

**BIBLIOGRAPHIE****BIBLIOGRAPHY****BOEKBESPREKING****BIBLIOGRAFIA****Dictionnaire de Science du Sol**

par J. Lozet et C. Mathieu

Technique et Documentation Lavoisier

280 p. 16 x 24. 1986.

Le grand mérite des auteurs est d'avoir osé aborder l'ensemble des thèmes qui constituent la Science du Sol dans son sens le plus large.

Le sol est en effet un milieu complexe, un système inclus lui-même dans d'autres systèmes dont il est un élément : les écosystèmes terrestres et semi-terrestres, les divers agrosystèmes induits par l'homme, avec plus ou moins de succès, pour obtenir une production alimentaire, industrielle, adaptée à ses besoins, financièrement plus rentable.

Le sol a une histoire plus ou moins longue, il naît en milieu continental par altération de roches dures ou meubles selon des processus régis par les conditions climatiques, qui influencent la nature et la densité du couvert végétal, et partant, la qualité et la quantité de matière organique restituée par celui-ci. Le sol évolue, de jeune, il devient mature et, même sénile, lorsque la stabilité du milieu dans lequel il est né, s'est maintenue très longtemps. Cas des sols des vieilles surfaces aplanies d'Afrique peu perturbées par les modifications climatiques des cent derniers millénaires.

Le sol a un profil défini par une superposition de couches ou horizons qui permettent de l'identifier et de le classer : profil naturel en relation avec un couvert végétal naturel ou peu artificialisé, profil cultural, induit par les pratiques culturales, les divers systèmes de culture introduits par l'homme, en relation avec le développement des technologies. Ces profils et les horizons qui les définissent ont des propriétés morphologiques, une organisation perceptible macroscopiquement sur le terrain, microscopiquement au laboratoire; des propriétés physico-chimiques dont certaines mesurables sur le terrain, d'autres au laboratoire. Ils sont le siège d'activités biologiques qui constituent le vaste domaine, en plein essor de la biologie, de la microbiologie du sol.

Tous ces aspects sont abordés dans le dictionnaire des sols de J. Lozet et C. Mathieu. Les termes et les concepts de la pédologie et de l'agrologie sont définis ou présentés.

Selon les définitions présentées par les auteurs, la pédologie est la science qui étudie les caractères physiques, chimiques, biologiques des sols et leur évolution, tandis que l'agrologie est la science qui étudie les sols cultivés.

La terminologie spécifique des grandes classifications des sols, actuellement utilisée dans le monde, parfois très complexe, et pour tout dire, parfois ésotérique, comme celle du Soil Taxonomy, est définie, commentée. Les termes relatifs à la cartographie des sols, à l'évaluation des terres, à l'agrologie, utiles pour l'agronome chargé d'effectuer des améliorations foncières, de l'aménagement du territoire, pour le chimiste désireux de connaître l'origine des échantillons de terre soumis à l'analyse, sont définis.

Mais en plus de la terminologie propre à la pédologie et à l'agrologie, certaines définitions et certains concepts des disciplines, qui leur sont connexes, situés à leur aval, ou à leur amont ou qui cheminent à leur côté, sont présentés : géologie, géographie, physique, hydrologie, minéralogie des argiles et minéraux en grains, chimie et physique des colloïdes minéraux et organiques, propriétés physiques et chimiques en rapport avec l'économie en eau, avec la fertilité, la fertilisation.

2.400 mots spécifiques à toutes ces disciplines sus-évoquées sont ainsi définis. L'index anglais-français inclus dans l'ouvrage en fait en plus un véritable dictionnaire anglais-français de Science du Sol.

Le format choisi par l'éditeur et la qualité de la reliure en font un véritable memento supportant aisément le transport. L'impression est très claire et agréable. Les illustrations, tableaux et figures sont bons et adéquats. A déplorer seulement le manque de netteté de certaines des 43 photos présentées en noir et blanc... Mais, on peut être compréhensif quant on connaît le prix de l'impression de photos couleurs.

