

# Handbook on Citrus Fruits Cultivation and Oil Extraction

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Citrus fruits are produced all around the world. They contain healthy nutrition content that works wonders for the body. Citrus fruits act as a fabulous source of vitamin C and a wide range of essential nutrients required by the body. India only represents a mere 4% of global citrus fruit production. But now a day, there is a rise in its cultivation. This rise in citrus production is mainly due to the increase in cultivation areas & the change in consumer preferences towards more health & convenience food consumption & the rising incomes. Citrus fruits have long been valued as part of a nutritious and tasty diet. The flavours provided by citrus are among the most preferred in the world, and it is increasingly evident that citrus not only tastes good, but is also good for people. It is well established that citrus and citrus products are a rich source of vitamins, minerals and dietary fiber (non starch polysaccharides) that are essential for normal growth and development and overall nutritional well being. However, it is now beginning to be appreciated that these and other biologically active, non nutrient compounds found in citrus and other plants (phytochemicals) can also help to reduce the risk of many chronic diseases. Appropriate dietary guidelines and recommendations that encourage the consumption of citrus fruit and their products can lead to widespread nutritional benefits across the population. All citrus fruit is acid fruit. The acid fruits are the most detoxifying fruits and excellent foods. Lemon oil is obtained from the fruits of citrus Limonum, Risso (Rutaceae). Although the majority of commercially available essential oils are extracted from the original botanical material by use of steam distillation, most citrus essential oils are extracted by pressing the rinds of the citrus fruits. The oil of sweet orange is obtained from the fruits of citrus Aurantium Risso and the oil of bitter orange from fruits of citrus Bigaradia Risso (Aurantiaceae). Orange Essential Oil is energizing and is usually well loved by men, women and children. Citrus fruit oils are cheaper than most other essential oils. Lemon or sweet orange oils that are obtained as by products of the citrus industry are even cheaper.

Some of the fundamentals of the book are botanical classification, classification of genus citrus, criteria for citrus classification, information on important citrus fruits, subgenus fucitrus (edible citrus fruits), citrus cultivation, citrus fruits, kinnow mandarin, citrus fruit breeding, soil inspection for citrus family, nutrition for citrus world, proper harvesting of citrus, post harvesting of citrus fruits, etc.

This handbook on citrus fruits provides relevant information on most citrus crops, the basics of citriculture & production, pre & post harvest management, picking, storage etc. Selected topics on oil extraction of citrus fruits are also given to provide knowledge of the techniques used. This book will be helpful for technocrats, farmers, research scholar, institutions etc.

## Contents

Contents

1. Botanical Classification  
 Classification of Genus Citrus  
 Criteria for Citrus Classification  
 Different Classification  
 Subgenus Eucitrus (10 Species)  
 Subgenus 2. Papeda (6 Species)  
 Subgenera 1. Archicitrus (5 Sections, 98 Species)  
 Subgenera 2. Meta Citrus (3 Sections, 46 Species)  
 Others of Somewhat Doubtful Classification  
 Information on Important Citrus Fruits  
 Subgenus Fucitrus (Edible Citrus Fruits)  
 Acid Group  
 Citrus Medica Linn. (Citron)  
 Citrus Lemon Burm (Lemon)  
 Citrus Aurantifolia Swingle (Acid Lime)  
 Citrus Latifolia Tanaka (Tahiti or Persian Lime)  
 Citrus Limettioides Tanaka (Sweet Lime)  
 Citrus Jambhiri Lush (Rough Lemon; Jambiri)  
 Citrus Limetta Risso (Limetta of the Mediterranean)  
 Citrus Karna Raff (Kharna Khatta)  
 Citrus Limonia Osbeck (Rangpur Lime)  
 Citrus Pennivesiculata Tanaka (Gajanimma)  
 Orange Group  
 Citrus Aurantium Linn (Sour, Bigarade or Senville Orange)  
 Citrus Sinensis Osbeck (Sweet Orange)  
 Citrus Myrtifolia Raffinesque  
 Citrus Bergemia Risso (Bargmot Orange)  
 Citrus Natsudaoides Hayata  
 Pumelo-Grapefruit Group  
 Mandarin Group  
 Citrus Reticulate Blance (loose skinned orange or Santra of India)  
 Citrus Unshiu M (Satsuma Mandarin)  
 Citrus Deliciosa Tenore  
 Citrus Nobilis Loureiro (King Mandarin)  
 Citrus Reshni Tanaka (Spice Mandarin)  
 Citrus Medurensis Lou (Calamondin)  
 Citrus Madaraspata Tanaka  
 Subgenus Papeda : (Inedible Citrus Fruits)  
 Eupapeda Citrus  
 Citrus Macroptera (Metanewsian Papeda)  
 Papeda Citrus  
 Citrus Ichangensis  
 Citrus latipes (Khasi Papeda)  
 Kumquats  
 Fortunella Margarita Swingle (Nagami or Oval Kumquat)  
 Fortunella Japonica Swingle (Marumi or Round Kumquat)  
 Fortunella Crassiflora Swingle (Meiwa Kumquat)  
 Fortunella Bindsii Swingle (Hong Kong wild Kumquat)  
 Poncirus Trifoliata L. (Trifoliate Orange)  
 Citrus Relatives  
 Aegle Marmelos Linn. (Bael)  
 Feronia Limonia (Linn) Swingle (Wood apple)

