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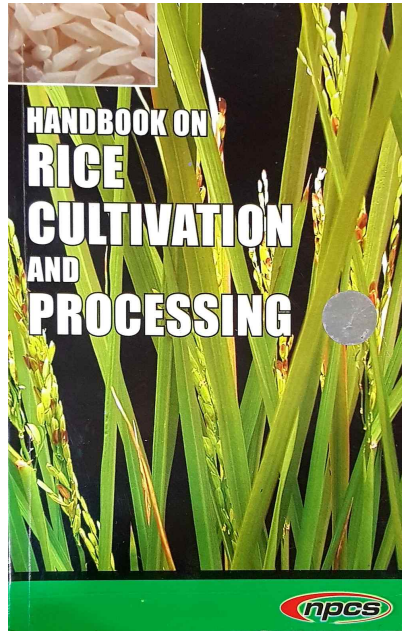
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Handbook on Rice Cultivation and Processing

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Description

Rice is the staple food of over half the world population. Rice is normally grown as an annual plant, although in tropical areas it can survive as a perennial crop and can

produce a ratoon crop for up to 30 years. The rice plant can grow to 1 to 1.8 m tall, occasionally more depending on the variety and soil fertility. Since its origin, the spread of rice cultivation is extensive and rice is now being grown wherever water supply is adequate and ambient temperature are suitable. The rice grain is covered with a woody husk or hull, which is indigestible and is to be removed in the first step during processing for making the rice edible. Rice cultivation is well suited to countries and regions with low labor costs and high rainfall, as it is labor intensive to cultivate and requires ample water. Rice can be grown practically anywhere, even on a steep hill or mountain. The traditional method for cultivating rice is flooding the fields while, or after, setting the young seedlings. This simple method requires sound planning and servicing of the water damming and channeling, but reduces the growth of less robust weed and pest plants that have no submerged growth state, and deters vermin. While flooding is not mandatory for the cultivation of rice, all other methods of irrigation require higher effort in weed and pest control during growth periods and a different approach for fertilizing the soil. Drying is an essential step in the processing and preservation of paddy; it is the process that reduces grain moisture content to a safe level for storage. Milling is a crucial step in post production of rice. The basic objective of a rice milling system is to remove the husk and the bran layers, and produce an edible, white rice kernel that is sufficiently milled and free of impurities. India is the second largest rice producing country of the world after China. India also grows some of the finest quality aromatic rice of which basmati is the most high quality rice. This book basically deals with history, origin and antiquity of rice, seed rice and seed production, harvest and post harvest operations, water management practices for rice, diseases and pests of rice and their control, application of biotechnology in aromatic rice improvement, traditional methods of parboiling, modernization of parboiling process, solvent extractive rice milling, general types of quick cooking rice processes, dry milled rice products in brewing, breakfast cereals, rice flakes, puffed rice, rice in multi grain cereals etc.

The present book contains cultivation and processing of rice in various ways. The book is very resourceful for the entrepreneurs, technocrats, research scholars etc.

Content

CHAPTER 1

HISTORY, ORIGIN AND ANTIQUITY OF RICE

Antiquity

Species Ancestral To Rice

Genetic Process Involved In Domestication

Diversification and Spread

CHAPTER 2

BREEDING

Period of Inter-Racial Hybridization Between Japonicas and Indicas

Period of Inter-Racial Hybridization Between Semi-Dwarf Taiwanese Types/Derivatives and Indicas

Breeding Upland Rices With Tolerance To Drought

Breeding for Water-Logged and Lowland Conditions

Deep Water Conditions

Flood Resistance

Breeding for Insect Resistance

Breeding for Resistance

Biotype Variation

Breeding for Resistance

Breeding for Disease Resistance

Variability In *Pyricularia Oryzae*

Resistance Breeding

Rice Tungro Virus-Disease (Insect Vector: *Nephotettix Virescens*)

Resistance Breeding

Breeding for Multiple Resistance

Breeding for Saline Conditions

Screening Techniques

Breeding for High Altitude Areas

Quality Breeding

Breeding for Higher Protein Content In Rice

Breeding High-Yielding, Scented Rice Varieties

Other Methods

Summing Up

CHAPTER 3

SOILS-THEIR CLASSIFICATION AND AGRO-CHEMICAL CHARACTERISTICS

Classification and Distribution

The Soils on Which Rice Is Grown In India and Their Classification

Distribution of Various Kinds of Soils In India

The Physical, Chemical and Agronomic Characteristics of Rice Soils

The Special Requirements of The Rice Crop

Chemical Characteristics To Be Looked for In Rice Soils

Physical Properties of Rice Soils

Agronomic Characteristics of Rice Soils

Measures Needed for Realizing The Rice-Production Potential of The Major Soil Groups of The Various States

CHAPTER 4

SEED RICE AND SEED PRODUCTION

Sources of Pure Seed

Classes of Seed

Seed Rice Culture

The Control of Red Rice

The Time and Method of Harvesting Seed Rice

Processing and Storing Seed Rice

Drying, Cleaning and Grading

Storing Seed Rice

CHAPTER 5

RICE CULTURE

Crop Rotations

Cropped Land Structure

The Krasnodar Territory

The Don River and Cis-Caspian Lowland

The USSR Far East

The Ukraine, Uzbekistan, and Southern Kazakhstan

Intensified Cropping Systems

Fallowing

Catch-Crops

Land Preparation

Basic Soil Treatment

Tilling Grassland for Rice

Tilling Land for Fallow-Sown Crops

Preparing Seedbed for Rice

Current Land-Smoothing or Planing

Preparing Seedbed for Early and Deep Planting of Rice

Wet or Underwater Levelling

Minimum Tillage for Rice

Fertilization

Mineral Nutrients and Sources

Soil Liming

Fertilization Practices

Seed and Seeding

Classification of Seed

Pre-Plant Treatment of Seed

Rate of Seeding

Method of Seeding

Water Management

Systems of Water Management

Managing Water for Nonchemical Weed Control
Managing Water for Chemical Weed Control
Soil Herbicides
Managing Water for Saline Soils
Managing Water for Insect and Pest Control
Managing Water for Early and Deep-Seeded Rice
Crop Tending

