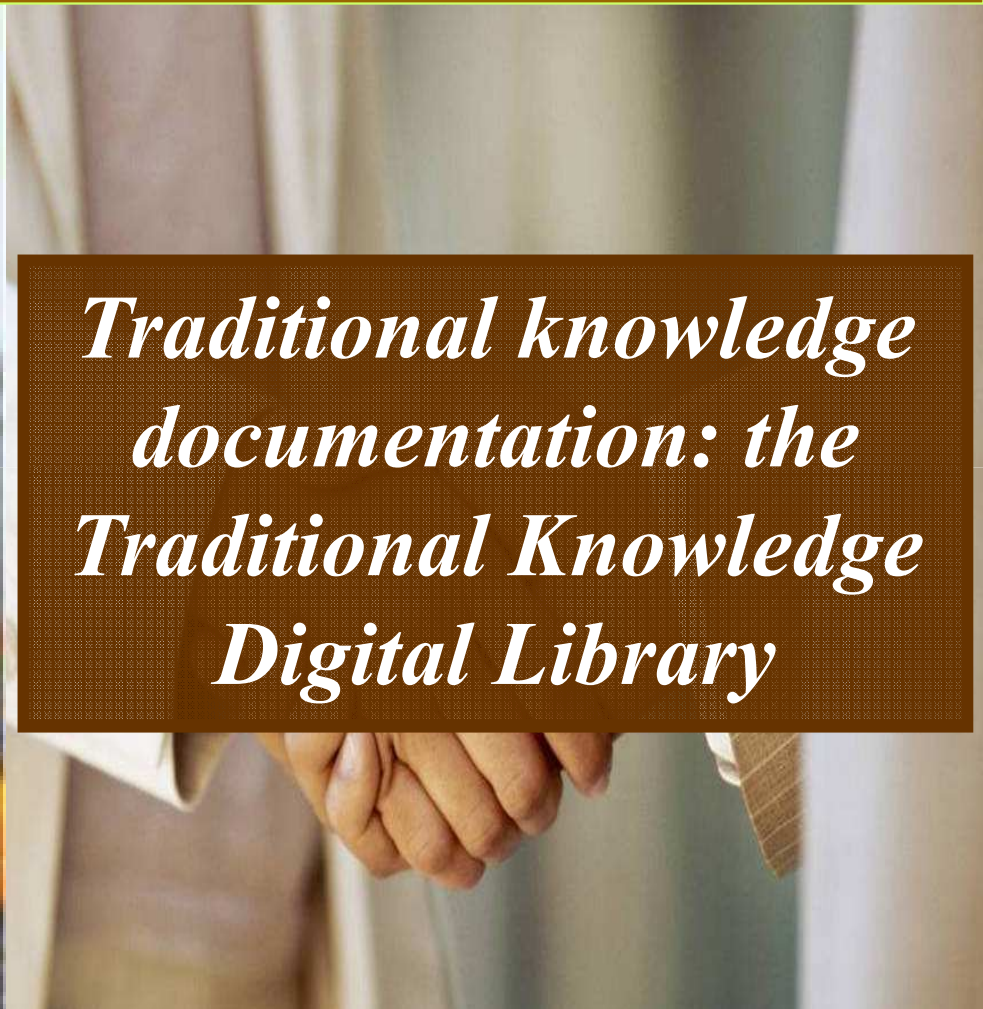


FICCI International Conference on Traditional Knowledge

FICCI, Federation House, Tansen Marg, New Delhi, 13th November 2009

Supported by: DIPP and WIPO



*Traditional knowledge
documentation: the
Traditional Knowledge
Digital Library*

**V K Gupta, Senior Advisor and Director, TKDL,
Council of Scientific and Industrial Research, Rafi Marg, New Delh;
E-mail: vkg@csir.res.in**

TKDL

OBJECTIVES AND TARGET AUDIENCE



- **Prevent Misappropriation of Indian Traditional Knowledge**
 - Break Format & Language barriers
- **For International Patent Offices only**
- **Multilingual (French, German, Japanese, English & Spanish)**
- **Creating new Intellectual Property for promoting Access to Medicines (Since 2008)**

PROTECTING TRADITIONAL KNOWLEDGE

India

- Turmeric
- Neem
- Basmati


TKDL – TKRC - IPC



STUDIES ON PATENTS ON MEDICINAL PLANTS

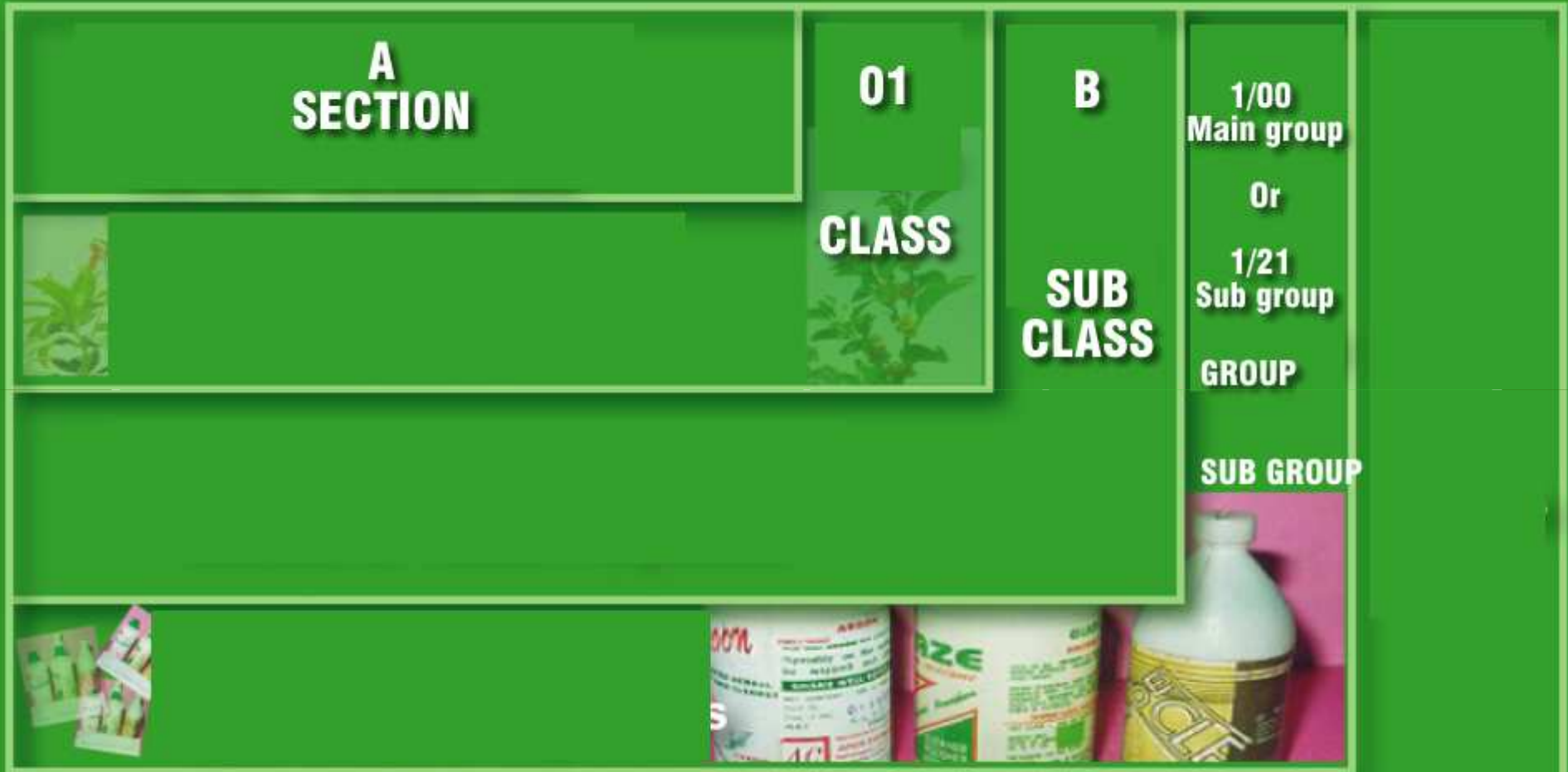
■ March 2000	:	4896
■ March 2003	:	15000
■ December 2005	:	35587
■ December 2008	:	85000
■ Medicinal Plant Patents / Year	:	5000
■ Possible Patents concerning Indian Plants / Year	:	4000
■ Possible Patents on Indian system of Medicine on yearly basis	:	2000
■ Annual average Growth Rate between 2000-2008	:	200%

IPC & Medicinal Plants

A Section Human Necessities	61 Class	K Sub Class	35 Group	78 Sub Groups
 Medical or Veterinary Science; Hygiene				
Preparation for Medical, Dental or Toilet Purposes				
 Extracts of Animal, Plant or Micro-organisms				
Materials from Plants				



TKRC Classification Symbol



**Section A – Ayurveda; Class 01 – Pharmaceutical Preparations
Sub-Class B – Based on Animals; Group 1/00 – Based on Animals
& their Products; Sub-group 1/21 - Milk**

IGC & TKDL

- ▶ Enhancement in IPC subgroups on medicinal plant from 1 to 200 & linking TKRC (25000 subgroups) to IPC, Recognition of TK by IPC & contribution to Quality Patent Search.
- ▶ Inclusion of 2 of CSIR Scientific Journals i.e. Indian Journal of Traditional Knowledge & Medicinal and Aromatic plants Abstracts
- Contribution in establishing standard WIPO/GRTKF/IC/4/14 on setting up of databases & registries on Traditional Knowledge & Biological Genetic Resources
- Awareness Building on TKDL
 - Presentation in plenary of IGC-2002 & 2004
 - Presentation in committee of Experts IPC-2001,2003

(११८६) गुडूच्यादि काथः
(बं० से० । मसू० त्रि०)
गुडूची मधुकं रास्ना पञ्चमूलं कनिष्ठकम् ।
बन्दनं काश्मर्यफलं बलामूलं विकङ्कतम् ॥
पाककाले मसूर्यान्तु वातजायां प्रयोजयेत् ॥

The
United

United States Pat

rights to the person(s) having title
right to exclude others from mak-
ing for sale, or selling the inven-
tion about the United States of Am-
the invention into the United States
for the term set forth in the claims
ment of maintenance fees.

Application was filed prior to the
term of this patent is twenty years
from the date of the application, or
twenty years from the date of the applica-
tion, whichever is the longer, except
any extension.