## 2. Citrus Cultivation

Sweet Oranges

Citrus Sinensis Osbeck

Batavian

Hamlin

Jaffa

Malta Blood Red

Mosambi

Pineapple

Sathgudi

Shamouti

Valencia Late

Washington Navel Oranges

Mandarin Oranges

Citrus Reticulata B.

Calamondin (Citrus Madurensis Lou)

Cleopatra (Spice Tangerine) C. reshni T.

Coorg Orange

Dancy Tangerine

Desi Mandarin (Pathankot)

Khasi Orange

King Mandarin

Kinnow Mandarin

Nagpur Santra

Satsuma Orange (C. unshiu M.)

Temple Mandarin

Lemon C. limon Burm

Eureka Lemon

Lisbon Lemon

Lucknowseedless

Hill Lemon (Galgal) C. pseudolimon Tanaka

Malta Lemon

Meyer Lemon

Napali Oblong

Villafranca

Lime

Acid Lime (Citrus aurantifolia Swingle)

Tahiti (Persian) Lime (C latifolia Tanaka)

Rangpur Lime (Citrus Limonia Osbeck)

Sweet Lime (Citrus Limettioides Tanaka)

Pummelo (C. Grandis Osbeck)

Nagpur (Chakotra)

Grapefruit (C. Paradisi Macf)

Duncan

Foster

Marsh Seedless

Ruby

Shaharanpur Special

Thompson (Pink Marsh)

Citrus Hybrids

Inter Generic Hybrids

Hybrids of Poncirus

Citranges

Citrangquats (Citrus O(range) Kum(quats)  
Citrangedins (Citrus O(range) Calomon (din)  
Citrangors  
Cleitranges  
Citrumelos  
Hybrids of Fortunella  
Procimequat (Pro(to)Citrus—L)imequat.  
(Fortunella japonica—C.aurantifolia, Cv. "Mexican)—F.hindsii.  
Limequats (C. aurantifolia—F. japonica)  
Orangequats. (C. reticulata Cv. satsuma—F. japonica—F. morgarita Cv. meiwa)  
Hybrids of Genus Eremocitrus  
Intrgeneric Hybrids

### 3. Citrus Fruits

Sweet Orange

Climate

Soil

Cultivars

Mosambi

Blood Red Malta

Sathgudi

Pineapple

Washington Navel

Jaffa

Shamouti

Valencia Late

Hamlin

Batavian

Propagation

Raising of Seedlings for Rootstock

Budding

Planting

Manure and Fertilizers

Irrigation

Interculture and Intercropping

Training and Pruning

Bahar Treatment

Fruit Drop

Physiological Fruit Drop

Control Measures

Pathological Fruit Drop

Control Measures

Harvesting

Yield

Post Harvesting Handling and Storage

### 4. Mandarin

Uses

Climate

Soil

Varieties

Nagpur Santra

Khasi Orange (Mandarin)

Coorg Orange  
Desi Mandarin (Pathankot)  
Other Varieties  
Propagation  
Manure and Fertilizers  
Yield  
Post Harvest Handling and Storage

#### 5. Kinnow Mandarin

Uses  
Climate  
Soil  
Propagation  
Planting  
Manures and Fertilizers  
Irrigation  
Interculture and Intercropping  
Flowering and Fruiting  
Harvesting  
Yield  
Post Harvest Handling and Storage

