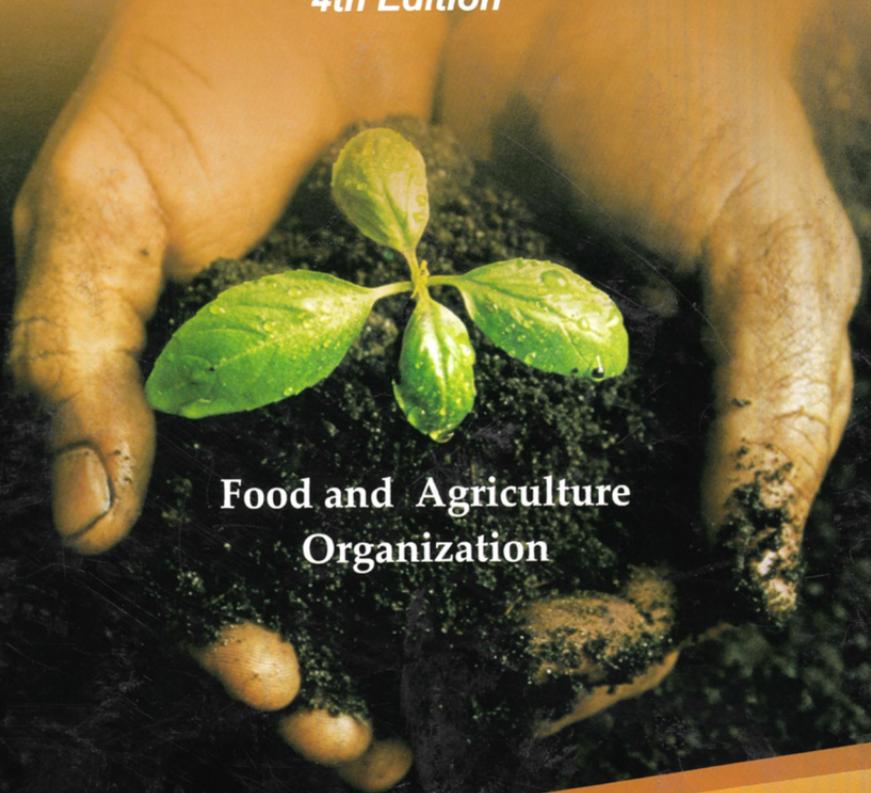


# FERTILIZERS AND THEIR USE

A Pocket Guide for Extension Officers

*4th Edition*

A close-up photograph of a pair of weathered, brown hands cupping a small, vibrant green seedling with four leaves. The seedling is growing out of a mound of dark, rich soil. The background is a warm, golden-brown color, suggesting a field or a warm environment. The hands are positioned as if carefully holding and nurturing the young plant.

Food and Agriculture  
Organization

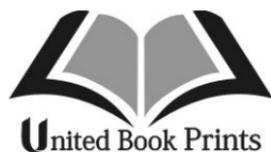


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A pocket guide for extension officers

*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.



# Contents

1.	INTRODUCTION	1
2.	RATIONALE FOR THE NEED OF FERTILIZERS (INCREASE OF PRODUCTION AND INCREASE OF FARM INCOME)	2
	Fertilizers increase crop yields	3
	Organic manure improves fertilizer efficiency	5
3.	NUTRIENTS - THEIR ROLE FOR THE PLANT AND THEIR SOURCES	6
	Nutrients needed for plant growth	6
	The functions of nutrients	7
	Photosynthesis	9
4.	SOILS	12
	What is a soil?	12
	Soil constituents, texture and structure	13
	How the soil holds nutrients and releases them	14
	Soil organisms	16
	Rhizobium / biological N-fixation / green manuring / mycorrhizae	18
	Soil reaction and liming	19
	Soil and good agricultural practices	20
5.	FERTILIZER RECOMMENDATIONS FOR SELECTED CROPS ACCORDING TO THEIR NEEDS	22
6.	THE IMPORTANCE OF BALANCED FERTILIZATION	27
7.	FERTILIZERS, THEIR APPEARANCE, QUALITY, LABELING	31
	What is a fertilizer?	31
	Fertilizer grades	33

Slow release fertilizers / nitrification and urease inhibitors	39
8. CALCULATION OF FERTILIZER RATES	41
9. HOW TO APPLY FERTILIZERS	45
Broadcasting	46
Row or band placement	46
Top-dressing	46
Side-dressing	47
Foliar application	47
10. HOW TO DETERMINE FERTILIZER NEEDS	48
Hunger signs in plants	48
Soil tests	52
Plant testing	54
Fertilizer field trials	55
Long-term field experiments	56
11. OTHER FACTORS LIMITING CROP YIELDS	58
12. FERTILIZER EXTENSION WORK	61
Conducting a fertilizer demonstration	62
Determination of plot size	64
Calculation of fertilizer rates per plot	66
Broadcasting fertilizer on small plots	67
Evaluation of fertilizer demonstrations	68
Conducting meetings on fertilizers	69
13. CONCLUSIONS	71
ANNEX: CONVERSION FACTORS	72

## List of figures

1.	Crop yields in the USA, 1930 to 1998	4
2.	Rooting depth of plants under fertilized and unfertilized conditions	4
3.	Average elemental composition of plants	7
4.	Plants make sugar from sunlight, air, water and soil nutrients	10
5.	To get the highest possible yield no nutrient must be limiting	11
6.	Effect of balanced fertilization on crop yields -Pakistan	29
7.	Diagram of fertilizer production routes	31
8.	Relative sources of nutrients at different soil test levels	52
9.	Soil sampling	54
10.	Importance of crop protection	59
11.	Example of the lay-out of a simple demonstration with control plot and two different rates of N	65
12.	Correct method of applying broadcast fertilizer on a small plot	67

## List of tables

1	Nutrient removal by crops in kilograms per hectare	23
2	Some important fertilizers	35
3	Multinutrient fertilizers - range of nutrient contents	37
4	Some important micronutrient fertilizers	39