IUSS president and vice-president elect

The 19th World Congress of Soil Science will be held in Brisbane, Australia, in 2010. The Australian Society of Soil Science Inc has elected Prof. Roger Swift as president and Dr Neal Menzies as vice president. They will be in charge after the 18th congress in 2006 and a short biography is given below.

**Prof. Roger Swift**

Executive Dean, Faculty of Natural Resources, Agriculture & Veterinary Sci, Univ. of Queensland. Email: deannravs@uqg.uq.edu.au

I am pleased to become the next President of IUSS. I have a long and distinguished record of service to soil science as lecturer, researcher, manager & administrator in universities & research organisations. I have also been fortunate to work and gain experience in several countries. I graduated from Birmingham University and held positions at Manchester & Edinburgh Universities and Reading University where I was Professor of Soil Science and Dean of Agriculture & Food. In New Zealand, I was Professor of Soil Science & Vice-Principal Lincoln University. I started my professional career in Australia as a Postdoctoral Fellow at University of Western Australia, before returning to the United Kingdom. I returned to Australia 20 years later to become Chief of the CSIRO Division of Soils and then Coordinator CSIRO Land & Water Sector. I moved to my current position at University of Queensland in 2000.

Through these leading positions, through service on national policy and research committees and through training of new teachers & researchers, I have made a significant impact on the development and progress of soil science in each of these countries. In addition to working in Australia, New Zealand and the United Kingdom, I have run projects in Africa, southeast Asia and the Middle East. I have an extensive network of friends and colleagues throughout these countries, Europe, North America and elsewhere. I have an extensive publication record of



original papers, books & chapters, and have trained many PhD students & Postdoctoral Fellows. I am a Fellow of the Australian Academy of Technology Science & Engineering and of the Royal Society of Chemistry, and received a Centenary Medal for services to science.

I have served the IUSS and other soil science societies as Chair (plus Vice- & Past-Chair) of IUSS Commission II (Soil Chemistry); organised three IUSS symposia (Hamburg, Acapulco, Montpellier) and edited the proceedings; and led two IUSS working parties. I have attended all IUSS Congresses since 1968 and I now welcome the opportunity to serve the Union at the highest level. I am also a member of three national soil science societies and have served on the national council of two of these. I have served as President of the International Humic Substances Society (which developed from an IUSS Working Group). I have organised two international meetings, six national meetings, all with subsequent published proceedings.

Dr Neal Menzies

Associate Professor, School of Land & Food Sciences, University of Queensland, St Lucia
Email: n.menzies@uq.edu.au

I have a passion for soil science and have worked hard as a teacher, and in my role as a supervisor of postgraduate researchers, to bring others into our rewarding field. I also have a strong commitment to our professional organization, and have served as Secretary, Vice-President and President of the Queensland branch of the Australian Society of Soil Science. I am currently Vice-President of the ASSSI Federal Council. I would be pleased to have the opportunity to serve soil science as Vice-President of IUSS.



Following my PhD, I worked as a soil chemist at the International Institute of Tropical Agriculture in Cameroon, and as a lecturer in soil science at the University of Newcastle-upon-Tyne, before returning to Australia to take an academic position at the University of Queensland. I believe soil scientists can make a useful contribution to solve a broad range of problems. This is well reflected in the research projects I have been involved in, including projects in agricultural production, water quality, waste disposal, mined-land rehabilitation, conservation biology, and even forensic science. I am a well-regarded teacher, and an active researcher with a strong publication record. I assisted in the organization of the 1998 ASSSI National Conference and the recent International Soil Tillage Research Organisation conference. I am also involved in the organization of the 2004 International Soil Conservation Organisation Conference.

Why should national societies subscribe to IUSS

Annual subscriptions from National Soil Science Societies, either directly or indirectly via National Academies, are essential for maintaining a strong presence of the IUSS for effective promotion of soil science as a discipline to professionals, policymakers, and the general public. This is critical to keep our science strong and viable and to enhance its visibility throughout the world. In particular, the active participation of National Societies as a member of the Council of IUSS at the 18th World Congress of Soil Science in Philadelphia in 2006 will greatly help strengthen the breadth and depth of this global showcase of Soil Sciences as a natural science and the critical role that Soil Sciences play in sustainable agricultural production, natural resource conservation and environmental protection. Support from premier National Soil Science Societies is critical to the functional existence of IUSS and the success of these endeavors.

In addition to the fact that National Society members become part of the international community of Soil Scientists and the Society is qualified to send a representative to IUSS council meetings, IUSS Executive Committee members play key leadership roles in promoting the shared missions of the IUSS and National Soil Science Societies. For example, the Deputy Secretary General (Alfred Hartemink) maintains a comprehensive and continuously updated IUSS web page with information and links supporting Soil Science, and together with the Secretary General (Stephen Nortcliff) publishes the IUSS bulletin twice per year. The Secretary General plays a vital ambassador role in promoting IUSS/National Soil Science Societies interests, at the global level linking northern well established Soil Science societies with burgeoning southern hemisphere counterparts; within a European context by spearheading development of the Thematic Strategy for Soil Protection (providing two of the 12 co-chairs, Stephen Nortcliff and Winfried Blum); and by representing IUSS's membership in ICSU, links with UNESCO and other agencies to influence priorities in policies and draw attention to the potential for Soil Science and Soil Scientists to address many of the current problems facing the earth and its inhabitants. IUSS's leadership promotion of Soil Science on a global scale is also evidenced by moves to have IUSS as an active participant (with IUGS, IUGG and IGU) in the UN sponsored International Year of Planet Earth (likely to be in 2006/2007); and in the same context, IUSS is actively seeking to establish a World Soil Day (December 5) to be launched during the Year of Planet Earth.

Distinguished Soil Scientists are recognized internationally by election as IUSS Honorary members at each Intercongress meeting of the World Congress of Soil Science, and by presentation at each WCSS of monetary awards: the IUSS-Dokuchaev for outstanding basic research in Soil Science, and the IUSS-Liebig for outstanding contributions in applied Soil



Science such as new discoveries and techniques that improve agronomic production and environmental quality. And last but not least, the diversely represented IUSS Divisions (Div. 1, Soil in Space and Time; Div. 2, Soil Properties and Processes; Div. 3, Soil Use and Management; and Div. 4, Role of Soils in Sustaining Society and the Environment), Commissions and Working Groups, continuously address frontier Soil Science issues, challenges and opportunities by planning and executing scientific and educational programs that benefit professionals and assist in educating the general public and policymakers about the importance of soil science to the global society.

ISRIC has a new director

ISRIC in Wageningen has a long-standing relationship with the IUSS. Its first director, Prof. F.A. van Baren was also the ISSS Secretary General from 1950 to 1974. After Prof. F.A. van Baren, the director was Dr Wim Sombroek (†2003) and Dr Roel Oldeman. The new director is Dr David Dent whom was for many years at the University of East Anglia and more recently at the Bureau of Rural Sciences in Canberra, Australia. By way of introduction here a few words about ISRIC.

World Soil Information!

ISRIC – World Soil Information is an independent foundation, established in 1966 at the request of the UNESCO General Council as an International Soil Museum. Its mandate is: *To increase knowledge of the land, its soils in particular, and to support the sustainable use of land resources.* It is based in Wageningen, in The Netherlands and, since 2001, has enjoyed a strategic partnership with Wageningen University and Research Centre.

The institute has built up special expertise in soils globally, not least in tropical soils; data management and interpretation; taxonomy; soil survey, land evaluation and land use planning; soil conservation and soil fertility.

ISRIC – World Soil Information encompasses:

- The unique World Soil Museum with a documented collection of nearly one thousand monoliths representing the major soils of the world and a continually updated, thematic exhibition comprising some eighty selected examples. The World Soil Museum maintains a broad educational, seminar and publications program catering for visitors from around the world from schools colleges and universities and the general public;
- The ICSU World Data Centre for Soils, serving the scientific community as custodian of global and regional soil datasets, land resources maps and reports – collecting, scrutinising, analysing and disseminating data and information, and making them freely available. For many of these data, ISRIC is the sole repository;
- An active program of applied research.

Probably, the institute is best known for its underpinning of the FAO-Unesco Soil Map of the World (1971-81) and interpretations of this information including the Global Assessment of Human-induced Soil Degradation - GLASOD (1987-90), the World Reference Base for Soil Resources (1980-98) which is the internationally accepted soil classification system, and the successor to the Soil Map of the World – the global Soil and Terrain Database – SOTER. However, the demand for traditional soil information has shrunk almost to vanishing point; this reflects the contraction of soil science world wide, especially in natural resources surveys that were supported mainly by overseas aid. So, the data we have must work harder but, also, there are continual demands for integrated assessments encompassing not just soils but water, ecosystems, and social and economic aspects of the problems of the day. ISRIC – World Soil Information, now the only global soils institute, is responding with:

- A major program of refurbishing and digitising its holdings so that, soon, they will all be available on the internet. In 2003, the library index was digitised; this year the

1000 profile ISIS database is being transformed into SQL format for web delivery, to be followed by the 8000 profile WISE database and, ultimately, the global SOTER data; better documentation of and access to the reference collection of soil samples, thin sections, and other specialised collections



- A Virtual Soil Museum for web delivery of the educational program and collections;
- Applied research concentrating on completion of global SOTER at 1:1M to 1:5M, a task only half done; and making the data holdings work – for instance interpretations soils data for carbon sequestration and climatic change scenarios, and scenario studies for soil erosion and other forms of land degradation, contributions to the World Overview of Conservation

Technologies (WOCAT) and applications to sustainable land management. In partnership with FAO and UNESCO, ISRIC is also working up initiatives in *green* water (most of the world's available fresh water is held in the soil, and soil use and management determines the partitioning of rainfall to runoff, soil water and stream base flow); and a new global assessment of land degradation and improvement.

ISRIC – World Soil Information is seeking partnerships with all holders of spatial soil data, to help secure these precious assets and make them more available, either freely or under licence, to everyone who can make good use of them.

Further information: www.isric.org

In Memoriam W.G. Sombroek (1934-2003)

IUSS Secretary General 1978-1990

Wim Sombroek, who died on 19th December 2003 at the age of 69 years, was Secretary General of the International Society of Soil Science from 1978 to 1990, and was an officer in a number of ISSS/IUSS Working Groups and Commissions.

He was born in Heiloo, The Netherlands, on 27 August 1934. He obtained his M.Sc at Wageningen University in 1959, and was awarded a Ph.D. in 1963 on the thesis "Amazon Soils" This well-known book was based on his work in Belem, Brazil, as member of the FAO/Unesco team for forestry research and animal husbandry. It was during this period that his great interest in the soils and ecology of Amazonia started, which eventually resulted in his return to the region in 1989.

From 1963 till 1965 he worked as soil surveyor in the UNDP/FAO Sokoto Valley Project in Nigeria. After his African work he stayed three years in Treinta y Tres, Uruguay, at the UNDP/FAO Regional Project for Development of the Laguna Merin Basin, where he was responsible for the soil survey of the entire basin.

After having been a staff member of the International Institute for Land Reclamation and Improvement in Wageningen, he became in 1972 Project Manager of the Kenya Soil Survey Project. This resulted in the co-authored publication in 1982 of "The Exploratory Soil Map and



Agroclimatic Zone Map of Kenya". Kenya was the first country in Africa with such a detailed soils inventory.



From 1978 to 1991 he was Director of the International Soil Reference and Information Centre (ISRIC), which he combined until 1990 with being Secretary General of the ISSS. This combination proved very beneficial for both institutions. ISRIC was established by the Dutch Government in 1966 on the assignment of Unesco, and put forward by the ISSS. A number of ISSS projects were partly or wholly carried out at ISRIC, e.g. the World Reference Base for Soil Resources (WRB) and the World Soils and Terrain Digital Database (SOTER), which helped ISRIC to become a well-known institution all over the world.

Wim moved to Rome in 1991, Italy, to become Director of the Land and Water Development Division of FAO, a position he held until 1996. Besides his

many administrative and organizational duties, he published widely about carbon sequestration, landuse planning, land degradation and the assessment of the productive capacity of soils, also in relation to climate change. He was the (co)editor of a number of books on these subjects.

Returning to the Amazon, he worked, with Manaus as base, in a World Bank-financed project on ecological-economic zoning. He was fascinated by the Terra Preta dos Indios about which he published recently, but spent also time on his hobby: archaeology, including old Dutch fortresses along the Amazon river and its tributaries.

Because of his many internationally recognized activities in the field of soil science, Dr. Ir. W.G. Sombroek was elected Honorary Member of the ISSS at the 16th World Congress of Soil Science in Montpellier in 1998. In 2003 Wim Sombroek became the first Honorary Fellow of ISRIC, World Soil Information.

In his home town Wageningen, he had an active contribution to the study and safeguarding of the historical developments since its establishment in the 12th century.

Locally, nationally and internationally, he will be missed in many circles.

The members of the International Union of Soil Sciences offer their condolences to Mrs. Willemijn Sombroek, their four daughters, husbands and grand children.

THANKS, WIM !

Each of us has a story to tell this day
Of meeting Wim Sombroek along the way
He touched our lives in ways oft untold
And helped us become 'champions with gold'

He had a passion for land as we know
Fueled by the Amazon where jungles grow
A flame that didn't flicker or ever go out
His last endeavor Terra Petra still to shout

What made this man a man to remember?
Dedication from January through December?
A ready zeal to impart his vast knowledge
To those who never had seen a college?

Perhaps it was the breath of his interests keen
Archeology nearby, within, without - to be seen
And wild orchids garnered in an exotic place
In his green house always finding space

Was it not the pillars there at home?
Wife Willmijn and four girls that let him roam
Whose constancy supported his very being
Welcomed his return late in the evening?

What do you recall when you hear his name?
A towering presence with mustache and mane
Blue eyes twinkling through gold-rimmed glasses
A fat little notebook shock full of addresses

Or maybe the pause as he 'rolled' his own
Smoke rising gently as softly it was blown
Or the patient way he slightly leaned over
Catching your phrases like blossoms of clover

I, too, have a special way to recall –
Several clusters of Dutch bulbs one fall
He planted along my garden maze
Now each spring he brightens my gaze

I hear his laughter, feel his handshake
I treasure the moments we dared to take
To dream our dreams, to vision the future
Returning to Pedology, our souls to nurture

Are we mourning – never; rejoicing – ah, yes, ever
Along with insights, strengths, and wisdom so clever
There was gentleness, love, and tenderness, too
Wim Sombroek – our hearts give thanks to you.
Ricahard W. Arnold



Thai soil scientist knighted

At an investiture held at the Dusit Maha Prasart Palace in Bangkok, Thailand, on May 5th, 2003, His Majesty King Bhumibol Adulyadej conferred the title of GRAND COMPANION OF THE MOST ILLUSTRIOUS ORDER OF CHULA CHOM KLAO on Dr. Pisoot Vijarnsorn. This Order is equivalent to a knighthood. Dr. Pisoot is currently the Senior Specialist on Soil Survey and Classification at the Land Development Department, Bangkok, Thailand. He studied at Kasetsart University, Bangkok and obtained his Masters at University of Illinois and Ph D at the University of Tokyo. He was national soil correlator for a long time and recently produced the Soil Map of Thailand, which was exhibited during the World Soil Congress at Bangkok in 2002.