Application was filed on or after the
this patent is twenty years from the
date, subject to any extension of time
application containing a claim which
earlier filed application, subject to
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John P. Ebd

United States Patent and Trademark
Office
Washington, D.C. 20540
John P. Ebd
John P. Ebd

Key Attributes of TKDL

BP/70

English

Title of Traditional Knowledge

English

Knowledge Known Since

Guducyadi Kvatha(14)

100 years

TKRC CODE : A01A-1/1512, A01A-1/1592, A01A-1/1789, A01A-1/1815, A01A-1/1824, A01A-1/1966, A01A-1/1988, A01A-1/2039, A01A-1/670, A01A-1/920, A01A-3/19, A01D-19/01

IPCCode : A61K35/78,A61K9/08,A61P31/12

DETAILS OF PROCESS / FORMULATION :

1. Guducyadi Kvatha(14) is a therapeutic single/compound formulation consisting of useful parts of following ingredient(s) *Tinospora cordifolia* (Guduci), *Glycyrrhiza glabra* (Yastimadhu, Klitaka (Substitute)), *Pluchea lanceolata* (Rasna), *Desmodium gangeticum* (Salaparni), *Uraria picta* (Prasniparni), *Solanum xanthocarpum* (Kantakari, Laksamana (Substitute drugs) (Sveta)), *Solanum indicum* (Brahti), *Tribulus terrestris* (Goksura), *Pterocarpus santalinus* (Rakta candana), *Gmelina arborea* (Gambhari), *Sida cordifolia* (Bala), *Solanum xanthocarpum* (Kantakari, Laksamana (Substitute drugs) (Sveta))

2. Therapeutic composition/formulation is mentioned below :

English

1	<i>Tinospora cordifolia</i> (Guduci)	(Stem)	1	Part
2	<i>Glycyrrhiza glabra</i> (Yastimadhu, Klitaka (Substitute))	(Root)	1	Part
3	<i>Pluchea lanceolata</i> (Rasna)	(Leaf)	1	Part
4	<i>Desmodium gangeticum</i> (Salaparni)	(Root)	0.2	Part
5	<i>Uraria picta</i> (Prasniparni)	(Root)	0.2	Part
6	<i>Solanum xanthocarpum</i> (Kantakari, Laksamana (Substitute drugs) (Sveta))	(Root)	0.2	Part
7	<i>Solanum indicum</i> (Brahti)	(Root)	0.2	Part
8	<i>Tribulus terrestris</i> (Goksura)	(Root)	0.2	Part
9	<i>Pterocarpus santalinus</i> (Rakta candana)	(Heart Wood)	1	Part
10	<i>Gmelina arborea</i> (Gambhari)	(Fruit)	1	Part
11	<i>Sida cordifolia</i> (Bala)	(Root)	1	Part
12	<i>Solanum xanthocarpum</i> (Kantakari, Laksamana (Substitute drugs) (Sveta))	(Whole Plant)	1	Part

English

3. A composition as described above is formulated as (Decoction / Water Extract)(Kvatha)
4. Therapeutic composition mentioned above is prepared by Kvatha Curna/Kvatha: Drugs are cleaned and dried.
5. It is useful in the treatment of Small pox(Masurika)

LIST OF DOCUMENTS WITH DATE OF PUBLICATION(PRIOR ART):

**Nagin Das Chagan lal
Saha**

**Bharat Bhaisjya Ratnakar, Gopi nath Bhisakratnen
Vol II B. Jain publishers (New Delhi) Ed. Reprint - August 1999.**



従来の知識資源のタイトル

Japanese

その後知られている知識

Mañjīsthādīkvāthah (Vṛhat) (08)

500 years

TKRC Code : A01A-1/1225, A01A-1/1237, A01A-1/1351, A01A-1/1463, A01A-1/1482, A01A-1/1515, A01A-1/1547, A01A-1/1587, A01A-1/1590, A01A-1/1592, A01A-1/16, A01A-1/1664, A01A-1/1740, A01A-1/1824, A01A-1/1864, A01A-1/1883, A01A-1/1935, A01A-1/1938, A01A-1/1966, A01A-1/2000, A01A-1/2147, A01A-1/237, A01A-1/265, A01A-1/291, A01A-1/415, A01A-1/429, A01A-1/44, A01A-1/480, A01A-1/488, A01A-1/513, A01A-1/52, A01A-1/530, A01A-1/538, A01A-1/566, A01A-1/60, A01A-1/603, A01A-1/635, A01A-1/741, A01A-1/759, A01A-1/761, A01A-1/823, A01A-1/880, A01A-1/903, A01A-1/972, A01A-1/989, A01A-2/25, A01A-3/47, A01A-3/9, A01D-1/35, A01D-18/04, A01D-20/25, A01D-21/01, A01D-6/31, A01D-8/07, A01D-8/28, A01D-8/52, A01D-9/07, a01f-1/1

IPC コード : A61K35/78, A61K9/08, A61K9/14, A61P15/00, A61P17/00, A61P19/00, A61P19/02, A61P19/06, A61P21/00,

のプロセス/ 公式 :

1. Mañjīsthādīkvāthah^a (Vṛhat) (08) 次のような有用な構成成分を含む治療的化合物製剤アカネ・カルジフォリア (マンジスタ), カヤツリグサ (ムスタカ), ホラレナ・アンチダイセンテリカ (クタジャ、インドラヤヴァ), タイノスポラ・コルジフォリア (グドゥチ), モッコウ (クスタ), ジンギベル・オフィシネール (アルドラカ), クレロデンドラム・セツラタム (バラング), ソレナム・ザントカルパム (カンタカリ、ラクサマナ (代用薬品) (スヴェタ)), アヤメガサ (ヴァチャ), アザジラクタ・インジカ (ニンバ), ウコン (ハリドラ), メギ・アリステタ (ダルハリドラ), カラスウリ・ダイオイカ (パトラ), コウレン (カトゥキ), コンズランゴ・テネシッシマ (ムルワ), エンベリア・ライプス (ヴィダンガ), プロテカルプス (ビジャカ (アサナ)), セイロンマツリ (チタラカ), アスパラガス・レスモサス (サタヴァリ、メダマハメダ (代用薬品)), リンドウ・クッルー (トラヤマツナ, トラヤンティ), キンマ・リンガム (ピッパリ), ホラレナ・アンチダイセンテリカ (クタジャ、インドラヤヴァ), アデトダ・ヴシカ (ヴァサ), ダカサブロウ・アルバ (ブリッングラジャ), ヒマラヤスギ・ヒマラヤスギ (デヴァダル), シサンペロス・パレイラ (パタ), アセンヤクノキ (カディラ), シタン (ラクタ・チャンダナ), オペルクリナ・タルパタム (トリワルタ), クラタエヴァ・ヌルヴェラ (ヴァルナ), センプリ・シライタ (キラタティクタ), ソレリア・コリリフォリア (バクキ), ナンバンサイカチ (アルガワダ), ストブラス・アスパル (サクホタカ), センダン・アゼダラク (マハニンバ、カイドリヤ?), ポンゲミア・ピンネタ (カランジャ、ナクタマラ、ウドキリヤ), トリカプト・ヘテロフィツラム (アティヴィサ), サヤバナ・ヴェッティヴェロイデス (ハリベラ), スイカ・コロシンチス (インドラヴァルニ), ヘミデスマス・インジカス (サリヴァ (ウトパラ・サリヴァ)), フェマリア・パルヴィフロラ (パルパタ・ベータ), ファゴンタ・クレティカ (ダンヴィヤサ), テルミナリア・チェブラ (ハリタキ), テルミナリア・ベッリリカ (ビビタカ), エンブリカ・オフィシユナリス (アマルキー)

2. 治療的構成/製剤は以下の通り

1	アカネ・カルジフォリア (マンジスタ)	(根)	1	パート、部
2	カヤツリグサ (ムスタカ)	(茎・塊茎)	1	パート、部
3	ホラレナ・アンチダイセンテリカ (クタジャ、インドラヤヴァ)	(ステムバーク)	1	パート、部
4	タイノスポラ・コルジフォリア (グドゥチ)	(ステム)	1	パート、部
5	モッコウ (クスタ)	(根)	1	パート、部
6	ジンギベル・オフィシネール (アルドラカ)	(根茎)	1	パート、部

STATUS

Discipline	Current Status
Ayurvedic formulations	81,500
Unani formulations	1,09,500
Siddha formulations	12,200

TKDL ready to safeguard 2,03,200 medicinal formulations like Neem and Turmeric in Ayurveda ,Unani and Siddha which are present in 30 million A4 size pages, at International Level