#### 6. Sour Lime

Uses  
Climate  
Soil  
Types/Varieties of Lime  
Kagzi Lime  
Chakradhar Lime  
Rangpur Lime (*Citrus limonia* Osbeck)  
Taheti (Persian) Lime (*C. latifolia* Tanaka)  
Propagation  
Raising of Seedlings  
Planting  
Manure and Fertilizers  
Irrigation  
Interculture and Intercropping  
Training and Pruning  
Flowering and Fruiting  
Harvesting  
Postharvest Handling and Storage

#### 7. Sweet Lime

Uses  
Climate  
Soil  
Varieties  
Mitha Chikna  
Propagation  
Planting  
Manures and Fertilizers  
Irrigation  
Training and Pruning

Flowering and Fruiting  
Harvesting  
Yield  
Handling and Storage

## 8. Lemon

Uses  
Climate  
Soil  
Varieties  
Eureka  
Lisbon Lemon  
Villafranca  
Lucknow Seedless  
Nepali Oblong  
Baramasi  
Kagzi Kalam  
Hill Lemon. (Galgal) C. pseudolemon Tanaka  
Meyer Lemon  
Pat Lemon  
Italian Lemon  
Rajamundry Lemon  
European Lemon  
Ponderosa Lemon or Japanese Lemon  
Malta Lemon  
Propagation  
Planting  
Irrigation  
Manure and Fertilizers  
Training and Pruning  
Improvement in Yield  
Harvesting  
Yield  
Post Harvest Handling and Storage

## 9. Grapefruit

Uses  
Climate  
Soil  
Varieties  
Marsh Feedless  
Duncan  
Foster  
Saharanpur Special  
Ruby  
Thompson (Pink Marsh)  
Triumph  
Propagation  
Planting  
Irrigation  
Training and Pruning  
Flowering and Fruiting  
Harvesting

Yield

Post-harvest Handling and Storage

10. Pummelo

Uses

Climate

Soil

Varieties

Propagation

Planting

Cultural Practices

Harvesting and Yield

Insect-pests of Citrus Fruits

Lemon Butterfly (*Papilio demoleus* Linn)

Control Measures

Citrus Leaf Miner (*Phylloenistis Citrella* Stainton)

Control Measures

Citrus Psylla (*Diaphornia Citri* Kuwayma)

Control Measures

Whiteflies

Control Measures

Control Measures

Aphids

Control Measures

Mites

Control Measures

Scale Insects

Control Measures

Nematodes

Control Measures

Stem and Bark Borers (*Indarbela Tetraonis* Moore and *I. qudrinotata* Walker)

Control Measures

Fruit Sucking Moths (*Ophideres* spp).

Control Measures

Fruit Flies (*Daccus* spp).

Diseases of Citrus Fruits

Gummosis (*Photophthora* spp, *Diplodia Natalensis* Pole Evans)

Control Measures

Ganoderma Root Rot (*Ganoderma Lucidum* Karst)

Control Measures

Pink Disease (*Pellicularia Salmonicolour* Dastur)

Control Measures

Powdery Mildew (*Acrosporium Tingitaninum* Subr).

Control Measures

Anthrachnose (*Colletotrichum Gloeosporioides* and *Gloeosporium Limethicolum* Clausen)

Control Measures

Twig Blight (*Diplodia* and *Fusarium* spp.)

Control Measures

Citrus Canker (*Xanthomanas Citri* Dowsan)

Control Measures

Tristeza Virus Disease (*Corium Vialoris*)

Control Measures

Xyloporosis

Control Measures  
Psoriasis  
Control Measures  
Exocortis or Scalybutt  
Control Measures  
Citrus Greening  
Control Measures  
Dendrophthoe  
Control Measures  
Fruit Cracking  
Control Measures  
Citrus Decline  
Control Measures  
Granulation  
Control Measures  
Fruit Drop  
Control Measures  
Alternate Bearing  
Control Measures