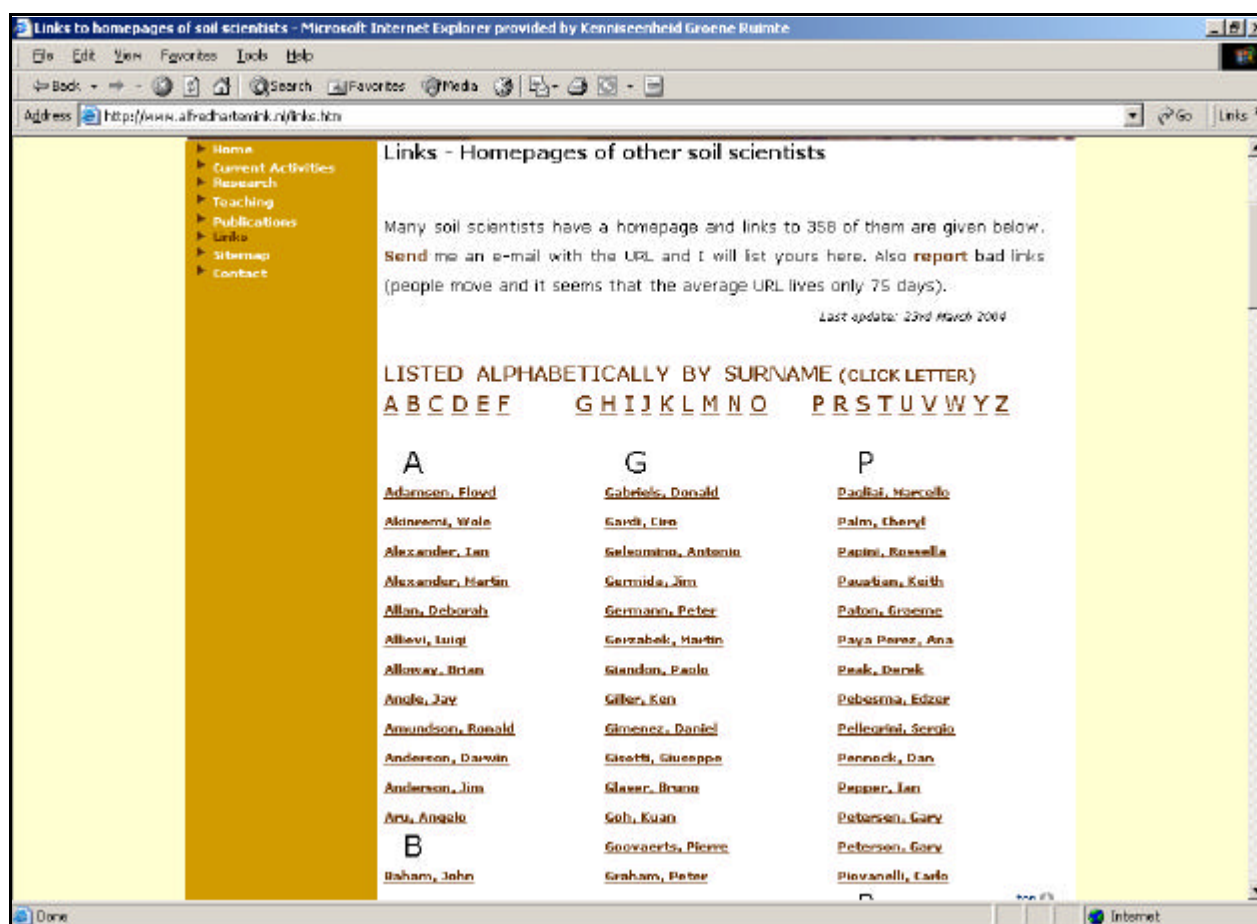
Dr. Pisoot devoted considerable amount of his time in helping people to use soil information. With this interest, he was intimately involved in the land development projects initiated by the King and also served as an advisor to the Princess. He has always been very active in the Soil and Fertilizer Society of Thailand and has attended many of the recent World Congresses. He is well known to all those who have visited Thailand to attend the many meetings and workshops that have been held here. Apart from his knowledge, everyone remembers Pisoot for his humor that has no bounds, and his ability to make everyone feel at home.

It is not often that a soil scientist is recognized at the highest level in his/her country and all scientists pay tribute to Sir Pisoot for his accomplishments and wishes him continued success before and after his retirement on November, 2004.

Hari Eswaran
Washington DC

Widening networks: Soil Scientists Homepages!

We live in an era with ever-widening communication networks. Great as it may be, it can take a while to find someone's e-mail or postal address although some search-engines are amazingly clever. In order to facilitate finding colleagues and to get an idea of what they are doing Alfred Hartemink has listed links to more than 350 soil scientists on his homepage, see www.alfredhartemink.nl/links.htm If you would like to be included send an e-mail to alfred.hartemink@wur.nl



Reports of Meetings

Report of the 50th anniversary meeting of the Austrian Soil Science Society (ASSS)

The Austrian Soil Science Society, founded in 1954, celebrated its 50th anniversary during the 2004 annual meeting (10-11 May, Federal Office and Research Centre for Forests, Mariabrunn, Vienna). The first day of the annual meeting was dedicated to the topic "soil and society". The presentations of this day presented by invited speakers only covered a wide range of topics. Winfried Blum/Vienna started with an introductory talk (Soil and Society), Walter Kilian/Baden presented the "History of the ASSS", Hans Peter Blume/Kiel gave an overview of the "History of Soil Research in the German Speaking Region", followed by Verena Winiwarter/Vienna with the lecture "Historical Development of Soil Use in Europe". After lunch the programme continued with a talk about "Soil protection – a challenge for society?" by Stephen Nortcliff/Reading, followed by Peter Lüscher/Birmensdorf-Zürich: "Intact Forest Soil – an Indicator for Sustainability", Stephan Kopelent/Vienna: "Soil and Soil Management in the View of Religions", Gerd Wessolek/Berlin: "Soil and Art" and finally Martin H. Gerzabek/Vienna: "Perspectives for Soil Research in the 21st Century". Full papers of the talks will be available together with the oral and poster presentations of the second day of the meeting in the "Mitteilungen der Österreichischen Bodenkundlichen Gesellschaft" (see www.boku.ac.at/oebg)



The anniversary meeting was attended in total by more than 110 participants. The ASSS was delighted to welcome the Secretary General of IUSS, Stephen Nortcliff, Prof. Dr. Hans Sticher, Vice-President of the Swiss Academy for Natural Sciences, the President of the German Soil Science Society, Prof. Dr. Franz Makeschin, the President of the Hungarian Soil Science Society, Prof. Dr. György Várallyay, the Secretary General of the Czech Soil Science Society, Dr. Milan Sanka and the representative of the Swiss Soil Science Society, Dr. Peter Lüscher and many official representatives of Austrian scientific institutions and ministries. Prof. Winfried E.H. Blum, former Secretary General of IUSS and honorary member received the order of merit of the Republic of Austria during a short celebration after the morning programme of the 10th of May. Prof. Blum and Prof. Eduard Klaghofer were awarded the honorary membership of the ASSS during the general assembly in the evening. The general assembly decided to implement the first commission of the Society, the commission "Subillyricum". This commission will provide a platform for our colleagues from Slovenia and might be the basis for a future Slovenian Soil Science Society, which does not exist today. Prof. Tomaz Prus/ University of Biotechnology, Ljubljana was elected as head of the commission.

Martin H. Gerzabek
President of the Austrian Soil Science Society

Second conference of the IUSS working group SUITMA -Soils of Urban, Industrial, Traffic and Mining Areas

From July 7 to 11, 2003, Nancy, France did host the second SUITMA – conference. This was three years after the first in Essen, Germany. About 130 participants from 20 countries did follow the invitation to report and discuss about the current state of this very new field of soil research. The conference was organised by the "Groupement d'Intérêt Scientifique sur les Friches Industrielles" (GISFI, <http://gisfi.prd.fr>) of Lorraine.

Was the first SUITMA – conference more or less a broad check to make visible the state of knowledge about the until now nearly unknown urban soil, application of soil information and soil quality problems, so was the second SUITMA – conference thematic oriented on methodologies for the study of urban soils and classification (14 contributions), biological properties of urban soils (13), pollution dynamics and transfer risks (30), physical and chemical properties of urban soils (16), remediation of degraded or polluted soils (11), historical (7), health (6) and legal aspects (6). The numerous presentations did give essential descriptions and inputs for the management of the existing soil problems and such we just start to become aware, for example such related to storm water infiltration, occurrence of pathogenic organisms, pollutant transfer or threats to children at school yards.

The oral and poster presentations are published as abstract book and as CD-Rom. The CD-Rom is available from Louis.Florentin@ensaia.inpl-nancy.fr



Discussion on Anthrosol formation of the Deutsch-Franzoesischer Park in Saarbruecken (Photo J.L.Morel).

The region around Nancy, Lorraine, and of the Saarland next to it offer excellent possibilities for tours about the themes of SUITMA. The region was one of the most important coal and iron mining, and iron and steel production areas in Europe. It was also the frontier for some years of the French and German army in the First World War. The organizers took the opportunity to show in an impressive way what are the impact of regional soil use and military actions and what that means for soils and their properties. The themes of the 4 one – day tours were 'Industrial soils from mining residues, dumps and coal mining areas', 'Soils with modified physical properties due to mining and military activities', 'Industrial soils from an iron-steel industry area' and 'Urban soils'.

The Conference dinner was at Château d'Haroué. It is a beautiful French Castle with a wonderful atmosphere. It did offer us small walks, many talks and a French dinner, that means a dinner for gourmets.

The scientific community of the working group SUITMA decided to have the third conference in 2005. We were very pleased that we got 7 offers to perform the third conference. We want to thank all of them sincerely. The decision was to go to a country outside Europe and North America, in countries where strong growth of urban agglomeration occurs. The third SUITMA-conference will be in Cairo, Egypt from 17 to 25 November 2005 (presentations from 19 – 21 November) and the fourth is envisioned in China, Nanjing, in 2007. Please check also the announcement in preparation in www.iuss.org (UPCOMING MEETINGS) or www.urban-soil.de. Another important decision was to add military areas to the soil use spectrum covered by SUITMA. Large areas of the world are used for military purposes. Soils are in part strongly modified by military activity.

The working group SUITMA covers soils from areas which have been strong modified by soil use. The decision was to settle the Working Group SUITMA under the roof of Division III – Soil Use and Management in the new structure of IUSS.

It was pleasant to discover that soil science goes with success into cities and discovers the urban terrain. The target to give soil scientist of the field of strong by human modified soils a scientific home and forum by the IUSS working group SUITMA was well achieved.

The excellent conference organisation and ground breaking tours by INPL-ENSAIA, UHP, INRA and CNRS and friendly organisations, the conference place Palais des Congrès in Nancy and the French hospitality made the second SUITMA conference to an event



We want specially to thank Jean Louis MOREL, Louis FLORENTIN, Christophe SCHWARTZ and Guillaume ECHEVARRIA, Liliane LAURENT and the many others of GISFI who did the work with them.

Wolfgang Burghardt
University Duisburg - Essen, Germany, Chair of IUSS WG SUITMA

THE 6TH ESAFS SOIL CONFERENCE, TAIWAN, 24-29, 2003

The East and Southeast Asian Federation of Soil Science Societies (ESAFS) links Soil Science Societies in the Asian region. It was formed during the 14th World Congress of Soil Science of the International Soil Science Society at Kyoto in 1990 and has had a meeting once every two years. Societies belonging to 'monsoon Asia' whose agriculture is or was rice-based are welcome to participate and with each Conference, the number of countries is increasing. At the Taiwan meeting, the 199 participants were from Japan, Taiwan, Philippines, Thailand, Sri Lanka, Bangladesh, India, with South Korea having more than 60 participants. Observers are also invited and the United States has always participated. The Secretariat of the Federation is at the country of the host country.

The theme of the 6th Conference is "Soil management technology on low-productivity and degraded soils". Two days of technical sessions were held in Taipei and this was followed by four days of field trips. After the opening ceremony on the first day the Keynote Speech with a title, "Soil degradation on the coastal lowlands in Southeast Asia", was given by Dr. Kazutake Kyuma, Emeritus Professor at Kyoto University. This was followed by nine technical presentations ranging from landscape conditions to microbiology. Time was also provided for poster presentations. The second day commenced with a Keynote speech from Dr. Hari Eswaran (USDA-NRCS, World Soil Resources) entitled, "Soil Science in Asia: Confronting New Realities of the 21st Century". Another 12 technical papers and 51 posters concluded the day. A business meeting was held to discuss issues of the Federation and determine the venue of the next Conference. The proceeding of the Conference is already published and available from Dr. Zueng-Sang Chen (soilchen@ccms.ntu.edu.tw).

The field trip spanned the entire length of the island from Taipei to Kaohsiung. Confining to the theme of the Conference, the participants had the opportunity to see and discuss management aspects of different crops including tea, wax-apple and bamboo, land degradation in different landscape settings and under different kinds of land use, and mitigation technology to address some of these land degradation conditions. Erosion and soil conversation is a major problem on this island and finding cost-effective technologies is a continuing challenge. Hidden degradation problems include the example of land subsidence induced by excessive extraction of ground-water for fish pond management. A visit to a living museum near Taichung demonstrated the devastation that can be caused by earthquakes as happened here on September 21, 1999. The photo-gallery on the website of the Korean Soil Science Society (<http://www.ksssf.or.kr/>) captures the spirit of the Conference.



(Some participants at a house that was abandoned due to land subsidence. Left to right, Hari Eswaran-USA, Kazutake Kyuma-Japan, Zueng Sang Chen-Taiwan, Horng Yuh Guo-Taiwan, Dar Yan Lee-Taiwan, G. Narayananswamy-India, and Young-Tae Jeon-South Korea).

Appreciating the socioeconomic conditions of the region, specifically the burgeoning population, the Conference concluded that there was an urgent need to enhance the investments in research and technology development for land management. It also recognized that there was a serious lack of information on the condition of the land resources and this should be addressed through more organized monitoring activities. Though a few countries have monitoring programs, the discussions showed that these should evolve to a coordinated program to evaluate land resource conditions and state of degradation.

The 7th ESAFS Conference will be held in Philippines in 2005. Details of the meeting will be announced in 2004 or can be obtained from Dr. Clarita Aganon of Central Luzon State University (cpaganon@yahoo.com) Fax: 63-044-4560-704).

Hari Eswaran
Washington D.C.