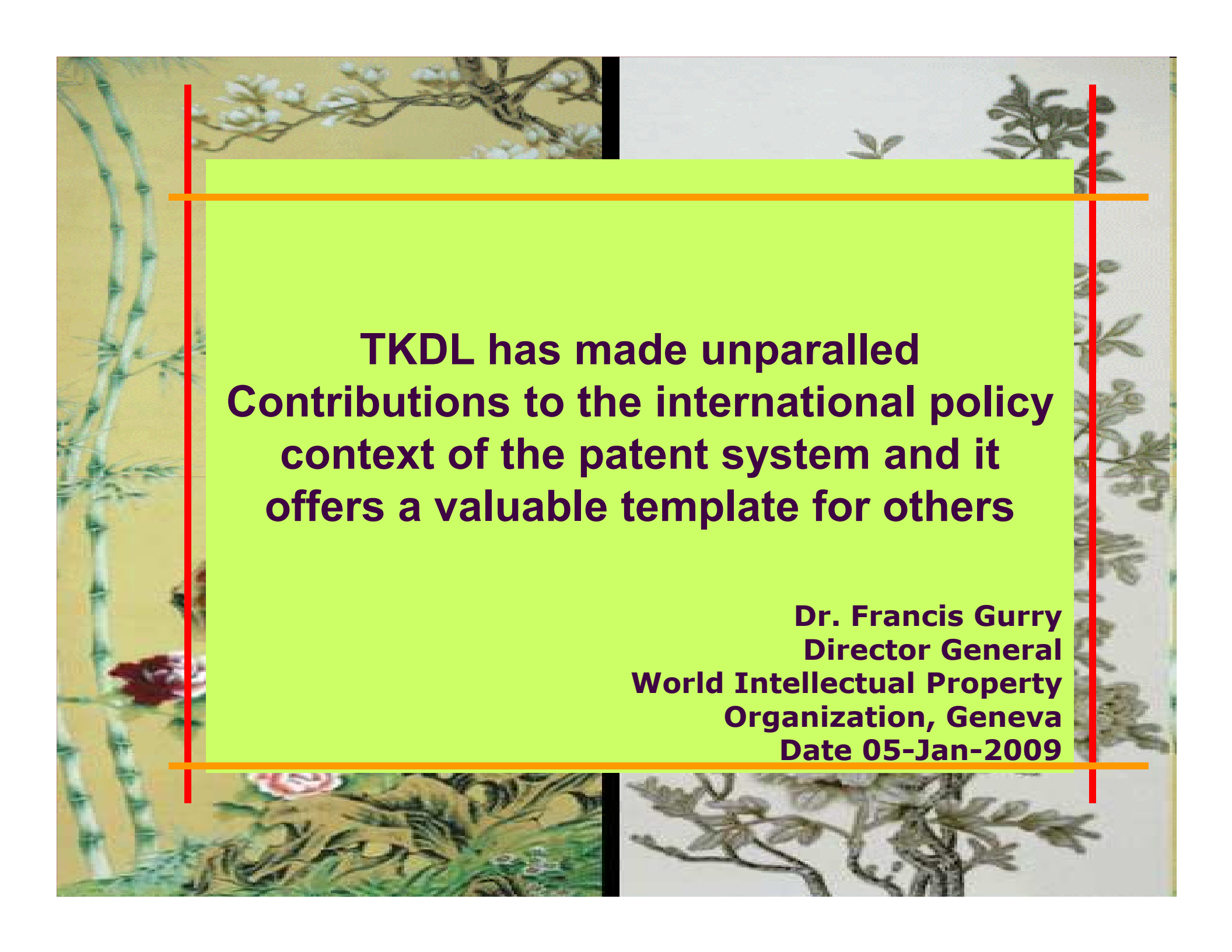
Cost/ Effectiveness of TKDL

■ TKDL Route

- No. of A4 Size page information in 5 international languages **30 Million**
- Expenditure Incurred **1.4 Million US \$**

■ Translation Route

- Skill needed, knowledge of Ayurveda/ Unani/ Siddha/ Sanskrit/ Persian/ Tamil/ German/English/French/Japanese/Spanish/ Modern medicine & Science
- In case above skill set was available, it would have costed 1.2 billion US \$, a team of 5000 and time period of 60 years against the team of 100 and cost of 2.0 million US\$
- TKDL protects 0.2 million formulations based on Neem cases, cost of such protection would be astronomical(200 billion US\$).

The background features traditional East Asian floral patterns. On the left, there are bamboo stalks and a red rose. On the right, there are green leaves and branches. A central yellow rectangular box contains the main text. The text is in a bold, black, sans-serif font. The box is framed by a red border and a yellow border.

**TKDL has made unparalleled
Contributions to the international policy
context of the patent system and it
offers a valuable template for others**

**Dr. Francis Gurry
Director General
World Intellectual Property
Organization, Geneva
Date 05-Jan-2009**



TKDL & WORLD HEALTH ORGANIZATION

Regional consultation on Development of Traditional Medicines in the South East Asia Region, Pyongyang, DPR Korea, 22-24 June 2005

Recommendation No.5

WHO should develop a model framework on replicating Traditional Knowledge Digital Library (India) suitable for adapting to individual Country needs

The information, along with a photographic scan of the relative verse, is then uploaded to an online database and translated into English, French, German, Spanish, Japanese and Hindi. So far, some 140,000 treatments have been entered into the Traditional Knowledge Digital Library (TKDL), a \$2 million project launched five years ago to provide a direct link to what is regarded in the patent world as prior knowledge. The first of its kind, the TKDL is serving as a

Natural Healing

Will India succeed in bringing its ancient Ayurvedic plant medicines into the modern world?

By Aryn Baker | Kottakkal

THIS WEEK'S COVER



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The Washington Times
FRIDAY SEPTEMBER 23, 2005 25 cents
India makes moves to reclaim heritage from piracy'

By David
LONDON
September



BBC NEWS

BBC NEWS Wednesday, 7 December 2005, 13:22 GMT India hits back in 'bio-piracy' battle By Soutik Biswas, BBC News, Delhi

http://news.bbc.co.uk/2/hi/south_asia/4506382.stm In a quiet government office in the Indian capital, Delhi, some 100 doctors are hunched over computers poring over ancient medical texts and keying in information.....People outside India are not aware of our immense traditional knowledge wealth VK Gupta, project directorThe mammoth Indian encyclopaedia may finally give alternative medicine the shot in the arm it sorely needs

teleg

India adopts yoga poses
By David
(Filed: 18/09/2005)



"Yoga piracy is becoming more common and we are moving to do something about it," says Vinod Gupta, whose office is in New Delhi. "No one should be allowed to take our traditional knowledge and make it their own."

"We know of at least 150 asanas yoga postures in the UK, Germany and Japan. These were developed by them as their own."

In an effort to protect the domain in India, the government is taking a small step toward that goal by building a catalog of plants and yoga positions. The institute has developed a database, in New Delhi at India's National Institute of Science Communication and Information Resources, also includes more than 30 million pages of ancient Indian texts translated into English, French, German, Spanish and Japanese. The institute plans to add traditional Indian food, architecture and farming methods -- all in an effort to establish the provenance of India's natural and cultural property. "At least 150 experts have been working six days a week for the last three years on this," says V.K. Gupta, director of the institute. "Now we have a mechanism through which we can prevent

"No one should be able to take our traditional knowledge and make it their own," says Vinod Gupta. "The institute cannot understand the move is traditional Indian knowledge worth protecting. So far, 10 million pages of ancient Indian texts translated into English, French, German, Spanish and Japanese. The institute plans to add traditional Indian food, architecture and farming methods -- all in an effort to establish the provenance of India's natural and cultural property. "At least 150 experts have been working six days a week for the last three years on this," says V.K. Gupta, director of the institute. "Now we have a mechanism through which we can prevent

The move is traditional Indian knowledge worth protecting. So far, 10 million pages of ancient Indian texts translated into English, French, German, Spanish and Japanese. The institute plans to add traditional Indian food, architecture and farming methods -- all in an effort to establish the provenance of India's natural and cultural property. "At least 150 experts have been working six days a week for the last three years on this," says V.K. Gupta, director of the institute. "Now we have a mechanism through which we can prevent

BUSINESS

Break with tradition

Traditional medicine has spent decades in the wings of pharmacology. Now India is pushing it to centre stage, as **K. S. Jayaraman** reports.

For years, the drug industry has been curious about traditional medicine — especially the venerable systems of India and China. Now, the Indian government has taken a step that could open the way for greater commercial exploitation of its traditions around the world. In the past few years, India has developed a huge electronic database known as the Traditional Knowledge Digital Library. Last month, the Indian cabinet agreed to give patent offices around the world access to the library, to make sure that patents are not granted on existing Indian remedies. And the government may soon go one stage further, inviting major international drug companies to collaborate with Indian researchers on deriving drug candidates from the library's contents. It hopes to boost the country's public health care in the process.

But the move to share the library's content has sharply divided opinion in India, where the country's cultural and intellectual heritage. Advocates of sharing say that the database, which has been under construction at the National Institute of Science Communication and Information Resources in New Delhi since 2000, could have a major impact on the process of drug discovery. The database has the potential to "slash the cost of drug development", says Vinod Gupta, a computer scientist and director of the institute. "We have a treasure chest of plant-based medicines, created by experimenting directly on man for hundreds of years."

Others are not so sure. They worry that India risks losing out by sharing its knowledge with outsiders. Purveyors of traditional medicine fear that international companies will grab control of the information. "It is hard to believe that the multinational drug companies are interested in collaborating on traditional medicine research in order to promote it," says P. Ram Manohar, research director of Arya Pharma, which produces drugs based on traditional knowledge in Coimbatore. "Their interest would be confined to using it to develop new drugs — over which they could exercise control." And that would be of little help to India's healthcare agenda.

Some also doubt that the information really yield the blockbuster drugs that architects of the database are hoping for. Two major drug companies that are active in India — Pfizer and Merck — declined to respond when asked whether the database was of interest to them.

Medicine bags
Traditional Indian medicine consists of three main systems, known as Ayurveda, Siddha and Unani. Between them, they use about 1,500 medicinal plants, a third of the drug formulations. The Digital Library already contains 143,000 formulations due to be added in the next few months. The creation of the library has met with the gradual acceptance of the country's foreign protection, and companies will generate more of the traditional medicines.

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IN THIS ISSUE NATURE INSIGHT: LAB ON A CHIP

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A Nature Issue on trial
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Cloudy with methane drizzle and flash floods
- CURRENTS THAT SOOTHE
Wound healing induced by electric signals

SPINTRONICS AT THE ATOMIC LEVEL

A positive spin on GaAs semiconductors

NATURE JOBS
Clinical trials



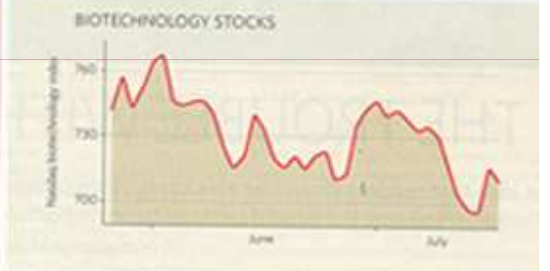
IN BRIEF

VACCINE VENTURE Swiss drugmaker Novartis has announced plans to build a \$600-million, state-of-the-art production plant for flu vaccine in Holly Springs, North Carolina. The plant — more than a third of which will be paid for by the US government — will be the first in the United States to derive vaccines from cell culture rather than the chicken eggs commonly used at present. The company says its facility is designed to produce 50 million doses of seasonal flu vaccine annually, and up to 150 million doses of avian-flu vaccine if required.

CHINA CRISIS Amnesty International, the human-rights watchdog, has accused Google and Microsoft of contributing to 'Internet repression' in China by cooperating with the country's authorities. "The apparatus of Internet repression is considered to be more advanced in China than in any other country and companies are particularly willing to cooperate with the Chinese government," Amnesty says in a report issued on 20 July. Yahoo has faced a consumer backlash in the West, after giving the police the identities of two dissident Chinese writers, who are now in prison.

