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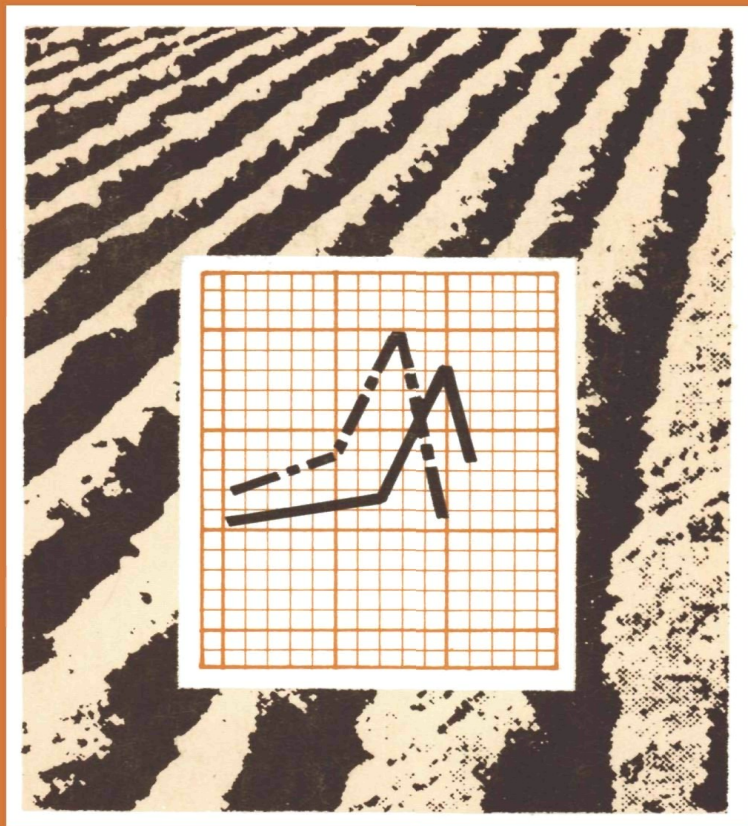
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# The Journal of

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# Agricultural Science

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# The Journal of Agricultural Science

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**The Journal of Agricultural Science** publishes papers from all over the world based on original data and on reassessments of past data covering the whole range of agricultural science. Each issue contains about 25 full length papers plus some short communications.

**The Journal** was launched in 1905 by the Cambridge Professors of Agriculture and the Director of the Rothamsted Experimental Station and their policy of making it a major source for agricultural education has been followed throughout. Thus all papers submitted are very carefully refereed for their scientific content and those published equally carefully edited to ensure that the English (the only language used) is unambiguous and easily translated into other languages.

**Subscriptions.** *The Journal of Agricultural Science* is published annually in two volumes of three parts. All orders must be accompanied by payment. The subscription price for 1988, volumes 110 and 111, is £132.00 in UK, £145 elsewhere net (USA and Canada US \$295) per volume (post free); single parts are available at £24 net (USA and Canada US \$55) plus postage. Orders or enquiries may be sent to any bookseller or subscription agent, or to the publisher: Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU (USA and Canada, Cambridge University Press, 32 East 57th Street, New York, NY 10022, USA). Second class postage paid at New York, NY, and at additional mailing offices. **POSTMASTER:** send address changes in USA and Canada to *The Journal of Agricultural Science*, Cambridge University Press, 510 North Avenue, New Rochelle, NY 10801.

## EDITORIAL POLICY

The *Journal of Agricultural Science* was founded in 1905, when the number of agricultural scientists in the world was very small. Now the number of those engaged in research in agriculture throughout the world is immense. During its long history the *Journal of Agricultural Science* has progressively adjusted to contemporary change by adopting a policy of publishing papers of high quality, which reflect the development of science relevant to agriculture. Indeed much of the seminal scientific work on which advances in farming practice have been based has been published in its pages.

The Editors consider matters related to policy on a continuing basis. Recently, however, more wide-ranging discussions have taken place with a view to defining the role of the Journal in the 1990s and beyond. The conclusions reached and the reasons for them are no doubt of interest to our contributors and readers and they are consequently discussed below.

