

Aloe Vera Handbook Cultivation, Research Finding, Products, Formulations, Extraction & Processing

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Aloe Vera is a semi tropical plant. It is one of the oldest known medicinal plants gifted by nature, Aloe Vera often called Miracle plant known by many names. It contains more than two hundred tonic ingredients including essential amino acids, enzymes, glucose and more. Also contains the most essential components required by the human body. It is grown wild in hedge rows in dry soil conditions and almost all parts of India. It can be grown even under constant drought conditions. Commercial cultivation and utilization of this plant with the application of technology can be of great value. There are various benefits of this plant; it is used to support the natural healing of skin that has been damaged. A common usage is to sooth sunburned skin. Aloe Vera can also be made into juices, gels, powders and is often added to products. For example it can be found in cosmetics, shampoos, lotions and many other common household Aloe Vera products. The many benefits of Aloe Vera are not fully researched as of yet. Processing of Aloe Vera gel derived from the leaf pulp of the plant, has become a big industry worldwide due to the application in the food industry. It has been utilized as a resource of functional food, especially for the preparation of health drinks which contain Aloe Vera gel and which have no laxative effects. Given the exponentially growing demand for it in the international market, it presents the finest commercial opportunity among the various medicinal plants. Also, India is among the few countries gifted with the unique geographical features essential for cultivation of Aloe Vera and other high potential medicinal plants.

Some fundamentals of this book are chemical investigations of different parts of the leaf, agro technique: Aloe Vera, economics of cultivation per hector, aloe (Aloe Vera) investment opportunity, specialty raw material market for cosmetics/toiletries, strategy for capacity creation and marketing, influence of Aloe Vera on the glycol amino glycans in the matrix of healing dermal wounds in rats, effects of low molecular constituents from Aloe Vera gel on oxidative metabolism and bactericidal activities of human neutrophils, Aloe Vera & aids research, anti diabetic activity of aloes: preliminary, aloe reduction in ulcers, erosions & hemorrhages, extraction process, processing steps, extraction process of aloe gel and powder etc. This book highlights such technical details to guide and encourage new entrepreneurs. It is very useful book for consultants, farmers, students of Agricultural universities, libraries etc.

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8. Patent

U.S. Patent 6, 027, 728 (2000)

Herbal Skin regeneration and method

A method for skin regeneration comprising

Description

Background of the Invention

Summary of the Invention

Detailed Description of the Invention

U.S. Pat. 6, 030, 622

Herbal Extract composition and method

(2000) with immune boosting capability

Background of the Invention

Field of the Invention

Description of the Background Art

Summary of the Invention

Detailed Description of the Preferred Embodiments

Extract Preparation

Preparation of Extract of ARUM ALOE

Preparation of Extract of POMEGRANATE.

Preparation of Extract of TEA.

Preparation of Extract of HIBISCUS.

Preparation of Combined Extracts of ARUM and POMEGRANATE

Preparation of Combined Extracts of ARUM, POMEGRANATE, TEA and HIBISCUS

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In Vitro Inhibition of gp 120 Binding to MT-4 Cells Measured with Anti-gp 120 Monoclonal Antibody.

Chemical Analysis of Combined Extracts

Aloe vera gel toothpaste

United States Patent 5, 294, 434 March 15, 1994

Summary of Invention

Detailed Description

United States Patent 5,989,560

November 23, 1999

Herbal intestinal tract cleanser

Field of the Invention

Background of the Invention

Summary of the Invention

Detailed Description of the Preferred Embodiments

Aloe vera ointment

United States Patent 4,725,438 February 16, 1988

Field of the Invention

Background of the Invention

Summary of the Invention

Objects of the Invention

Description of the Preferred Embodiment

Summary of the Achievements of the Objects
of the Invention

United States Patent 5,288,492 February 22, 1994

Decongestant composition containing aloe vera

Background of the Invention

Field of the Invention

Description of the Prior Art

Summary of the Invention

Detailed Description of the Invention

United States Patent: 6,004,558

Technical Field

Background of the Invention

Summary of the Invention

Detailed Description of the Invention

Separation of primary isoflavones using chromatographic techniques

Method for extraction and removal of genistein, daidzein, formononetin and biochanin

Anti-cancer activity of isoflavone free cell extracts

Treatment of a sixty two year old male diagnosed with prostate cancer

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Detailed Description of a Preferred Embodiment

Herbs and Preparation of Formulations

Patient Selection

Herbal Preparation and Dosage

Results of the Study

Effect of Discontinuing Usage of the Present Invention

Conclusion

United States Patent 5,904,924 May 18, 1999

Green nutritional powder composition

Summary of the Invention

Detailed Description of the Present Invention

U.. Pat. 5,876,728 (1999)

Natural Composition extracted from Plants used in the treatment of Cancer

Background of the Invention

Objectives of the Invention

Summary of the Invention

Detailed Description of the Invention

Test Substances

Cell Culture

Cytotoxicity Assay

Fresh Tumor Specimens

Turmeric & Aloe Vera for treating health ailments

Summary of the Invention

U.S. Pat. 4591, 387 (1986)

Aloe Vera Leaf Processor

Brief Description of the Invention

Detailed Description of the Invention

U.S. Pat. 5, 215, 760 (1993)

Detailed Description of the Preferred Embodiments

U.S. Pal 4,309,180 (1983)

Cosmetic facial preparation containing aloe vera

Detailed Description of the Preferred Embodiment
U.S. Pat. 6,013, 259 (2000)
Aloe Vera Ophthalmic Solution
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Extract of Lavender
Topical Compositions
Pharmaceutical/Cosmetic Compositions
Cleaning Compositions
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Washing
Filleting
Grinding
Homogenization
pH Adjustment
Selective Precipitation
Centrifugation
Weighing/Storage
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Drying
Milling
Blending
Storage and Exportation
Moderate or Medium Filtration
(Filtration Using A Medium Filter)
Fine Filtration (Filtration Using A Fine Filter)
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Dialysis
Anion Exchange Chromatography
Size Exclusion Chromatography
Step-Wise Filtration
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Mouse TNF- α Assay In Biological Fluids
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Macrophage Activation and Anti-inflammatory
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RAW Cells Secreted Interleukin-6 in Response
to FBA
 α -MF \bullet Stimulated IL-6 Production
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Kushta Busud
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