Cereal grains play an important role in meeting the nutrient needs of the human population. Like any food, they are good to excellent sources of some nutrients and low or void in other nutrients. The vitamins content varies from one part of grain to another. The quality of cereal products is determined by a variety of characteristics which may be assigned different significance depending on the desired and use or type of product. Wheat, through the centuries, has been intimately associated with food uses for man. The usual conversion of wheat to a food product results in some proportion of kernel becoming an animal feed. The wheat milling industry produces bran, red dog, germ, and shorts and these secondary fractions amount to approximately 25% of the whole grain. Rice is one of the leading food crops of the world and is produced in all continents. It is generally considered to be a tropical crop; yields are higher in temperate areas than in the tropics. Rice is comparatively high in caloric value, N free extract, and rice protein has a fairly good balance of the essential amino acids. Rice variety is divided by grain size and shape into three types, known as short, medium and long grain rice. Historically and now through planned breeding, each grain type is associated with specific milling, cooking and processing characteristics. There are number of rice varieties of each grain type in commercial production and new ones are continually in the process of being developed and released. Barley is a crop with worldwide distribution; it is preeminent plant for the use in experimental genetic studies. Barley has a high degree of self fertilization, but is easily hybridized. Barley grain is rich in starch and sugars, relatively poor in protein and very low in fat. Corn kernels are flat seeds due to pressure during growth from adjacent kernels on the cob. They are botanically classified as a caryopsis (dry, indehiscent, single seeded fruit) and are attached to the cob by the pedicle. Corn and corn products are generally the most cost effective feeds or feed supplements available. Popcorn is undoubtedly the oldest snack food and has been consumed for centuries. The grasses known collectively as millets are a set of highly variable small seeded plant species indigenous to many areas of the world. Millets are of value especially in semiarid regions because of their short growing season and higher productivity under heat and drought conditions. Pearl millet is the most widely grown millet and is a very important crop in India. The common oat (Avena sativa) is a species of cereal grain grown for its seed, which is known by the same name (usually in the plural, unlike other grains). While oats are suitable for human consumption as oatmeal and rolled oats, one of the most common uses is as livestock feed. Oats make up a part of the daily diet of horses, about 20% of daily intake or smaller, and
are regularly fed to cattle as well. Oats are also used in some brands of dog food and chickenfeed. Oat seeds
are commonly marketed as cat grass to cat enthusiasts, since cats readily harvest and eat tender young oat,
wheat, and some other grass sprouts. Sorghum is a genus of numerous species of grasses, one of which is
raised for grain and many of which are used as fodder plants either cultivated or as part of pasture. The
plants are cultivated in warmer climates worldwide. Maize, wheat and rice together accounted for 87% of all
grain production worldwide, and 43% of all food calories, while the production of oats and rye have drastically
fallen from their previous levels.
Some of the fundamentals of the book are origin of wheat classification of wheat, endeavours to find
industrial uses for wheat, criteria of wheat quality, botanical criteria of quality, milling principles, extraction
rate and its effect on flour composition, grain structure as affecting grinding, definition of flour extraction stone
milling: yields of products, roller milling: flour extraction rates, rice production and utilization, origin of rice,
comparison of rice with other cereal grains, composition of rice and cereal, breeding rice varieties with
specific, industrial uses for rice and rice by products, caryopsis and composition of rice, gross structure of the
rice caryopsis and its milling fractions etc.

The present book contains processing of various cereals like wheat, rice, corn, oat, barley and sorghum with
latest techniques. This is very useful book of entrepreneurs, agriculturists, researchers and professionals.

