

# Handbook on Speciality Gums, Adhesives , Oils, Rosin & Derivatives, Resins, Oleoresins, Katha, Chemicals with other Natural Products

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The forest in India yields a large number of products, which play an important role in the economy of the country. Natural products may be extracted from tissues of terrestrial plants, marine organisms or microorganism fermentation broths. A crude (untreated) extract from any one of these sources typically contains novel, structurally diverse chemical compounds, which the natural environment is a rich source of. There are numerous product which is has a vital commercial applications for example gum karaya, locust bean gum, tamarind gum, rosin and rosin derivatives, turpentine and its derivaties, tall oil and its derivatives, essential oil of deodar, essential oils of cinnamum species and many more. Gum is any of a number of naturally occurring resinous materials in vegetative species. Various essential oils are also obtained from natural resources like deodar, Juniperus recurvavar, Suamata, Cinnamum species, agar wood etc. Tall oil products find use in many product applications because of their economy and ready availability. Tall oil is more like a chemical product with a constant and dependable supply and a steady price. It has a large number of applications like; adhesives, carbon paper, cement addition agent, detergents, drawing oils, fungicides, lubricants, soaps, rubber additives, surface coating etc. Phenolic adhesives continue to be the most significant adhesives for the production of weather resistant wood products. In terms of volume of trade, revenue and employment potential, the minor forest products have surpassed the traditional major forest products viz, timber, firewood, pulp, wood etc. Aromatic and medicinal plants are one the major resource from forests; the medicinal plants have been used since ancient times for the treatment of human ailments. Rosin, also called colophony is a solid form of resin obtained from pines and some other plants, mostly conifers, produced by heating fresh liquid resin to vaporize the volatile liquid terpene components. It is semi transparent and varies in color from yellow to black. At room temperature rosin is brittle, but it melts at stove top temperatures. It chiefly consists of different resin acids, especially abietic acid. Oleoresin is a naturally occurring mixture of oil and a resin extracted from various plants, such as pine or balsam fir. Over three quarters of the world population relies mainly on plants and plant extracts for health care. Natural products have evolved to encompass a broad spectrum of chemical and functional diversity. It is this diversity, along with their structural complexity, that enables small natural molecules to target a nearly limitless number of biological macromolecules and often to do so in a highly selective fashion. Because of these characteristics, natural products have seen great success as therapeutic agents. However, this vast pool of compounds holds much promise beyond the development of future drugs.

This book makes an attempt to provide information of chemical nature, physical properties, manufacturing process, purification, applications, and compatibility of gums, adhesives, oils, rosin & derivatives, resins, oleoresins, katha, chemicals with other natural products. This book contains chapter on rosin and rosin derivatives, esterification of methylolated rosin, turpentine and its derivaties, tall oil and its derivatives, tall oil

in liquid soaps, essential oils of cinnamum species, utilization of tannin from waste conicer barks, katha production in Tarai area of Uttar Pradesh, adhesives for wood based on natural polyphenolic substance, etc. This book contains process of forest based products like Gums, Resins, Oleoresins, Essential Oils and other natural products obtained from Indian forests. It gives an insight of richness and vastness of the forest wealth. This book is first of its kind, which covers comprehensive treasure of information on a wide variety of products. This is very resourceful book for students, growers and marketing agencies, country where there is rich flora and fauna awaiting proper exploitation, production and utilization.

## Contents

### CHAPTER 1

#### GUM GHATTI

Chemical Nature

Physical Properties

Manufacture

Biological/Toxicological Properties

Handling

Application Procedures

Commercial Uses

Industries using Gum Ghatti

Formulations Wax Emulsion

Table Syrup Emulsion

Laboratory Techniques

Bark and Foreign Organic Matter (BFOM)

Viscosity (5% Solution)

Viscosity (7% Solution)

### CHAPTER 2

#### GUAR GUM

Manufacture

Seed Structure

Purification

Grades

Chemical and Physical Properties

Structure

Solubility in Water

Rheology

Reactivity

Biological Properties

Handling

Dry Storage

Solution Preparation

Applications

Oil and Gas

Explosives

Textile

Food

Paper

Mining

Commercial Applications: Compounding and Formulating

Food

Explosives  
Commercial Uses: Processing Aids  
Oil and Gas  
Textile  
Carpets  
Paper  
Kraft Papers  
Kraft Linerboard  
Recycled Linerboard  
Corrugating Medium  
Boxboard  
Offset News Stock  
White Papers  
Mining  
Industries using Guar Gum  
Oil and Gas  
Explosives  
Food  
Paper  
Textile  
Mining  
Formulations  
Ice Cream  
Ice Milk  
Sherbet  
Sour Cream  
Buttermilk  
Yogurt  
Instant Imitation Bakery Jelly  
Whipping Composition for Frozen Deserts