CHAPTER 6

HARVEST AND POST-HARVEST OPERATIONS

Draining for The Harvest
Pre-Harvest Chemical Drying
Pre-Harvest Operations
Harvesting Rice
Grain Moisture Content
Post-Harvest Operations

CHAPTER 7

WEEDS AND THEIR CONTROL

Weed Control Practices
Nonchemical Weed Control
Chemical Weed Control

CHAPTER 8

PEST PROFILE AND INTEGRATED PEST MANAGEMENT IN AROMATIC RICES

Introduction
Diseases
Stem Rot
Narrow Brown Leaf Spot
Insect Pests
Integrated Pest Management
Future Outlook

CHAPTER 9

WATER MANAGEMENT PRACTICES FOR RICE

The Effect of Land Submergence on The Growth and Yield of Rice
The Depth of Submergence
Effect of Partial Submergence
Water Requirement of The Rice Crop
Drainage Requirement of The Rice Crop
Water-Management Practices for Salt-Affected Areas
Effective Rainfall

CHAPTER 10

DISEASES AND PESTS OF RICE AND THEIR CONTROL

Rice Diseases

Pests of Rice

Environmental Considerations In Rice Production

CHAPTER 11

HYBRID BREEDING IN AROMATIC RICE

Introduction

Heterosis Breeding In Basmati Rice

Development of Basmati-Type Cms Lines

Restorer Breeding

Breeding Approaches

Quality Characteristics of Basmati Restorer Lines

Stability Analysis of Basmati Hybrids

Effects of Cytoplasm on Yield and Quality Traits

Basmati Hybrids Under Evaluation

Tagging of Fertility Restorer Gene (S) In Basmati Rice

Problems and Future Prospects

CHAPTER 12

BIOTECHNOLOGY AND MOLECULAR BREEDING OF AROMATIC RICE

Introduction

Functional Genomics

Cloning Disease Resistant Genes

Molecular Analysis of Rice Genes

Production of Transgenic Rice Plants

Gene Silencing

Application of Biotechnology In Aromatic Rice Improvement

In India

Diagnostics and Dna Fingerprinting

Marker Tagging of Individual Genes and Qtls

Future Prospects and Conclusion

CHAPTER 13

DRYING OF PADDY

Theory of Grain Drying

Methods of Drying

Methods of Mechanical Drying

Drying of Parboiled Paddy

Method of Drying

Tempering After Drying

Types of Dryers

Operation Data of Drying Plants

Problems

CHAPTER 14

MILLING OF PADDY

Traditional Methods

Modern Methods

Mini Rice Mill

Problems of Modern Rice Mills

Economics of Modern Milling

CHAPTER 15

PARBOILING PROCESSES

Traditional Methods of Parboiling

Modernisation of Parboiling Process

Modern Processes

Process Description of The Different Parboiling Plants

CHAPTER 16

BASMATI RICE

Introduction

What Does Basmati Mean?

Ancient Records of Rice In India

Basmati Rice In The 19th Century

Basmati In The 20th Century

Breeders should Work on The Sastika (Sathi) Cultivar

The Name Basmati-Specific or Generic?

Conclusion

CHAPTER 17

ROUGH RICE STORAGE

Deterioration of Stored Rice By Fungi

Factors Influencing Deterioration

Storage Technology

Pest Control

CHAPTER 18

SOLVENT EXTRACTIVE RICE MILLING

Introduction

The X-M Concept

The Development of X-M

Process Description

X-M Products

Rice Milling Yields

Economics

Technology Expansion Prospects

CHAPTER 19

QUICK-COOKING RICE

Introduction

General Types of Quick Cooking Rice Processes

The "Soak Boil Steam Dry" Methods

The Expanded Dry Pregelatinized Rice Methods

The Rolling or "Bumping" Treatment

Dry Heat Treatments

The Freeze Thaw Process

Gun Puffing

Freeze Drying

Chemical Treatments

Combinations of Methods

Miscellaneous Processes

Conclusion

CHAPTER 20

RICE IN BREWING

Manufacture of Beer

Adjuncts In Brewing

Dry Milled Rice Products In Brewing

Malted Rice In Brewing

Specifications for Brewer's Rice

Effects on Beer Manufacture and Quality of Using Rice

As Adjunct

Problems In Using Rice As Adjunct

Differentiation Between All Malt and Malt Adjunct Beers

Summary

CHAPTER 21

RICE BREAKFAST CEREALS AND INFANT FOODS

Breakfast Cereals

Rice Flakes

Puffed Rice

Oven Puffed Rice Cereal

Shredded Rice Cereal

Rice In Multi Grain Cereals

Product and Ingredient Characteristics

Enrichment

Packaging

Areas for Further Research

Rice In Infant Foods

Precooked Infant Rice Cereal

Nutritive Value of Rice Cereal

Formulated Baby Foods

Inspection of Raw Material and Finished Goods

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