

Editorial

LAUNCHING THE NEW INTERNATIONAL JOURNAL "SOIL & TILLAGE RESEARCH"

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HISTORY

In the nineteen-fifties the number of soil tillage research workers was still only small and their very first international conference in 1955 in Uppsala, Sweden, was a historic event. The need for personal contacts being considered as very valuable, subsequent conferences were held in 1958 (Stuttgart-Hohenheim, Fed. Rep. of Germany), 1962 (Doorwerth, The Netherlands), 1965 (Ås, Norway), 1970 (Silsoe, U.K.), and 1973 (Wageningen, The Netherlands).

These six conferences were organised on a voluntary basis by small groups of enthusiastic individuals. However, this proved to be an extremely heavy task and, moreover, this procedure did not warrant vital continuity. Therefore, at the 1973 conference, the International Soil Tillage Research Organization (ISTRO) was founded to take care of organizing three-yearly conferences and achieving personal contacts among soil tillage research workers all over the world. In this way ISTRO also hopes to encourage scientific research in the field of soil tillage and field traffic, and to stimulate the adaptation of its findings to agricultural practice.

To demonstrate the historical development and as a token of great appreciation for the organizers of the early international soil tillage conferences, the 1973 conference is looked upon as being in true sense the 6th Conference of ISTRO.

In pursuit of its aims and considering that soil tillage is an integrating part of the cropping system, ISTRO promotes contacts among research workers such as soil scientists, plant scientists, agricultural engineers and economists, agronomists, weed specialists, and others. In accordance with this policy, shortly after the 7th Conference in 1976 at Uppsala, Sweden, Dr. J.D. Pidgeon and Dr. B.D. Soane (Scottish Institute of Agricultural Engineering) brought up the idea of founding an international journal catering specifically

for scientific research in soil tillage. In September 1977 they produced, on request of the Board of ISTRO, an excellent discussion paper on the subject in which they stated the following:

- (1) There is no journal of international standing devoted specifically to the publication of the results of soil tillage research.
- (2) In recent years there has been a resurgence of interest in tillage research and an increase in the number of workers involved and papers published.
- (3) Published information on the results of tillage research has become widely scattered in the literature. A new journal would allow a substantial part of it to be gathered together.
- (4) A new journal would also foster the multi-disciplinary approach which is so vital for the successful translation of research findings into agricultural practice.
- (5) The journal would be an appropriate medium for publishing in full, papers based on the more outstanding reports submitted to ISTRO conferences.
- (6) There are numerous examples of successful specialist research journals which have acquired a high reputation and make an important contribution to the exchange of research information.

In March 1978 a committee, nominated by the Board of ISTRO, opened discussions with Elsevier Scientific Publishing Company on the possibilities of starting the proposed journal. Elsevier was interested and agreed to study the project carefully. As a result a detailed project description was produced and, in October 1978, it was subjected to a world-wide enquiry.

The crucial question was whether research workers in soil tillage and related fields really felt the need for an international scientific journal in their specialism. At the same time such a widespread consultation provided an excellent opportunity to bring the scope of the journal — if it were to be launched — into accordance with the wishes and ideas of its potential contributors and users.

In order to restrict the chance that a bias would affect the outcome of the enquiry, the selection of people to be approached was made along three different lines. About one third of the names and addresses was supplied by ISTRO. About a similar number was selected by the scientific staff of Elsevier from relevant literature. In both instances the condition was made to have a reasonable distribution over the various parts of the world and over the different subdisciplines within the scope of the projected journal. People contacted were asked to submit addresses of other persons whose opinion might be valuable. This produced the last one-third of the addresses for the enquiry.

The enquiry had a satisfactory return score of 71.6%. Of the total of 197 replies received, 79.2% was positive to the idea of founding the journal, 8.1% was neutral and 12.7% was negative. The positive, neutral and negative responses were rather randomly scattered over the various parts of the world. Moreover, there appeared to be sufficient readiness to contribute manuscripts and to subscribe to the journal if it were to be created. In view of these results, in June 1979, Elsevier decided to start the journal as from 1980.

TITLE OF THE JOURNAL

From the beginning it was the intention to not restrict the scope of the journal to soil tillage *per se* and to name it accordingly. In the answers to the enquiry some 67 different titles for the journal were suggested. The words most commonly occurring in the suggested titles were "soil", "tillage", "crop", and "management". Taking this into account, and after much discussion, it was finally agreed to name the journal "Soil & Tillage Research". In this title the sign "&" for the word "and" is meant to represent a closer link between "Soil" and "Tillage" than the word "and" itself. The subtitle could not be shorter than: "An international journal on research and development in soil tillage and field traffic, and their relationships with soil environment, land use, and crop production", as it is meant to define the whole wide field of soil tillage in its broadest sense.

AIMS AND SCOPE

As defined in the subtitle the journal aims at divulging results of scientific research in the domain of soil tillage and related fields, a subject matter which is characterised by a rapidly growing interest and, consequently, yielding an ever rising stream of new ideas. The final aim is to contribute through this medium to raising the standard of soil management, increasing soil fertility, improving soil and water conservation, and increasing crop yields, both in quantity and quality.