CHAPTER 3  
GUM ARABIC  
Chemical Nature  
Physical Properties  
Manufacture  
Biological/Toxicological Properties  
Rheological Properties  
Additives/extenders  
Additives  
Extenders Handling  
Applications  
Application Procedures  
Compatibility  
Commercial Uses  
Food Applications  
Confectioneries  
Dairy Products  
Bakery Products  
Flavor Fixation  
Flavor Emulsification  
Beverages  
Pharmaceutical

Suspending Agent  
Demulcent Agent  
Emulsification  
Antiseptic Preparation  
Miscellaneous Applications Medicines  
Cosmetics  
Adhesives  
Paints  
Inks  
Lithography  
Textiles  
Miscellaneous Uses  
Industries using Gum Arabic  
Food Industry  
Pharmaceutical Industry  
Cosmetic Industry  
Other Industries  
Formulations  
Confectioneries  
Food Emulsions  
Pickle Oil Emulsion  
Pickle Juice  
Beverages  
Stabilized Fruit Drink  
Dry mix Limitation Orange Drink  
Cloud Gum  
Beverage Stabilizers  
Nut Coating  
Inks  
Gloss finish Inks Wood grain Inks  
Laboratory Techniques  
30% Viscosity Method  
Insoluble Residue  
Sediment and Color  
Peroxidase Content

## CHAPTER 4

### GUM KARAYA

General Information  
Chemical Nature  
Physical Properties  
Films  
Adhesiveness  
Hydrolysis  
Pastes  
Grades  
Manufacture  
Biological/Toxicological Properties  
Short term Studies  
Long term Studies  
Special Studies  
Rheological Properties  
Handling

Applications  
Application Procedures  
Compatibility  
Future Developments Commercial Uses  
Commercial Uses  
Pharmaceuticals  
Pulp and Paper  
Food Products  
Textiles  
Petroleum and Gas Recovery  
Industries using Gum Karaya  
Formulations : Pharmaceuticals  
Denture Adhesive  
Colostomy Rings  
Cosmetic  
Alcohol Wave set Concentrate  
Typical Wave set Formula  
Food Products : Sherbet Stabilization

## CHAPTER 5

### GUM TRAGACANTH

Chemical Nature  
Structure  
Reactivities Acid  
Labile Sugars  
Electrochemical Properties  
Physical Properties : Rheological Properties  
Biological/Toxicological Properties  
Consumer Exposure Data  
Caloric Value  
Hypercholesterolemia  
Tumors  
Allergenic Properties  
Lethal Effects  
Manufacturing and Quality Control  
Handling  
Additives and Extenders  
Application Procedures  
Specialties  
Future Developments  
Commercial Uses: Compounding and Formulating  
Pharmaceutical and Medical  
Food Products  
Ice Cream Stabilizers  
Water Ices  
Commercial Uses: Processing Aids  
Crayon Manufacture  
Ceramics Manufacture  
Leather Curing  
Textiles Processing  
Paper Processing  
Wooden Match Manufacture

Industries using Gum Tragacanth  
Food Industry  
Pharmaceutical and Cosmetic Industries  
General Industrial Uses  
Formulations  
Italian Dressing  
Russian Dressing  
Blue Cheese Dressing  
French Dressing  
Low calorie Italian type Dressing  
Sweet and Sour Sauce  
Low calorie French type Dressing  
Barbecue Sauce  
Dietetic (artificial) Fruit Jelly  
Citrus flavor Beverage Emulsions  
Low calorie Chocolate Syrup  
Low calorie Chocolate Pudding  
Marshmallow Topping  
Nondairy Sour Cream  
Toasted Onion flavored Chip Dip  
Mexican flavored Chip Dip  
Tuna, Chicken and Ham Salad Spreads

Cole Slaw Dressing  
Imitation Mayonnaise Dressing  
Mustard Sauce  
Spaghetti Sauce  
Pickle Relish  
Laboratory Techniques  
Identification  
Microscope Instrument  
Viscosity Testing

## CHAPTER 6

### LOCUST BEAN GUM

Manufacture  
Seed Structure  
Purification  
Grades  
Properties  
Structure  
Solubility in Water  
Rheology  
Reactivity : Derivatives  
Commercial Uses : Compounding and Formulating  
Food Products  
Ice Cream  
Cheese  
Sauces and Salad Dressings  
Canned Pet Food  
Commercial Uses : Processing Aids  
Textiles Processing  
Carpets Processing