GREEN FOCUS The Ford motor company has said that it will spend £1 billion (US\$1.9 billion) over six years in Britain on research and development into cleaner engines. The company says that 9,500 engineers will be deployed in the effort. It intends to create a version of its most popular car — the Ford Focus — that delivers 70 miles per gallon. The announcement has been welcomed by the government, but unions note that it involves the redeployment of existing resources, not fresh investment.

MARKET WATCH



This week, Wood Mackenzie, an Edinburgh-based research and consulting firm, reviews recent trends in biotechnology stocks. Biotech continues to retreat from its high point in February, although the rate of decline has slowed. The Nasdaq biotechnology index is down 4% over the past eight weeks, and 12% since the start of the year. Broader indices are also falling in a volatile market.

Amgen of Thousand Oaks, California, has fared particularly badly, falling 5% over the past eight weeks and 20% so far in 2006. Investors believe there is a growing threat to Amgen's erythropoietin drugs for treating anaemia, which generated \$5.8 billion in sales in 2005 — nearly half of total turnover. Rival Roche of Basel, Switzerland, has a second-generation erythropoietin drug, called CERA, which is likely to reach the market in 2007. And the European Union has cleared

a path for the approval of generic versions of some biological drugs, including erythropoietin.

Amgen is given more 'weight' in the index than any other company, so its losses are an important factor in the overall drop. But many other listed firms have suffered.

Shares in Anadys Pharmaceuticals of San Diego, California, lost two-thirds of their value after the company suspended a phase I trial of its hepatitis-C treatment and its chief executive announced his forthcoming departure. Stock prices in another San Diego company, Neurocrine Biosciences, dropped by three-quarters after problems with its insomnia drug candidate, indipin.

In a period of general market anxiety, biotech shares are particularly vulnerable to bad news. Now, strong second-quarter results will be needed to bolster confidence in the sector.

Obligations of Providers & Users of TKDL

India's Strategy Non Disclosure Agreement with International Patent Offices

(CCEA has approved access to TKDL for International Patent Offices)

- **Users**

- Shall not disclose the content to third party
- Shall utilize for patent search & examiners, can give printouts to patent applicants for citation purposes
- No use other than search & examination
- Will provide non-confidential information received from applicant on usage to provider
- Will give feedback for enhancing the features of TKDL

- **Provider**

- Shall provide uninterrupted access
- Training to users (as and when needed)
- Render assistance in search & examination (as & when needed)
- Free to utilize for itself & can grant access to others

Views of EPO After Access (Feb 2009) to TKDL

- **An improved patent granting process at an early stage of patent examinations.**
- **A unique encyclopedia**
- **Shedding light on grey areas**
 - **TKDL is precise and TKRC ensures meticulous documentations**
 - **Thanks to TKDL, patent examiners can prove exactly when and where a medical treatment became public knowledge**

TKDL Access Agreement with other International Patent Offices

- **United States Patents & Trade Mark office (likely to be signed in Nov. 2009)**
 - USPTO considers TKDL established by India is part of the very important work being done internationally w.r.t Traditional Knowledge databases. These databases will help to compliment the extensive prior art searches done by the patent examiners in the United States & around the world.
- **11, other International search Authorities (Australia, Japan, Russia, Korea, China, Canada, Finland, Sweden, Austria, Spain, Nordic) – June 2010**
- **Balance Major International Patent offices**
 - Possible by Dec. 2010
- **Would protect globally Indian Traditional Medicinal open domain documented knowledge.**

Tangible Results of TKDL Access Agreement with EPO

- Normal route of opposition of an international patent
- (10-15 years)



– Neem (10 years)



– Enola Beans (10 years)



– Monsanto soyabean (13 years)

- TKDL route (Less than 12 Weeks)



– Anti-Vitiligo Cream (3 week)



– Anti Cancer Pistacia Vera (1 weeks)



– Withdrawal of application by Uniliver on Cardio Vascular tonic (3 Weeks)



– Composition for Heart Disease and Health Products (9 Weeks)



– Method for altering the Metabolism Characteristic of Food Products (11 Weeks)



– Method of Treatment or Management of Stress

Impact of TKDL Access Agreement with European Patent office

- Identification of Patent Applications based on India's Ayurveda, Unani & Siddha Systems of Medicine
- ▶ Citation from TKDL references through Third Party Observations
- ▶ Method of Treatment or Management of Stress

Traditional Medicine



**Modern
Medicine**

**Modern
Science**

TKDL for Validation of Ayurveda, Unani, & Siddha against each other

All systems of Indian system of Medicine have survived & grown in Indian Subcontinent.

Used common Bio and Genetic Resources.

For Diseases of Subcontinent and its population.

جو اسیں شیوہ ج تالیف

اسہال ہوا سیر بسیار مفید بلکہ اسہال خون و جگری را کہ ضعف در آن بسیار باشد و زرف الدم بہر عضو کہ با

Digital Integration of Ayurveda, Unani & Siddha

- **Plant name**
 - **Ayurveda/Unani to Italic/Botanical Name**
- **Disease Nomenclature**
- **Search on Classification symbols, Disease Symptoms, Plant, Disease, etc.**

Value Addition – Modern Science to TKDL

- ❑ Taxonomic Information, citation, synonyms, vernacular names, habitat, geographical information
- ❑ Morphological Information
- ❑ Cytological Information
- ❑ Germplasm Information
- ❑ Phytochemistry
- ❑ Pharmacological Information
- ❑ Pharmacognostical Information
- ❑ Toxicology
- ❑ Utilization

Diseases and Common Indian Medicinal Plants

Malaria

System of Medicine	AYURVEDA	UNANI	SIDDHA	COMMON MEDICINAL PLANTS
NO. of Formulations in TKDL	1587	48	95	<i><u>Brahmi</u>, <u>Neerpirami</u>, <u>Sapthalai</u>, <u>Indravaruni</u>, <u>Pippali</u>, <u>Srmgika visa</u> / <u>Vatsanabha</u></i>
Formulations in TKDL	<u>Aindrirasayanam</u>	<u>Habb-e-bukhar</u>	<u>Sanda Marutha</u> <u>Kuzhamabu</u>	<i>,<u>Sarumam</u>, <u>Acacia arabica</u>, <u>Sambiran ipoondu</u></i>

Economic Strength

**Oil Rich
Middle East
Countries**

**USA
Europe
Japan**



LDCs

**Brazil
China
India**

Indigenous S&T Capabilities

Economic Strength



**Brazil,
China, India,**

Traditional Knowledge & Biodiversity Capability

**Traditional Knowledge &
Biodiversity Capability**

**Oil Rich Middle
East Countries**

**Brazil,
China, India**

**USA
Europe
Japan**



Indigenous S&T Capabilities



Thank You

Stages of Formal Acceptance of Traditional Knowledge Classifications

Feb 2001

India drives agenda on inclusion of traditional knowledge at International Patent Classification Union

Task force of five nations constituted by WIPO

Feb 2002

Task force recommends creation of subclass in A61 linking Traditional Knowledge Resource Classification developed by India with International Patent Classification

Materials from Plants

Stages of Formal Acceptance of Traditional Knowledge Classifications



Feb 2003

International Patent Classification Union adopted 200 subgroups for publication by July, 2005

Accords formal recognition and acceptance of Traditional Knowledge as a distinct discipline at international level

Oct 2004

Deliberations on IPC-TKRC Concordance list of the new main group A61K 36/00

Country-wise Periodicals included in PCT Minimum

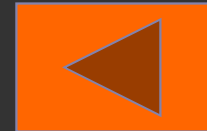


S. No.	Country	No. of NPL	S. No.	Country	No. of NPL
1.	USA	85	7.	India	2
2.	UK	20	8.	France	2
3.	Germany	15	9.	Switzerland	2
4.	Russia	6	10	Denmark	1
5.	Japan	5	11	Czech	1
6.	Netherlands	3	12	Italy	1
			13	Croatia	1
TOTAL					144

Section A – Ayurveda

Class

- 01 – Pharmaceutical Preparations (*Kalpna*)
- 02 – Personal Hygiene Preparations
- 03 – Dietary (*food/food stuff or Beverages*)
- 04 – Biocides, Fumigatives (*Dhupana, krmighna*)



Section A Class 01 – Pharmaceutical Preparations (*Kalpna*)

● Sub-Class

- 01A Based on *Audbhida* (Plants)
- 01B Based on *Jangama* (Animals)
- 01C Based on *Parthiva* (Minerals)
- 01D Characterised by *Roga* (Diseases)
- 01E Characterised by *Karma* (Action)
- 01F Mode of Administration
- 01G Miscellaneous

● Sub-Class: A01A – Pharmaceutical Preparations (*Kalpna*) Based on *Audbhida* (Plants)

- | | | | |
|---------|------|------|--------------------------------|
| ● Group | A01A | 1/00 | Whole medicinal plant |
| | | 2/00 | Parts of medicinal plant used |
| | | 3/00 | Characterised by Physical form |

CARAKA-SAMHITĀ

CHIKITSĀSTHĀNAM

22

ऐन्द्री मत्स्याख्यको ब्राह्मी चन्दा ब्रह्मसुवर्चला । पिप्पल्यो लवणं हेम शङ्खपुष्पी विषं घृतम् ॥ २४ ॥
एषां त्रियक्कान् भागान् हेमसर्पिर्विषैर्विना । द्वौ यवौ तत्र हेमस्तु तिलं दद्याद्विषस्य च ॥ २५ ॥
सर्पिषश्च पलं दद्यात्तदैकघ्नं प्रयोजयेत् । घृतप्रभूतं सक्षौद्रं जीर्णं चान्नं प्रशस्यते ॥ २६ ॥
जराज्याधिप्रशमनं स्मृतिमेधाकरं परम् । आयुष्यं पौष्टिकं धन्यं स्वरवर्णप्रसादनम् ॥ २७ ॥
परमोज्जस्करं चैतत् सिद्धमैन्द्रं रसायनम् । नैनत् प्रसहते कृत्या नालक्ष्मीर्न विषं न रुक् ॥ २८ ॥

श्वित्रं सकुष्ठं जठराणि गुल्माः ग्रीवा पुराणो विषमज्वरश्च ।

मेधास्मृतिज्ञानहराश्च रोगाः शाम्यन्त्यनेनातिबलाश्च वाताः ॥ २९ ॥

(इत्यैन्द्रं रसायनम्)

Aindri, matsyākhyaka, brāhmī, vacā, brahma-suvarcalā, pippali, lavaṇa, śaṅkhaṇṇi, all in quantity of three barely grains, gold in that of two barley grains, viṣa equal to one sesamum seed and ghee 40 gms,—all should be mixed together and used. After the food is digested, diet containing honey and plenty of ghee should be given.