## 11. Citrus Fruit Breeding

Aims of Citrus Breeding  
Related to Fruit Characters  
Related to Tree Characters  
Related to Rootstocks  
Problems in Citrus Breeding  
Time  
Polyembryony  
Sterility  
Breeding Method  
Introduction  
Selection  
Hybridization  
Mutation Breeding  
Choice of the Procedure  
Cytogenetics  
Blossom Biology in Citrus  
Blooming Period  
Flower Bud Differentiation  
Flower Bud Development  
Inflorescence  
Sex Ratio  
Anthesis  
Dehiscence  
Stigma Receptivity  
Storage, Longevity and Fertility of Pollen  
Pollen Germination  
Pollination and Fecundation  
Fruit Development  
Technique of Hybridization  
Structure of the Citrus Flower  
Calyx  
Corolla

Stamens  
Pistil  
Selection of Parents  
Selection of Seed Parent Trees, Branches and Flowers  
Bagging the Flowers  
Emasculation  
Pollination  
Fruit Set

## 12. Suitable Climate

Influence of Climatic Factors

Temperature

Relative Humidity

Rainfall

Winds

Altitude

Climatic Requirements of Different Citrus Species

Sweet Oranges (*Citrus Sinensis* Osbeck)

Mandarin Oranges (*Citrus Reticulata* Blanco)

Acid Lime (*Citrus Aurantifolia* Swingle)

Sweet Lime (*Citrus Limettioides* Tanaka)

Lemon (*Citrus Limon* B)

Grapefruit (*Citrus Paradisi* Macf)

Pummelo (*Citrus Grandis* Osbeck)

Climate in Different Regions of India

## 13. Type of Soil

Water Drainage

Depth of the Soil

Nature of the Subsoil

Soil-reaction

Salts

Type and Fertility of the Soil

Soils Requirement of Different Citrus Species

Citrus Soils of India

Citrus Soils of Elsewhere

Work Done in India

Citrus Breeding in U.S.A.

Tangelos (Tangerine  $\times$  Grapefruit)

Citranges (*Poncirus Trifoliata*  $\times$  *Citrus Sinensis*)

Citrangquats (Citrangle  $\times$  Kumquat)

Limequats (Mexican Lime  $\times$  Kumquat)

Hybrid acid Citrus fruit

Mandarin Types

Citrus Breeding in U.S.S.R.

Citrus Breeding in Other Countries

New Approaches in Citrus Breeding in India

## 14. Making an Orchard

Selection Of Site

Spacing

Preparation of the Site

Layout

- Selection of Varieties
- Digging and Filling of Pits
- Planting Season
- Planting
- Care of Young Plants

#### 15. Cultivation of an Orchard

- History
- Cultivation
- Greenhouse
- Orchard House and its Management
- Composts, Potting Methods, and Containers
- Bark Preparation
- Feeding of Orchard Plants
- Outdoor Cultivation of Orchards
- Growing Orchards in Outdoor Beds
- Vegetative Propagation
- Raising of Orchards from Seeds
- Care of Seedling
- Shoot Tip or Meristem Culture
- Differentiation of Flower Buds and Induction of Flowering
- Resting
- Method of Hybridisation
- Storing Pollen
- Procedure for Pollination
- After Pollination
- Diseases and Pests
- Control Measures for Fungal Diseases
- Viral Diseases and their Control
- Insect Pests and their Control

#### 16. Propagation of Citrus Fruits

- Seed Propagation
- Seed storage
- Seed Bed
- Sowing Time
- Sowing
- Germination
- Shade
- Nursery Bed
- Care of the Young Seedlings
- Asexual Propagation
- Budding
- Preparation of Stock Seedling
- Collection of Budwood
- Storage of Budwood
- Method of Operation
- Height of the Budding
- Lopping
- Care of Young Budlings in the Nursery
- Digging of Budlings
- Transporting
- Budwood Certification Programmes

Cuttings  
Layering  
Grafting  
Top-Working  
Purchasing of Seedlings or Budlings  
Care of Plants on Arrival from the Nursery  
Propagation of Different Citrus Species  
Bud Variation  
Causes of Bud Variations  
Classification or Variations  
Significance of Bud Variation  
Bud Selection  
Bud Selection Methods  
Nucellar Embryony  
Origin and Development of Nucellar Embryos  
Factors Affecting the Polyembryony  
Identification  
Inheritance of Nuclear Embryony  
Nucellar Embryony in Citrus Species and Cultivars  
Strongly Polyembryonic  
Weakly Polyembryonic  
Number of Embryos Per Seed  
Number of Nucellar Seedlings Per Seed  
Horticultural Significance  
Significance of Nucellar Embryony in Citrus Breeding  
Nucellar Embryony and Heterozygosity  
Drawback of Nucellar Seedlings  
Performance of Nucellar Lines  
In Vitro Culture of Nucellar Embryos