The Indian Society of Soil Science held the 68th Annual Convention Nov. 4-8 2003

The 68th Annual Convention of the Indian Society of Soil Science (ISSS) was held at the Chandra Shekhar Azad University of Agriculture and Technology (CSAUA&T), Kanpur during November 4-8, 2003. Attended by more than 300 delegates, the inaugural function was held on 4th November at the University Auditorium. The dignitaries Dr. G Narayanasamy, President of the Indian Society of Soil Science; Dr G.B. Singh, Director General, Uttar Pradesh Council



of Agricultural Research, Lucknow, as Chief Guest; and Dr. J.S.P. Yadav, Ex-Chairman, Agricultural Scientists Recruitment Board and former President of ISSS as the Guest of Honour and Dr P.K. Singh, Vice Chancellor of the University, graced the function. In his introductory remarks, Dr. Narayanasamy paid rich tributes to the Members and the Council of ISSS, past and the present, for the significant achievements of the Society during the past 68 years and also making ISSS as one of the most respected professional societies in India. Dr. P.K. Singh, in his address, emphasized on the need for development of eco-friendly integrated plant nutrient supply systems for the several cropping systems in the country. Dr J.S.P. Yadav, the Guest of Honour, drew attention of the delegates to a marked deceleration of total factor productivity and emphasized on the urgent need of enhancing input use efficiency and crop productivity in India in order to bridge the gap between the actual and potential yields. The Chief Guest Dr G.B. Singh stressed on the need of taking up research on priority in areas viz., tillage, soil and water conservation measures, residue recycling and carbon sequestration.



During the inaugural function the Fellowship of ISSS for the year 2003 was conferred on (i) Dr. P. Singaram, Head, Department of Environmental Sciences, TNAU Coimbatore; (ii) Dr D.L.N. Rao, Project Coordinator, Indian Institute of Soil Science, Bhopal; (iii) Dr. Dipak Sarkar, Head, NBSS&LUP Regional Centre, Kolkata; and (iv) Dr. C.L. Arora, Senior Soil Chemist, Department of Soils, PAU, Ludhiana. Dr. (Ms.) C. Chatterjee, Professor, Lucknow University, Lucknow was awarded with the 12th International Congress Commemoration Award, while Dr. (Ms.) T.R. Rupa, Senior Scientist, Sugarcane Breeding Institute, Coimbatore was awarded the Golden Jubilee Commemoration Young Scientist Award. Inaugural function came to a close with a formal vote of thanks by Dr M.M. Agrawal, Organizing Secretary, 68th Annual Convention of the ISSS and Professor and Head, Department of Soil Science and Agricultural Chemistry, CSAUAT, Kanpur.

During this Convention five special lectures were organized. The 30th Dr. R.V. Tamhane Memorial Lecture was delivered by Dr. P.K. Chhonkar, Head, Division of Soil Science and

Agricultural Chemistry, Indian Agricultural Research Institute, New Delhi on 5th November on the topic "Organic farming: Science and belief ". The 21st Prof. J.N. Mukherjee - ISSS Foundation Lecture was delivered by Dr. D.K. Pal, Head, Division of Soil Resource Studies, National Bureau of Soil Survey and Land Use Planning, Nagpur. He delivered this lecture on the topic 'Significance of clays, clay and other minerals in the formation and management of the Indian soils'. First Dr R.R. Agarwal Memorial Lecture, instituted in 2003 in the memory of Dr. R.R. Agarwal, a former President of the Indian Society of Soil Science, was organized on 4th November and it was delivered by Dr J.S.P. Yadav, Former Chairman, Agricultural Scientists Recruitment Board, ICAR, New Delhi on the topic "Managing soil health for sustained high productivity". An evening lecture on the topic "GIS application for soil resources and its importance for the country" was delivered by Dr. B.R. Marwah, Professor, Transportation Engineering, Indian Institute of Technology, Kanpur on 6th November. On 7th November a special lecture on the topic "Heavy metal toxicity and soil ecology" was delivered by Dr. K.C. Banger, Chairman, Haryana Public Service Commission, Chandigarh.

A Symposium on "Trends in Soil Research" was arranged on 5th November. Dr N.N. Goswami, Chief Editor and a Past-President of the ISSS and Dr G. Narayanasamy, President of the ISSS conducted this symposium as Chairman and Co-Chairman, respectively and Dr S.K. Sanyal, an Editor of JISSS acted as the Rapporteur. Careful analysis of the Trends in Soil Research as mirrored through publications in the Journal of the Indian Society of Soil Science during 1995-2002 *vis-a-vis* publications in related fields in some of the leading international journals and setting priorities for the research in India in the 21st Century were the highlights of this symposium. In addition, a National Seminar on "Developments in Soil Science – 2003" was organized, in which 56 papers were presented in oral sessions besides 222 papers in poster sessions on 4th, 6th and 7th November. Oral presentations were organized in four concurrent sessions on these 3 days while poster display was held in four half-a-day sessions. The 68th Annual General Body Meeting of ISSS was held on 5th November with Dr. G. Narayanasamy, President of the ISSS conducting the meeting, and this was attended by 157 members of the Society. The business of the meeting as per the listed agenda, was transacted. A lively cultural programme was organized on 4th November in which classical/semi-classical numbers relating to dance, song, etc. were presented by the professional and amateur artists. The programme was appreciated and enjoyed by the participants.

The concluding session was held on 7th November. A review of the Symposium on "Trends in Soil Research" as well as the National Seminar was made. Members were invited to offer their comments on the several activities carried out during the preceding four days. Many useful suggestions were offered by the members. Dr. G. Naryanasamy, delivered the Presidential Address, in which, he made a passionate appeal to the Soil Scientists to address different uses of soil, which so far had been confined to its role as a medium for plant growth in their research agenda. At the end of the concluding session, the annual convention was declared formally closed by Dr. G. Narayanasamy, President of the ISSS.

A field trip was organized on 8th November in which about 60 delegates, some with their spouses, joined. The group was taken by bus to different institutions of CSIR/ ICAR and places of tourist interest in Lucknow. Sixty-ninth Annual Convention of the Society will be held during October/ November 2004 at the Acharya NG Ranga Agricultural University, Hyderabad, Andhra Pradesh, India. The most important activity being planned is the International Conference on Soil, Water and Environmental Quality – Issues and strategies during January 28-February 1, 2005 at New Delhi under the aegis of the International Union of Soil Sciences (IUSS). For details, members of the IUSS may kindly visit the ISSS website www.iss-india.org and www.iss-india.org/icsweq.html.

DR. R.K. RATTAN
Secretary, Indian Society of Soil Science
Division of Soil Science and Agricultural Chemistry
Indian agricultural Research Institute, New Delhi 110012, INDIA



International Symposium on Soil and Plant Analysis, South Africa, January 2003

The International Symposium on Soil and Plant Analysis (ISSPA) is the premier international gathering and showcase event in soil and plant analysis. The 8th ISSPA was held in a congenial atmosphere at the Lord Charles Hotel in Somerset West, Cape Town, Western Cape, South Africa, January 13-17, 2003 (Theme: *"Challenges for Sustainable Development: The role of Soil, Plant, and Water Analysis"*). It continued a successful series of symposia held biennially since 1989. It was sponsored by the Soil and Plant Analysis Council and the Agri Laboratory Association of Southern Africa (AgriLASA). The purpose of the symposium was to bring together agricultural and natural resource scientists from around the world to disseminate information on methodology, terminology, interpretation and application of soil, plant, and water analyses for the purpose of efficient resource management, sustainable production, and environmental protection. The program included tours, training workshops, an instrument expo, and plenary and poster sessions.

The Local Organizing Committee included Lizelle Adams, Karen Adendorff, Andries Claassens, and Arri van Vuuren (Chair). Other members of the Symposium Organizing Committee were Robin Barnard (South Africa), Yash Kalra (Canada), Jan Meyer (South Africa), Robert Miller (USA), George Rayment (Australia), and Byron Vaughan (USA). The Symposium Program Committee included Robin Barnard (Chair), Andries Claassens, Yash Kalra, Robert Miller, and Arri van Vuuren. Anette Palm (Germany) was the symposium manager. Claude Moller (South Africa) was the master of ceremonies. George Rayment received the prestigious J. Benton Jones, Jr. Award for his significant contributions in the development and advancement of soil testing and plant analysis.

A 212-page *Program and Abstracts* book was given to all the registrants at the beginning of the symposium. The oral and poster papers will be published in a proceedings as a special issue of the *Communications in Soil Science and Plant Analysis* after a scientific review. There were six half-day training workshops: (1) The interpretation of soil, leaf, and sap analyses (2) Latest trends in laboratory automation (3) Soil fertility concepts for laboratory personnel (4) Scanning NIR techniques and applications (5) Soil testing in organically enriched soils and growth media (6) Managing soil acidification.

A number of highly regarded keynote speakers presented oral papers. These plenary papers and the poster papers were presented in the following eight sessions: (1) Different proficiency testing systems (2) Organically enriched soils and growth media: Production and analytical challenges (3) New analytical techniques and approaches (4) Appropriate agricultural systems for emerging farmers (5) Micronutrients: Future trends and requirements (6) Smart sampling and precision farming (7) Soil acidity and amelioration (8) Pollution, salt affected soils, and the environment.

The pre-symposium tour on January 8-12 took the Garden Route to Port Elizabeth (known as *"The Friendly City"*) stopping at various points of interest such as the highest bungee jumping (216 m) location in the world. We visited the 11,718 ha Addo Elephant National Park in the Eastern Cape. The wildlife included elephant, Cape water buffalo, Burchell zebra, black rhino, wart hog, eland, kudu, red hartebeest, grey duiker, Cape grysbok, bushbuck, black-backed jackal, yellow mongoose, vervet monkey, bat-eared fox, stork, ostrich, and the unusual flightless dung beetle. The tour included a visit to the 5,000 ha Amakhla Game Reserve; the guided tour of man-eating Nile crocodiles at the Reed Valley Crocodiles was followed by a 2-hour game drive in open Land Rovers. The wildlife included giraffe, zebra, bat-eared fox, many antelope species



(L to R) Yash Kalra (Canada), Christos Tsadilas (Greece), Peter Csatho (Hungary), Robert Miller (USA), and Darryl Warncke (USA) at one of the eight poster sessions.

(e.g., wildebeest, impala, gemsbok, and red hartebeest), and tortoise. After dinner in the bush Lapa, a night drive to view nocturnal animals completed the Safari. The stay in Port Elizabeth gave us the unique opportunity to swim in the beautiful Indian ocean and relax on the beach. On January 11, we drove to Oudtshoorn (ostrich capital of the world) via the spectacular Outeniqua pass. After a stop at Knysna, we boarded the Outeniqua Choo Tjoe for a train trip to George. The Choo Tjoe is the last steam-hauled scheduled passenger train operating in Southern Africa. We then returned to the coach and continued our trip to Oudshoorover. On January 12, we travelled back to Somerset via Route 62. The stops included a visit to the world famous Cango Caves, where the mysterious and breathtaking limestone formations have been sculpted by nature through the ages. Route 62 is the travellers route which meanders between Cape Town, Oudtshoorn, and Port Elizabeth. It is the world's longest wine route (380 km). The post-symposium tour on January 17 included visits to the Charles Back, Delheim, and Lanzerac Manor wineries.

On January 12, after the pre-symposium tour, Michael Chetty (a delegate from Durban, South Africa) took Desh Duseja (a delegate from Nashville, USA) and me to Gordon's Beach. He was wearing a T-shirt "Volvo for life". We went to a restaurant "Spur Steak Ranches" to check out the "Castle". On the menu there was a slogan "A taste for life". I had met Michael and Desh at the 7th ISSPA in Edmonton in 2001. So ISSPA's motto can be "Friends for life".

I will always remember the stunning view of Cape Town (known as "The Mother City") from the top of the flat-topped Table Mountain (1,000 m above sea level). I will remember it the same way as I remember that more than 35 years ago I was on the second floor of 43 Kings Drive in Winnipeg when I heard on the radio that Christiaan Neethling Barnard performed the world's first human heart transplant on December 3, 1967 at the Groote Schuur Hospital. I got a chance to see this historic hospital during my visit to Cape Town. If you go to South Africa, Cape Town is a must-visit.

The ISSPA is now held alternately in North America and overseas. The 9th ISSPA will be held in Cancun, Mexico in early 2005. It will be organized by the Soil and Plant Analysis Council, Colegio de Postgraduados, and the Mexican Soil Science Society. The theme will be "Soil, Plant, and Water Analysis: Quality Analytical Tools for an Era of Ecological Awareness". Jorge



Etchevers is the Chair of the Symposium Organizing Committee (Email: jetchev@colpos.mx). Further information will be posted on our web site (www.spcouncil.com). Stay tuned !

Yash P. Kalra, Canadian Forest Service
Edmonton, Alberta, Canada

10th Congress of Soil Science, Tandojam, Pakistan

The 10th Congress of Soil Science, organized by the Soil Science Society of Pakistan, was held at the Sindh Agriculture University, Tandojam, March 16–19, 2004. Its theme was *"Management of natural resources for food security"*. The Congress was participated by 300 soil scientists and agronomists, including 21 participants from India, Bangladesh, Iran, and Russia. Congratulatory messages were received from General Pervez Musharaf, President, Islamic Republic of Pakistan; Mir Zafaraullah Khan Jamali, Prime Minister, Islamic Republic of Pakistan; Prof. Dr. Atta-ur-Rahman (*Nishan-e-Imtiaz*, *UNESCO Science Laureate*), Federal Minister for Science & Technology and Chairman, Higher Education Commission; Sardar Yar Muhammad Rind, Federal Minister for Food, Agriculture & Livestock; Dr. Ishrat ul Ebad, Governor, Sindh; Sardar Ali Muhammad Khan Mahar, Chief Minister, Sindh; Mr. Arif Mustafa Jatoi, Minister for Food and Agriculture, Sindh; Mr. Irfan Ullah Khan Marwat, Minister for Education, Sindh; and Dr. Bashir Ahmad Chandio, Vice Chancellor, Sindh Agriculture University. Mr. Arif Mustafa Jatoi, Minister for Food and Agriculture, Sindh, was the Chief Guest at the inaugural session. Eminent scientists of the country, including Dr. Kauser Abdulla Malik (*Hila-e-Imtiaz*; *Fellow, Third World Academy of Sciences*), Member (Bio-sciences), Pakistan Atomic Energy Commission, delivered special plenary lectures on topics related to the Congress theme.

The Congress Abstract Book contained a total of 180 oral and poster papers, in the areas of soil survey, soil chemistry, soil fertility, soil physics, soil salinity, soil microbiology, soil conservation, and soil environment. The full papers will be published in a special issue of the Pakistan Journal of Soil Science, after peer review. The technical sessions were well attended, with adequate discussions after each presentation. State-of-the-art audio-visual equipment was used for the presentations. The poster papers gave an opportunity for greater interaction with the authors, national and international networking, and developing professional relationships. The Congress Organizing Committee, comprising of leading soil scientists of the country, was headed by Dr. Nisar Ahmad, President Soil Science Society of Pakistan. Congress Secretary was Prof. Dr. Kazi Suleman Memon, Vice President of the Society and Dean, Agriculture, Sindh Agriculture University. Technical Committee was headed by Dr. Muhammad Ibrahim, Treasurer of the Society, and Souvenir Committee was led by Dr. Abdul Rashid of National Agricultural Research Center. The Souvenir, produced at the Congress, documented history of the Soil Science Society of Pakistan, its membership, past presidents, honorary members, past Chief Editors of the Pakistan Journal of Soil Science, and elaborated on past nine (9) Congresses of Soil Science, National Directory of Soil Scientists, and Soil Science News. The souvenir highlighted "Contributions of Soil Scientists in Agricultural Growth" as well as "Benchmark soils of Pakistan". After the dinner, excellent cultural program was organized on March 16 night for the delegates and the spouses. A post-congress tour was availed by a majority of the participants. The tour provided an opportunity to witness coastal agriculture, historical sites, and fertilizers factories.