Key Attributes of TKDL

BP/1833



Title of Traditional Knowledge Resource

Knowledge Known Since

Aindrīrasāyanam

1000 Years

TKRC CODE :

A01A-1/127, A01A-1/1482, A01A-1/267, A01A-1/40, A01A-1/488, A01A-1/507, A01A-1/52, A01A-1/547, A01A-3/9, A01B-1/23, A01C-1/49, A01C-1/50, A01D-20/16, A01D-20/46, A01D-20/51, A01D-22/02, A01D-22/10, A01D-22/16, A01D-6/31, A01D-6/46, A01D-7/39, A01D-7/44, A01E-1/157, A01E-1/165, A01E-1/187, A01E-1/206, A01E-1/207, A01E-1/31, A01E-1/84

IPC Code :

A61K33/00, A61K33/24, A61K35/12, A61K35/20, A61K35/78, A61K7/48, A61K9/14, A61P1/00, A61P1/04, A61P1/06, A61P1/08, A61P1/12, A61P1/14, A61P1/16, A61P11/04, A61P17/00, A61P17/12, A61P17/16, A61P21/06, A61P25/00, A61P25/08, A61P25/10, A61P25/12, A61P25/18, A61P25/26, A61P25/28, A61P29/00, A61P3/02, A61P31/08, A61P33/00, A61P33/04, A61P33/06, A61P37/04, A61P39/00, A61P39/02, A61P39/04, A61P39/06, A61P43/00

DETAILS OF PROCESS / FORMULATION :

1. **Aindrīrasāyanam** is a therapeutic single / compound formulation consisting of useful parts of following ingredient(s) : Citrullus colocynthis (Linn.) Schrad. (colocynth), Alternanthera sessilis (Linn.) DC. (sessile joyweed), Bacopa monnieri (Linn.) Penn. (coastal

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2. Therapeutic composition / formulation is mentioned below :

1	<u>Citrullus colocynthis (Linn.) Schrad. (colocynth)</u>	Root	- Powder	120 mg
2	<u>Alternanthera sessilis (Linn.) DC. (sessile joyweed)</u>	Leaf	- Powder	120 mg
3	<u>Bacopa monnieri (Linn.) Penn. (coastal waterhyssop , herb of grace, herb-of-grace)</u>	Whole plant	- Powder	120 mg
4	<u>Acorus calamus Linn. (calamus, sweetflag)</u>	Rhizome	- Powder	120 mg
5	<u>Cleome icosandra Linn. Syn. C. viscosa Linn. (Asian spiderflower)</u>	Root	- Powder	120 mg
6	<u>Piper longum Linn. (Indian Long Piper)</u>	Fruit	- Powder	120 mg
7	Rock salt	-	- Powder	120 mg
8	Gold	Calcined drug	- Powder	80 mg
9	<u>Convolvulus microphyllus Sieb. ex Spreng. Syn.: C. pluricaulis Choisy / Evolvulus alsinoides Linn. / Clitoria ternatea Linn.</u>	Whole plant	- Powder	120 mg



9	Convolvulus microphyllus Sieb. ex Spreng. Syn.: C. pluricaulis Choisy / Evolvulus alsinoides Linn. / Clitoria ternatea Linn.	Whole plant	-	Powder	120 mg
10	Aconitum chasmanthum Stapf & Holmes / Aconitum ferox Wall. ex Ser. (Indian aconite)	Rhizome	-	Powder	2.4 mg
11	Clarified butter	Cow			48 gm

3. Therapeutic composition mentioned above is prepared as **CŪRNA :(POWDER)**

Ingredients mentioned in the formulation are cleaned and dried properly. They are finely powdered and sieved. Where there are multiple ingredients, they are separately powdered and sieved. Each one of them (powder) is weighed separately, and mixed together. In industry, however, all the ingredients are cleaned, dried and powdered together by disintegrators. Mechanical sifters are also used. Salt, sugar, camphor etc., if mentioned are separately powdered and mixed in the end. Asafoetida (Higu) and salt may also be roasted, powdered and then added. Ingredients, which are to be taken fresh, are made into herbal paste, dried, and then added. Sometimes Bhṛvāṅg (trituration) with Svarasa (expressed juice of plants) or Kvṛṭha (decoction) etc. is given if indicated in the formulation.

4. A composition as described above is formulated as Powder .

5. The dose of above mentioned therapeutic composition is 12 gm .

6. Mode of administration Oral administration .

7. It is Memory enhancer , Beneficial for life span/ Providing longevity , Nutrient , Beneficial for voice , Complexion promoting , Energy providing/ Promoting Ojas , Antipoison; Alexipharmac; Antidote .

8. It is useful in the treatment of Leucoderma/Vitiligo(T) , Leprosy and other dermatoses , Diseases of abdomen , Abdominal lump , Enlargement of spleen , Malaria / Intermittent fever , Syncope/Fainting , Epilepsy , Psychosis/Insanity/Mania , Disease with Vata predominance

LIST OF DOCUMENTS WITH DATE OF PUBLICATION (PRIOR ART) :

Agniveśa

Caraka Samhitā - Edited & translated by P.V Sharma, Vol.-II :
Chaukhamba Orientalia, Varanasi, Edn. 5th, 2000. [Time of
origin 1000 BC-4th century]

prior art

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வயித்தியம்-எள

67-70

சண்டமாருதக் குழம்பு

மாருதமாங்கொடிவேலி முருங்கை வாகைமாவி சிங்கம்வேலை
பெருக்கம்வேர்மேனி, வாருதமா மழிஞ்சிவெட்டி வேம்பும்புங்கு
மருக்காரைபொற்கைபா னுயும்வேலை சாருதமா காப்ப்பாகம் விழி

முடக்கற்றானேடு சிற்றேரண்டக் காட்டுக்கொட்டை, காருதமாயி
கருணை சங்கங்குப்பி கருகொச்சிதமுதாழை வெண்ணைச்சியே. 426

கொச்சியொடுபூவரசு பெரியகொன்றை நுவலரியவெருமருத்த
காக்கைவேரும், கச்சியாங்கருஞ்சூரை செங்கத்தாரி கரிசாலைவெ
ளிரண்டுகற்றாழைபிரமி, கிச்சைசயாங்கழற்கொட்டி கருவேல்குன்றி
நிலவாகைபேய்க்குமட்டி திருகுதள்ளி, கொச்சைசயா மூக்கிரட்டை
சதூரக்கள்ளி கொடிக்கள்ளியவுரிசிறு குறிஞ்சாமே. 426

குறிஞ்சாவாங் கீழ்க்காயினெல்லி குன்றிகுலவும்வேர்வேலியிங்
றன்பருத்திக்கோவை, சிறிஞ்சான சிற்றாமுட்டிபேராமுட்டி சோந்
தைதூதுவளைக்கண்டங்காளி, கறிஞ்சானவழுதலையின் சிறுகாஞ்
சோறி கனமானபேய்க்கருடனிடகிழங்கு, இறிவான விராவிமுதல்
பலம்பத்தாக இடித்துநிழலுலர்த்தி குழித்தயிலம் வாங்கே. 427

வாங்கியே தயிலமொரு பாண்டத்தூட்டு வாகாகப் பேய்க்
குமட்டிச்சாறுநாழி, தேங்கியே திருகுற்றகள்ளிப்பாலும் செயலரசு
வகைவகைக்குநாழிவாரு, தீங்கில்லாத் தில்லம்பால் படிதாள்



कुटजादिकषायः—

कुटजं दाडिमं मुस्तं धातकीबिल्ववाल्कलम् ।
 लोध्रचन्दनपाठाश्च कषायं मधुना पिबेत् ॥३१॥
 सामे शूले च रक्ते च पिच्छाम्नावे च शस्यते ।
 कुटजादिरिति ख्यातः सर्वातीसारनाशनः ॥३२॥
 बहुशो दृष्टफलोऽयम् ॥ ३१-३२ ॥

इन्द्रयव, दाडिमफल के छिलके, मोथा, धाय के फूल, बेल के फल का गुदा, नेत्रवाला, लोध्र, लाल चन्दन और पाठा इनका कषाय बनाकर उसमें शहद मिलाकर पीना चाहिए । यह कषाय आमृतिसार, सशूलातिसार, रक्तातिसार और पिच्छिल पदार्थयुक्त अतिसार में प्रशस्त है । यह कुटजादि कषाय प्रायः सर्व प्रकार के अतिसार को नष्ट करता है ॥३१-३२॥



Key Attributes of TKDL

AK/590



Title of Traditional Knowledge Resource

Knowledge Known Since

Kutajādikaṣāyah

200 Years

TKRC CODE :

A01A-1/1592, A01A-1/1598, A01A-1/1892, A01A-1/2130, A01A-1/480, A01A-1/530, A01A-1/635, A01A-1/67, A01A-1/989, A01A-3/19, A01B-1/37, A01D-20/110, A01D-20/41, A01D-20/94, A01D-7/14, A01D-7/40, A01D-7/60, A01F-1/1

IPC Code :

A61K35/64, A61K35/78, A61K9/08, A61P1/06, A61P1/12, A61P1/14, A61P1/16, A61P1/18, A61P17/00, A61P17/02, A61P29/00, A61P31/00, A61P33/04

DETAILS OF PROCESS / FORMULATION :

1. **Kutajādikaṣāyah** is a therapeutic single / compound formulation consisting of useful parts of following ingredient(s) : *Holarrhena antidysenterica* (Roxb. ex Flem.) Wall. ex DC. (tellicherry bark), *Punica granatum* Linn. (pomegranate), *Cyperus rotundus* Linn. / *Cyperus scariosus* R. Br. / *Cyperus arundinaceum* Baker (chaguan humatag, cocograss, kili'o'opu, nutgrass, pakopako, purple nursesedge), *Woodfordia fruticosa* (Linn.) Kurz., *Aegle marmelos* Correa ex Roxb. (Indian bael), *Coleus vetiveroides* K.C. Jacob / *Valeriana jatamansii* Jones Syn.: *V. wallichii* DC., *Symplocos racemosa* Roxb. (sweetleaf, symplocos), *Pterocarpus santalinus* Linn. f. (red sandal wood), *Cissampelos pareira* Linn. (pareira brava), Honey