Contents

1. Wheat
   Origin of Wheat
   Classification of Wheat
   Moisture Consideration
   Comparison of Nutrient Values
   The Concept of Wheat Quality
   Feed Uses For Wheat
   Endeavors to Find Industrial Uses for Wheat
   Criteria of Wheat Quality
   Botanical Criteria of Quality
   Species
   Varieties
   Physical Criteria of Quality
   Weight Per Unit Volume
   Kernel Weight
   Kernel Size and Shape
   Kernel Hardness
   Vitreousness
   Color
   Damaged Kernels
   Impurities
   Milling Quality
   Chemical Criteria Of Quality
   Moisture Content
   Alpha-amylase Activity
   Fat Acidity
   Crude Fiber and Ash
   Wheat-Grading Systems
   Composition of Wheat
   Proteins
   Carbohydrates
Lipids
Minerals
Vitamins
Fiber
Pigments
Enzymes
Milling Principles
Extraction Rate and its Effect on Flour Composition
Grain Structure as Affecting Grinding
Definition of Flour Extraction
Stone-milling: Yields of Products
Roller-milling: Flour Extraction Rates
Extraction Rate and Flour Color
Some Factors Determining Commercial Extraction Rates
Changes in Ash, Thiamine, and Color with Increasing Extraction Rate
General Composition of Flours of different Extraction Rates
Effect of Increasing Extraction on Baking Quality
Roller-Milling Process
Breaking Process
Reduction Process
Grouping of Flour Streams According to Composition: Effect of Change in Extraction Rate
Some Recent Developments
Characteristics of Individual Flour Streams in Milling of White Flour
Proportions and Ash Contents.
Reduction Flours
Minerals
Phosphorus
Other Minerals
Flour Streams
Gluten
Protein Peptization, Proteolysis, Viscosity
Fat
Sugars and Maltose Figure
Sugars
Maltose Figure
B-Vitamins
Thiamine
Riboflavin
Niacin
Pentosans
Loaf Crumb Color
Baking Quality
Water-Absorption
Bread
Cookies (Biscuits)
Dry-cleaning of Wheat
Wheat Conditioning, Moisture Movement, Temperature Effects
Washing
Pick-up of Water by Wheat in Washing
Penetration Into Endosperm Conditioning In Practice Cold-Conditioning Warm-Conditioning Hot Conditioning Steam-Treatment Rolling Temperatures Protein Displacement Air Classification Special Grinding of Flour Usefulness of Products Damage to Starch Granules in Milling Factors In Individual Reductions Coarse Particle (A) Reduction Fine Particle Reduction Effects With Successive Reductions Effect of Wheat Type The Breaking System Quantitative Assessments Germ in Milling Path of the Germ in Milling Contribution to Oil of Flour Endosperm Structure as Affected by Milling Endosperm Cells Cell Walls Experimental Milling Criteria of Flour Quality Definition of Flour Quality Flour Quality and Strength Components of Quality Protein Content Flour Viscosity Enzyme Content Amylase Protease Lipase Absorption Ash and Flour Color Granulation Or Particle Size Response to Additives Color-Removing Agents Maturing Agents Enzyme Supplementation Starch Damage Methodology Microbiology Summary Wheat Pigments and Flour Colour Chemical Nature of Wheat Pigments Xanthophyll Carotene Flavones Pigments in Wheat and Flour
Pigments in the Developing Grain
Determination of the Total of Yellow Pigments
In Flour Expressed as Carotenoids
Flour Color
Sources of Flour Colour
Methods of Measuring Flour Color
Technology of Flour Color
2. Rice
Production And Utilization
Origin of Rice
Comparison of Rice with Other Cereal Grains
Composition of Rice and Cereals
Breeding Rice Varieties With Specific
Industrial Uses for Rice and Rice by-Products
Caryopsis and Composition of Rice
Gross Structure of the Rice Caryopsis and
its Milling Fractions
Gross Structure
Pericarp and Tegmen
Aleurone Layer
Embryo
Starchy Endosperm
Milling Fractions
Changes In Structure During Grain Development
Structure and Composition
Structure of the Rice Kernel
Important Components
Proteins
Starch
Lipids
Vitamins
Minerals
Other Constituents
Criteria of Rice Quality
Objective Versus Subjective Measurements of Criteria
Varieties
Grain Size, Shape, Weight, and Uniformity
Color and Translucence
Test Weight
Moisture Content
Impurities and Damaged Rice
Dockage
Damaged Kernels
Chalky Grains
Red Rice
Seeds or Kernels
Odours
Milling Quality
Milling Yield
Degree of Milling
Physicochemical Tests
Rice Drying
Harvesting Methods
Optimum Harvest Time
Preharvest Chemical Drying
Rice-Drying Terminology and Fundamentals
Kinds of Rice
Milling Yields
Weights
Moisture Content
Equilibrium Moisture Content
Drying-Rate Computation
Drying Methods
Forced-Air Drying
Deep-bed Driers
Supplemental Heat
Materials-Handling for Bin Driers
Continuous-flow, Heated-Air Driers
Tempering
Combination System of Drying
Batch Driers
Other Drying Methods
Commercial Rice Drying
Types of Enterprise
Receiving and Storing Undried Rice
Method for Increasing Drier-Facility Capacity
Sun and Shade Drying
Threshing and Winnowing
Mechanical Drying
Seed Rice
Rice Milling Technology
Removal of Foreign Matter from Rough Rice
Removal of Hulls
Removal of Bran
Sizing of Milled Rice
Solvent Extractive Rice Milling
The X-m Concept
The Development of X-M
Process Description
X-M Products
X-M Milled Rice
X-M Bran
X-M Rice Oil
Rice Milling Yields
Technology Expansion Prospects
Rice Storage
Deterioration of Stored Rice by Fungi
Fungi Associated with Rice Deterioration
Effect on Economic Value
Effect on Nutritive Value
Mycotoxins
Factors Influencing Deterioration
Storage Technology
Rice Storage Structures
Turning
Aeration
Aeration-System Design
Measuring Airflow
Operation for Dry Rice
Operation for Undried Rice
Pest Control
Stored-grain Insects
Other Pests
3. Barley
Genetics and Breeding