Sponsors of the Congress were Pakistan Science Foundation, Sindh Agriculture University, Higher Education Commission, Sindh Department of Agriculture, Pakistan Atomic Energy Commission, Fauji Fertilizer Company, Engro Chemical Pakistan Limited, United Agro-Chemicals, Jaffer Brothers Limited, and Chawala International. In Pakistan, congresses of soil science are organized biennially since 1985. Each Congress is participated by about 300 scientists, with about 150 scientific presentations – including invited papers, by leading

scientists, related to the Congress theme. Voluntary papers are presented orally or as posters. Outstanding posters are awarded certificates and cash prizes. Congress recommendations are disseminated amongst federal and provincial policy makers, administrators in agricultural research, education, extension, and agro-based industry.

Dr. Abdul Rashid
Land Resources Research Program, National Agric. Research Center, Islamabad, Pakistan
Email: LRRP@comsats.net.pk

Workshop of the Western Enviro-Agricultural Laboratory Association April 2003

Forty people attended the 14th Annual Workshop of the Western Enviro-Agricultural Laboratory Association (WEALA) held at the Alberta Research Council, Edmonton, Alberta on April 10, 2003. The theme was "*Advances in Laboratory Technology*". On behalf of the Alberta Research Council, Salim Abboud welcomed the participants at the meeting. Current WEALA President, Joel Crumbaugh, welcomed attendees on behalf of the Association and chaired the Workshop sessions.

A key component of the meeting was an instrument vendor show with displays by instrument manufacturers and laboratory equipment suppliers (ATS Scientific Inc., Donex Canada Ltd., Fisher Scientific, LECO Instruments Ltd., Mandel Scientific, SCP Science, and Varian Canada Inc.) and their new equipment currently on the market. The Workshop included the following presentations:

- (1) 1200 GC/MS triple quadropole: Darren Johnston, Varian, Edmonton, Alberta
- (2) Accelerated solvent extraction: Eric S. Francis, Dionex, Salt Lake City, Utah
- (3) Microwave digestion: Holly Bigelow, SCP Science, Edmonton, Alberta
- (4) Advances in soil CNS analysis: Doug Robertson, LECO Instruments Ltd., Calgary, Alberta
- (5) New Tekmar Velocity XPT purge and trap concentrator: Mandy Wong, ATS Scientific Inc., Vancouver, British Columbia
- (6) PC-Titration plus line of products for environmental and agricultural analysis: Rob Cameron, Mandel Scientific, Guelph, Ontario

The Association held its Annual Business Meeting following the Workshop. The results of a round robin study conducted last Fall were reviewed. The study included the analysis of compost and flyash samples for metals using EPA 3050 and EPA 3051 methods. Discussions were held to conduct a round robin study in Spring 2003 for soil salinity parameters. A committee was formed to organize the 15th Annual Workshop to be held in early 2004. Joel Crumbaugh (President), James LeBlanc (Vice President), and Brenda Chomin (Secretary/Treasurer) completed their terms on the 2002-2003 Executive. The Executive for 2003-2004 consists of James LeBlanc (President), Curtis Olive (Vice President), and Joel Crumbaugh (Secretary/Treasurer). The next Business Meeting is scheduled for October 1, 2003 in the Boreal Room, Northern Forestry Centre, Canadian Forest Service, Natural Resources Canada, Edmonton.

The Western Enviro-Agricultural Laboratory Association (WEALA) is a non-profit Association consisting mainly of analytical laboratories with common interests in promoting and improving the analytical chemistry industry. For more information, visit us online at www.weala.com.

Yash.P. Kalra and Joel A. Crumbaugh
Canadian Forest Service, Edmonton, Alberta, Canada



VACANCY

Full Professor of Earth System Science at Wageningen University

Station: Wageningen, The Netherlands

Vacancy number: GR HGL 2004-0502

Applications are invited for a position as full professor of Earth System Science, focusing on abiotic and biotic interactions and changes in the terrestrial part of the earth system. Special attention is paid to global changes in relation to land use, and the effect of land use changes on environmental systems, in which soil processes play a key role. The new professor bridges the gap between the soil disciplines, which focus on the local scales (micro-scale, farm/field scale and landscape), and environmental sciences that study global changes. The candidate is supposed to have a holistic and integrative approach of the earth system.

What we ask The professor of Earth System Science is charged with initiating, leading and supervising the academic teaching and scientific research in this field. Besides, he acquires contract research, supervises PhD students, and leads the chair group. He should meet the following requirements: relevant academic education, including PhD; evident didactic qualities and an inspiring teacher for students; ample experience in research in earth sciences and an affinity with soil science, as shown by publications in leading international journals; a view on the role and position of geoscientific research and education within the themes of Wageningen University and the graduate schools; successful research acquisition; coordinating, stimulating and initiating qualities with respect to research and the dissemination of its results among both society and scientific media in this field; a holistic and integrative attitude in research and education, as well as active cooperation with professional bodies; managerial ability and communication skills, and the willingness to participate in the management structure of a large and dynamic scientific organization; readiness to learn Dutch.

What we offer A full-time appointment with a salary ranging between € 4.517,- and € 6.592,- gross per month.

Information For further inquiries please contact the chairman of the committee, prof. dr. ir. A.K. Bregt, telephone +31 317 47 44 58 (e-mail: arnold.bregt@wur.nl), or the secretary, telephone +31 317 47 44 85 (e-mail: liesbeth.ruyten@wur.nl).

Applications Applications, indicating the vacancy number on letter and envelope, should be sent within three weeks to the Rector of Wageningen University, P.O. Box 9101, 6700 HB Wageningen, the Netherlands. Female candidates are especially encouraged to apply.

Cooperating Journals

The IUSS has 10 cooperating journals. These journals are available for individual IUSS members at reduced subscription rates. Some general information on these journals is given below. Should you be interested to subscribe to one of these journals please contact the IUSS

Treasurer: Dr. J H Gauld, The Macaulay Institute, Craigiebuckler, Aberdeen AB15 8QH, UK
Tel (44) 01224 498200 ext 2002, Fax (44) 01224 208065, j.gauld@macaulay.ac.uk

1. ARID LAND RESEARCH AND MANAGEMENT

Size: Four issues per year in one volume of ca. 400 pages. Publisher: Taylor & Francis New York - Editor-in-chief: Prof.Dr. J. Skujins, Utah State University, USA. Personal subscription rate for IUSS members (1998): US\$ 105.00.

2. BIOLOGY & FERTILITY OF SOILS

Size: Eight issues per year, in two volumes of about 750 pages. Publisher: Springer Verlag, Berlin-Heidelberg-New-York-Tokyo. - Editor-in-Chief: Prof.Dr. J.C.G. Ottow, Giessen, Germany. Full subscription rate for the two volumes, excluding surface mailing: 488.80 EUR. Personal subscription price for IUSS members for the two volumes, excluding postage and handling 305.55 EUR.

3. CATENA

an interdisciplinary journal of Soil Science-Hydrology- Geomorphology, focusing on Geoecology and Landscape Evolution. - Publisher: Elsevier Science, Amsterdam, the Netherlands - Joint Editors: J.A. Catt, Harpenden, J. Poesen, Leuven, Belgium, M. Singer, Davis, CA, USA, O. Slaymaker, Vancouver, Canada, M.F. Thomas, Stirling, UK, S.W. Trimble, Los Angeles, USA. Webpage: <http://www.elsevier.com/locate/catena> Personal subscription rate for 2003 (volumes 54-58 - 15 issues) for IUSS members 187 EURO (including postage/handling).

4. GEODERMA

an International Journal of Soil Science. - Publisher: Elsevier Science Publishers, Amsterdam, the Netherlands. - Editors-in-Chief: J.C. Bell, MN, USA, H. Insam, Innsbruck, Austria, A.B. McBratney, Sydney, Australia, and Prof. D.L. Sparks, Newark, USA - Webpage: <http://www.elsevier.com/locate/geoderma> Personal subscription rate for 2003 (volumes 117-122 - 24 issues) for IUSS members: 218 EURO (including postage/handling).

5. JOURNAL OF PLANT NUTRITION & SOIL SCIENCE/ZEITSCHRIFT FÜR PFLANZENERNÄHRUNG UND BODENKUNDE

international journal covering all aspects of plant nutrition and soil science with a special focus on soil-plant interactions Size: 6 issues per year. Publisher: Wiley-VCH, Weinheim, Germany. Webpage: <http://www.wiley-vch.de/publish/en/journals/alphabeticalIndex/2045/> Editors-in-chief: Prof. Dr. K.H. Feger, Dresden/Tharandt, Germany; Prof. Dr. F. Wiesler, Speyer, Germany. Personal subscription rate for IUSS members: 58.80 EUR, including postage.

6. PEDOBIOLOGIA

international journal, focusing on soil biology, especially on soil zoology and microbiology. - Publisher: Urban & Fischer, Jena. - Editors-in-chief: Prof. S. Scheu, Darmstadt, Prof. J. Lussenhop, Chicago, Dr. J. Schauerermann, Göttingen. Personal subscription rate for IUSS members (2001): 50.11 EUR, plus postage

7. SOIL AND TILLAGE RESEARCH

incorporating SOIL TECHNOLOGY, journal concerned with applied research and field applications on soil physics, soil mechanics, soil erosion and conservation, soil pollution, soil restoration, drainage, irrigation and land evaluation. - Size: 5 volumes (10 issues) per year. - Publisher: Elsevier Science, Amsterdam, The Netherlands - Editors-in-Chief: Prof. R Lal (USA); Prof. Dr. M. Kutilek (Czech Republic); Dr. A.J. Franzluebbers (USA). - Webpage: <http://www.elsevier.com/locate/still>. Personal subscription rate for 2003 (volumes 75-79 - 10 issues) for IUSS members 104 EURO (including postage/handling)

8. SOIL BIOLOGY & BIOCHEMISTRY

Size: 12 issues per year, in one volume. - Publisher: Elsevier Science, Amsterdam, the Netherlands - Editor-in-Chief: Prof.Dr. J.S. Waid, Buderim, Australia. Webpage: <http://www.elsevier.com/locate/soilbio>. Personal subscription rate for 2003 (volume 36 - 12 issues) for IUSS members: 166 EURO (including postage/handling).



9. JOURNAL OF SOILS AND SEDIMENTS - Protection, Risk Assessment and Remediation

an international journal devoted to contaminated but also to intact and disturbed soils and sediments. Editors-in-Chief: Deckere, Eric de, Belgium; Knacker, Thomas, Germany; Koerdel, Werner, Germany; Peijnenburg, Willie, The Netherlands; Co-editors: Blum, Winfried, Austria, Guerin, Turlough, Australia, Matschullat, Joerg, Germany. Appearance: 4 issues per year (6 issues in 2004) Publisher: Ecomed publishers, Landsberg, Germany; website: www.scientificjournals.com Subscription rate for IUSS members: USD 71.74 (printed version, plus postage); USD 78.92 (printed and online version, plus postage); USD 57.39 (online version); USD 93.26 (IP-Access including the printed version, plus postage).

10. AUSTRALIAN JOURNAL OF SOIL RESEARCH

an international journal for the publication of soil research relating to primary production, land and water management, environmental pollution, and site remediation. Publisher: CSIRO Publishing, Melbourne, Australia. Chair of Editorial Advisory Committee: B Clothier (New Zealand). Editors: J Fegent and S Banerjee. Web page: <http://www.publish.csiro.au/journals/ajsr/> Personal subscription rate for IUSS members for 2003 (Volume 41, 8 issues, c. 1500 pages): US\$105.00 (print and online--includes postage and handling), US\$80.00 (online only).

Upcoming Meetings

See also <http://www.iuss.org/pages/meetings.htm>

2004

World Congress of Agroforestry

Orlando, Florida, 27 June – 2 July.

Information: Ms. Mandy Padgett Stage, Congress Coordinator Office of Conferences & Institutes, University of Florida/IFAS, PO Box 110750, Gainesville, FL 32611-0750, Tel: 1-352-392-5930, FAX: 1 352-392-9734, E-mail: mrpadgett@ifas.ufl.edu

13th ISCO Conference

Brisbane, Australia, 4 -9 July

Information: The Conference secretariat: ICMS (Qld) Pty Ltd 82 Merivale Street South Bank Queensland 101 Australia Tel +61 7 3844 1138 Fax +61 7 3844 0909 isco2004@icms.com.au

2nd International Conference and Field Workshop on Soil Classification 2004

Petrozavodsk, Russia, August 3 -9, 2004.

Information: Mrs. Valeria Sidorova, Fax: +7 -8142-789810; E-mail: sidorova@krc.karelia.ru.

32nd International Geological Congress

Florence, Italia, 20-28 August, 2004

Information: Chiara Manetti Borgo Albizi, 28 - 50121 Firenze – ITALY, Phone/Fax: +39 055 2382146, E-mail: casaitalia@geo.unifi.it

EuroScience Open Forum

Stockholm, Sweden, 25-28 August, 2004

Information: gabriella.norlin@esof2004.org, tel: +46 8 546 44 154

EUROSOIL 2004

Freiburg, Germany, September 6-12, 2004.

Information: Dr. Thorsten Gaertig, Albert-Ludwigs Universitaet Freiburg, Institute for Soil Science and Forest Nutrition, Eurosoil 2004, 79085 Freiburg i. Br., Germany, Tel.: +49-(0)761/203-9144; Fax: +49(0)761/203-9144; E-mail: Thorsten.Gaertig@bodenkunde.uni-freiburg.de; <http://www.forst.uni-freiburg.de/eurosoil>

Fourth International conference on land degradation

Cartagena, Spain, 12-17 September

Information: Gregorio García Fernández, Secretary, ICLD4, Department of Agricultural Production. Technical University of Cartagena. Paseo Alfonso XIII, 48. 30203 Cartagena. Murcia. Spain. Tel.: +34-968-327072. Fax: +34-968-325435. Email: icld4@upct.es Website: <http://www.upct.es/icld4>

International Conference "Eco-Engineering – The Use of Vegetation to Improve Slope Stability

Thessaloniki, Greece, September 13-17, 2004.

Information: Sanna Dupuy, Laboratoire de Rhéologie du Bois de Bordeaux, Domaine de L'Hermitage, 69 route d'Arcachon, 33612 Cestas cedex, France; Tel.: +33-5-57-12-28-36; Fax: +33-5-56-68-07-13; E-mail: ecoconf@lrbb3.perroton.inra.fr; <http://www.ecoslopes.com>; <http://lrbb3.pierroton.inra.fr>.

Digital soil mapping

Montpellier, France, 15-17 September

Information: Philippe LAGACHERIE Phone :33 (0)4 99 61 23 47, E-mail philippe.lagacherie@ensam.inra.fr

International Meeting on Soil Micromorphology

Adana, Turkey, September 20-24, 2004.

Information: Prof.Dr. Selim Kapur, Dpt. of Soil Science and Archaeometry, University of Cukurova, Balcali, 01330 Adana, Turkey; Fax: +90-322-338-66-43; kapur@cu.edu.tr.