First and foremost the Journal will continue to publish the results of investigations in all fields of agricultural science; in other words, it will remain a 'generalist' journal. The Editors are of course aware that, during the last few decades, there has been a considerable increase in the number of highly specialized journals dealing with the sciences on which agriculture depends. A tendency to specialize is an inevitable consequence of the growth of science. As far as the Journal is concerned, as in the past so in the future, there may well be a temporary preponderance of papers on a single topic of current scientific interest. This generally arises because an excellent paper on such a topic tends to encourage submission of others of the same nature. The Editors feel that such temporary preponderance is unavoidable in a publication dealing with the results of contemporary researches, and it in no way detracts from the generalist approach. The Editors will continue to accept papers dealing with all aspects of agriculture science and will not actively encourage specialization within any of its many branches.

The Editors are also conscious of the fact that research undertaken without immediate agricultural application in mind often has considerable relevance to its practice. In maintaining the generalist nature of the Journal the Editors will facilitate the publication of high-quality papers reflecting the new dimensions of agricultural science which have been made possible by advances in the cognate disciplines. Their policy will include the encouragement of contributions which are concerned with investigational work close to that critical interface between basic science and its agricultural application.

This emphasis on what may be called 'strategic agricultural science' does not in any way exclude consideration of more applied work. Indeed, publication of the results of applied studies has always been and will always remain a feature of the Journal. The Editors do not intend, however, to cater for developmental studies in agriculture, and will only accept papers describing such studies if they reveal new insights, and have been very well conducted and integrated. **The main change of emphasis is that the Journal will now welcome the opportunity to publish work which is of a more fundamental nature and which may well prove to be definitive and instrumental in delineating the agricultural practices of the future.** It can be argued that this does not constitute a change in policy because the Journal has always had the role of publishing basic work of relevance to agriculture. This is so; but the Editors feel that this fundamental aspect of their policies merits restatement and reinforcement.

The Journal will continue to accept papers from throughout the world relating to the agricultures of all regions. The Journal is already international in both its contributors and readership. The absence of page charges and the rapidity of publication may well have contributed to its present status which is exemplified by the fact that it is in the leading few of the 52 international agricultural journals in the world. To help in informing scientists in countries other than the United Kingdom, the Editorial Board has been increased to include overseas members and the appointment of consultants in those countries not represented on the Editorial Board is being considered.

For many years the Editors have adopted a policy of insisting on very high standards in the editing of papers and this will continue. Also the Journal has always given careful attention to the statistical methods employed in agricultural research – a matter that is fitting since the late R. A. Fisher published much of his early work on statistical methods in agricultural experimentation in the Journal – and it continues to publish papers on the statistical and mathematical techniques employed in the analysis of biological data. This insistence on high standards of statistical analysis and interpretation in published papers will continue. So too will the provision of constructive criticism of papers about which the Editors continue to receive the thanks of authors.

It is now the intention of the Editors to publish short definitive reviews on subjects which are at the leading edge of agricultural science. This is in response to a perception of a real demand, and the subjects chosen will for the most part relate to the emerging pattern of papers which the Journal publishes. In the first instance one short review will appear in each volume, but if they prove successful more may be included.

Lastly, changes are taking place in the format of the Journal. The Journal's familiar grey-green cover has already been replaced with a more modern design, the typeface, headings and summaries have been updated for greater legibility, and high-quality paper is now used so that half-tone illustrations can be integrated with the text of papers. Short notes on researches of immediate interest will continue to be accepted for accelerated publication, and the new section for the publication of book reviews will be expanded.

These policy changes which are now being instigated are but a continuation of those which have characterized the development of the *Journal of Agricultural Science* over the last 83 years. They are designed to provide research workers with a venue for publication of work which is at the forefront of advance in the application of science to the production of food and other commodities from land and water resources. The Journal is highly respected and future contributors can be assured that, as in the past, their work will reach an international audience which is well aware that a paper published in the *Journal of Agricultural Science* is one of high merit.

## Instructions to Authors

*Failure to comply with the Instructions to Authors may delay publication*

The Journal welcomes concise papers reporting original experimental data or experimental methods, or new analyses of already existing data, in any aspect of Agricultural Science. The Journal publishes short reviews which are written only at the express invitation of the Editors. Submitted reviews will not normally be considered. The Editors must be informed if any of the material submitted has been published elsewhere. If a paper is accepted, it must not be published elsewhere in the same form. Experiments on animals must conform with legislation in the country where the experiments are carried out. Papers should be submitted to Miss Jane King, Journal of Agricultural Science, Department of Applied Biology, Pembroke Street, Cambridge CB2 3DX.