2. Therapeutic composition / formulation is mentioned below :



1	<i>Holarrhena antidysenterica</i> (Roxb. ex Flem.) Wall. ex DC. (tellicherry bark)	Seed	1 Part
2	<i>Punica granatum</i> Linn. (pomegranate)	Fruit rind	1 Part
3	<i>Cyperus rotundus</i> Linn. / <i>Cyperus scariosus</i> R. Br. / <i>Cyperus arundinaceum</i> Baker (chaguan humatag, cocoglass, kili'o'opu, nutgrass, pakopako, purple nutsedge)	Stem tuber	1 Part
4	<i>Woodfordia fruticosa</i> (Linn.) Kurz.	Flower	1 Part
5	<i>Aegle marmelos</i> Correa ex Roxb. (Indian bael)	Fruit pulp	1 Part
6	<i>Coleus vettiveroides</i> K.C. Jacob / <i>Valeriana jatamansii</i> Jones Syn.: <i>V. wallichii</i> DC.	Root	1 Part
7	<i>Symplocos racemosa</i> Roxb. (sweetleaf, symplocos)	Stem bark	1 Part
8	<i>Pterocarpus santalinus</i> Linn. f. (red sandal wood)	Heart wood	1 Part
9	<i>Cissampelos pareira</i> Linn. (pareira brava)	Root	1 Part
*	Prakṣepa Dravya (Additives)	-	-
10	Honey	-	12 gm

3. Therapeutic composition mentioned above is prepared as **KVĀTHA** :(DECOCTION)

Kvātha (decoction) is prepared by boiling powdered plant material with required quantity of water.

A specific quantity of water is retained after boiling, which is then filtered to obtain Kvātha. It is also called Śrta, Niryūha and Kaṣāya.

* Prakṣepadravya æ The fine powder of some fragrant and other ingredients like honey, clarified butter etc. is added to kvatha, which is called Prakṣepadravya.

4. A composition as described above is formulated as Decoction / Water extract .

5. The dose of above mentioned therapeutic composition is 24-48 gm .

6. Mode of administration Oral administration .

7. It is useful in the treatment of Diarrhoea with predominance of Ama , Acute diarrhoea , with Colic , Blood dysentery , Acute diarrhoea , with Slimmi , Discharge , and All types , Acute diarrhoea

LIST OF DOCUMENTS WITH DATE OF PUBLICATION (PRIOR ART) :

Govinda Dāsa

Bhaiṣajya Ratnāvalī - Edited by Rajeshvaradutta Shastri,
Translated by Ambikaduttashastri : Chaukhamba Sanskrit
Sansthan, Varanasi, Edn. 14th, 2001. [This book contains back
references from 1000 B.C.to 18th century]

prior art

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عطر و احوال فرا بادرین آن

39

جوارش تیواج تا لیت حکیم

علو نجان جبت اسهال بو ایسیر بسیار مفید بلکه اسهال خون و جگری را که ضعف در آن بسیار باشد و نزف الدم بهر عضو یک باشد نفع
عظیم دارد و صفت آن تیواج خطائی سه شقال پوست بیخ انجبار که با طباشیر مر و اید ناسفته سوده هر یک یک شقال گل مخموم
و م الاخوین کثیرا هر یک نیم شقال کوفه بختیه سه وزن ادویه شربت سیب و لایته شربت به ولایتی و یا شربت انجبار حسب اللیس
اینجه یک شقال با شیر تخم خرفه و خشخاش هر یک و شقال بخورند



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ஆவியளிக்கும் அமுதமுறைச் சுருக்கம்

(5) குடசுப்பாலை, அதிவிடையம், கோரைக்கிழங்கு, சாதிக் காய், கீச்சு, அபின், கஞ்சா, கழற்சிப்பருப்பு, இலவம் பிசின், சீரகம், மாங்கொட்டைப்பருப்பு, வில்வப்பழம் இவைகளை சம ன்ளையாய் எலுமிச்சம்பழச் சாற்றாலாட்டி கழற்சி அளவு உருண்டை செய்து தேனில் கொடுக்கத் தீரும்.



रसतन्त्रसार व सिद्धप्रयोगसंग्रह

द्वितीय खण्ड

प्रमेह

३७२

१२. मधुमेह दमन चूर्ण ।

द्रव्य—गुडमार ८ तोले, बिनोले की मींगी ४ तोले, जामुन की गुठलियों की मींगी ४ तोले, सुखे बिल्वपत्र ६ तोले तथा शुष्क निम्बपत्र २ तोले लें ।

विधि—सबको कूट पीस-कपड़छन चूर्ण बनाकर शीशी में भर लें ।

मात्रा—२ से ३ माशे तक, जल के साथ दिन में २ समय सेवन करें ।

उपयोग—इसके सेवन से मधुमेह रोग के कारण उत्पन्न होती रहने वाली शर्करा पर अति शीघ्र काबू हो जाता है, चाहे वह शर्करा केवल मूत्र में ही उत्पन्न हुई हो अथवा उसकी उपस्थिति रक्तान्तर्गत भी हो गई हो । इसके अतिरिक्त यह अग्न्याशय और यकृत के विकारों को दूरकर मधुमेह का दमन भी करती है ।

सूचना—यदि वसन्त कुसुमाकर रस के सहपान रूप से इस चूर्ण का प्रयोग किया जाये तो मधुमेह रोग में निश्चित लाभ होने की आशा है ।





Key Attributes of TKDL

RS21/437



Title of Traditional Knowledge Resource

Madhumeha Damana Curna

Knowledge Known Since

50 Years

TKRC CODE :

A01A-1/1900, A01A-1/265, A01A-1/67, A01A-1/927, A01A-1/946, A01A-3/9, A01C-1/76, A01D-16/02, A01F-1/1

IPC Code :

, A61K 131/00, A61K 36/00, A61K 36/185, A61K 36/27, A61K 36/58, A61K 36/61, A61K 36/75, A61K 9/14, A61P 3/10, A61P 5/00, A61P 5/48, C01B 5/00

DETAILS OF PROCESS / FORMULATION :

1. Madhumeha Damana Curna is a therapeutic single / compound formulation consisting of useful parts of following ingredient(s) : **Gymnema sylvestre (Retz.) R.Br. ex Schult. (meṣaśṛṅgī, madhunāśinī)** (miracle fruit), **Gossypium herbaceum Linn. (kārṇāsa)** (Le vant cotton), **Syzygium cuminii (Linn.)Skeels (jambū)** (jambolan plum, Java plum, kavika ni India, mesegerak), **Aegle marmelos Correa ex Roxb. (bilva)** (Indian bael), **Azadirachta indica A. Juss. (nimba)** (neem)

2. Therapeutic composition / formulation is mentioned below :

1 Gymnema sylvestre (Retz.) R.Br. ex Schult. (meṣaśṛṅgī, madhunāśinī) (miracle fruit)	Leaf	96 gm
2 Gossypium herbaceum Linn. (kārṇāsa) (Le vant cotton)	Seed	48 gm

3	<i>Syzygium cuminii</i> (Linn.)Skeels (jambū) (jambolan plum, Java plum, kavika ni India, me segerak)	Endosperm		48 gm
4	<i>Aegle marmelos</i> Correa ex Roxb. (bilva) (Indian bael)	Leaf	-Non-unctuous / Dry / Rough	72 gm
5	<i>Azadirachta indica</i> A. Juss. (nimba) (neem)	Leaf	-Non-unctuous / Dry / Rough	24 gm

3. Therapeutic composition mentioned above is prepared as CŪRNA :(POWDER)

Ingredients mentioned in the formulation are cleaned and dried properly. They are finely powdered and sieved. Where there are multiple ingredients, they are separately powdered and sieved. Each one of them (powder) is weighed separately, and mixed together. In industry, however, all the ingredients are cleaned, dried and powdered together by disintegrators. Mechanical sifters are also used. Salt, sugar, camphor etc., if mentioned are separately powdered and mixed in the end. Asafoetida (Higu) and salt may also be roasted, powdered and then added. Ingredients, which are to be taken fresh, are made into herbal paste, dried, and then added. Sometimes Bhāvanā (trituration) with Svarasa (expressed juice of plants) or Kvātha (decoction) etc. is given if indicated in the formulation.

4. A composition as described above is formulated as Powder (cūrna) .

5. The dose of above mentioned therapeutic composition is 2-3 gm .

6. It is given with adjuvant of Water (jala/udaka) .

7. Mode of administration : Oral administration (auśadhi pāna) .

8. Time of administration 2 Time(s) per day .

9. It is useful in the treatment of Diabetes mellitus (madhumeha)

LIST OF DOCUMENTS WITH DATE OF PUBLICATION (PRIOR ART) :

Rasatantrasārah Evam Siddhaprayogasamgrahaḥ; part II; Krishan Gopal Ayurveda Bhawan;Edn 8th;1990 [This book contains back references from 1000 B.C.to 20th century]

prior art

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خزان اللادوبیہ

پتاس

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مرض ذیابیطیس

جامن کے خشکوسیموں کا سفوف پانچ گرین سے پندرہ گرین تک یا اسکے سیال رسب کو ایک ڈرام سے دو ڈرام تک کی مقدار میں دن
تین مرتبہ کھلانا نهایت مفید ہے



Value Addition – Modern Science to TKDL

- Taxonomic Information, citation, synonyms, vernacular names, habitat, geographical information
- Morphological Information
- Cytological Information
- Germplasm Information
- Phytochemistry
- Pharmacological Information
- Pharmacognostical Information
- Toxicology
- Utilization



Zoom 100%

COMPONENTS OF BIODIVERSITY DIGITAL LIBRARY

KINGDOM....Plantae
CLASS....Magnoliopsida (Dicotyledons)
FAMILY....Scrophulariaceae
GENUS....Bacopa Aubl.
SPECIES....Bacopa monnieri (Linn.) Penn.