Dyeing Carpets  
Paper Products  
Wet end Addition  
Gum Preparation  
Mining Industry  
Industries using Locust Bean Gum : Food Industry  
Mining Industry  
Paper Industry  
Textiles Industry  
Formulation Ice Cream  
Ice Milk  
Sherbet  
Sour Cream  
Buttermilk  
Yogurt  
Instant Limitation Bakery Jelly  
Whipping Cream Composition (for Frozen Desserts)

## CHAPTER 7

### TAMARIND GUM

Chemical Nature  
Molecular Weight  
Derivatives  
Miscellaneous  
Physical Properties  
Manufacture  
Biological/Toxicological Properties  
Electrochemical Properties  
Rheological Properties  
Handling  
Applications  
By Result  
By End Product  
By Industry  
Application Procedures  
Future Developments  
Commercial Uses  
Processing Aids  
Industries using Tamarind Gum  
Formulations  
Size for Jute Yarn  
Size for Cotton Warps  
Latex Manufacture  
Other Uses  
Laboratory Procedures  
Viscosity Method  
Acid Insoluble Residue (Air)  
Fat Content 33  
Term Glossary  
General Information  
Chemical Structure  
Physical Properties  
Solution Properties

Effect of Salts on Viscosity  
Effect of PH on Viscosity  
Gelation With Metals  
Regulatory Status  
Commercial Uses : Food  
Xanthan Gum  
Dressings  
Foods and Drinks  
Other Products  
Xanthan Gum With Locust Bean Gum  
Commmercial Uses : Industrial  
Xanthan Gum  
Viscosity Control  
Other Applications  
Xanthan Gum With Locust Bean Gum  
Agricultural Sprays  
Gelled Products  
Slurried Explosives  
Fire Fighting  
Paper Sizing  
Photographic Processing  
Formulations  
Dessert Souffles  
Vanilla Souffle  
Chocolate Souffle  
Lemon Souffle  
Bakery Jellies  
Salad Dressings  
Green Goddess  
Creamy Russian  
French Dressing  
Creamy Italian  
Italian Dressing  
Dry Sauce Mixes  
Cheese Sauce Mix  
Barbecue Sauce Mix  
Spaghetti Sauce Mix  
White Sauce Mix1  
Frozen Pizzas  
Animal Feeds (Liquid)  
Laboratory Techniques  
Viscosity (Food Grade)  
Viscosity (Industrial Grade)  
Moisture Content  
Powder Color  
Determination of Gum in Mixtures

## CHAPTER 8

### CASSIA SIAMEA LAM. SEED

#### A NEW SOURCE OF COMMERCIAL GUM

Material and Methods

Results and Discussion



## CHAPTER 9

### ROSIN AND ROSIN DERIVATIVES

Composition

Reaction and Derivatives

Isomerization

Maleation

Oxidation

Photosensitized Oxidation

Hydrogenation

Hydrogenless Hydrogenation

Polymers of Vinyl Esters of Hydrogenated Rosin

Perhydrogenation

Hydrocracking of Rosin

Dehydrogenation

Polymerization

Analysis

Instrumental Analysis

Phenolic Modification

Salt Formation

Esterification

Hydrogenolysis

Polyesterification

Copolyesters

Ammonolysis

Preparations

Typical Uses

Styrenation

Decarboxylation

Hydroxymethylation and Hydroxylation

Nitrogenous Intermediates

Oxonation

Esterification of Methylolated Rosin

Amidation (12 AEAA)

Halogenated Rosin

Non phthalic Alkyd Resins

Shellacemodified Rosin

Use of Rosin in the Polymer Field

Adhesives

Hot Melt Adhesives

Chewing Gum

Floor Polishes

Flooring Materials (Vinyl Flooring)

