

Entrepreneur India

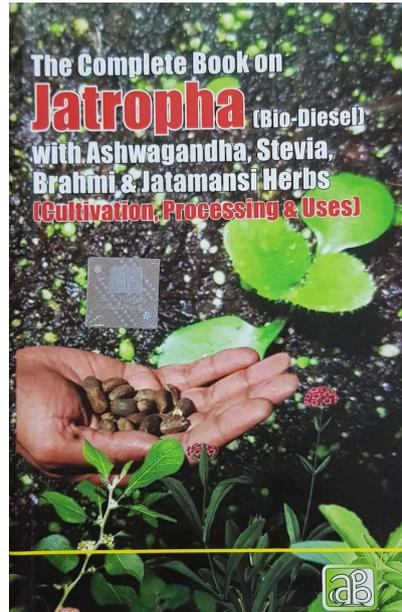
106-E, Kamla Nagar, New Delhi-110007, India.

Tel: 91-11-23843955, +91 9097075054

Mobile: +91-9097075054

Email: npcs.ei@gmail.com, info@entrepreneurindia.co

Website: www.entrepreneurIndia.co



The Complete Book on Jatropha (Bio-Diesel) with Ashwagandha, Stevia, Brahmi & Jatamansi Herbs (Cultivation, Processing & Uses)

| | |
|---------------------|----------------------------------|
| Code | NI176 |
| Format | paperback |
| Indian Price | ₹1500 |
| US Price | \$150 |
| Pages | 592 |
| ISBN | 8178330040 |
| Publisher | Asia Pacific Business Press Inc. |

Description

Jatropha proves to be a promising Biofuel plantation and could emerge as a major alternative to diesel thus reducing our dependence on oil imports and saving the precious Foreign Exchange besides providing the much needed energy security. Jatropha oil displacing conventional fossil fuel makes the related project fully eligible. The Jatropha plantation primarily focuses cultivated green biodiesel as an alternate source of fuels that can propel engines, generators and transportation as well as power generation in the future and replace existing sources. The main factor that makes the major difference is the cost of the bio fuel that it can be made cheaper than the petro diesel and on a long term basis without affecting the operational economics. Ashwagandha (also called as, Indian Ginseng), Stevia a natural non caloric sweetener, Brahmi (brain tonic) and Jatamansi are the important herbs which have very good medicinal values. Ashwagandha increases the count of white blood cells and prepares the body to produce antigens against various infections and allergies. It is also considered as a tonic for the heart and lungs as its regular intake controls the blood pressure and regulates the heartbeat. It has a strong nourishing and protective effect on the nervous system. Ashwagandha has been used as a sedative, a diuretic, a rejuvenating tonic, an anti inflammatory agent, aphrodisiac and an immune booster. It is especially beneficial in stress related disorders such as arthritis, hypertension, diabetes, general debility, etc. It has also shown impressive results when used as stimulants for the immune system. It is considered as an adaptogen that stimulates the immune system and improves the memory. Stevia also known as the sweet leaf which is an all natural sweetener, derived from a plant called stevia rebaudiana. It has no calories, no carbohydrates, and it has a glycemic index of zero, which makes it the sweetener of choice for many diabetics all over the world. The herbs are carefully nurtured and harvested at only certain times of the year. Stevia comes in many forms; stevia supreme, stevita ultimate stevia, stevita liquid stevia, fruit flavoured stevia and many more. Brahmi is used as a herbal brain tonic, to rejuvenate the body, as a promoter of memory and as a nerve tonic. It improves memory and helps overcome the negative effects of stress. It is unique in its ability to invigorate mental processes whilst reducing the effects of stress and nervous anxiety. Brahmi induces a sense of calm and peace. Brahmi has gain worldwide fame as a memory booster and mind alertness promoter. Jatamansi has the power to promote awareness and calm the mind. It is a very useful herb for palpitation, tension, headaches, restlessness and is used for promoting awareness and strengthening the mind. It aids in balancing the body of all three Ayurvedic doshas. This herbs sedative properties increase awareness, as opposed to valerian that dulls the mind. Aromatic, antispasmodic, diuretic, emmenagogue, nervine, tonic, carminative, deobstruent, digestive stimulant, reproductive some of the properties of Jatamansi herb.

This book is describes about the medical properties, important uses and applications, cultivation, chemical constituents, harvesting and post harvesting, yield and other

properties of herbs like safed mulsi, brahmi, jatamansi, ashwagandha, senna, shatavari and more. This book also deals with biodiesel, biofuel and petro crops : an alternative to conventional fuels, the potential of jatropha curcas in rural development and environment protection, prospects of expanding market for use of jatropha oil, jatropha: potential as insecticide/pesticide etc.