Citation: in Proc. Acad. Nat. Sci. Philad.98:94, 1946;
 Santapau in RBSI. 16(1) : 201, 1953.
Status: Abundant
known Since: 1756
TKDL TKRC:
Ploidy level:
Basic No.:
Chromosome No.:



SYNONYMS

LYSIMACHIA MONNIERI LINN. Cent. Pl. 2:9, 1756.
MONIERA CUNEIFOLIA MICHX. Fl. Bor-Amer. 2 : 22, 1803
 (Monnieria);

VERNACULAR NAMES

English Water hyssop
Hindi Jalnim, Brahmi; Neem-jal; jal-lep.
Kannada Niru brahmi
Malayalam Nirbrahmi
Marathi Nirbrahmi
Bengali Brihmi-sak
Sanskrit Nira-Brahmi, Manduki
Tamil Nirbrahmi,
Telugu Sambrani chettu

MORPHOLOGY



Zoom 100%

3. Chemical Constituent: Betulinic acid (InActive)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:

1. Plant Part Used: Whole plant

2. CAS Number: 11

3. Chemical Constituent: Flavonoids-Apigenin (Active)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:

1. Plant Part Used: Whole plant

2. CAS Number: 12

3. Chemical Constituent: Cynaroside and Luteolin (InActive)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:

1. Plant Part Used: Whole plant

2. CAS Number: 13

3. Chemical Constituent: Nicotine (InActive)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:

1. Plant Part Used: Whole plant

2. CAS Number: 14

3. Chemical Constituent: Hersaponin (InActive)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:



MORPHOLOGY

Habit A spreading or ascending branches, evergreen, fleshy herb. The branches spread on moist ground and forms dense mat

Root Roots are found growing at nodes.

Leaves The Leaves obovate-oblong or spatulate, obtuse, succulent, up to 1.8 X 0.6 cm. club shaped stalkless, and fleshy. The leaves are in bitter tasting.

Flowers Flowers bluish-purplish or white with bluish veins, erect, solitary, short or long-pedicellate at the axis of the leaves. The flowers are short lived and colour lightens gradually.

Fruits The fruits are capsules. Ovoid, Glabrous, 4-5 X 3-4 mm.

Seeds The capsules break open to release numerous minute black seeds.

Flowering period Aug.-Oct.

Fruiting period Nov.-dec.

PHYTOCHEMISTRY

1. Plant Part Used: Leaves

2. CAS Number: 21

3. Chemical Constituent: Sterol (Inactive)

4. Molecular Formula: C₂₆H₄₆O.H₂O

5. Molecular Weight:

6. Melting Point: 76

1. Plant Part Used: Whole plant

2. CAS Number: 1

3. Chemical Constituent: Dammaranes Bacosides A (2.5-3%) and B (Inactive)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:

1. Plant Part Used: Whole plant

2. CAS Number: 10



Zoom 100%

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 15**
- 3. **Chemical Constituent: Herpestine(alkaloid) (Inactive)**
- 4. **Molecular Formula: C34H46N2O6**
- 5. **Molecular Weight:**
- 6. **Melting Point: 116-17**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 16**
- 3. **Chemical Constituent: Jujubagenin (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 17**
- 3. **Chemical Constituent: Monnerin (Inactive)**
- 4. **Molecular Formula: C51H82O21.3H2O**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 18**
- 3. **Chemical Constituent: Sodium and Potassium salts (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 19**



Zoom 100%

- 3. **Chemical Constituent: Triterpene-Bacosine (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 2**
- 3. **Chemical Constituent: Hersaponin (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 20**
- 3. **Chemical Constituent: Betulic acid (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 22**
- 3. **Chemical Constituent: Bacoside B (Inactive)**
- 4. **Molecular Formula: C₄₁H₆₈O₁₃.5H₂O**
- 5. **Molecular Weight:**
- 6. **Melting Point: 203 (Decomp)**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 23**
- 3. **Chemical Constituent: Aglycone (Inactive)**
- 4. **Molecular Formula: C₃₀H₄₈O₄**
- 5. **Molecular Weight:**
- 6. **Melting Point: 235-37**

- 1. **Plant Part Used: Whole plant**



Zoom 100%

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 24
- 3. Chemical Constituent: Saponins (Inactive)
- 4. Molecular Formula:
- 5. Molecular Weight:
- 6. Melting Point:

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 3
- 3. Chemical Constituent: Monnierin (Inactive)
- 4. Molecular Formula: C51H82O21.3H2O
- 5. Molecular Weight:
- 6. Melting Point: 262-63

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 4
- 3. Chemical Constituent: Alkaloids Herpestine (Inactive)
- 4. Molecular Formula:
- 5. Molecular Weight:
- 6. Melting Point:

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 5
- 3. Chemical Constituent: Brahmine (Inactive)
- 4. Molecular Formula:
- 5. Molecular Weight:
- 6. Melting Point:

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 6



Zoom 100%

- 3. Chemical Constituent: Triterpenes (InActive)
- 4. Molecular Formula:
- 5. Molecular Weight:
- 6. Melting Point:

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 7
- 3. Chemical Constituent: Flavonoids (InActive)
- 4. Molecular Formula:
- 5. Molecular Weight:
- 6. Melting Point:

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 8
- 3. Chemical Constituent: Bacosides A (Active)
- 4. Molecular Formula: C41H68O13.4H2O
- 5. Molecular Weight:
- 6. Melting Point: 232-34(DECOMP.)

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 9
- 3. Chemical Constituent: Bacogenin (InActive)
- 4. Molecular Formula:
- 5. Molecular Weight:
- 6. Melting Point:

GEOGRAPHIC DISTRIBUTION

ADILABAD
 DEHRADUN Robers Cave

HABITAT



HABITAT

Marshy , Semi Aquatic ,

SOURCE OF ORIGIN

Old Literature The Wealth of India; A Dictionary of Raw Materials & Industrial products; NISCOM.CSIR. New Delhi

KNOWLEDGE HOLDERS

Institute Khanuja S.P.S

MAIN USAGE

Whole plant Improve intellect,The plant is reported to be useful in treating biliousness, inflammations, epilepsy, insanity, tumour, ulcers, flatulence, constipation, asthma, bronchitis, skin diseases, leprosy, lecuderma, sterility, fever anf general debility.

GERMPLASM INFORMATION

- 1. Plant Part: Whole plant**
- 2. Institute Name: National Bureau of Plant Genetic Resources (NBPGR), New Delhi**
- 3. Accession Number: 11**

- 1. Plant Part: Whole plant**
- 2. Institute Name: National Institute of Science Communication And Information Resources, (NISCAIR), New Delhi.**
- 3. Accession Number: 100**

PHARMACOLOGICAL INFORMATION

Plant Parts used as Drug: LEAVES

- 1. Drug Form: Paste**
- 2. Test Model: External**
- 3. Dosage:**
- 4. Drug Description:**

5. Mode of administration:
6. Mode Of Action:
REMEDY FOR RHEUMATISM
The paste of leaves is used for rheumatism

Plant Parts used as Drug: WHOLE PLANT
1. Drug Form: Extract
2. Test Model: Learning Performance
3. Dosage:
4. Drug Description: Saponin; Bcoside A & B.
5. Mode of administration:
6. Mode Of Action:
THERAPEUTIC
Treatment with plant extract improve maze learning in rats.

Plant Parts used as Drug: WHOLE PLANT
1. Drug Form: Mixture
2. Test Model: Dose administered on cat
3. Dosage: 0.5mg/kg
4. Drug Description: Brahmine
5. Mode of administration: Different dose
6. Mode Of Action:
THREPTIC
Brahmine is highly toxic; when administered at a dose of .5 mg/kg body wt. of cat, it produse a fall in blood pressure.

PHARMACOGNISTICAL INFORMATION

Plant Part used: WHOLE PLANT
1. Macroscopic Characters: Herb -- Creeping, glabrous, succulent herb, rooting at nodes; stem-thick, soft, glabrous, branches ascending. Leaves-Sessile, ovate-oblong or spatulate, entire, nerves obscure and lower surface dotted with black specks; Flower- Blue or white with purple veins, axillary and solitary on long pedicels. Capsules - Ovoid, blabrous
2. Microscopic Characters: Leaf-More or less isobilateral structure; epidermis with striated cuticle;

2. **Microscopic Characters:** Leaf-More or less isobilateral structure; epidermis with striated cuticle; stomata on both surfaces; epidermal cells have walls and glandular hairs on both surfaces, smaller on conical stalk and larger with 8-celled head; few prismatic crystals of Ca.Oxalate in mesophyll; no distinct midrib present; vascular bundles surrounded by bundle sheaths. Distinct bundle sheath surrounds vascular bundle of midrib. Transverse section shows lack of differentiation of mesophyll in the palisade and spongy layers. Both the epidermii show anisocytic type of stomata and glandular hairs.
3. **Powder Characters:**
4. **Histochemical Characters:**
5. **Drug Description:** Crude drug
6. **Organoleptic Characters:**
7. **Chemical Components:** Bacoside A (2.5 - 3%), Bacoside B and other bacosides, Hersaponin, Betulic acid, Monnierin, Alkaloids - Brahmine(0.01-0.02%) and Herpestine; Flavonoids; Saponin, D-mannitol, Nicotine, Saponins-Monierin, Sapogenins-Bacogenin A1-A4. Bacosine
8. **Finger Printing:**

Plant Part used: LEAVES

1. **Macroscopic Characters:** Obovate-oblong or spatulate, obtuse, succulent, entire nervous obscure and lower surface dotted with black specks.1.8 X 0.6 cm.
2. **Microscopic Characters:** Leaf more or less isobilateral structure; epidermis with striated cuticle; stomata on both surface; epidermal cells have wavy walls and glandular hairs on both surfaces, smaller on conical stalk and larger with 8-celled head; few prismatic crystals of Ca. oxalate in mesophyll; no distinct midrib present; vascular bundle surrounded by bundle sheaths.
3. **Powder Characters:**
4. **Histochemical Characters:** Transverse section shows lack of differentiation of mesophyll in the palisade and spongy layers.
5. **Drug Description:** Crude drug
6. **Organoleptic Characters:**
7. **Chemical Components:** Bacoside A, Bacoside B, Brahmine
8. **Finger Printing:**

TOXICOLOGICAL INFORMATION



Zoom 100%

DIGITAL HERBARIUM

1.Name Of Institute: National Institute of Science Communication And Information Resources, (NISCAIR), New Delhi.
2. Field Number: 2
3. Accession Number: 2
4. Barcode: ||563789||
5. Date of Collection: 10/11/04
6. Local Name: Brahmi
7. Locality: Niscair
8. Collected By: Dr T. K. Mukherjee
9. Identified By: Dr. Bala Subramaniam

