

# FERTILIZERS AND THEIR USE

A Pocket Guide for Extension Officers

*4th Edition*



Food and Agriculture  
Organization

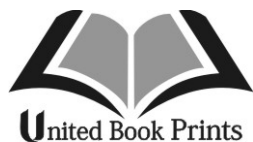


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*Fourth edition*

FOOD AND AGRICULTURE ORGANIZATION OF THE  
UNITED NATIONS  
INTERNATIONAL FERTILIZER INDUSTRY ASSOCIATION



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# Preface

This handbook was prepared originally for use by extension officers working for the FAO Fertilizer Programme. The first edition was published in 1965, third edition was published in 1978, reprinted in 1986.

For this new, 2000 edition, much of the 1978 text has been completely revised. Information on new technical developments and knowledge has been incorporated. The handbook explains the need for mineral fertilizers, their role in plants and the soil characteristics which are relevant to fertilization. A new section provides general recommendations for selected crops.

The chapter on “How to determine fertilizer needs” includes information on deficiency symptoms and on soil and plant tissue testing. A chapter is devoted to explaining and giving advice on laying out fertilizer demonstrations and on extension techniques in general.

The recommendations for selected crops are based largely on IFA’s “World Fertilizer Use Manual”, 1992. More detailed information is given in the Manual, which is available from IFA, Paris.\* Even the much more complete information given in the Manual will often require modification by the user to take account of official fertilizer recommendations for local crops and soils.

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\* “World Fertilizer Use Manual”, 1992, IFA, Paris, 632 p. Web site, <http://www.fertilizer.org>, also available in CD version.



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