Linoleum

Paper Sizing

Printing Inks

Letter Press Inks

Flexographic Inks

Gravure Inks

Lithographic Inks

Protective Coatings

Air Drying Hammer Finish

Epoxy Esters

Lacquers

Varnishes  
Rubber  
Pharmaceutical Uses

## CHAPTER 10 TURPENTINE AND ITS DERIVATIVES

### Introduction

#### (i) Processing of Oleoresin

##### I. Olustee Gum Cleaning Process

##### II. Recovery of Turpentine and Rosin

#### Batch Processing

#### Continuous Processing

#### Heater

#### Stripping Column

##### 1. Multiple Tube Column

##### 2. Luwa Columns

#### (ii) Fractionation of Turpentine

#### Batch Operation

#### Semi continuous Operation

#### Continuous Operation

#### Column Packings

#### Catalytic Isomerization of $\alpha$ pinene

#### pinene

#### carene

#### Longi Folene

#### Methods of Preparation of Terpene Derivatives

#### Camphene

#### Thaneite : Properties

#### Applications

#### P Menthadienes and P cymene

#### Myrcene

#### Alloocimene

#### Geraniol and Nerol

#### Linalool

#### Citral

#### Ionones and Methylionones

#### Citronellol

#### Citronellal

#### Myrcenol

#### Menthol

#### Carvone

#### Camphor

#### Pine Oil

#### Terpin Hydrate

#### Terpineols

#### Isobornyl Acetate and Isoborneol

#### Cinestrols

#### Terpen Resins (TPR)

#### Thymol

#### Xtane 505

#### Terpinyl Acetate

#### Isolongi Folene

#### Acetyl Longifolene

Camphor Oil  
Fenchone  
Acinol  
Acinone  
Pinetar  
Future Utilizations  
Uses of Terpene Derivatives  
Perfumes and Flavours  
Jasmin  
Orange Flower and Neroli  
Violet  
Fougere (Fern)  
Lily of the Valley  
Linden (Lime Blossom)  
Green Perfumes  
Perfumes for Men  
Soap  
Masking  
Agarbatti  
Textile Perfumes  
Aerosol Products  
Supari Chewing Tobacco  
Cigarettes  
Boot Polish  
Perfumed Disinfectants  
Medicines  
Pressure Sensitive Adhesives (PAS)  
Hot Melt Adhesives (HMA) and Coatings  
Other Uses  
Latest Uses of Terpene Solvent

## CHAPTER 11

### TALL OIL AND ITS DERIVATIVES

Production Processes for Tall Oil  
Recovery of Tall Oil  
Acid Refining of Tall Oil  
Fractionation of Tall Oil  
Composition and Properties of Tall Oil  
Crude Tall Oil  
Distilled Tall Oil  
Acid Refined Tall Oil  
Fractionated Tall Oil  
Analysis and Testing of Tall Oil Products  
Shipping, Storage, and Handling of Tall Oil Products  
Crude Tall Oil  
Acid Refined Tall Oil  
Tall Oil Fatty Acids and Distilled Tall Oils  
Tall Oil Heads  
Tall Oil Pitch  
Tall Oil Rosin  
Applications of Tall Oil

## CHAPTER 12

## THE CHEMISTRY OF TALL OIL FATTY AND ROSIN ACIDS

Chemical Composition of Tall Oil Fatty Acids

General Reactions of Tall Oil Fatty Acids

Reactions Involving the Double Bonds

Reactions Involving the Carboxyl Group

Chemical Composition of Tall Rosin

General Reactions of Tall Oil Rosin

Reactions Involving the Carboxyl Group

Reactions Involving the Double Bonds

## CHAPTER 13

### TALL OIL PRODUCTS IN SURFACE COATINGS

Tall Oil in Alkyd Resins

Tall Oil Formulation in Alkyd Resins

Short Oil Banking Alkyd solvent Process

Short Oil Banking Alkyd fusion Process

Long Oil Alkyd fusion Process

Rosin Modified Alkyd fusion Process

Epoxy Modified Alkyd

Esters of Tall Oil Products Tall Oil Fatty Acids

Tall Oil Rosin

Tall Oil Formulations in Esters

Glycerine Ester

Maleic Modified Ester

Distilled Tall Oil Epoxy Ester

Tall Oil Pitch

Other Uses for Oil Products

Limed Tall Oil Rosin

Limed Acid Refined or Distilled Tall Oils

Styrene Resins

Latex Paints

Polyurethanes

Putty and Caulking Compounds

Varnishes

Tallate Driers

Tempering Oils for Hardboard

## CHAPTER 14

### TALL OIL IN THE PLASTICIZER FIELD

Tall Oil Plasticizers

Esterification of Tall Oil for Plasticizers

## CHAPTER 15

### TALL OIL IN ADHESIVES AND LINOLEUM CEMENT

Tall Oil Rubber Adhesives

Tall Oil in Hot Melt Adhesives

Tall Oil Products in Linoleum Cements

Formulation With Tall Oil

Formulation With Tall Oil Esters

## CHAPTER 16

### TALL OIL IN ASPHALT PRODUCTS AND PETROLEUM USES

Tall Oil in Asphalt

Roads  
Soil Treatments  
Roofing  
Adhesives  
Antistripping Agents  
Plasticizers  
Miscellaneous  
Tall Oil in Petroleum Applications  
Oil and Gas Well Fracturing  
Drilling Muds  
Demulsification Agents  
Corrosion Inhibitors  
Catalyst  
Lubricating Oil Additives