The present system of medicine is gradually gaining popularity mainly because of less or no toxic or side effects of herbal drugs. So, these herbs have very good future prospects globally. This book contains cultivation, processing and uses of Jatropha, Ashwagandha (*Withania somnifera*), Stevia rebaudiana, Brahmi (*Bacopa monnieri*) and Jatamansi (*Nardostachys Jatmansi DC.*). This book will prove to be an invaluable resource for researchers, technocrats, agriculturist, agriculture universities etc.

Content

1. BIO DIESEL - JATROPHA CURCAS

Business Opportunities

2. BIODIESEL, BIOFUEL AND PETRO CROPS : AN ALTERNATIVE TO CONVENTIONAL FUELS

Introduction

Background

R&D Program and Major Achievements

Development of Biodiesel Crops like Jatropha Curcas

Evaluation of Petro Crops: Euphorbs

Evaluation and Improvement of Guayule (*Parthenium Argentatum*)

3. LIST OF IMPORTANT GOVERNMENT AND PRIVATE INSTITUTE/SCIENTIST ENGAGED IN RESEARCH AND DEVELOPMENT OF JATROPHA

4. TREE DESCRIPTION

Leaves

Flowers

Fruits

Seeds

Roots

5. THE POTENTIAL OF JATROPHA CURCAS IN RURAL DEVELOPMENT AND ENVIRONMENT PROTECTION

Introduction

Objectives of the Workshop
Production of *Jatropha curcas*
Jatropha curcas as an Energy Source
Other products of *Jatropha curcas*
Costs and Returns
Expected Output

6. JATROPHA : THE WONDER OIL BEARING TREE!

Introduction
Botanical Features
Ecological Requirement
Interesting History and Future of the Plant
Uses of *Jatropha curcas*
Jatropha : As ornamental Plant
Jatropha: As a fence
Jatropha curcas: As a potential oil crop
Jatropha oil: As raw material for industrial use
Jatropha: Potential as medicinal plant
Jatropha bark: As raw material for dye
Jatropha- For enrichment of soil
Jatropha: As potential feed stoke
Jatropha: Potential as insecticide/pesticide
Jatropha: As non conventional energy crop
Jatropha: As profitable agro forestry crop
Cultivation
Soils
Climates requirements
Spacing and seeds rate
Propagation
Inter-Cultivation
Irrigation
Expected Yield
Prospects of expanding market for use of *Jatropha* oil
Jatropha oil as an alternative to diesel
Diesel engine test for *Jatropha* oil
Jatropha oil; as alternative to kerosene as fuel

7. BIO DIESEL

What is Bio Diesel?
This fuel is called Bio-Diesel
The Advantages of Bio Diesel

The Process
The Technology
The Cost
International Laws and regulation
Biodiesel Scenario In India
Bio Diesel Experiments
Conclusion

8. GUJARAT OLEO CHEM TO EXPAND BIO-DIESEL PRODUCTION CAPACITY

Up to promote Jatropha seed oil farming

9. JATROPHA: THE BIO-FUEL PLANT

Introduction

Uses

Leaves, Bark & Roots

Seeds & Oil

Folk Remedies

Bio-Fuel

General Cultivation

Origin and Distribution

Cultivation

Description of the plant

Description of the species

Varieties

Seed rate and spacing

Field preparation and Planting

Inter-cultivations

Plant Protection

Jatropha Oil

Harvesting and yield

Post harvest processing

Project Profile

10. TRANS-ESTRIFICATION BIODIESEL PROCESS

Ingredients

Manufacturing Process

Process in Detail

Quantity of methanol to be used

Glycerine

11. CENTRE FOR JATROPHA PROMOTION: GROWING DIESEL FUEL PLANT:

CULTIVATION FOR BIO DIESEL PRODUCTION

Breaking the cycle of poverty

Can diesel be "cultivated" ?

12. BIODIESEL IN INDIA

Field Trials of Biodiesel

Economics of Jatropha Biodiesel

Target of biodiesel production

Raw Material (Jatropha curcas seed and oil)

Biodiesel Work in India

Work-Done In India

Indian Railways

13. OIL EXTRACTION - OIL EXPELLERS FOR JATROPHA SEEDS

14. BIODIESEL PROJECT 10 KI PER DAY

Introduction

Product Description and Uses

How is Biodiesel made?

Biodiesel Benefits

Description

Applications

Standards

Transport information

Personal protection

Consumer Safety

Alternative Fuels Incentives and Laws

Market Survey and Demand Supply Position

Raw Materials and Suppliers

Manufacturing Process Description

Project Implementation Schedule

Power Requirement

Utilities Specifications

Market and Selling Arrangements

Salient Features and Project Highlights

Basis and Presumptions

Manpower and Organization

15. PLANT OF 1000 LITERS PER DAY

Background

Description

Brief Process Description

Plant of 1000 liters per hour. (24 Kilo Liters per day)