Inheritance and Heritability
Biotechnology
Breeding
Population Breeding Methods
Hybrid Barley
Plant
Spike
Kernel
Soil and Climatic Requirements
Rotations
Planting
Fertilizing and Water Use
Harvesting
Pest Control
Diseases
Weeds
Insects
Chemical Composition
Carbohydrates
Starch
Soluble Sugars
Nonstarch Polysaccharides
Protein
Fats
Minerals
Vitamins
Phenolic Compounds
Processing and Utilization
Feed and Food Barley
Animal
Human
Malting Barley
Uses
Marketing
Classification and Prices Received
Storage
4. Corn
Anatomical Structure, Composition, and Properties
Corn Types and Their Compositions
Corn Quality and Grading Standards
Corn Utilization
Corn as Livestock Feed
Direct Utilization of Corn as Food
Alkali-Cooked Corn-based Foods
Sweet Corn
Popcorn, the Original Snack Food
Separation of Corn Into its Component Fractions
Dry Corn Milling
The Tempering-Degerming Milling Process
Products from the Tempering-Degerming Process
Wet Corn Milling
The Wet-Milling Process
Wet Corn Mill Products
Conversion of Raw Fractions into Value-Added Ingredients and Chemicals
Modified Starches
Corn Sweeteners
Furfural Production from Corncobs
5. The Millets
Introduction
Structure and Physical Properties
Composition
Polyphenols and Antinutritional Factors
Postharvest Technology
Milling
Wet Milling
Food Uses
Nutritional Value
Feed Use
Nutritional Value
Human Studies
Effect of Decortication on Nutritional Value
6. Oats
History
Origin of Cultivated Oats
Genetics and Breeding
Cytogenetic Relationship of Species within Avena
Genetic Markers
Utilization of Germplasm Resources
Breeding
Breeding Objectives
Breeding Procedures
The Oat Plant
The Mature Grain
Chemical Composition
Protein
Protein Content and Distribution
Solubility Classification
Amino Acid Composition and Distribution
Lipids
Lipid Content and Distribution
Lipid Composition
Polysaccharides
Starch
B-glucan
Minerals
Vitamins
Processing and Utilization
Utilization
Processing
Cleaning
Drying and Cooling
Hulling
Cutting and Flaking
Oat Flour
7. Rye
Rye Breeding
Morphology and Kernel Characteristics
Growing Conditions
Rye Storage and Rye Grain Reserves and Disappearance
Rye Milling
Rye Flours
Nutrient Composition of Rye
Antinutritional Factors in Rye
Food Uses of Ryees
Industrial Uses of Rye
Rye As Animal Feed
8. Sorghum
Introduction
Origin
Structure and Physical Properties
Appearance of Sorghum Grain and its Genetics
Composition
Tannins and Polyphenols: Effects on Sorghum
Quality and Nutritional Value
Industrial Utilization
Wet Milling
Sorghum Starches
Dry Milling
Alcohol Production
Use of Sorghum for Beer and Malt
Lager Beer
Sorghum Malt
Clear Sorghum Beer
Sour, Opaque Beer
Processing For use in Feeds
Processing for Food
Traditional Food Systems
Sorghum in Baked and Pasta Products
Sorghum Syrup, Molasses, and Sugar
Nutritional Value
Nutritional Value of Sorghum as Livestock Feed
Human Digestibility Studies
Effect of Processing
9. Triticale
History

General Characteristics
Grain Development and Structure
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NIIR PROJECT CONSULTANCY SERVICES , 106-E, Kamla Nagar, New Delhi-110007, India. Email:npcs.india@gmail.com Website: NIIR.org