The respondents to the enquiry paid a wealth of attention to the proposed scope of the journal. Their comments have been given attention in the final formulation of the scope as far as this was possible. It was decided not to draw up a limitative formulation, but to leave manoeuvring space for the Editor-in-Chief to react adequately to new developments in the subject field and to suggestions of authors and users of the journal.

Within this context, the journal will welcome contributions on such subjects as:

- (1) Soil suitability for tillage practices and crop production under different conditions.
- (2) Soil properties that determine trafficability and workability.
- (3) Selection, adaptation or development of tillage systems in relation to specific conditions of soil, climate, relief, irrigation and drainage, crops and crop rotations, level of fertilization, degree of mechanization, etc.
- (4) Effects on soils and crops of special tillage systems, including minimum and reduced cultivation, and direct drilling (zero-tillage).
- (5) Soil-deformation processes induced by soil-working tools and traction devices, and their effects on soil structure throughout the profile.
- (6) Effects of tillage operations and field traffic on physical, chemical and biological parameters of the soil environment.
- (7) Effects of tillage-induced changes in the soil environment on crop estab-

ishment, root development and plant growth, and their interactions.

(8) Influence of weather conditions on the shorter and longer term effects of tillage-induced changes in soil bulk density, retention and transfer of water, heat and gases in the soil, and soil structural stability.

(9) Role of tillage in weed, pest and disease control.

(10) Topsoil and profile amelioration, e.g. by application of organic matter and soil conditioners, subsoiling, and drainage.

(11) Land preparation and adaptation (e.g. by levelling, management of stony soil, surface irrigation, bed and furrow formation) for different production systems.

(12) Tillage practices in relation to soil and water conservation and land reclamation (e.g. erosion control, dry farming, residue management).

(13) Development, design and testing of soil working tools and traction devices; reduction of wear; power requirements.

(14) Measuring methods and data-processing in connection with the soil-machine-plant system, and procedural interactions.

(15) Energy requirements and economic aspects of tillage systems.

(16) Mathematical modelling of soil-deformation processes and tillage systems.

(17) Environmental aspects of soil tillage (e.g. effects on water quality).

Nature of papers

The journal will aim at excellence by accepting only papers of the highest level, which should be of international interest; this does not exclude papers that are based on national or regional studies or case histories, but the methodology applied, results obtained, conclusions drawn or views developed on the basis of the regional material should be of much wider importance. All articles will be critically refereed. Each article must be preceded by a brief abstract, as is conventional in scientific journals. There will be no rigid restrictions on the length of papers; the Editor-in-Chief will decide in each case whether the importance of the content warrants the number of pages needed to print it. Nor will there be a limitation on the number of illustrations, provided they contribute to the understanding of the paper. All papers should be in English. No page-charge will be made.

Kinds of contributions

Contributions to the journal should fall into the following sections:

- Primary papers, reporting the results of scientific investigations
- Papers that integrate the findings of specialists that focus on a given theme
- Short scientific communications
- General review articles
- Scientific discussions
- Letters containing scientific comment on papers published in the journal

- Editorials and guest editorials, which may be either informative, commentarial or critical
- Reviews of books within the scope and standards of the journal
- ISTRO news and announcements, and other news of interest to the readership.

Occasionally, special issues of the journal will be devoted to contributions from various disciplines but dealing with one central theme.

Submission of papers

All contributions to the journal should be addressed to the Editorial Secretariat, "Soil & Tillage Research", P.O. Box 330, 1000 AH Amsterdam, The Netherlands.

COLLABORATION BETWEEN ISTRO AND ELSEVIER

When the decision to establish the new journal was taken, already existing contacts between ISTRO and Elsevier were formalised. On 11 September 1979, on the occasion of the 8th Conference of ISTRO at Stuttgart-Hohenheim (Fed. Rep. of Germany), a formal contract between ISTRO and Elsevier was signed. This contract arranges that ISTRO scientifically supports the journal, that the Editor-in-Chief is appointed jointly and that consultation takes place about the composition of the Editorial Advisory Board. Elsevier is responsible for the financing, copy-editing, printing, distribution and promotion of the journal. The Editorial Secretariat, operated by the publisher, functions as a supplementary service to the Editor-in-Chief. Scientific supervision of the journal and business management are well distinguished.

The enquiry also provided the opportunity to nominate persons for the Editorial Advisory Board and it has been used freely. Not less than 276 nominations were made, related to 162 people. Among the candidates only 13 were mentioned more than three times, with a highest score of 14 times. These 13 people have all been appointed. The Board has subsequently been completed with a selection from the remaining candidates, made in such a way that a fair geographical and subdisciplinary distribution resulted. •

The duties of the Editorial Advisory Board are various. The most important one is to referee, critically and speedily, submitted manuscripts. Further, the Board is requested to advise the Editor-in-Chief and the publisher — upon invitation as well as spontaneously — on journal policy, and, last but not least, to encourage authors and readers to use the journal as the prime international medium of information in the domain of soil tillage research.

CONCLUDING REMARKS

No journal can exist without authors. Therefore, we would like to stimulate you to consider "Soil & Tillage Research" for submission of your best

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papers, which deserve the attention of a world-wide readership. We hope you will also encourage your colleagues to contribute high-quality manuscripts to the journal.

If, in this way, the journal will be supported by all of us, we may trust it will become a stimulating medium for the advancement of scientific research in the domain of soil tillage and related fields.