6th International Symposium on "Plant Soil Interactions at Low pH"

Sendai, Japan, 1-5 October, 2004

Information: Dr. Prof. Masahiko SAIGUSA, Field Science Center, Graduate School of Agricultural Science, Tohoku University, Kawatabi, Naruko, Tamatsukuri, Miyagi 989-6711, JAPAN, Fax: +81-229-84-7364, E-mail: mailto:6thPSIIPH@agri.tohoku.ac.jp

Third international nitrogen conference

China, 12-16 October

Information: Conference Secretariat, P.O.Box 821, Institute of Soil Science, Chinese Academy of Sciences Nanjing, 210008, People's Republic of China. E-mail: n2004@issas.ac.cn Tel: +86-25-86881015, +86-25-86881019, +86881041. Fax: +86-25-86881028, +86-25-86881000. Website: <http://www.issas.ac.cn/n2004>

Agro Environ 2004: Role of Multi-purpose Agriculture in Sustaining Global Environment

20-24 October 2004, Udine, Italy. Information: Prof. Giuseppe Zerbi, Dipartimento di Produzioni Vegetali, University of Udine, Via delle Scienze 208, 33100, Udine, Italy. Tel.: +390432558670; Fax +390432558603; e-mail: agroenv@uniud.it, Conference Website: www.dpvta.uniud.it/~agroenv

13th World Congress Clean Air & Environment

Salzburg, Austria, October 24-29, 2004.

Information: <http://www.iuappa.fsnet.co.uk> or iuappa@nsca.org.uk

SuperSoil

Sydney, Australia, 5-9 December

Information: Secretariat: supersoil@icms.com.au Homepage:

<http://www.icms.com.au/supersoil> c/- ICMS Pty Ltd, 3rd Floor, 379 Kent Street, Sydney, NSW 2000, Australia Telephone: +61 2 9290 3366, Facsimile: +61 2 9290 2444



2005

9th International Symposium on Soil and Plant Analysis

Cancun, Mexico, 10 January – 4 February

Information: Palm International Conferences, Turnstrasse 11, 67706 Krickenbach, Germany, tel + 49 6307 401103, palmmail@convservices.de

International conference on soil, water and environmental quality

New Delhi, India, 28 January – 1 February

Information: R.K. Rattan, IARI, New Delhi 110 012, tel 0091 11 25841991, isss@vsnl.com

Global Soil Change: Time-Scales and Rates of Pedogenic Processes

Montecillo, Mexico, 29 March – 6 April

Information: Dr. Elizabeth Solleiro-Rebolledo, Instituto de Geología, UNAM. Circuito de la Investigación Científica, Ciudad Universitaria, C.P. 04510, Mexico City. E-mail: solleiro@geologia.unam.mx, Fax +52-56-22-43-17. Tel. +5255-56-22-42-86 ext. 142 Fax +52-56-22-43-17,

8th International conference on the chemistry of trace elements

Adelaide, Australia, 3-7 April

Information: 8th ICOBTE Conference Secretariat, ATTN: Sandra Wildman

CSIRO Land & Water Private Bag No. 2, Glen Osmond 5064, South Australia, Fax: +61-8-8303-8572, Email: 8thICOBTE@csiro.au

19th International Congress on Irrigation and Drainage (ICID)

Beijing, China, September 10-18

Information: Chinese National Committee on Irrigation and Drainage, No. 20 West Chegongzhuang Road, Beijing 100044, China; Tel.: +86-10-6841-5522/6841-6506; E-mail: cncid@iwhr.com

IUFRO World Congress 2005

Brisbane, Australia, August 8-13

Information: Russell J. Haines, Queensland Forestry Research Institute (QFRI), Australia, Tel.: +61-7-389-69-714; Fax: +61-7-389-69-628; E-mail: hainesr@gfri1.se2.dpi.gld.gov.au.

Soils of urban, industrial, traffic, mining and military areas

Cairo, Egypt, 17-25 November

Information: Scientific contact: suitma@mail.eun.eg Administrative contact: Professor Salah A. Tahoun Tel: 202 260 1742, 202 401 0930, Mobile: 2010 526 4844 Fax: 2055 288 7567 Email: stahoun@mail.eun.eg Mailing address: P. O. Box 2893 Heliopolis El-Horria Cairo 11361, Egypt

2006

ivth International symposium on deteriorated volcanic soils

Morelia, Mexico, 1-7 July

Information: Dr. Miguel Bravo, Centro Nacional para Produccion Sostenible (CENAPROS), Morelia, Mexico, bravo_miguel@infoisel.net.mx, Tel.: ++52-443 325-3173 or --3178, FAX: ++52-435-352-3172

18th World Congress of Soil Science

Philadelphia, USA, July 9-15

Information: Lee E. Sommers, Colorado State University; Fort Collins, Colorado, E-mail: Lee.Sommers@ColoState.Edu <http://iuss.colostate.edu/18wcscs/>

New Publications¹

Amazonian Dark Earths. Origin, Properties, Management. J. Lehmann, D.C. Kern, B. Glaser and W.I. Woods, editors. Kluwer Academic Publishers, Dordrecht, Boston, 2003, xvii + 505 p. ISBN 1-4020-1839-8. Hardcover.

Amazonian Dark Earths of prehistoric origin are differentiated from surrounding soils by their darker colour, higher organic matter content, higher pH, greater P content, greater exchangeable Ca and Mg, and increased minor element concentrations. Although already known since the mid 1870s, recent studies show that their extension is much greater than previously thought. Much of the recently gained new data about the soils and archaeological and anthropological findings have not been integrated and the present book is the first one to do so. This book is not only a testament to the vanished civilizations of the Amazon Basin, but may provide the answer to how the large, sophisticated societies were able to sustain intensive agriculture in an environment with mostly infertile soils. Locally known as Terra Preta de Indio these anomalous soils are even today fertile and highly productive. Though clearly associated with pre-European settlements questions remain whether the Dark Earths were intentionally produced or merely a by-product of habitation activities. This book provides a comprehensive review of the current understanding of these fascinating soils: their origin, properties, and management through time. It is divided into four sections. In the first, a historical perspective of the research on anthropogenic soils in general is given and the place the Amazonian Dark Earths have in it. The properties of these soils are given in the second section: soil fertility, soil organic matter, carbon sequestration, and agro-biodiversity. The third section provides an overview of methods relevant to research on Amazonian Dark Earths. The fourth section deals with the current management of soils around homesteads and agricultural fields. This highly interesting, well-illustrated book with colour photographs and maps, is dedicated to the memory of Wim Sombroek. He is regarded as the father of contemporary Terra Preta research, and the inspirator for this book. He wrote the foreword, but did not see the final product of his endeavors in the Brazilian Amazon. His fieldwork started in the 1960s, which was described in his thesis on the soils of the Amazon, published in 1966, and ended nearly forty years later.

Price: EUR 135.00; USD 149.00; GBP 86.00.

Orders to: In the Americas: Kluwer Academic Publishers, P.O. Box 358, Accord Station, Hingham, MA 02018-0358, USA. Fax: +1-781-681-9045. Email: kluwer@wkap.com. Elsewhere: Kluwer Academic Publishers, P.O. Box 322, 3300 AH Dordrecht, The Netherlands. Fax: +31-78-6576474. Email: orderdept@wkap.nl. Homepage: www.wkap.nl.

LEISA Magazine 1984 – 2003. CD-ROM. ILEIA, Amersfoort.

This cd-rom contains all articles published by ILEIA (Centre for Information on Low External Input and Sustainable Agriculture) in the ILEIA Newsletter and the LEISA Magazine. (Magazine on Low External Input and Sustainable Agriculture) from 1984 to 2003. The nearly 1000 articles reflect twenty years of practical field experiences with low external input and sustainable agriculture as described by field practitioners and development workers from all over the world. The articles also reflect the development of interest and knowledge on ecological and participatory approaches in agricultural development that have taken place during these two decades. The articles are indexed by volume, author and topic and are available in HTML and PDF formats.

Requests to: ILEIA, P.O. Box 2067, 3800 CB Amersfoort, The Netherlands. Fax: +31-33-4632410. Email: ileia@ileia.nl. Homepage: www.ileia.org

¹ The New Publication section is prepared by Hans van Baren (hans.vanbaren@wur.nl); should you have a publication that you would like to have included in the next IUSS Bulletin, ask your publisher to send a review copy to: ISRIC-IUSS, PO Box 353, 6700 AJ Wageningen, The Netherlands.



Feed the Soil to Feed the People. The role of potash in sustainable agriculture. Volume 1: Invited papers. A.E. Johnston, editor. International Potash Institute, Basel, 2003, 369 p. Softcover.

This publication contains the proceedings of the IPI Golden Jubilee Congress, held in Basel, in October 2002. The presented invited papers are included in this first volume of the proceedings; the second volume is in preparation. German and French potash producers established IPI in 1952 as a non-governmental, non-profit organization. Currently, IPI is supported by the European and Near East potash industry and has its headquarters in Basel, Switzerland. Over the years, its aims have changed somewhat in response to the changing needs for food production in different parts of the world.

The book has the following chapters: Opening session (5 papers); Session 2 – economic and social issues to achieve sustainable and viable agriculture (4 papers) with a panel discussion on economic constraints in achieving sustainable crop production (3 papers); Session 3 – Plant nutrients for sustainable agriculture (4 papers) with a panel discussion on the imbalance in nutrient supply as a threat to sustainable crop production (3 papers); and Session 4 – Potash in agriculture (6 papers).

Price: USD 25.00.

Orders to: International Potash Institute, P.O. Box 1609, CH-4001 Basel, Switzerland. Fax: +41-61-261-29-25. Email: ipi@ipipotash.org. Homepage: www.ipipotash.org.

Rocks for Crops. Agrominerals of sub-Saharan Africa. P. van Straaten. ICRAF, Nairobi and University of Guelph, 2002, x + 338 p. ISBN 0-88955-512-5. Softcover.

Soils of large parts of Africa are overfarmed and overgrazed, resulting in declining soil productivity. Or, as Professor Pedro Sanchez puts it in his foreword: "Soil fertility depletion has been identified as the fundamental biophysical root cause of insufficient food production". The degradation of this fundamental life-supporting resource poses a major threat to the future of African farmers. However, farmers are increasingly reversing soil degradation and nutrient depletion through improved management techniques, making use of available organic and inorganic resources. This book introduces the applied, goal-oriented, natural resource science of agrogeology. According to the author, a geologist with many years of practical experience in Africa, agrogeology is the study of geological materials and processes that contribute to the maintenance of agro-ecosystems. Agrominerals are naturally occurring geological resources for the production of fertilizers and soil amendments. The present inventory of indigenous agromineral resources from 48 countries in sub-Saharan Africa shows the potential of developing the known agrominerals and finding additional mineral resources for use in agriculture, horticulture, forestry and agroforestry. The use of low-cost agrominerals is only a part of an overall integrated land management strategy that aims at assisting the small-scale farmers by making the best use of locally available resources to improve farming.

This text and inventory is an excellent starting point for soil and agricultural scientists and (agro)geologists to work together to help increase crop yields in a sustainable way.

Requests to: ICRAF, P.O. Box 30677, Nairobi, Kenya. Fax: +254-2-524001. Email: icraf@cgiar.org. Homepage: www.icraf.cgiar.org. Or to: Prof. P. van Straaten, Department of Land Resource Science, University of Guelph, Guelph, Ontario N1G 2W1, Canada. Fax: +1-519-824-5730. Email: pvanstra@uoguelph.ca. Homepage: www.uoguelph.ca/lrs.

Land Quality, Agricultural Productivity, and Food Security. Biophysical Processes and Economic Choices at Local, Regional, and Global Levels. K. Wiebe, editor. Edward Elgar, Cheltenham and Northampton, 2003, xi + 461 p. ISBN 1-84064-752-3. Hardcover.

Despite remarkable growth in food production in recent decades, nearly one billion people remain undernourished, and longstanding concerns about the world's capacity to feed its people and protect its resources remain very real. Addressing these challenges requires improved understanding of the links between land quality, land degradation, agricultural

productivity, and food security. These links have been the subject of interest for many years, but have remained shrouded by conceptual difficulties, disciplinary boundaries, and incomplete data. Recent developments in each of these areas offer the prospect of improved understanding, and are the subject of this book. This book presents the results of innovative, collaborative research conducted over the past four years by soil scientists, geographers, economists and other scientists. The individual chapters comprise a collection of integrated studies on the interaction between biophysical processes and economic choices. Part one of this book presents overviews from the perspectives of soil science and economics and describes new data and methods for the construction of land quality indicators. The second part examines the role of land quality in explaining differences in agricultural productivity between countries. Part three turns to land degradation over time and its impact on changes in agricultural productivity at various spatial scales, recognizing farmers' differing incentives to address land degradation. Part four explores the implications of land degradation-induced productivity losses and depletion of water resources for food security at regional and global scales. Finally, part five discusses continuing challenges for research and policy. With contributions from leading experts in soil science and economy, and especially the linkage of their knowledge in the integrated approaches, this is an intriguing book!

Price: GBP 95.00. Orders to: In North and South America: Edward Elgar Publishing, P.O. Box Williston, VT 05495-0575, USA. Fax: +1-802-864-7626. Email: eep.orders@aidcvt.com Elsewhere: Marston Book Services, P.O. Box 269, Abington, Oxon OX14 4YN, UK. Fax: +44-1235-465555. Email: direct.order@marston.co.uk Homepage: www.marston.co.uk Homepage Edward Elgar: www.e-elgar.com

Oil Palm. Management for Large and Sustainable Yields. Th. Fairhurst and R. Härdter, editors. International Potash Institute, Basel, 2003, iv + 382 p. ISBN 981-04-8485-2. Softcover.

The oil palm has now been established on about 5.5 M ha of land in SE Asia. Due to its large demand for nutrients and the size of the area planted, the crop is now one of the largest consumers of mineral fertilizer nutrients. SE Asia is able to supply all its requirements for N, but most of its requirements for P, and all its K requirements as well as part of its requirement for Mg fertilizers must be imported. As only a small proportion of total nutrient uptake is exported in palm and kernel oils –the economic products of oil palm– there is a considerable scope for recycling nutrients contained in crop residues or provide nutrients to other cropping systems in the form of compost. Much knowledge and know-how has accumulated in the last 30 years and it is the aim of this publication to provide scientists consultants, managers and growers with state-of-the-art knowledge on issues related to nutrient management in oil palm.

Price: USD 22.00, plus mailing charges. Orders to: East & Southeast Asia Programs, 126 Watten Estate Road, Singapore 287599. Fax: +65-6467-0416. Email: dtan@ppi-ppic.org Homepage: www.ppi-ppic.org/seasia

Handbook of Processes and Modeling in the Soil – Plant System. D.K. Bendi and R. Nieder, editors. Food Products Press and The Haworth Reference Press, New York, London, 2003, xxi + 762 p. ISBN 1-56022-915-2 (softcover); 1-56022-914-4 (hardcover).