Au total, ce dictionnaire est une œuvre très utile et complète qui peut intéresser tous ceux qui se sentent concernés par l'environnement, par le capital sol, que ce soit par désir de mieux le connaître ou par souci d'en assurer l'amélioration, la saine gestion, et la conservation.

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## The potato in the human diet

by Jennifer A. Woolfe with contributions from Susan V. Poats.

published in collaboration with International Potato Center at the Cambridge University Press; First publication, 19 March 1987 (ISBN-0-521-32699-9)

Price; £ 17.50 or \$ 32.50

### Contents :

- Structure of the potato tuber and composition of tuber dry matter.
- The nutritional value of the components of the tuber
- Protein and other nitrogenous constituents of the tuber
  - 1. Composition of the tuber nitrogen
  - 2. Nutritive value of tuber nitrogen
  - 3. Potato protein from processing waste
- Effect of storage, cooking and processing on the nutritive value of potatoes
  - 1. Storage
  - 2. Main methods of domestic preparation
  - 3. Processing
  - 4. Summary
- Glucoalkaloids, proteinase inhibitors and lectins
- Patterns of potato consumption in the tropics
- Index

In 230 pages.

This book reviews the current knowledge about the nutritional value of the potato and its role in the nutrition of both children and adults. It opens with an examination of the structure and composition of the potato tuber and then analyses the nutritional value of its components, emphasising the many important vitamins, mineral and trace elements found in the tuber. An entire chapter, devoted to the nitrogenous constituents, underlines the high quality of potato protein. The effects of storage, cooking and processing on the potato's nutritional value are then considered, followed by a discussion of toxic components in the tuber, with emphasis on glycoalkaloids. In the final section, patterns of potato consumption and prospects for improving dietary intakes are examined, with case studies drawn from several developing countries.

The synthesis presented in this volume will be of value to students and research workers in nutrition and food science in both developed and developing countries. Dieticians, nutritionists, policy makers, and aid personnel involved in agricultural and rural development will also find this book informative and of practical use.

Frank ELLIS,

## **Peasant Economics — Farm Households and Agrarian Development, Wye Studies in Agricultural and Rural Development,**

Cambridge University Press, 1988, 257 p.

"Peasant Economics" comes as a surprise. At first, it seems strange to call a textbook on the economic analysis of peasant household agricultural production "peasant economics". One asks oneself if there is a large enough specific body of economic theory applied to peasants to come up with a book with such an ambitious title. The reader thus starts the book with a lot of scepticism and apprehension. However, the more he advances in the book, the more he is likely to become impressed by the concept, scope, thoroughness and clarity of the book. Peasant economics is really what it is all about and the book rightfully merits its title.

Economic theories are presented which are specifically geared to peasant farming and — household behavior and which offer a logical, rational explanation of why things are the way they are. In this, a full social science perspective is adopted, avoiding a too narrow economicistic interpretation and drawing on themes and insights of social or political analysis, including Marxian concepts and interpretations.

The central theme in the book is the economic behavior of "peasants". The economic concept of peasants advanced in the book is that they are family farmers only partially integrated into incomplete or imperfect markets. This concept goes beyond the usual definitions of subsistence, traditional, resource poor, small scale, backward etc. farmers and pervades every chapter in the book.

The book is intended to be a theoretical textbook for students of agricultural economics or rural development at undergraduate or early at the postgraduate level.

Practical applications or guidelines for carrying out rural development projects are not within the scope of the book. However, the book does provide the reader with an understanding of peasant household decision making, the working of rural markets and the paths of technical change. The basic economic theory which is used is relatively elementary.

The book has twelve chapters which cover the full range of issues and problems facing peasant households. Adequate attention is paid to risk-aversion, women in the peasant household, household models and the new home economics, farm size and technical change. Each chapter is followed by a summary and suggestions for further reading. This reviewer particularly appreciated chapter four on the profit maximizing peasant where a.o. the contribution of T.W. Schultz is put into a proper perspective, and chapter three dealing with elements of peasant political economy. Concepts in Marxian political economy are introduced and shown to have relevance to an understanding of peasant behavior.

