



NUCLEAR STRATEGIES IN FOOD AND AGRICULTURE

25 YEARS OF PROGRESS

1964-1989



Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture

Table of Contents

Nuclear strategies in food and agriculture	1
Insect and pest control	3
Mediterranean fruit fly	4
The sterile insect technique (SIT)	4
Tsetse fly	5
Future emphasis	7
Food preservation by irradiation.....	8
FAO/IAEA activities	9
Worldwide approved use of irradiated foods.....	9
Technology transfer and training	11
Wholesomeness of irradiated food.....	12
International trade in irradiated foods	13
International Consultative Group on Food Irradiation.....	13
Animal power, food, and clothing.....	14
Parasitology	15
Animal nutrition.....	15
Fighting rinderpest in Africa.....	16
Reproduction.....	17
Disease diagnosis	19
Technical co-operation and assistance	20
Plant breeding for better crops	21
A change in emphasis	23
Hands on experience	24
Mutant varieties	25
Future directions	26
Laboratory support.....	26
Soil fertility, irrigation, and crop production.....	27
Crop nutrition and fertilizers.....	27
Soil moisture	29
Biological nitrogen fixation	30
Crop physiology.....	31
Information exchange	31

Environmental concerns and agrochemicals.....	32
Nitrogen fertilizer as a water pollutant	33
Radionuclides in the environment	34
Industrial pollution	34
Pesticides in agriculture.....	35
Assistance to developing countries.....	36
International co-operation	36