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 soothe 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 hectar, 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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Global Scenario

International Aloe Science Council

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Japanese Scenario

Scenario

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The stimulation of postdermabrasion wound healing with stabilized aloe vera gel-polyethylene oxide dressing
Aloe-emodin effects on arylamine N-acetyltransferase activity in the bacterium Helicobacter pylori.
Influence of aloe vera on the healing of dermal wounds in diabetic rats.
Influence of Aloe vera on the glycosaminoglycans in the matrix of healing dermal wounds in rats.

Immunochemical distinction of Aloe vera, A. arborescens, and A. chinensis gels.
Aloe barbadensis extracts reduce the production of interleukin-10 after exposure to ultraviolet radiation.
Influence of Aloe vera on collagen characteristics in healing dermal wounds in rats.
Influence of Aloe vera on collagen turnover in healing of dermal wounds in rats.

Studies of aloe. VI. Cathartic effect of isobarbaloin.
[The action of an aqueous extract of Aloe barbadensis Miller in an in-vitro culture of Trichomonas vaginalis].

Biotherapy with the pineal inmunomodulating hormone melatonin versus melatonin plus aloe vera in untreatable advanced solid neoplasms.

Nitro chemopreventive effects of plant polysaccharides (Aloe barbadensis Miller, Lentinus edodes, Ganoderma lucidum and Coriolus versicolor).
The therapeutic potential of Aloe Vera in tumor-bearing rats.

In vitro angiogenic activity of Aloe vera gel on calf pulmonary artery endothelial (CPAE) cells
Isolation of cDNA for an NADP-malic enzyme from Aloe arborescens
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Aloe Vera to treat gastrointestinal Problems
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Aloe vera gel hindered wound healing of experimental second-degree burns: a quantitative controlled study.
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Treatment of experimental frostbite with pentoxifylline & Aloe vera cream
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Skin Disorders/Inflammation
Anti-inflammatory activity of Aloe vera against a spectrum of irritants
Wound healing. Oral and topical activity of Aloe vera.
Processed Aloe vera administered and topically inhibits inflammation
Uses of Aloe in treating leg ulcers & dermatosis
Anti-inflammatory and wound healing activity of a growth substance in Aloe vera.
Anti-inflammatory & wound healing properties of Aloe vera
Effects of topical medications on the healing of open pad wounds in dogs
Anti-inflammatory activity of extracts from Aloe vera gel.
Skin Disorders Virus: Bacteria, Fungi & Parasites
Dental Disorders
Aloe Vera Gel Toothpaste
Aloe in Dentistry
Why Aloe may work
Use of Whole-Leaf Aloe
8. Patent
Herbal Skin regeneration and method
A method for skin regeneration comprising
Description
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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
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Field of the Invention
Description of the Background Art
Summary of the Invention
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Preparation of Extract of TEA.
Preparation of Extract of HIBISCUS.
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Preparation of Combined Extracts of ARUM, POMEGRANATE, TEA and HIBISCUS
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Stimulation of Cytokine Production in Normal Persons
In Vitro Inhibition of gp 120 Binding to MT-4 Cells Measured with OKT4A Monoclonal Antibody.
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
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Herbs and Preparation of Formulations
Patient Selection
Herbal Preparation and Dosage
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Effect of Discontinuing Usage of the Present Invention
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United States Patent 5,904,924 May 18, 1999
Green nutritional powder composition
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National Composition extracted from Plants used in the treatment of Cancer
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Turmeric & Aloe Vera for treating health ailments
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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
Background of the Invention
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Allantoin
Extract of Lavender
Topical Compositions
Pharmaceutical/Cosmetic Compositions
Cleaning Compositions
Weighing
Washing
Filleting
Grinding
Homogenization
pH Adjustment
Selective Precipitation
Centrifugation
Weighing/Storage
Tray loading
Drying
Milling
Blending
Storage and Exportation
Moderate or Medium Filtration
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Microparticulate Factor From FBA and No Production

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Epitheleal Cells (EC) Proliferation

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Kuhl Roshania

Kushta Abrak Safaid

Kushta Busud

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Phytochemicals:
Effluent treatment:
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Process outline
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