This book presents a holistic view of the processes within the soil-plant-atmosphere continuum. In 22 chapters, written by one or more leading experts in their field, the book examines the following subjects: physical, chemical and biological processes; soil formation and weathering process; the impact of radioactive fallout on the soil-plant system; soil degradation and remediation; water and matter dynamics in the soil-plant system; growth and development of crops at various levels of production; and the potentials and limitations of using simulation models. The extensive, up-to-date bibliography includes also references to literature in languages other than English. It is a valuable reference text for students as well as for scientists working in many disciplines, and would be a valuable library purchase for



universities and institutions where soil and its wider applications for food security are important subjects of study.

Price: USD 89.95, softcover; USD 149.95, hardcover. Orders to: The Haworth Press, 10 Alice Street, Binghamton, NY 13904-1580, USA. Fax: 1-607-771-0012. Email: orders@haworthpress.com Homepage: www.haworthpress.com

Sustainable Soils. The Place of Organic Matter in Sustaining Soils and Their Productivity. B. Wolf and G.H. Snyder. Food Products Press and The Haworth Press, New York, London, 2003, xx + 352 p. ISBN 1-56022-917-9 (softcover); 1-56022-916-0. Hardcover.

There has been a growing concern that intensive agriculture is not sustainable because of its use of large amounts of synthetic fertilizers and pesticides and increased dependence on irrigation. Although improvements are being made, they have not completely eliminated criticism of the modern intensive mode, resulting in a depletion of necessary minerals, pollution of land and water and erosion.

This book shows the importance of organic matter in maintaining crop production. The addition of organic matter to soil is covered in great detail. This organic matter can be derived from crop residues, cover crops, sods, various wastes, such as manures, sludges and composts. The benefits of these different forms of organic matter are discussed, and how each should be handled for maximum returns. The text also stresses the necessity of combining organic matter with reduced tillage and added chemicals.

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Landscape Agroecology. P.A. Wojtkowski. Food Products Press, New York, London, 2004, xiv + 330 p. ISBN 1-56022-252-2 (hardcover); 1-56022-253-0 (softcover).

Agroecological landscapes are those that have productive purposes. They can involve agriculture and/or forestry, and be intensively managed or lightly touched, but still human-influenced. A fully agroecological landscape would be more in harmony with, and would often use, natural processes. A more agreeable end goal is a landscape formulated using ecological dynamics to back a productive role and as a by-product maintaining, through decorous use, respect for the land, the natural processes, the vegetation, and the living creatures therein. As such, landscape agroecology pursues multiple goals with multiple means. These goals include efficient food production, economic viability, protection of potable water and wildlife, sustainable recycling of nutrients, and social sustainability of rural community. Taking these considerations into account, makes decisions a complex process. The author examines a broad range of options for each goal and suggests criteria for preferring one over another.

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Decision Support Tools for Smallholder Agriculture in Sub-Saharan Agriculture. A Practical Guide. T.E. Struif Bontkes and M.C.S Wopereis, editors. IFDC, Muscle Shoals and CTA, Wageningen, 2003, ix + 194 p. ISBN 0-88090-142-X. Softcover.

This book is meant to help agricultural researchers and extension staff in the selection and application of tools that facilitate decision-making to improve soil fertility management and agricultural productivity. These tools provide valuable additions to traditional approaches in research and development because they better capture the diversity and dynamics of farming systems and readily be applied to provide site-specific diagnoses, analyses, and best-bet management options. A large variety of Decision Support Tools (DSTs) are presented, ranging

from relatively simple nutrient-flow mapping to more complex crop growth-simulation modeling. Case studies mostly set in sub-Saharan Africa provide practical examples of the use of these tools. An introductory chapter helps the reader to find the appropriate tool for a particular topic. In the appendices, more detailed information is provided on each tool, such as a brief description and contact addresses of the developers of the tool. In a message from the Ecoregional Fund, the chairman of its International Scientific Advisory Committee, Prof. Johan Bouma, writes: "I consider this book to be an accessible and valuable guide that promotes the use of DSTs. I sincerely hope that it will increase the use of these tools and contribute to an accelerated and sustainable development of the agricultural sector in sub-Saharan Africa and the improvement of the well-being of farmer families in the region". The book is a result of a project carried out in West Africa, managed by IFDC-An International Center for Soil Fertility and Agricultural Development, funded by the Ecoregional Fund to Support Methodological Initiatives. The publication is co-funded by the ACP-EU Technical Centre for Agricultural and Rural Cooperation (CTA).

Price: Download: USD 10.00, Paperback USD 25.00. Orders to: IFDC, P.O. Box 2040, Muscle Shoals, AL 35662, USA. Fax: +1-256-381-7408. Email: general@ifdc.org Homepage: www.ifdc.org

Encyclopedia of Geomorphology. A. Goudie, editor. Routledge, 2003, 1400 p. ISBN 0-415-27298-X. Hardcover.

Geomorphology, the discipline that analyses the history and nature of the earth's surface, deals with the landforms produced by erosion, weathering, deposition, transport and tectonic processes. In recent decades, there have been major developments in the discipline and these are reflected in this major encyclopedia, the first such reference work to be published for 35 years. In two volumes, the encyclopedia contains 640 alphabetically organized entries to provide a comprehensive guide both to specific landforms and to the major geomorphological processes that create them. The entries are fully cross-referenced and indexed. The text is well-illustrated with many line drawings and 16 pages with colour plates.

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Encyclopedia of Soils in the Environment. D. Hillel, editor-in-chief. Elsevier, 2004, c. 2200 p. ISBN 0-12-348530-4. Four volumes, case bound. (will be published in August 2004)

This encyclopedia is a comprehensive and integrated consideration of a topic of vital importance to human societies in the past, present and future. It encompasses the present knowledge of the world's variegated soils, their origins, properties, classification, and roles in the biosphere. Over 250 entries cover a broad range of issues facing today's soil scientists, ecologists, and environmental scientists. The volumes feature articles that survey specific aspects of soil biology, ecology, chemistry and physics. Rounding out the encyclopedia's coverage, contributions cover cross-disciplinary subjects, such as the history of soil utilization for agricultural and engineering purposes and soils in relation to the remediation of soil pollution and the mitigation of global climate change. All entries have photographs, figures, tables and graphs. The set is also available online. See for details about availability and subscription information: www.info.sciencedirect.com

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Introductory price, valid for 3 months after publication: USD 875.00; GBP 569.00. List price: USD 1095.00; GBP 710.00. 30% reduction for IUSS members. Orders to: In the Americas: Elsevier Customer Service, 11830 Westline Industrial Drive, St. Louis, Missouri 63146, USA. Fax: +1-800-535-9935 or +1-314-523-5940. Email: usbkinfo@elsevier.com Elsewhere: Elsevier Customer Service, Linacre House, Jordan Hill, Oxford, OX2 8DP, UK. Fax: +44-1865-474111. Email: eurobkinfo@elsevier.com Homepage: www.books.elsevier.com



Input Subsidies and Agricultural Development. Issues and Options for Developing and Transitional Economies. IFDC, Muscle Shoals, 2003, vii + 27 p. ISBN 0-88090-141-1. Paper Series IFDC-P-29. Softcover.

World population is projected to reach over 8 billion in 2025 and over 9 billion in 2050. Over 90% of the increase will occur in the developing and transitional economies where food insecurity and environmental degradation are serious challenges. In confronting these challenges, the use of mineral fertilizer and associated inputs will continue to play a critical role, as it has done in the past. In the context of market reforms, which have taken place during the last decade, and the Uruguay Round Agreement on Agriculture, this paper provides an assessment of arguments for and against input subsidies, especially fertilizer subsidies, and discusses various alternatives to subsidies and IFDC experiences in dealing with fertilizer subsidies.

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Interactions of the Major Biogeochemical Cycles. Global Change and Human Impacts. SCOPE 61. J.M. Melillo, Chr.B. Field and B. Moldan, editors. Island Press, Washington, Covelo, xxi + 357 p. ISBN 1-55963-066-3 (softcover); 1-55963-065-5 (hardcover).

This is the first major update by the Scientific Committee On Problems of the Environment (SCOPE) in twenty years on the interactions that define earth's biogeochemistry. The book provides breakthrough information about how earth's major elements, such as carbon, nitrogen, phosphorus, sulfur, oxygen and hydrogen, work together to maintain the planet's ecosystems. New technologies, such as infrared reflectance and nanotechnologies are giving scientists insights into the dynamics of a greater number of nutrients, allowing the development of multiple resource interaction models and more accurate understanding.

The book's landmark findings are critical to addressing environmental degradation. Human activities, including agriculture, industry, and urbanization alter elements interactions and contribute to major environmental problems ranging from climate change and depletion of the ozone layer to acidification of soils to destruction of coral reefs. The book represents significant progress in the study of element interactions and in our ability to reduce humanity's negative impacts on natural processes.

Price: USD 35.00, softcover; USD 75.00, hardcover.

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Impressions of Interactions. Land as a dynamic result of co-production between man and nature. M. Sonneveld. Ph.D. thesis Wageningen University, 2004, 132 p. Softcover.

During recent decades, considerable efforts have been made in the discipline of soil science to develop soil classification systems, soil maps and simulation models. Moreover, land evaluation procedures were developed as means to contribute to agriculture. In its early stages, just around and after the Second World War, it was known that farmers can and do adapt soils to their needs. Additionally, soil classification made extensive use of local (soil) knowledge and land evaluation was basically systematized farmers experience. However, it has proved to be difficult to include local actors systematically within a general research approach for soil science. It appears that, in time, the broad relationships between farmers and their land have been lost. Now that agriculture is confronted with environmental problems in many areas of the world, pleas for other research approaches have been made. In this thesis, it is proposed to use co-production as a new framework for research. In general, co-production has been regarded as the on-going interaction between and mutual

transformations of farmers and living nature. The main objective of the thesis is to describe soil systems in two case study areas along the lines of co-production. One case study is located in the north of The Netherlands, the other one in KwaZulu-Natal, South Africa.

Requests to: Dr. M. Sonneveld, Boeslaan 43-1, 6703 EP Wageningen, The Netherlands. Email: marthijn.sonneveld@wur.nl

The Ecology of Soil Decomposition. S.M. Adl. CABI Publishing, Wallingford, 2003, xiii + 335 p. ISBN 0-85199-661-2. Hardcover.

Decomposition is an ecological process that recycles dead tissues, mainly from primary production, into nutrients in the soil. This book is about the trophic interactions among species that live in the soil. These interactions are responsible for the decomposition of previously living cells and tissues, for pedogenesis (from a biological perspective, it is the accumulation of organic matter into the mineral soil) and for biomineralization (making the decomposing matter available as nutrients in the soil solution). The biological interactions between species that carry out the decomposition of organic matter are the primary focus of this book.

The key topics addressed in this book are functional groups, spatial stratification and successions over time, involving bacteria, protists, fungi and micro-invertebrates. Emphasis is placed on the role of species diversity in functional groups. The book is of significant interest to those working in areas of ecology, soil science and microbiology.

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Managing Soil Quality. Challenges in Modern Agriculture. P. Schjonning, S. Elmholt and B.T. Christensen, editors. CABI Publishing, Wallingford, 2004, viii + 344 p. ISBN 0-85199-671-X. Hardcover.

Soil quality is a concept that allows soil functions to be related to specific purposes. Other books on soil quality have emphasized descriptive aspects, by focusing on, for example, soil quality indicators, indexing and minimum data sets. This book takes a management-oriented approach by identifying key issues in soil quality and management options to enhance the sustainability of modern agriculture. Topics covered include major plant nutrients (N, P, K), soil acidity, soil organic matter, soil biodiversity, soil compaction, erosion, pesticide and urban waste. Also included are treatments of the soil quality concept, its history, and its applicability in research and in developing and developed societies. The book is written for post-graduate students and researchers in agronomy and in soil, crop and environmental sciences, and to stakeholders involved in issues related to land use and agricultural development. The book has 18 chapters, with many tables and references. The last chapter is a synthesis about Soil Quality Management, in which it is shown that, based on the contributions in the book, it is generally not possible to identify simple thresholds for sustainable farming at either the soil-quality indicator level or the management level. More adequate means of communicating management prescriptions to farmers and other decision makers in society are needed. Decisions should be based on knowledge of management effects on individual soil types as well as on stochastic and mechanistic models simulating soil processes and functions. This calls for well-educated farmers and consultants. The editors conclude this interesting synthesis with the sentences: "The profession of (soil) science will only survive if scientists realize that they have to participate in teams involved with implementation of research results. The presentation of scientific results in a transparent framework of sustainability considerations will enable a more clear distinction between science *per se* and the values and goals set by society".

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publishing.org/bookshop In USA and Latin America: Oxford University Press, 2001 Evans Road, Cary, NC 27513, USA. Fax: +1-919-677-1303. Email: orders@oup-usa.org.

Soil Fertility Decline in the Tropics, with Case Studies on Plantations. A.E. Hartemink. ISRIC and CABI Publishing, 2003, xiii + 360 p. ISBN 0-85199-670-1. Hardcover

According to Sir E.J. Russell (1926) "No scientific investigation is complete until its results can be expressed quantitatively. Only when this is done can the investigators feel reasonably certain that they have gained the right perspective and that they know how nearly their hypothesis approximate the truth". The author, who is Deputy Secretary General of the IUSS since 2002, keeps to this writing, and many relevant data are presented about the subject of his research, mostly carried out in Tanzania and Papua New Guinea. Maintaining the soil chemical fertility is a prerequisite to sustain crop productivity. Permanent cropping without adequate nutrient replenishment and soil conservation measures may result in nutrient mining or soil fertility decline. It is generally assumed that this decline is widespread under annual cropping systems of subsistence farmers in the tropics. This book has its main focus on agricultural plantations, which have been largely neglected in the discussion on soil fertility decline and sustainable land management. Plantation agriculture is an important form of land use in the tropics and is rapidly expanding. It has been long assumed that a perennial plant cover protects the soil better than an annual crop and it has also been stated that land degradation under perennial crops is usually less than in arable farming under similar conditions. This book reviews these concepts, focusing on soil chemical changes under different land-use systems in the tropics. These include perennial crops, annual crops and forest plantations. Two case studies are presented in detail. The author clearly demonstrates that soil fertility decline is a problem on plantations. Prof. D.J. Greenland states in his foreword that "This book should help to refocus attention on the dangers of continuing soil degradation, and on the need to ensure that positive nutrient balances are maintained for plantation as well as for food crops".

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Soil. Fragile Interface. P. Stengel and S. Gelin, editors. Science Publishers, Enfield and Plymouth, 2003, xii + 252 p. ISBN 1-57808-219-6. Hardcover. Translation from French of *Sol, interface fragile*, INRA, Paris, 1998. ISBN 2-7380-0786-4.

This book is written from the perspective of pedologists and agronomists and is a study of the Earth's crust, which is subjected to climatic agents and inhabited by living creatures. These phenomena slowly transform soil through the interaction of physical, climatic and biological processes. As an interface, soil is an ecological system whose complexity is manifest by the considerable diversity of organisms existing in it. It is evident that soil is vital for the functioning of ecosystems. There is a greater awareness of the threats against the long-term productivity of the soil, which should be regarded as a practically non-renewable resource. These threats result from many processes, the most worrying being chemical pollution, acidification, erosion and physical degradation, and reduction of organic matter content. Salinisation and acidification have also affected vast areas. Mankind, which has long associated its prosperity with the fertility of the Earth, has neglected its care for the soil for several decades, while water and air have received far more attention. This book emphasizes the importance of soil conservation and advocates a broad-based soil rehabilitation programme.