**Scripts.** Papers, written in English, should be typed in double spacing on one side of the paper with a margin of at least 4 cm on the left-hand side. Two copies should be submitted.

**Layout and style.** Authors are recommended to use the style adopted in recent issues. Details and sample pages showing preferred layout for various subjects may be obtained in advance of submission from the Executive Editor, Miss Jane King, at the address given above.

**Title.** The title must be specific and suitable for indexing by the automatic methods now being employed. Male authors should give surnames and full initials, female authors should give one forename. The full name and address of the institution where the research was done should be stated. Change of address may be given as a footnote. A short title, not exceeding 50 characters, should be provided for the running headlines.

**A summary,** placed at the beginning of the text, should briefly indicate the experiments described, the main result and important conclusions.

**The text.** The Editors do not insist on a rigid format but it is usually convenient to divide the paper into sections, e.g. Introduction, Materials and Methods, Results, and Discussion. An excess of headings and subheadings should be avoided. The Introduction should show why the work was

carried out; a detailed review of literature is not necessary. Relevant details should be given of the experimental materials and design, and the techniques and statistical methods used. Numerical results should be shown in Tables and not repeated in the text. Metric units should be used.

Experimental details and Results should be recorded in the past tense. The Discussion should relate the author's results to other work on the subject and give the author's conclusions. A simple direct style of writing, avoiding unnecessary repetition and circumlocution, is preferred. Footnotes should not be used.

**Tables** must be self-explanatory, typed on separate sheets, numbered consecutively and carry an appropriate title. Numerical results should be displayed as means with their relevant standard errors. Normally a mean should be rounded to one tenth of its standard error and the standard error given to one place of decimals more than the mean.

**Figures** should be restricted to the display of results when a large number of values can be comprehended more easily; Tables and Figures may not reproduce the same data. Line drawings should be 25 cm wide and drawn in black waterproof ink on Bristol Board, graph paper with blue lines or tracing paper. Numbering and lettering, which must be kept to an absolute minimum, should be legibly inserted in soft pencil. A photocopy of the line drawing should be provided; a full legend describing the Figure and giving a key to all the symbols on it should be typed on a separate sheet.

**Plates** may be accepted, but only if they make a definite contribution to the value of the paper. They should be good quality, unmounted, glossy prints and be lightly numbered in pencil on the reverse side. If several plates or coloured photographs are submitted the author may be asked to contribute to the cost of reproducing them.

**References.** In the text a reference should be quoted by the author's name and date (in parentheses). Where there are three authors, all names should appear at the first mention; thereafter, and at all

times if there are four or more authors, the first name followed by *et al.* should be used, unless there is ambiguity, in which case all the names should be given at each occurrence. A list of References should be given at the end of the text listing, in alphabetical order, surname of authors, initials, year of publication (*in parentheses*), title of paper, name of journal in full (underlined to denote italics), volume and first and last pages of the reference. Authors should check that all references in the text appear at the end of the paper and vice versa, and that names and dates correspond in the two places.

**Short notes** may be accepted provided they are based on adequate experimental evidence; special provision is made for their publication with the least possible delay. MSS should not exceed 1500 words in length or their equivalent (a Summary is not required). For tabulated matter allow 25 words per line of the table (including headings). For line illustrations allow 225 words per quarter of page.

**Series.** The Editors do not wish to publish continuing series and will divide work into parts

only if they consider it of advantage to the readers; the whole work must be submitted at the same time. In general the first part must include in the Introduction the reasons for carrying out the whole work and the final part must end with a Discussion of all the findings to show the progress made.

**Mathematical models.** Authors preparing papers involving complex mathematical models are advised to obtain, from the above address, notes setting out the Editor's policy on these models.

**Proofs** will be sent to authors to enable them to check the correctness of the type-setting. Excessive alterations due to amendments of the author's original agreed copy may be charged to the author.

**Offprints.** Contributors will receive 25 copies of their papers free and can order others when they receive the proofs.

**Books for review.** Books should be sent to the Review Editor, W. J. Ridgman, 1 Hillside Lane, Arrington, Royston, Herts SG8 0DA.