## CHAPTER 17

### TALL OIL IN LIQUID SOAPS

Tall Oil in Disinfectants  
Tall Oil in Synthetic Detergents and Wetting Agents  
Syndet Types  
Syndet Products  
Tall Oil in Biodegradable Detergents

## CHAPTER 18

### TALL OIL IN FLOTATION COLLECTORS AND CORE OILS

Tall Oil in Flotation Collectors  
Flotaion Collectors  
Flotation Applications  
Tall Oil in Core Oils

## CHAPTER 19

### TALL OIL IN RUBBER

Styrene butadiene Rubber  
Cold SBR Formulation (SBR 1500 Series)  
Hot SBR Formulation (SBR 1000 Series)  
Cold High Solids SBR 2105 Latex Formulation (SBR 2100 Series)  
Hot SBR Latex Fromulation (SBR 2000 Series Type II)  
Foam Rubber

## CHAPTER 20

### TALL OIL IN PAPER SIZE

Paper Making Process  
Rosin Sizing Materials  
Forms of Size Available  
Paste Size  
Dry Size  
Methods of Preparing Liquid Size  
Cooking Process  
Emulsion Process  
Bewoid Process  
Delthirna Process  
Internal and External Sizing  
Effect of Wet Strength Resins and

Paper Coating Resins on Sizing  
Sizing of Nonconventional Paper  
Testing of Sizing  
Water Resistance of Paper and Paperboard T433 M 44  
(Dry Indicator Method)  
Water Immersion Test of Paperboard  
Water Absorption of Paperboard  
Water Absorptiveness of Nonbibulous Paper and Paperboard  
T441 M 60 (Cobb Test)  
Degree of Curl and Sizing of Paper T466 M 52  
Ink Penetration Test  
Fotosize Penetration Test Lactic Acid Test

## CHAPTER 21

### TALL OIL IN PRINTING INKS

Typographic Printing and Typographic Inks  
Heat Set Inks  
Steam Set Inks  
Newsprint Inks  
Lithographic Printing and Lithographic Inks  
Intaglio or Gravure Printing and Gravure Inks  
Silk Screen Printing Inks  
Overprint Varnishes  
Bag Inks

## CHAPTER 22

### MISCELLANEOUS APPLICATIONS OF TALL OIL

Tall Oil Fatty Acids for Chemical Intermediates  
Polymerized Fatty Acids  
Azelaic and Pelargonic Acids  
Tall Oil in Corecipated Barium Salts  
Tall Oil in Defoamers  
Tall Oil Pigment Dispersants  
Tall Oil in Masonry and Cement Coatings

## CHAPTER 23

### EUCALYPTUS : A VERSATILE MATERIAL FOR AROMA CHEMICALS

## CHAPTER 24

### HIMALAYAN CEDARWOOD OIL

Indian Himalayan Cedarwood Oil  
Comparative Studies  
Export of Himalayan Cedarwood Oil from India  
Solvent Extraction of the Oil  
Purification of the Oil  
Empyreumatic Himalayan Cedarwood Oil Vern. Chiloan Oil

## CHAPTER 25

### ESSENTIAL OIL OF DEODAR (CEDRUS DEODARA)

The Essential Oil  
Raw Material  
Physico chemical Properties

Chemical Composition of C. Deodara  
Distillation  
Latest Research Work  
Uses of Cedarwood Oils

CHAPTER 26  
ESSENTIAL OIL OF JUNIPERUS RECURVA VAR.  
SQUAMATA AND OTHER OILS OF JUNIPERUS SPP.  
Oil From Berries  
Oil From Leaves  
Oil From Wood  
Experimental  
Tlc of the Oil  
Glc of the Oil

CHAPTER 27  
AGARWOOD AND OIL OF ARARWOOD  
Physico chemicals Properties and Chemical Composition  
Trade and Production of Agar and Its Oil  
Uses

CHAPTER 28  
ESSENTIAL OILS OF CINNAMUM SPECIES  
Cinnamum Cassia (nees) Nees Ex Blume  
Export Import of Cassia and Tejpat Leaves

CHAPTER 29  
LIGNIN AND ITS DERIVATIVES  
Primary Source  
Manufacture of Lignin and Its Derivatives:  
General Properties  
Commercial Lignins  
Uses

CHAPTER 30  
UTILIZATION OF TANNIN FROM WASTE CONICER BARKS  
Chir Pine and Its Availability  
Technical Analysis  
(a) Evaluation Studies  
(b) Leaching Studies  
(c) Tanning Procedure : (1)  
Conclusion and Suggestions

CHAPTER 31  
LEACHING AND TANNING STUDIES ON  
COMMERCIAL GRADE NASPAL (POMEGRANATE RIND)  
Experimental  
Conclusions