#### 17. Budded Roots

Qualities of a Good Rootstock  
Citrus Rootstocks in India  
Citrus Rootstocks of the World  
Rootstock Trials in India  
Punjab  
Uttar Pradesh  
Assam  
Andhra Pradesh  
Maharashtra  
Karnataka  
Tamil Nadu  
Characteristics of Rootstocks  
Cleopatra Mandarin: Citrus Reshni T.  
Troyer Citrange  
Citrus Sinensis — Poncirus Trifoliata  
Swingle Citrumelo  
Duncan Grapefruit — Trifoliolate Orange  
Stock and Scion Relationships in Citrus  
Effect of Root stock on Vigour of the Scion  
Effect on Precocity  
Effect on Productivity and Yield  
Effect on Fruit Size, Colour and Quality

Effect on Winter Hardiness  
Effect on Nutrition  
Effect on Disease Resistance  
Effect of the Scion on Rootstock  
Effect of Interstocks  
CITRUS ROOTSTOCK PROBLEMS  
Stionic Failures  
Viruses  
Diseases  
Nematodes  
Salts

18. Cutting of Weak/Neglected Parts  
Pruning of Young and Pre-bearing Plants  
Pruning Bearing Trees  
Pruning Older Trees  
Pruning Neglected Trees  
Pruning Overgrown Trees  
Hedging  
Root Pruning  
Pruning Time  
Wound Protection  
Pruning Different Citrus Species  
Pruning Problems

19. Soil Inspection for Citrus Family  
Soil Tillage  
Different Soil Management Practices

20. Inter Cultivation  
Choice of Intercrops in India  
Intercropping in Other Countries

21. Nutrition for Citrus World  
Mineral Nutrition  
Nitrogen  
Phosphorus  
Potassium  
Calcium  
Magnesium  
Sulphur  
Zinc  
Iron  
Copper  
Manganese  
Boron  
Molybdenum  
Combined Nutritional Sprays  
Factors Governing the Nutrition  
Nutrient Elements Balance  
Manuring and Fertilization  
Manuring of Young and Pre-bearing Trees  
Manuring Bearing Trees

Time of Application  
Methods of Application  
Foliar Analysis  
Soil Vs. Foliar Analysis  
The Concept of Foliar Analysis  
Factors Affecting Mineral Composition of Leaves  
Methods of Leaf Sampling  
Preliminary Survey of Orchard and Selection of Initial Sampling Technique  
Methods of Analysis  
Leaf Analysis Standards  
Interpretation of the Leaf Standards of Different Elements

## 22. Control Irrigation

Irrigation Requirement of Citrus Trees  
Time and Frequency of Irrigation  
Quality of Irrigation Water  
Systems of Irrigation  
Basin System  
Furrow System  
Flood Irrigation System  
Check System  
Sprinkler Irrigation  
Advantages  
Disadvantages  
Drip- or Trickle-irrigation  
Advantages  
Disadvantages  
Pitcher System  
Sub-surface Irrigation  
Irrigation to Young and Pre-Bearing Trees  
Irrigation to Bearing Trees

## 23. Unwanted Weed Removal

Control  
Weed Control in Nurseries  
Weed Control in the Main Field  
Herbicidal Effects  
Phytotoxic Effects  
Other Effects

## 24. Proper Harvesting of Citrus

Picking Time  
Methods of Picking  
Handling  
Grading  
Packing  
Marketing

## 25. Oil of Bergamot

## 26. Oil of Lemon

## 27. Oil of Mandarin

28. Oil of Orange

29. Study of Orange Essential Oils  
Analysis by Infrared Spectroscopy

30. Study of Orange Essential Oils  
Chemical Modifications During Aging

31. Citrus Carotenoids (I) The Structure of Citranaxanthin, a New Carotenoid Ketone  
Experimental  
Isolation of Citranaxanthin I  
Anal. Calcd.  
Alkali Cleavage of Citraanaxanthin (I).  
Reduction of Citranaxanthin  
Citranaxanthin (I)  
Anal. Calcd.