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Ecology. From Ecosystem to Biosphere. Chr. Lévêque. Science Publishers, Enfield and Plymouth, 2003, xvii + 472 p. ISBN 1-57808-294-3. Hardcover. Translation from French of *Écologie de l'écosystème à la biosphère*, Dunod, Paris, 2001. ISBN 2-10-005232-2.

Ecology is above all a science of observation that involves a large number of disciplines, including zoology, botany, geology, climatology, hydrology, etc. Two large domains are usually recognized in the field of scientific ecology: population biology and ecosystem ecology. The latter needs long term multidisciplinary research programmes to understand the functioning of ecosystems and the biosphere. To meet such a holistic approach ecologists have to improve long term ecological studies, to develop new tools such as databases and integrative modeling, and to promote new paradigms that consider global scale. This book provides a synthesis of the present knowledge of ecosystem ecology, from local to global. It is organized into four parts. The first presents research methods, which are based on observation, experiment and modeling. Then follows an introduction to the concept of ecosystem. The various themes of current research are then addressed: ecological hierarchies, homogeneity and heterogeneity, the role of biological diversity, spatial and temporal scales, etc. Finally, there is an overview of the global functioning of the biosphere from a historical perspective. The theoretical concepts are abundantly illustrated by examples, presented in boxes. This book is designed for graduate students as well as researchers and lecturers who wish to understand the heritage and paradigms of ecosystem ecology and to use modern concepts.

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The Conservation and Improvement of Sloping Land. A manual of soil and water conservation and soil improvement on sloping land. Volume 3: Practical application – Soil and Water Conservation. P.J. Storey. Science Publishers, Enfield and Plymouth, 2003, xix + 349 p. ISBN 1-57808-234-X. Softcover.

Earlier books in this series of three are concerned with Practical understanding (volume 1) and Practical application – soil improvement (volume 2). The author has more than 30 years experience in the problems of soil and water loss, both of quantity and quality, who learned to stop this loss and how to improve even the worst land. Dr. David Sanders, the former President of the World Association of Soil and Water Conservation, writes in his foreword that, although for the last 40 years the world has been able to produce food surpluses and farmers in Europe and the USA have even been paid subsidies not to farm some of their land, it is important that we conserve our soil and water resources. As reasons for that, he mentions: First, the amount of land available for food production is finite and this land is steadily being lost through erosion and other forms of degradation. It is also diverted to other purposes, such as housing and infrastructures. Secondly, the present high rates of agricultural production have been achieved largely through the use of irrigation, heavy use of fertilizers, insecticides and herbicides, combined with the use of new, high yielding crop varieties. Unfortunately, much of this is not sustainable. Thirdly, even though there may be sufficient food worldwide, many poor people do not have enough money to purchase what they need. The only way that many millions of people, mainly in the developing world, can exist by farming whatever land is available to them. For these people it is vital that the available land is conserved in a productive state. The author has recognized the problem and has successfully put together practical, comprehensive manuals, which should provide a guide to anyone working in the field of soil and water conservation. The book has not only practical advice on how to carry out various conservation practices, but gives also basic information about soil, including their formation, chemistry, physical attributes and management. It also has information about related subjects, such as vegetation, livestock, surveying and approaches to extension. All this is done in easy to read English.



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Soil Pollution. Origin, Monitoring & Remediation. I.A. Mirsal. Springer-Verlag, Berlin, Heidelberg, 2004, xi + 252 p. ISBN 3-540-40143-1. Hardcover.

This graduate-level text and reference book treats the subjects related to the interdisciplinary fields of soil pollution and remediation. Chapter 1 consists of a thorough, comprehensive introduction to the relevant fundamentals of the mineralogy, chemistry, and properties of soil, while in chapter 2 readers are well prepared to understand the biochemical aspects of soil remediation. Monitoring and modeling of soil pollution are covered in chapters 3 and 4 in a manner enabling readers of various disciplines to acquire the scientific literacy that makes further reading and research practical. The book is designed as a contribution to understanding the origins, mechanisms and consequences of the environmental setbacks brought about by soil pollution. The book presents a comprehensive, integrated overview of previously separately treated materials, written for students and teachers as well as for professionals from the earth, environmental and agricultural sciences.

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Dictionary of Agricultural and Environmental Science. F.R. Troeh and R.L. Donahue. Iowa State Press, Ames, 2003, ix + 553 p. ISBN 0-8138-0283-0. Softcover.

This dictionary is intended to facilitate communication in agricultural and environmental sciences. Both of these broad sciences deal with the environment but in very different ways. People working in these areas need to be able to communicate with each other clearly and effectively. Prof. Donahue, who started the project to compile this dictionary, but who passed away before its conclusion, wished to bridge the gaps that often exist between scientists and practitioners in both areas. He spent approximately ten years compiling terms and definitions from many sources. Prof. Troeh, who was asked to complete the project, expanded the material by adding many terms and derivations for most of the words. The dictionary comprises nearly 10,000 terms in the following fields: agriculture, soil science, animal science, agricultural engineering, environmental protection, and related fields, but also numerous biological chemical and health terms. Each term is listed in bold type followed by a designation of usage and, where possible, its derivation from a source language. Definitions are supplied as needed to cover the usage of the word. The terms are illustrated with relatively few photographs and drawings.

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Erosion Prediction in Ungauged Basins (PUBs): Integrating Methods and Techniques.

IAHS Publication 279. D.H. de Boer, W. Froehlich, T. Mizuyama and A. Pietroniro, editors. International Association of Hydrological Sciences, Wallingford, 2003, xii + 250 p. ISBN 1-901502-22-8. Softcover.

Human impact on runoff and erosion is increasing worldwide because of growing pressure to develop land and water resources. However, in many parts of the world runoff and erosion rates are not monitored, precluding an accurate assessment of human impact and sustainable practices. The objective of a symposium was to review recent developments in a wide range of methods and techniques that can be used to characterize runoff and erosion in ungauged basins, and to evaluate how to integrate the information obtained using remote sensing, GIS,

modeling and other methods into a coherent view of the ungauged basin. The book is arranged in four sections: (1) field-based studies-current conditions (3 papers); (2) field based studies-historical perspectives (5 papers); (3) empirical and physically-based models (8 papers); and (4) integrating models, GIS and remote sensing (12 papers). It includes case studies from around the world.

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Erosion and Sediment Transport Measurement in Rivers: Technological and Methodological Advances. IAHS Publication 283. J. Bogen, T. Fergus and D.E. Walling, editors. International Association of Hydrological Sciences, Wallingford, 2003, viii + 238 p. ISBN 1-901502-42-2. Softcover.

The growing awareness of the importance of fluvial sediment in a wide range of environmental problems has accentuated the need for better and more consistent information, yet, data collection in the field still lags behind other areas of hydrology. New problems call for new approaches, new strategies and new methods, in order to develop an improved understanding of cause and effect relationships for different activities within a river basin. Developments in what can be measured in the field, or on samples returned to the laboratory, and in how the data can be used, are moving forward apace. This volume comprises a selection of papers presented at a workshop in 2002, grouped into three topics: (1) suspended sediment (6 papers); (2) erosion and sediment sources in catchments (5 papers); and (3) bed load monitoring and transport processes (13 papers). Together the papers provide both a synthesis of existing knowledge and a review of the progress of current research and development.

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BALCROP – Balanced Fertilization for Better Crops in Vietnam. N.Van Bo, E. Mutert and C. D Sat. PPI/PPIC, Singapore, 2003, vi + 145 p. ISBN 981-04-2743-3. Softcover.

BALCROP is a project to safeguard the environmentally friendly and economic use of fertilizers for sufficient agricultural production with the objective of optimizing crop performance in Vietnam. The project supports cooperative research, extension and training involving Vietnamese farmers and extension workers and representatives of a number of national institutions. Since 1994 the projects has developed activities in more than 20 provinces, involving the country's major crops and soils. The findings and results are given in this publication. The continuing adaptation of the principles of balanced fertilization by farmers, extension workers and the Government of Vietnam has countrywide resulted in a remarkable change of crop productivity and the NPK fertilizer consumption pattern in recent years.

Orders to: Mrs. Doris Tan, PPI/PPIC, Southeast Asia Program, 126 Watten Estate Road, Singapore 287599. Fax: +65-6-4670416. Email: dtan@ppi-ppic.org Homepage: www.ppi-ppic.org/seasia

Transboundary Protected Areas. The Viability of Regional Conservation Strategies. U.M. Goodale, M.J. Stern, C. Margoluis, A.G. Lanfer and M. Fladeland, editors. The Haworth Press, Binghamton, 2003, xx + 271 p. ISBN 1-56022-095-3. Softcover. ISBN 1-56022-094-5. Hardcover. (Also published as Journal of Sustainable Forestry, volume 17, numbers 1 and 2, 2003.)

A Transboundary Protected Area can be defined as: "An area of land and/or sea that straddles one or more boundaries between states, sub-national units such as provinces and regions, autonomous areas and/or areas beyond the limits of national sovereignty or jurisdiction, whose constituent parts are especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through



legal and other effective means" (Sandwich et al., 2001). Transboundary management is a recent conceptual innovation in efforts to improve natural resources management and innovation. It also serves an even more important goal – that of learning how to bring about sustainability in natural and human systems – a goal that is sought by a growing number of people and governments throughout the world who strive for security and prosperity. Such cross-boundary efforts are likely to proliferate in the foreseeable future in terrestrial, aquatic and marine situations. Setting a straight course to transboundary management will require us to learn from our past management efforts, to discover what worked, why, and under what circumstances. In this way we can identify best practices, disseminate them widely and improve on them. The 2001 publication *Transboundary Protected areas for Peace and Cooperation* by the World Commission on Protected Areas of the World Conservation Union (IUCN) accelerated our learning on transboundary initiatives by providing guidelines upon which to learn and improve. The present publication, an outcome of a conference of the International Society of Tropical Foresters, aims to continue to support practice-based learning toward the achievement of these goals. The papers approach transboundary protected areas primarily from a management perspective, and focus principally upon social and management issues, with less emphasis upon biological concerns. After providing an overview of transboundary conservation around the globe, specific case studies in Africa, Asia, Europe and the Americas are included. The volume concludes with a synthesis of the conference proceedings.

Price: USD 49.95, softcover; USD 69.95, hardcover. Orders to: The Haworth Press, 10 Alice Street, Binghamton, NY 13904-1580, USA. Fax: +1-607-771-0012. E-mail: orders@haworthpress.com Homepage: www.haworthpress.com.

Atlas Gleb Lesnych Polski (Atlas of Forest Soils in Poland). S. Brozek and M. Zwydak. Centrum Informacyjne Lasow Panstwowych, Warsaw, 2003, 467p. ISBN 83-88478-17-6. Hardcover.

This publication in the Polish language has information about 173 forest soils in Poland. Each soil has very well reproduced photographs of profile and landscape, extensive profile and site descriptions and full analytical data. The soils are not only classified in the Polish classification systems, but also according to the World Reference Base for Soil Resources of 1998. Plant communities are also in Latin. Poland is well known for its detailed knowledge of the soils from the country, and it is hoped that funds can be found to translate the book into English, and have it published for the benefit of many soil scientists outside Poland! I am still using the soils atlas of Poland published in 1986, but glad that I have the present one at hand! A nicely produced atlas, for a very reasonable price!

Price: PLN 80 or about EUR 20.00, plus postal charges (about 2500 g). Orders to: Centrum Informacyjne Lasow Panstwowych (State Forest Information Centre), ul. Bitwy Warszawskiej 1920 r. nr 3, 02-362 Warsaw, Poland. Fax: +48-22-823-96-79.

Email: wydawnictwa@lasypanstwowe.gov.pl

Bioavailability, Toxicity and Risk Relationships in Ecosystems. R. Naidu, V.V.S.R. Gupta, S. Rogers, R.S. Kookana, N.S. Bolan and D.C. Adriano, editors. Science Publishers, Enfield, 2003, xvi + 344 p. ISBN 1-57808-192-0. Hardcover.

This book is a compendium of information that elucidates the role of bioavailability in determining toxicity, and in turn its significance in risk assessment. Bioavailability in this context is loosely defined as the transport and uptake of an element by an organism. The book is based on a symposium organized during the 4th International Symposium on the Biogeochemistry of Trace Elements held in 1997. Since this meeting Drs. Naidu and Adriano have promoted the concept of the dynamic nature of bioavailability in terrestrial ecosystems and numerous conferences, which have led to the compilation of the present book. The book describes bioavailability within the context of environmental health and ecotoxicological risk

assessment and the potential impact that metals may have on the soil ecosystem. Specific discussions focus on fundamental principles and scope of bioavailability, soil, plant and microbial processes that influence metal dynamics, indicators of bioavailability, and selected case studies demonstrating the impact of metals on terrestrial ecosystems and how bioavailability relates to regulatory and site assessment requirements. The book is not only intended as a text for post graduate students, remediators and risk assessment experts to understand the application of various conventional and innovative tools for assessing bioavailability and risks posed by contaminants at highly contaminated sites, but also for regulatory authorities and environmental planners who wish to learn about metal bioavailability, risk relations and site remediation.

Price: USD 96.00. Orders to: Science Publishers, P.O. Box 699, Enfield, NH 03748, USA. Fax: +1-603-632-5611. Email: sales@scipub.net Homepage: www.scipub.net

Plant Litter. Decomposition, Humus Formation, Carbon Sequestration. B. Berg and C. McClaugherty. Springer-Verlag, Berlin, Heidelberg, 2003, xii + 286 p. ISBN 3-540-44329-0. Hardcover.

The authors had intended to summarize and synthesize new information that had developed in the last 20–30 years in the field of plant litter decomposition. It turned out, however, that the main part of more recent work was directed towards boreal and temperate forest systems and therefore, with a focus on these ecosystems they concluded a synthesis that has a similarity to a case study. The book focuses on the transfer from newly shed litter to recalcitrant humus, describing and explaining the systems of chemical changes taking place in the process both on a mechanistic basis and on a more general and regional level, considering different climates and species. The book gives a synthesis of the different sub-processes on the basis that decomposition is microbially mediated and develops a system in the decomposition processes leading to chemical changes in litter. Further, it introduces a conceptual model for litter transformations from litter fall until the decomposing litter accumulates as humus. The effects of substrate quality, climate and their interactions on decomposition are presented as well as examples of litter types that break the basic pattern. A system is suggested for humus accumulation rates among forest systems, a system that may be a starting point for estimates of carbon sequestration in forest systems.

Price: EUR 129.95; SFR 210.00; GBP 100.00; USD 149.00. Orders to: Springer-Verlag, Tiergartenstrasse 17, D-69121 Heidelberg, Germany. Fax: +49-6221-345229. Email: orders@springer.de Homepage: www.springer.de In North America: Springer-Verlag, 175 Fifth Avenue, New York, NY 10010, USA. Fax: +1-201-348-4505. Email: service@springer.ny.com Homepage: www.springer-ny.com

Handbook for the Assessment of Soil Erosion and Sedimentation Using Environmental Radionuclides. F. Zapata, editor. Kluwer Academic Publishers, Dordrecht, Boston, 2002, xii + 219 p. ISBN 1-4020-1041-9. Hardcover.