CHAPTER 32  
CHEMICAL EXAMINATION OF THE TANNIN  
PEARING PLANTS OF THE FORESTS OF ANDHRA PRADESH

## CHAPTER 33

### SAL SEEDS A NEW SOURCE OF TANNING MATERIAL

Isolation and Identification of Polyphenolic Constituents

Separation and Utilisation of Sal Tannings

## CHAPTER 34

### PREPARATION OF PHENOLIC RESINS FROM

#### MYROBALAN TANNIN EXTRACTS

Polyphenolic Compounds of Myrobalan

Reaction of Formaldehyde With Myrobalan Extract in Presence of Both Acid and Alkali Catalyst

Condensation With Formaldehyde

Condensation Reaction of Gallic Acid with Formaldehyde

Reimer Tieman Reactions

Duff Reaction

Villsmeyer Reaction

## CHAPTER 35

### KATHA PRODUCTION IN TARAI AREA OF UTTAR PRADESH

Chipping

Extraction

Concentration

Crystallization

Filtration

Hydraulic Press

Hydraulic Press

Drying of Katha Batties

Manufacture of Deshi Katha

Utilization of Byproducts

## CHAPTER 36

### STUDIES ON THE EFFECTS OF WOOD MOISTURE ON THE RECOVERY OF KATHA FROM ACACIA CATECHU

Experimental

Result & Discussion

Inferences

## CHAPTER 37

### EXTRACTION OF PURE CATECHIN FROM KHAIR WOOD AND KATHA SAMPLES AND AN IMPROVED METHOD FOR ITS ESTIMATION

Experimental

Extraction of Catechin From Wood by using Organic Solvents

## CHAPTER 38

### ADHESIVES FOR WOOD BASED ON NATURAL POLYPHENOLIC SUBSTANCE

Adhesives Based on Tannins

Tannins are Classified in two Groups

Adhesives Based on Lignins

## CHAPTER 39

### LAC PRODUCTION, UTILISATION AND FUTURE



Production  
Utilisation

CHAPTER 40  
HIGH ALPHA CELLULOSE PULP EXPERIMENTAD  
RESUMS & DISCUSSION FROM POPLAR CASALE  
Analysis

CHAPTER 41  
HIGH ALPHA CELLULOSE FROM FAST GROWING  
PLANTS SUCH AS CROTALARIA JUNCEA AND  
CROTALARIA RETUSA  
Experimental  
Results & Discussions

CHAPTER 42  
UTILIZATION OF PINUS CARIBAEA NEEDLES FOR  
FIBRE BOARDS  
Material & Method  
Board Formation  
Additives Blending  
Pressing  
Results and Discussions

CHAPTER 43  
WOOD POLYMER COMPOSITES AND  
THEIR INDUSTRIAL APPLICATIONS  
Chemistry of the Process  
Impregation Process  
Monomers for Wood Polymer Composites  
Physical Properties  
Commercial Applications  
Catalys Heat Process  
World Wide Production

CHAPTER 44  
POLYURETHANE FOAMS FROM THE REACTION OF  
BARK AND DIISOCYANATE

CHAPTER 45  
PARTICLEBOARD MANUFACTURE AND PROCESSING  
Definition  
Raw Materials  
Wood  
Adhesive  
Wax Emulsions  
Manufacturing : Particle Preparation  
Particle Drying  
Blending  
Mat Formation  
Pressing Operation  
Finishing  
Surface Finishing

Grain Printing on Flat Panels  
Conclusion

#### CHAPTER 46 CARBOHYDRATE MODIFIED PHENOL FORMALDEHYDE RESINS FORMULATED AT NEUTRAL CONDITIONS

Experimental Methodology : Adhesive Formulation

Veneer

Bonding

Determination of Shear Strength

Prehydrolysis of Southern Red Oak

Extraction of Cured, Modified Phenol formaldehyde Resins

Isolation of Compounds VI VIII

Results and Discussion : Bonding Veneer Panels

Incorporation of Carbohydrate Into Cured Resin

#### CHAPTER 47 UTILIZATION OF MINOR OIL SEEDS

Appendix

Mahuva : (Madhuca Latifolia or M. Lonoifolia)

Sal : (Shorea Rubra)

Kusum : (Schleichera Trijuga)

Khakhan : (Salvadora Oleocedrus)

Tamarind : (Tamarindus Indica)

Undi : (Calophyllum Inophyllum)

Karanda Oil : (Pongamia Glabra)

Pisa : (Aetnodaphne Bookerii)

Neem : (Azadirachta Indica)

Kokum : (Garcinia Indica)

Dhupa : (Vateria Indica)