32. Citrus Carotenoids (II) The Structure of Reticulataxanthin

33. Factors Direct Fruit Variety

Climatic Factors

Temperature

Water

Nutritional Factors

Nitrogen

Phosphorus

Potassium

Magnesium

Manganese

Copper

Boron

Rootstock Effects

Fruit Size

Colour of Rind

Juice

Total Soluble Solids

Total Acidity

Ascorbic Acid Content

34. Post Harvesting of Citrus Fruits

Degreening

Pre-harvest Treatment

Post-harvest Application

Storage

Waxing

Polyethylene Covers

Growth Regulators

Cold Storage

Controlling Moulds in Storage

35. New Problems for Citrus Family

Alternate Bearing

Factors Affecting Alternate Bearing  
Control  
Resting Treatment  
Choice of Bahar  
Granulation  
Analogy of Granulation  
Physico-chemical Characteristics of Granulated Fruits  
Incidence and Progress of Granulation  
Factors Affecting Granulation  
Humidity  
Temperature  
Light  
Tree age  
Tree health  
Tree Vigour  
Tree Aspect  
Tree Variation  
Fruit Size  
Rootstock  
Varietal Susceptibility  
Control Measures  
Irrigation  
Effect of Time Sprays  
Effect of Growth Regulators  
Nutritional Sprays  
Citrus Decline  
Symptoms  
Factors Responsible for Citrus Decline  
Soil Factors  
Nutritional Factors  
Rootstock Factors  
Orchard Management Factors  
Insect-pests  
Nematodes  
Fungal Diseases  
Viruses  
Control Measures  
Fruit Drop  
Retarding or Inhibiting Factors  
Accelerating or Initiating Factors  
Temperature  
Water  
Insect Pests and Diseases  
Physiological Factors  
Nitrogen  
Carbohydrates  
Auxins  
Embryo Development  
Control of Fruit Drop  
Mandarins  
Sweet Oranges  
Grapefruit  
Lemons

### 36. Use of Plant Growth Regulators

2,4-Dichlorophenoxy Acetic Acid (2,4-D)

2,4,5-Trichlorophenoxyacetic Acid (2,4,5-T)

Napthalene Acetic Acid (NAA)

Gibberellins

Cytokinins

Growth Retardants

Ethylene

Limitations

### 37. Serious Diseases of Citrus

Diseases Caused by Fungi

Gummosis

Symptoms

Etiology and Spread of Disease

Varietal Susceptibility

Control Measures

Preventive Measures

Curative Measures

Diplodia Gummosis

Symptoms

Spread

Control

Ganoderma Root Rot

Symptoms

Control

Pink disease

Symptoms

Control

Powdery Mildew

Symptoms

Etiology and Spread

Control

Felt Disease

Symptoms

Etiology and Spread

Varietal Susceptibility

Control

Anthraco nose

Symptoms

Etiology and Spread

Control Measures

Scab

Symptoms

Etiology and Spread

Varietal Susceptibility

Control

Dry Root-rot

Symptoms

Etiology

Control

Armillariella Root-rot

Symptoms  
Control  
Sooty Mould  
Symptoms  
Damage  
Etiology and Spread  
Control  
Melanose  
Symptoms  
Etiology and Spread  
Control  
Twig Blight  
Etiology  
Symptoms  
Control  
Leaf Fall and Fruit-rot  
Symptoms  
Etiology  
Control  
Sphaeropsis Knots  
Limb Breakage  
Greasy Spot  
Nursery Diseases  
Diseases Caused by Bacteria  
Citrus Canker  
Symptoms  
Etiology and Spread  
Varietal Resistance  
Control  
Citrus Blast  
Bacterial Root Rot  
Diseases Caused by Viruses  
Diseases Affecting Certain Stionic Combinations  
Tristeza or Quick Decline  
Symptoms  
Etiology  
Transmission of the Virus  
Varietal Susceptibility  
Control  
Saving the Existing Infected Orchards  
Avoiding Losses in New Citrus Plantings  
Xyloporosis  
Symptoms  
Virus Diseases Occurring Irrespective of Rootstocks  
Psorosis  
Symptoms  
Etiology  
Control  
Stubborn Disease  
Symptoms  
Etiology  
Diseases Caused by Viroids  
Exocortis or Scalybutt