Chapter two presents in summary form the neoclassical theory of farm production. The production functions which are shown only exhibit stages II and III of production, thereby assuming implicitly that farmers cannot produce in stage I, which of course, they can and do. This may be misleading.

The reader should be warned that it is a theoretical textbook about economic theory of peasant households. Thus, one will not find references or guidelines for the actual conduct of, for instance, farming systems research or on-farm research of new technologies. Of course, farming systems researchers are strongly advised to read the book in order to become acquainted with the various economic theories which explain peasant behavior and decision making.

The scope of the book is basically micro-economic i.e. theories about the behavior of farm households. Linkages with the macro-economic and policy-nature of agrarian development are only occasionally made. It was never the purpose of the book to specifically develop such micro-macro linkages and to address the macro-economic nature of agrarian development. Along the same lines, the development of markets and marketing in peasant societies is outside the scope of the book.

In summary, this book is a theoretical textbook about farm household micro-economic theories which takes into account the peasant political economy and intrahousehold relations within a context of social and economic change. It is the best theoretical textbook which this reader knows about this subject. It has the great advantage of pulling together the bewildering array of theories that now exist on peasant- and household decision making in poor countries. It presents them in a logical, consistent way and stresses the links which connect them. They help to explain the reality of peasant farming and as such constitute a strong basis from which to undertake more practical work. Without reservation, this textbook is recommended to students and teachers of agrarian development with an elementary training in economics.

## Plants of cropland in Western Samoa - With special reference to Taro

by Elke Sauerborn and Joachim Sauerborn

Edition Plits 2 (4) 1984 (21 x 15 cm). 331 pages

ISSN-0175-6192 ISBN 3-924333-30-0

Published by : Jozef Margraf. Stuttgart. Germany.

The first part describes Western Samoa in the points of view of its situation in the Pacific, its history, its social organization, its climate, its geology, its agriculture, its crop and animal production. A special part is devoted to Taro.

The second part is divided into two sub-chapters.

The first is identification keys for di and monocotyledons

- one to identify the species by their vegetative characters
- one by their vegetative and generative characters
- one item, starting out from the colour of the flowers
- one to identify monocotyledons, (poaceae and cyperaceae).

The second and most important part is the descriptions and drawings of 129 species.

A glossary of terms and a bibliography completes this book.

The issue can be ordered from :

Institut für Pflanzenproduktion in den Tropen und Subtropen,  
Universität Hohenheim, Postf. 700.562  
7000 Stuttgart 70 - FR. Germany

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## First Cuban Forestry Congress and International Symposium on Agroforestry Techniques

November 22-24, 1989; La Habana

The Scientific Program of this event includes lectures, the symposium and the topics are the following:

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| — Forest Ecology                               | — Physical and Mechanical Properties of Wood                           |
| — Forest Soils and Hydrology                   | — Forest By-Products Utilization                                       |
| — Genetics and Forest Seed Production          | — Mechanical Transformation of Wood                                    |
| — Forestation and Reforestation                | — Wood Conservation  |
| — Use of Pesticides and Fertilizers            | — Wood Chemistry   |
| — Mechanization in Silviculture                | — Utilization of Forest Biomass  |
| — Silvicultural systems and Forest Improvement | — Silviculture and Forest Industry Economy, Organisation and Planning  |
| — Forest Hygiene                               | — Local Community Participation in Forest Development and Protection   |
| — Forest Protection and Fire Control           | — Biotechnology and Genetic Engineering applied to Forest Tree Species |
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| — Protected Areas                              |  |
| — Forest Mensuration and Management            |  |
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| — Forest Utilization and Exploitation          |  |

Deadline for the reception of abstracts and papers : May 15, 1989 and August 30, 1989, respectively.

For further information please address your mail to:

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