

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

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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 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.

## 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

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