## Other Miscellaneous Virus Diseases

Budunion Crease

Citrus Mosaic

Infectious Variegation

Yellow-Corky Veins

Blastomania

Leaf-curl-disease

Other Virus-Like Disorders

Creeping Stem

Bark Eruptions

Woody Galls

Young Tree Decline

Gummy Pitting

Tatter Leafâ€™ Citrange Stunt Complex

Citrus Mosaic, Navel Infections Mottling and Natsudaiddai dwarf

Citrus Greening

Symptoms

Etiology

Transmission

Varietal Susceptibility

Control

Phanerogamic Parasites

Dendrophthoe (Loranthus)

Cassytha

Physiological Disorders

Foam Disease

Symptoms

Cause

Fruit Splitting

Symptoms

Cause

Control

Endoxerosis

Symptoms

Cause

Control

Creasing (Puffiness)

Rough Fruit Disorder

Market for Storage Diseases

Penicillium Moulds

Alternaria Rot

Black Core Rot

Diplodia-Stem-end Rot

Aspergillus Rot

Miscellaneous Diseases

## 38. Important Pests of Citrus

Introduction

Root Pests

Stem and Trunk Pests

Borers

Chloridolum Alemene Thomson

Monohanmus Versteegi Nitzema (Trunk Borer)

Stein and Bark Borers (Indarbela Spp.)

Damage by Borers

Control

Foliage Pests

Lemon Butterfly (Papilo Demoleus Linn.)

Papilionidae : Lepidoptera.

Distribution

Host Plants

Life History

Damage

Control

Citrus Leaf-Miner: (Phyllocnistis Citrelia Stainton) (Phyllocnistidae: Lepidoptera).

Distribution

Host Plants

Life History

Damage

Control

Citrus Psylla: Diaphornia Citri Kuwayama

Distribution

Host Plants

Life-history

Damage

Control

Whiteflies (Aleurocanthus Spp, Dialeurodes Spp)

Distribution

Host Plants

Life History

Damage

Control

Weevils: (Myloccerus Discolor BOH)

Mealy Bugs : Pseudococcus Spp (Pseudococcidae : Hemiptera)

Distribution

Host Plants

Life History

Damage

Control

Aphids: Hemiptera Aphididae

Distribution

Host Plants

Life History

Damage

Control

Thrips: (Scirtothrips spp, Heliiothrips spp)

Distribution

Host Plants

Damage

Life History

Control

Scale Insects: (Coccidae: Homoptera)

Damage

Armoured Scales

Unarmoured or Soft Scales

Spread

Control

Mites: (Tetranychidae: Acarina)

Distribution

Life History

Damage

Citrus Rust Mite: *Phyllocoptruta Oleivorus* Ashm

Six-spotted Mite : *Tetranychus Sexmaculatus* Riley

Control

Minor Pests

Hairy Caterpillars *Euprotctis Fraterna* M

The Citrus Leaf-roller (*Psorosticha Zizyphi* Staintor)

Orange Hair Streak: (*Tarucus Theophrastus*)

A Grass Hopper : *Poekilocerus Pictus* Fab

Cricket: *Braehytrypes Portentosus* Light

Longhorn Beetle: *Oberea Mangalorensis*

Flower Pests

Citrus Flower Moth : *Prays Citri* Milliers

*Cacoecia Epicyrta* Meyrick

Blossom Midge *Sayneura Citri* G & P

Fruit Pests

Fruit Sucking Moths (Noctuididae : Lepidoptera)

*Calpe Emarginata*

Distribution

Host Plants

Life History

Damage

Control

Fruit Flies

Distribution

Host Plants

Life History

Damage

Control

Fruit Sucking Bugs

Distribution and Host Plants

Life History

Damage

Control

Citrus Rind Borer: *Prays Endocarpi* Meyrick.

General Control Measures

### 39. Nematodes of Citrus

Citrus Root Nematode

*Tylenchulus Semipenetrans* Cobb. 1913

Host Range

Control Measures

Cultural Control

Biological Control

Resistant Rootstocks

Reniform Nematode (*Rotylenchulus Reimformis*)

Burrowing Nematode (*Radopholus Similies*)

The Lesion Nematode (*Pratylenchus Coffeae*)

Root-knot Nematode (*Meloidogyne Africana*)

The Lance Nematode (Hoplolaimus Indicus)  
Poncirus  
Fortunella (Kumquats)  
Citrus

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