#### CHAPTER 48 CHEMICAL INVESTIGATION OF FATTY OIL OF BURSERA PENICILLATION SEED

Composition of the Seed Kernel Oil

#### CHAPTER 49 ABUTILON INDICUM SEED OIL: CHARACTERISATION OF HBR REACTIVE ACIDS

#### CHAPTER 50 A NEW $\beta$ HYDROXY OLEFINIC FATTY ACID IN PLANTAGO MAJOR (PLANTAGINACEAE) SEED OIL

#### CHAPTER 51 GLYCOLIPIDS OF BORAGINACEA SEED OILS

#### CHAPTER 52 STYRENE COPOLYMERIZATION OF BABUL (ACACIA) OIL AND ITS ALKYL

Experimental Materials Used

Refining and Bleaching of the Oil

Isomerization

Styrenation of Babul Oil  
Preparation of Styrenated Alkyds  
Pre styrenation Process  
Formulation  
Post Styrenation Process  
Formulation  
Testing  
Results and Discussion  
Conclusion

CHAPTER 53  
INVESTIGATION OF NEEM SEED SHELL FLOUR  
Experimental : Preparation of Sample  
Treatment of the Shell Flour  
Preparation of Moulding Powder

CHAPTER 54  
DEVELOPMENT OF SALSEED OIL INDUSTRY

CHAPTER 55  
STUDIES ON TAMARIND KERNEL OIL  
Experimental : Materials  
General Methods  
Extraction, Purification and General Characterization of  
Tamarind Kernel Oil  
Analysis of Fatty Acid Composition  
Extraction and Identification of Monoglycerides  
Extraction and Identification of Free Fatty Acids  
Isolation and Characterization of Unsaponifiable Matter  
Fractionation of Tamarind Kernel Oil  
Analysis of Neutral Lipids  
Deacylation of Phospholipid Fractions  
Hydrolysis of Phospholipids, Identification of Bases  
Identification of Polyhydroxy Compounds  
Analysis of Glycolipid Fraction  
Identification of Component Sugars  
Tlc Analysis of Glycolipid Fraction  
Analysis of Sterol Glycoside  
Componental Analysis of ASG  
Results and Discussion : Total Fatty Acids  
Neutral Lipids  
Unsaponifiable Matter  
Samples Phospholipids  
Glycolipids

CHAPTER 56  
TECHNOECONOMIC EVALUATION OF ANGELICA  
ARCHANGELICA ROOTS AS A COMMERCIAL SOURCE  
OF ANGELICA OIL  
Materials and Methods  
Technoeconomic Evaluation

