Now a day’s horticultural commodities getting export from India, among them cashew retain top position. For cashew cultivation certain parameters such as characteristics of cashew, weather condition, geographical location, propagation - layering, budding and grafting, nature of soil are the main to improve and increase the overall productivity of cashew with suitable planning of efficient water management. This book includes organic farming method of cashew. Three main cashew products are traded on the international market - raw nuts, cashew kernels and cashew nut shell liquid (CNSL). A fourth product - the cashew apple is generally processed and consumed locally.

This book is not only confined to the different methods of cashew processing but also describe about by-products obtained from cashew. The traditional method of cashew processing through which we get CNSL (Cashew Nut Shell Liquid), the major source of Cardanol. We also came to know about production of CNSL derivatives, polymerization of CNSL, rubber like elasticity products, styrene product of CNSL, multifunctional alcohol obtained from CNSL and lots of other information.

Cardanol is a phenolic lipid which is the byproduct of cashew nut processing. It has several uses and applications in chemistry, chemical industries, additives industries and fuel industries for low sulphur diesel fuel. This book contains the purification process of CNSL for isolation of cardanol, evaluation of copperised CNSL and neem oil as wood preservatives. It also provides a wide idea to their readers about its nutritional value, commercial exploitation, hygiene and safety issues, packaging and preservation, uses, manufacturers and suppliers of machinery of this process.

This book also engaged in quality control system, design and development of soft nano materials from CNSL cashew to play a vital role in nano technology. It covers all the area concerned in this field and presents a crystal clear overview on the process and its by-product from all possible aspects.

Contents

Preface

1. Introduction
2. Indian cashew - The Government initiatives
3. Cashew Development in India
4. Agro-ecological regions and classification of cashew
5. Morphology and Characteristics of growth and development of cashew tree
6. Improved productivity of cashew through soil and nutrient management
7. Effect of weather parameters of cashew production
8. Improvement: Breeding, Germplasm, Selection and hybridization
9. Diseases of Cashew
10. Propagation- layring, budding and Grafting
11. Cultivation
12. Planning for improved productivity through efficient water management
13. Organic farming in cashew
14. Traditional Method of Cashew Processing
15. Cashew Processing Operation
16. Production of CNSL Derivatives
Rubber like elasticity products
 Electrical insulating materials
 Phenol of CNSL and its products
 Cating Composition from CNSL
 Polymerization of CNSL
 Polymerized ethers of CNSL
 CNSL-Shellac derivatives
 Cellulose ethers plasticized with ethers of CNSL
 Modified ether-esters of CNSL
 Polymerized Cardanol
 Furfuraldehyde condensation product of CNSL

Styrene product of CNSL
Glyceryl ethers of Hydrogenated cardanol
Anacardic-acrolein resins
Allyl ethers of anacardic products
Pine wood-Anacardic products
Products of anacardic materials using sulfonic acid catalysts
Molding compound of Cashew Nut Shell Oil polymer
Epoxy modified CNSL
Anacardic acid treated with TRIS (Hydroxyethyl Isocyanurate)
Rust inhibitor from CNSL
Project Report of Anti-Corrosive Point from CNSL
Eco-friendly management of water hyacinth with a mycoherbicide with CNSL
Multifunctional alcohol obtained from CNSL
Design and Development of soft nano materials from CNSL
Cashew to play role in nano technology
17. Quality control of cashew kernels
18. Commercial exploitation of cashew apples
Infestation
Hygiene and Safety
Food hygiene and law
Food poisoning and its causes
Personal hygiene
Clanliness of equipment and working area
Other sources of contamination
Packaging and Preservation
Uses of cashew
References
List of cashew manufacturers/Suppliers of Machinery
Cashew Research Organisations
Cashew Regional Nurseries in Public Sector areas
Cashew Regional Nurseries in Private Sector Areas
Major processors and exporters of cashew
Internet sites
19. CASHEW LIQUID: Development of a Cashew Nut Cracking Device
20. The Potential of CNSL in Fuel Blends for Engines

Liquid(CNSL) for Isolation of Cardanol
22. Evaluation of Copperised Cashew Nut Shell Liquid and Neem Oil as Wood Preservatives
23. Utilisation of Cashew Nut Shell Liquid from Anacardium occidentale as Starting Material for Organic Synthesis
24. Edge Retentive and Solvent Free Coating Based on a Renewable Raw Material
25. Multifunctional additives from cashew nut shell liquid
26. Honey coated nuts
27. Volatile nut aroma and flavour compositions
28. Gloss coatings to foods and for protecting nuts from rancidity
29. Lubricity Improving Additive Composition for Low Sulfur Diesel Fuel
30. Process for preparation of oximes
31. Antioxidant composition for motor gasoline
32. Rapid Dry Fiberglass Stain
33. Method for producing cardanol (II)
34. Manufacture of Bisphenol Compounds
35. Preparation of Hydrophobically Modified Poly(acrylic acid) [PAA]
36. Heat-curable epoxy resin composition
37. Adhesives for car body assembly
38. Nutritional supplement compositions
39. Hydrophobic Polyols of Low Viscosity
40. Preparation of Flavour or Fragrance Microcapsules
41. Silane-Modified Phenolic Resins

About NIIR
NIIR PROJECT CONSULTANCY SERVICES (NPCS) is a reliable name in the industrial world for offering integrated technical consultancy services. NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.


NPCS also publishes varies process technology, technical, reference, self employment and startup books, directory, business and industry database, bankable detailed project report, market research report on various industries, small scale industry and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by professionals including project engineers, information services bureau, consultants and project consultancy firms as one of the input in their research.

Our Detailed Project report aims at providing all the critical data required by any entrepreneur vying to venture into Project. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.