Commercial Conditions

Oil Expeller Manufacturers

16. EQUIPMENT FOR DECENTRALISED COLD PRESSING OF OIL SEEDS

Introduction

General advice for a complete oil mill

Influences on product quality in decentralised oil mills

Pre-treatment of the seed

Parameters of the press

Examples of a complete oil mill

Oil seed expeller

Equipment for pre-treatment of the seed

Overview manufactures of cold pressing oil expeller

Oil expeller manufactures

Purification of plant-oil

Filter equipment manufactures

Standardisation of cold pressed Rape Seed Oil

Fuel for Plant Oil Adapted Diesel Engines

17. Stevia

Shelf Life

Botanical Trait and Constituent

History

Application and Benefits

Growing Stevia in Home Garden

Process for Extraction and Grades

Sweetvia Produced by Stevia Co.inc., USA

Liquid Concentrates

Grades Internationally Available

Safety

Regulations

FDA, USA Investigation on Stevia

Important Players

Global Scenario

Economics

Recommendation

Artificial Sweeteners Scenario

Acesulfame K

Aspartame

Sucralose

Xylito

18. ASHWAGANDHA

Introduction

Folklore Uses of Ashwagandha (*Withania somnifera*)

Ashwagandha in Vedas

Cultivation

Agronomical perspectives

Genetics and Crop Improvement

Physiological Manipulations

Cell and Tissue Culturing

Genetic engineering

Chemical Constituents of Ashwagandha (*W. somnifera*)

Pharmacognosy

Root

Leaf

Stem

Floral Parts

Histology of Floral Parts

Corolla

Androecium

Gynoecium

Fruit

Seed

Embryology

Seedling anatomy

Concluding Remarks

International Occurrence

Concluding Remarks

19. BRAHMI

Regional Names

Medicinal Properties & Uses

Cultivation & Propagation

Soil and Climate

Land Preparation

Transplanting

Manure/Fertilizer

Irrigation

Weeding
Harvesting/Post-harvesting
Chemical Constituents
Major Constituents
Other Constituents
Active Constituents
Analytical Profile
Bacoside A Solution
Calibration Curve
Test Solution
Procedure
Yield
Substitute/Adulterants
Home Remedy
Dose
Important Formulation

20. JATAMANSI

Regional Names
Distribution
Medicinal Properties & Uses
Cultivation
Soil and Climate
Nursery raising and Planting
Manure/Fertilizer
Irrigation and Weed Control
Harvesting/Post-harvesting
Chemical Constituents
Major Constituents
Other Constituents
Active Constituents
Analytical Profile
Substitute/Adulterants
Home Remedy
Dose
Important Formulation

21. SAFED MUSLI

Regional Names
Distribution
Medicinal Properties & Uses

Cultivation & Propagation
Soil and Climate
Nursery Raising and Planting
Manure/Fertilizer
Irrigation
Weeding
Harvesting/Post-harvesting
Chemical Constituents

Yield

22. SARPAGANDHA

Regional Names
Distribution
Medicinal Properties & Uses
Cultivation & Propagation
Soil and Climate
Nursery Raising & Planting
Manure/Fertilizer
Irrigation
Weeding
Harvesting/Post-harvesting
Chemical Constituents
Major Constituents
Other Constituents
Active Constituents
Yield
Home Remedy
Dose

23. SENNA

Regional Names
Distribution
Medicinal Properties & Uses
Cultivation & Propagation
Soil and Climate
Land Preparation
Nursery Raising and Planting
Thinning and Weeding
Manure/Fertilizer

Irrigation
Harvesting/Post Harvesting Operation
Chemical Constituents
Major Constituents
Other Constituents
Active Constituents
Yield

24. SHATAVARI

Regional Names
Distribution
Medicinal Properties & Uses
Cultivation & Propagation
Soil and Climate
Land Preparation
Nursery Raising and Planting
Weeding
Irrigation
Manure/Fertilizer
Harvesting/Post Harvesting
Chemical Constituents
Major Constituents
Other Constituents
Active Constituents
Analytical Profile
Solvent System
TLC Plates
Derivatization
Scanning
Standard Solution
Sample Preparation
Calibration Curve
Estimation of Shatavarin IV in the drug
Yield
Substitutes/Adulterants
Home Remedy

About Niir

NIIR Project Consultancy Services (NPCS) is a reliable name in the industrial world for offering integrated technical consultancy services. Its various services are: Pre-feasibility study, New Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Preparation of Project Profiles and Pre-Investment and Pre-Feasibility Studies, Market Surveys and Studies, Preparation of Techno-Economic Feasibility Reports, Identification and Selection of Plant and Machinery, Manufacturing Process and/or Equipment required, General Guidance, Technical and Commercial Counseling for setting up new industrial projects and industry. NPCS also publishes various technology books, directories, databases, detailed project reports, market survey reports on various industries and profit making business. Besides being used by manufacturers, industrialists, and entrepreneurs, our publications are also used by Indian and overseas professionals including project engineers, information services bureaus, consultants and consultancy firms as one of the inputs in their research.