CHAPTER 57

## COMMERCIAL UTILISATION OF INDIAN BERBERSIS

Raw Material

Chemical Evaluation

Resources

### CHAPTER 58

#### PROCESS DEVELOPMENT FOR HECOGENIN AND SOLASODINE

Hecogenin From Agave Species

Solasodine From : Solanum khasianum

### CHAPTER 59

#### PRODUCTION OF STRYCHINE AND BRUCINE FROM NUX VOMICA PROCESS:

Process

Yields

Equipments Required

Raw Materials

Economics

### CHAPTER 60

#### AN IMPROVED METHOD FOR THE PRODUCTION OF BRUCINE AND STRYCHNINE FROM STRYCHNOS NUX VOMICA BARK

Uses

Earlier Methods of Extraction of Strychnine and Brucin

Improved Method for the Extraction of Brucine and Strychnine

### CHAPTER 61

#### HERACLEUM SPECIES AS SOURCES FOR FURANOCOUMARINS

### CHAPTER 62

#### MEDICINAL AND AROMATIC PLANT RESOURCES OF THE KUMAON HIMALAYAS: PRESENT POSITION, FUTURE STRATEGIES AND PROSPECTS

Appendix 1 : Medicinal Plants Bearing Alkaloids

Appendix II: Plants Bearing Glycosides

Appendix III : Plants Bearing Edible and

Appendix IV : Plants Bearing Tannins

Appendix V : Plants Bearing Essential Oils

### CHAPTER 63

#### UTILIZATION OF APRICOT KERNELS AND A SOURCE OF VITAMIN B15

### CHAPTER 64

#### SOLVENT EXTRACTION OF ARTEMISIA ANNUAL ON PILOT PLANT SCALE

Experimental Procedure

A. Bench Scale Study

B. Pilot Plant Scale Study

Results and Discussion

## CHAPTER 65

### CANDELILLA WAX

Results and Discussion

Transplanting and Harvesting

Yield of Stems and Wax

Physico Chemical Properties

Results & Discussion

## CHAPTER 66

### CHEMURGY OF KALPVRIKSHA

Collection

Transportation

Drying

Decortication

Crushing/Extraction

Solvent Extraction

Saponin

Wet Rendering Process

Production of Palmitic Acid

High Pressure Splitting

Meal

Seed Coat

## CHAPTER 67

### UTILIZATION OF MOHUA FLOWERS FOR CITRIC ACID PRODUCTION

Materials and Methods

Microorganism

Growth of the Organism

Viscosity

Determination of Sugar

Determination of Citric Acid: Fermentation Conditions

Results and Discussion

Effect of Cultural Conditions of Citrate Production

## CHAPTER 68

### INDUSTRIAL UTILIZATION OF KOKAM

## CHAPTER 69

### NUTRITIVE VALUE OF SOME LESSER KNOWN WILD FRUITS OF JAMMU & KASHMIR STATE

Availability and Utilization

Experimental

Results and Discussion

## CHAPTER 70

### WILD VEGETABLE OOD MATERIALS OF JAMMU AND KASHMIR

Bauhinia Variegata Linn

Bombax Ceiba Linn

Capparts Spinosa Linn

Caralluma Tuberculata N.E. Br.

Cicer Soongaricum Stapf

Coccinia Cordifolia  
Codonopsis Ovata Benth  
Corylus Columna Linn.  
Diplaium Esculentum  
Emblica Officinalis Gaertn.  
Eremurus Spp.  
Euphorbia Royleana Linn.  
Megacarpaea Polyandra Benth.  
Momordica Dioica Roxb.  
Morniga Oleifera Lamk  
Punica Ranatum Linn  
Rheum Spp. R.emodi Wall  
Taraxacum Officinale Weber  
Telosma Pallia Craib. (D.Goalmanda)

## CHAPTER 71

### EDIBLE MUSHROOMS OF JAMMU & KASHMIR FORESTS

Morels (Morchella Sp.)  
Dhingri (Pleurotus)  
Pleurotus Fossulatus (Cooke) Sacc  
Pleurotus Flabellatus (Berk, and Br.) Sacc; Vern  
Other Edible Mushrooms  
Coprinus  
Geopora Arenicola  
Boletus Sp.  
Agrocybe Cylindracea (D.C. ex. Fr) R.maire  
Flammulina Velutipes Curt. Ex. Fr. (Karst): Lactarius  
Scrobiculatus Scop. Ex. Fr.  
Tuber Cibarium Sibth.

## CHAPTER 72

### PROSPECTS OF FURFURAL AND FURFURAL BASED INDUSTRIES IN INDIA

Uses  
Conventional Processes  
Possibilities  
Conclusion

## CHAPTER 73

### KEWDA INDUSTRY IN ORISSA

Distribution Pattern and Availability of the Plant  
Historical Development and Present Set Up of the Industry  
Uses and Demand of the Perfume  
Collection  
Distillation  
Cost Estimation  
Present Position and Future Prospects of the Industry

## CHAPTER 74

### PENCIL RAW MATERIALS IN KERALA

Industry A Birds Eye View  
Specification of Wood  
Species Used and Availability

Some Suggestions conclusion  
Conclusion

## CHAPTER 75 FOREST BASD RAW MATERIALS IN NEPAL

Tropical Zone (below 1000 M)  
Sub Tropical Zone (1000 2000 M)  
Temperate Zone (2000 3000 M)  
Sub Alpine Zone (3000 4000 M)  
Climate and Temperature  
Raw Materials  
Plants Yielding Vegetable Gums and Resins  
Bengal Kino Gum or Palash Gum  
Sal Gum  
Sahanjan Gum

## CHAPTER 76 MINOR FOREST PRODUCTS OF BIHAR

CHAPTER 77  
INDUSTRIALLY IMPORTANT MINOR FOREST  
PRODUCTS OF ORISSA  
Plants Used in Drug and Pharmaceutical Industry  
Plants Used in Perfumery Industry  
Vetiveria Zizanioides (Vetiver)  
Cymbopogen Flexuosus (Lemongrass)  
Hyptis Suavelens (Linn.) Poit  
Plants Yielding Gums and Resins of Industrial Use  
Plants Used in Vegetable Oil and Fat Industry  
Madhuca Latifolia (Roxb)  
Pongamia Pinnate (Linn.)  
Sehleichera Elesa (Lour)  
Plants Used in Food or Food colourant Industries  
Bixa Orellana Linn  
Plants Used in Leather Tanning Industry  
Cleistanthus Collinus (Karade)  
Broomgrass for Broom Industry  
Kendu for Bidi Manufacturing Industry  
Bamboo for Pulp in the Paper Industry  
Fibre Yieldig Plants for Cordage Industry

List of Address of Machinery Suppliers

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