This handbook deals with soil erosion and sedimentation. Soil erosion and associated sediment deposition are natural landscape-forming processes that can be greatly accelerated by human intervention through deforestation, overgrazing, and non-sustainable farming practices. Soil erosion and sedimentation may not only cause on-site degradation of the natural resource base, but also off-site problems, e.g. downstream sediment deposition in fields, floodplains and water bodies, water pollution, eutrophication, and reservoir siltation. There is an urgent need for accurate information to quantify the problem and to underpin the selection of effective soil-conservation technologies and sedimentation-remediation strategies, including assessment of environmental and economic impacts. Existing classical techniques to document soil erosion are capable of meeting some of the needs, but they all possess important limitations. The quest for alternative techniques for assessing soil erosion, to complement existing methods, directed attention to the use of environmental radionuclides, in particular fallout ¹³⁷Cs, as tracers to quantify rates and establish patterns of soil redistribution within the landscape. This handbook contains the developments made in the refinement and



standardization of the technique, developed by 25 research groups worldwide, and featuring the contributions of a team of leading experts in the field. It provides a comprehensive coverage of the methodologies for using radionuclides, primarily ^{137}Cs and ^{210}Pb to establish rates and spatial patterns of soil redistribution and determine the geochronology of sediment deposits. The book also aims to give advice on matters relating to the selection of suitable coring sites, the sampling strategy, and on methods for retrieving cores and subsampling. It is stated that these first steps should be well planned and executed with careful attention to detail. The book is illustrated with many figures and photographs.

Price: EUR 79.00; USD 76.00; GBP 51.00. Orders to: In North America, Mexico and Latin America: Kluwer Academic Publishers, P.O. Box 358, Accord Station, Hingham, MA 02013-0358, USA. Fax: +1-781-681-9045. E-mail: kluwer@wkap.com Homepage: www.wkap.com. Elsewhere: Kluwer Academic Publishers, Customer Service, P.O. Box 322, 3300 AH Dordrecht, The Netherlands. Fax: +31-78-6576474. E-mail: orderdept@wkap.nl. Homepage: www.wkap.nl.

Tropical Soils. Properties and Management for Sustainable Agriculture. A.S.R. Juo and K. Franzluebbers. Oxford University Press, Oxford, New York, 2003, ix + 281 p. ISBN 0-19-511598-8. Hardcover.

There are many images of agriculture in the tropics: the luxuriant cash and tree crop plantations on the rich volcanic soils in Latin America, the endless rice paddies on the fertile alluvial soils in Asia, the vast savanna grasslands in Africa, where the nomadic herders roam, and the millions of slash-and-burn farmers and their families who derive their livelihood from the acidic infertile soils throughout the humid tropics. During past decades, attempts to mimic industrial food production systems of temperate regions have met with limited success. There is abundant evidence depicting that large-scale land clearance for crop and livestock production in the humid tropics could transform the once lush green tropical forests into human-made deserts. On the poorly buffered kaolinitic soils, continuous cropping and chemical fertilization could lead to severe compaction and acidification after only a few years to a level detrimental to plant growth. Agronomists and ecologists now recognize the fragility of tropical ecosystems and more research is being conducted to better understand the structure and function of natural ecosystems in terms of species diversity, energy flow, and nutrient cycling, and their application to the development of sustainable and productive agricultural ecosystems in the tropics. The book consists of two parts. Part I deals with basic considerations of soil science, and specifically related to those in the tropics. Part II discusses the properties and management of major arable soils in relation to the development of ecologically and economically sustainable farming practices in the tropics. This book is intended for a multidisciplinary readership including agricultural and environmental planners, extension workers, farmers, as well as teachers and students of tropical soil science.

Price: GBP 45.00; USD 59.50. Orders to: Oxford University Press, Saxon Way West, Corby, Northants NN18 9ES, UK. Email: bookorders.uk@oup.com Homepage: www.oup.co.uk In USA: Oxford University Press, 2001 Evans Road, Cary, NC 27513, USA. Email: orders@oup-usa.org Homepage: www.oup.com

Analyse chimique des sols. Méthodes choisies. C. Mathieu et F. Peltien. Avec la collaboration de E. Jeanroy, F. Marcovecchio, F. Servain et H. Soucheyre. Editions TEC & DOC. Lavoisier, Londres, Paris, 2003, xix + 388 p. ISBN 2-7430-0620-X.

Ce manuel pratique présente un inventaire détaillé et raisonné des analyses chimiques des sols réalisées en laboratoire. La caractérisation des sols et la compréhension de leur dynamique nécessitent en effet, outre des interventions in situ, des mesures et des analyses en laboratoire, notamment par les méthodes dites "classiques". Répondant aux besoins d'informations actualisées les concernant, ce volume décrit ces méthodes choisies en 14 rubriques qui abordent successivement, après avoir rappelé l'importance des prélèvements sur

le terrain et de la préparation des échantillons de terre: les mesures du pH; les dosages du carbone organique, de l'azote, du calcaire, du gypse, de la salinité, des sols solubles, de la capacité d'échange cationique, des cations échangeable, de l'acidité d'échange, du phosphore, du fer, de l'aluminium et du manganèse, des oligoéléments et des éléments traces. Chaque rubrique est introduite par un rappel des concepts et des définitions du domain analysé. Ce rappel permet de fixer les limites des methods présentées, d'évaluer les avantages et les inconvénients de leur usage. Les auteurs s'appuient également sur leurs expériences de terrain diversifiées pour proposer des choix appropriés. Après avoir exposé les methods, le materiel nécessaire et les modes opératoires, ils présentent des résultats. Le manuel s'applique à l'analyse des sols en régions climatiques tempérées, méditerranéennes, arides ou tropicales.

Prix: EUR 65.00.

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Using Eucalyptus for Soil and Water Conservation on the Highland Vertisols of Ethiopia. Tropical Resource Management Papers no. 52. S. Kidanu. Ph.D Thesis, Wageningen University, 2004, 197 p. ISBN 90-6754-733-6. ISSN 0962-9495. Softcover.

Resource degradation is a critical problem in the highlands of Ethiopia, covering nearly one half of the country. With agricultural production lingering behind population growth, the gap between the availability and the demand for agricultural land continues to grow. This results in severe land use conflicts. Thus, high potential and more resilient soils need intensification to sustain human needs. This publication discusses the opportunities of a short rotation (3 years) Eucalyptus-based agroforestry system to intensify annual sole cropping of the Vertisols in the highlands. This soil type represents a major production resource, but is vastly underutilized due to severe waterlogging. A typical Vertisol-Nitosol toposequence in Gishi watershed in the central highlands was selected for the study. The productive and protective functions, alternative resource utilization, farm economics and the allelopathic potential of an Eucalytus-based agroforestry system were investigated. The system increases land productivity, cuts down soil erosion rates to tolerable limits, reduces runoff, and increases the proportion of available water for biomass production without significant nutrient depletion.

Price: Listprice: EUR 20.00. Free for individuals in developing countries. Orders to: Department of Environmental Sciences, Erosion and Soil and Water Conservation Group, Wageningen UR, Nieuwe Kanaal 11, 6709 PA Wageningen, The Netherlands. Fax: +31-317-486103. Email: jolanda.hendriks@wur.nl. Homepage: www.dow.wau.nl/eswc.

Recent FAO publications:

Land Resources Information Systems in the Near East. Regional Workshop, Cairo, 3-7 September 2001. S. Masui and J. Antoine, compilers. R. Brinkman, editor. World Soil Resources Report 99. FAO, Rome, 2002, vii + 94 p. ISBN 92-5-104860-8. ISSN 0532-0488. Softcover.

The purpose of the meeting was to promote Land Resources Information Systems and their application in the assessment, mapping and monitoring of land in relation to food security and sustainable development in the Near East. The workshop was attended by representatives from 11 countries and four regional organizations, where new developments in Land and Water Information Systems, the preparation of national/regional land and water reports and future collaboration in the FAO Land and Water Development Division (AGL) Gateway global network were discussed. The resources persons contributed by sharing their experiences from the countries involved and the organizations assisted in the preparation of the plan of action to promote future reporting and exchange of information in the region. Preliminary country reports on the state of the land, water and plant nutrient resources based on the Gateway guidelines and checklist were presented and discussed.



The present report contains the proceedings of this regional workshop.
Listprice: USD 20.00. Prices vary per country. Orders to: see below.

Data sets, indicators and methods to assess land degradation in drylands (+CD-ROM).

World Soil Resources Reports 100. FAO, Rome, 2003, 122 p. ISBN 92-5-104925-4. Softcover.

This report summarizes the findings of an e-mail conference that took place from 9 October to 4 November 2002 and which was organized by the Land Degradation Assessment in Drylands project (LADA). It contains exchanges of views on data sets and methods that may be used to assess land degradation and a discussion on the biophysical, socio-economic and institutional indicators that explain the root causes, driving forces, status, impact and responses to land degradation at various scales. It is anticipated that the LADA E-mail conference website at <http://www.fao.org/landandwater/agll/lada/emailconf.stm> will become a continuing forum for the exchange of information on land degradation.

Listprice: USD 30.00. Prices vary per country. Orders to: see below.

Biological management of soil ecosystems for sustainable agriculture. World Soil Resources Reports 101. FAO, Rome, 2003, 118 p. ISBN 92-5-104966-1. Softcover.

This report includes a review of current understanding and knowledge of the biological management of soil ecosystems through a set of case studies from different production systems and socio-economic conditions, in the areas of indicators and assessment of soil health, adaptive management and innovative technologies.

Listprice: USD 27.00. Prices vary per country. Orders to: see below.

Agricultural drainage water management in arid and semi-arid areas (+CD-ROM). FAO Irrigation and Drainage Papers 61. FAO, Rome, 2003, 204 p. ISBN 92-5-104839-8. Softcover.

This publication provides planners, decision-makers and engineers with guidelines to sustain irrigated agriculture and at the same time to protect water resources from the negative impacts of agricultural drainage water disposal. On the basis of case studies from Central Asia, Egypt, India, Pakistan and the United States of America, it distinguishes four broad groups of drainage water management options: water conservation, drainage water re-use, drainage water disposal and drainage water treatment. All these options have certain potential impacts on the hydrology and water quality in an area, with interactions and trade-offs occurring when more than one is applied. This publication presents a framework to help make a selection from among the various drainage water management options and to evaluate their impact and contribution towards development goals. In addition, it presents technical background and guidelines on each of the options to enable improved assessment of their impacts and to facilitate the preparation of drainage water management plans and designs. The full texts of the case studies can be found on the CD-ROM.

Listprice: USD 38.00. Prices vary per country.

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mbk@ksu.edu

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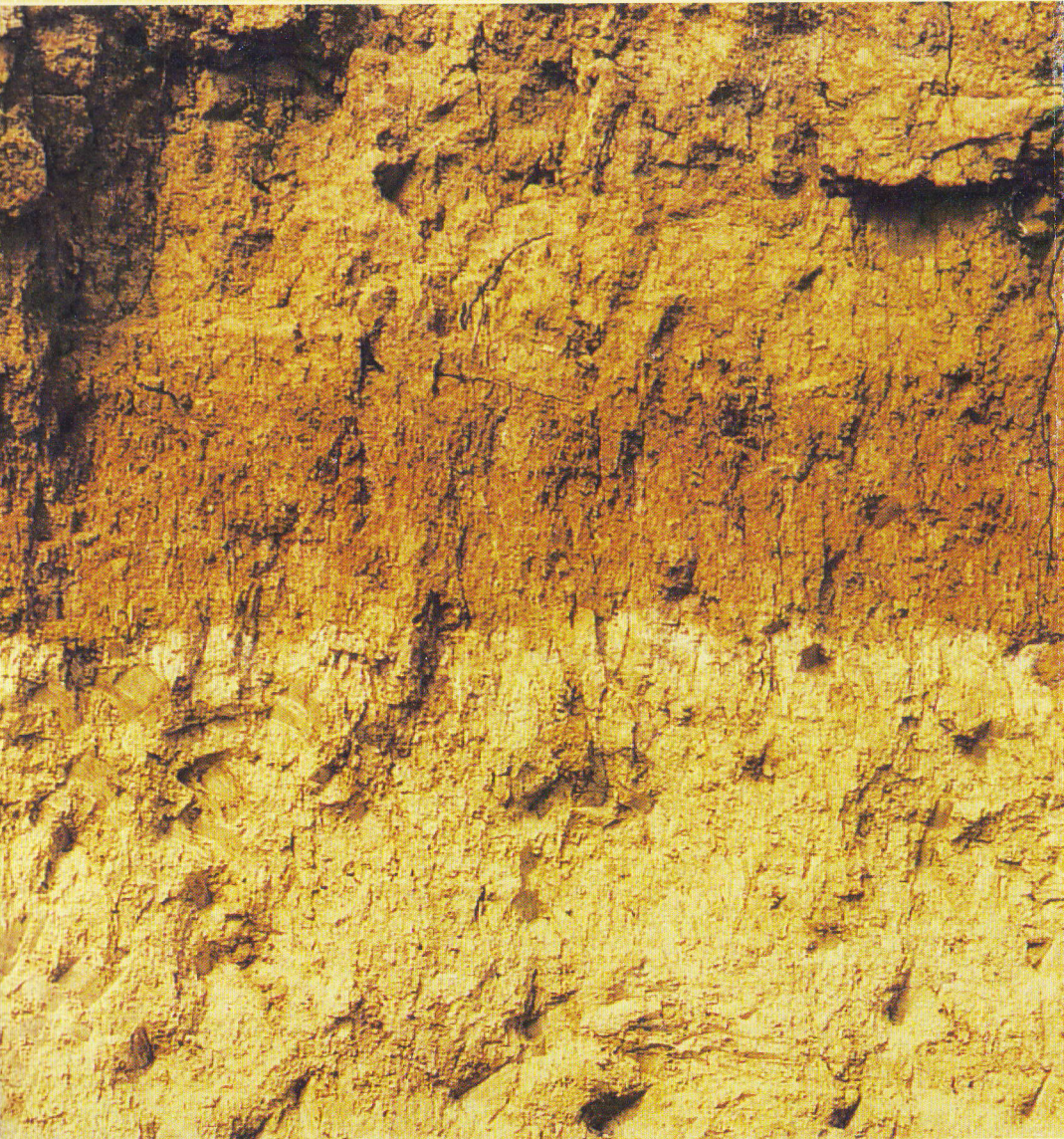
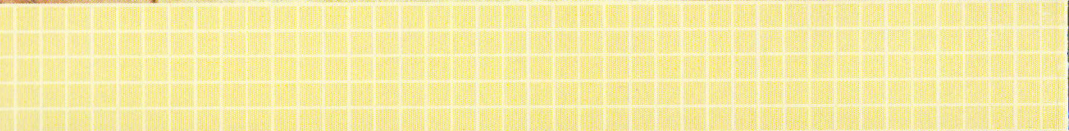
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