1.Name Of Institute: National Institute of Science Communication And Information Resources, (NISCAIR), New Delhi.
2. Field Number: 1
3. Accession Number: 1
4. Barcode: ||||1890||
5. Date of Collection: 10/11/04
6. Local Name: Brahmi
7. Locality: Patel Nagar
8. Collected By: Dr. Bala Subramaniam
9. Identified By: Dr. H.B.Singh

1.Name Of Institute: National Institute of Science Communication And Information Resources, (NISCAIR), New Delhi.
2. Field Number: 3
3. Accession Number: 3
4. Barcode: ||2345||25
5. Date of Collection: 10/11/04
6. Local Name: Brahmi
7. Locality: Patel Nagar
8. Collected By: Dr H.B.Singh
9. Identified By: Dr T.K.Mukherjee



Zoom 100%

9. Identified By: Dr T.K.Mukherjee

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- (2) THE AYURVEDIC PHARMACOPOEIA OF INDIA , Anonymous
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- (8) THE USEFUL PLANTS OF INDIA , Ambasta S.P. , 65
- (9) THE USEFUL PLANTS OF INDIA , Ambasta S.P. , 1992 , 65
- (10) THE USEFUL PLANTS OF INDIA , Ambasta S.P. , 1992 , 254
- (11) THE USEFUL PLANTS OF INDIA , Ambasta S.P. , 1992 , 65
- (12) INDIAN J. PHARM. , Chopra et al. , 1956 , 18 , 369
- (13) WOI , Anonymous
- (14) WOI , Anonymous , 1988 , 2 : B , 2
- (15) WOI , Anonymous , 1988 , 2 : B (Revised) , 2

- (16) WOI , Anonymous , 1988 , 2 :B , 2
- (17) WOI , Anonymous , 1988 , 2 :B (Revised) , 2
- (18) WOI , Anonymous , 1988 , 2: B (Revised) , 3



Bacopa monnieri



Brahmi

Bacopa monnieri (Linn.) Penn.



Citrullus colocynthis



Indravāruṇī

Citrullus colocynthis (Linn.) Schrad.



Alternanthera Sessilis



Acorus calamus



Piper longum



بیاض کبیر

حصہ دوم

33

حب بخار موسمی بخاروں کے لئے نہایت مفید ہے۔ تپ لرزہ کی باری بہت جلد رک جاتی ہے۔ اگر بخار کے موسم میں احتیاطاً اس کا استعمال کیا جائے تو انسان بخار سے بچا رہتا ہے۔ یہ نسلوچین ایکٹولہ کنٹریٹہ یعنی کونین، چھ ماشہ گوند بولیمین ماشہ ست گلوچہ ماشہ سب دواؤں کو کوٹ چھان کر پانی سے نم کر کے مٹر کے دانہ کے برابر گولیاں بنائیں، ایک یا دو گولی صبح دوپہر اور شام کے وقت پانی کے ساتھ استعمال کریں اور بخار کے وقت اس کو نہ دیں مگر اس کو حفظاً ناقصہ م کے طور پر استعمال کرنا چاہیں تو ایک گولی کھانا کھانے کے بعد کھالیا کریں۔



Key Attributes of TKDL

MA3/95



Title of Traditional Knowledge Resource

Knowledge Known Since

Habb-e-bukhar

50 Years

TKRC CODE :

A01A-1/13, A01A-1/1966, A01A-1/272, A01A-1/472, A01C-1/76,
A01D-20/46, A01F-2/15, A01F-2/16, B01D-24/02, B01D-24/69

IPC Code :

A61K 36/48, A61K 36/59, A61K 36/899, C01B 5/00, A61P 29/00,
A61P 33/06, A61P 33/00, A61P 29/00, A61P 29/00, A61P 43/00

DETAILS OF PROCESS / FORMULATION :

1. **Habb-e-bukhar** is a therapeutic single / compound formulation consisting of useful parts of following ingredient (s) : *Bambusa arundinacea* (Retz.) Roxb. Syn.: *B. bambos* Voss (bamboo), *Acacia arabica* Willd., *Tinospora cordifolia* Miers (tinospora), Water

2. Therapeutic composition / formulation is mentioned below :

1 <i>Bambusa arundinacea</i> (Retz.) Roxb. Syn.: <i>B. bambos</i> Voss (bamboo)	Exudate	12 gm
2 <i>Acacia arabica</i> Willd.	Exudate	3 gm
3 <i>Tinospora cordifolia</i> Miers (tinospora)	Stem	6 gm

3. Therapeutic composition mentioned above is prepared as HUBOOB. Huboob (pills) are medicinal preparations made by mixing powdered drugs in a suitable binder (Water/Oil/Resin of plant) and made into round and uniformly shaped balls of the required size. To avoid the sticking of the lubdi during the rolling between the fingers lubricants like Raughan Zard or Raughan-e-Kunjad is applied.

4. A composition as described above is formulated as Pills .

5. The dose of above mentioned therapeutic composition is 1-2 Pills .

6. Mode of administration : Oral administration .

7. Time of administration Morning , Afternoon , and In the evening .

8. It is useful in the treatment of seasonal fever , Malaria / Intermittent fever , and used for prevention of Fever/Pyrexia

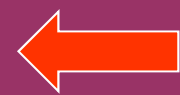
LIST OF DOCUMENTS WITH DATE OF PUBLICATION (PRIOR ART) :

Kabiruddin

Bayaz-e- Kabir Volume II

prior art

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CARAKA-SAMHITĀ

CHIKITSĀSTHĀNAM

22

ऐन्द्री मत्स्याख्यको ब्राह्मी चन्दा ब्रह्मसुवर्चला । पिप्पल्यो लवणं हेम शङ्खपुष्पी विषं घृतम् ॥ २४ ॥
एषां त्रियक्कान् भागान् हेमसर्पिर्विषैर्विना । द्वौ यवौ तत्र हेमस्तु तिलं दद्याद्विषस्य च ॥ २५ ॥
सर्पिषश्च पलं दद्यात्तदैकघ्नं प्रयोजयेत् । घृतप्रभूतं सक्षौद्रं जीर्णं चान्नं प्रशस्यते ॥ २६ ॥
जराज्याधिप्रशमनं स्मृतिमेधाकरं परम् । आयुष्यं पौष्टिकं धन्यं स्वरवर्णप्रसादनम् ॥ २७ ॥
परमोज्जस्करं चैतत् सिद्धमैन्द्रं रसायनम् । नैनत् प्रसहते कृत्या नालक्ष्मीर्न विषं न रुक् ॥ २८ ॥

श्वित्रं सकुष्ठं जठराणि गुल्माः प्लीहा पुराणो विषमज्वरश्च ।

मेधास्मृतिज्ञानहराश्च रोगाः शाम्यन्त्यनेनातिबलाश्च वाताः ॥ २९ ॥

(इत्यैन्द्रं रसायनम्)

Aindri, matsyākhyaka, brāhmī, vacā, brahma-suvarcalā, pippali, lavaṇa, śaṅkhaṇṇi, all in quantity of three barely grains, gold in that of two barley grains, viṣa equal to one sesamum seed and ghee 40 gms,—all should be mixed together and used. After the food is digested, diet containing honey and plenty of ghee should be given.



Key Attributes of TKDL

BP/1833



Title of Traditional Knowledge Resource

Knowledge Known Since

Aindrīrasāyanam

1000 Years

TKRC CODE :

A01A-1/127, A01A-1/1482, A01A-1/267, A01A-1/40, A01A-1/488,
A01A-1/507, A01A-1/52, A01A-1/547, A01A-3/9, A01B-1/23,
A01C-1/49, A01C-1/50, A01D-20/16, A01D-20/46, A01D-20/51,
A01D-22/02, A01D-22/10, A01D-22/16, A01D-6/31, A01D-6/46,
A01D-7/39, A01D-7/44, A01E-1/157, A01E-1/165, A01E-1/187,
A01E-1/206, A01E-1/207, A01E-1/31, A01E-1/84

IPC Code :

A61K33/00, A61K33/24, A61K35/12, A61K35/20, A61K35/78,
A61K7/48, A61K9/14, A61P1/00, A61P1/04, A61P1/06, A61P1/08,
A61P1/12, A61P1/14, A61P1/16, A61P11/04, A61P17/00,
A61P17/12, A61P17/16, A61P21/06, A61P25/00, A61P25/08,
A61P25/10, A61P25/12, A61P25/18, A61P25/26, A61P25/28,
A61P29/00, A61P3/02, A61P31/08, A61P33/00, A61P33/04,
A61P33/06, A61P37/04, A61P39/00, A61P39/02, A61P39/04,
A61P39/06, A61P43/00

DETAILS OF PROCESS / FORMULATION :

1. **Aindrīrasāyanam** is a therapeutic single / compound formulation consisting of useful parts of following ingredient(s) : Citrullus colocynthis (Linn.) Schrad. (colocynth), Alternanthera sessilis (Linn.) DC. (sessile joyweed), Bacopa monnieri (Linn.) Penn. (coastal

DETAILS OF PROCESS / FORMULATION .

1. **Aindrīrasāyanam** is a therapeutic single / compound formulation consisting of useful parts of following ingredient(s) : Citrullus colocynthis (Linn.) Schrad. (colocynth), Alternanthera sessilis (Linn.) DC. (sessile joyweed), Bacopa monnieri (Linn.) Penn. (coastal waterhyssop , herb of grace, herb-of-grace), Acorus calamus Linn. (calamus, sweetflag), Cleome icosandra Linn. Syn. C. viscosa Linn. (Asian spiderflower), Piper longum Linn. (Indian Long Piper), Rock salt, Gold, Convolvulus microphyllus Sieb. ex Spreng. Syn.: C. pluricaulis Choisy / Evolvulus alsinoides Linn. / Clitoria ternatea Linn., Aconitum chasmanthum Stapf & Holmes / Aconitum ferox Wall. ex Ser. (Indian aconite), Clarified butter

2. Therapeutic composition / formulation is mentioned below :

1	<u>Citrullus colocynthis (Linn.) Schrad. (colocynth)</u>	Root	- Powder	120 mg
2	<u>Alternanthera sessilis (Linn.) DC. (sessile joyweed)</u>	Leaf	- Powder	120 mg
3	<u>Bacopa monnieri (Linn.) Penn. (coastal waterhyssop , herb of grace, herb-of-grace)</u>	Whole plant	- Powder	120 mg
4	<u>Acorus calamus Linn. (calamus, sweetflag)</u>	Rhizome	- Powder	120 mg
5	<u>Cleome icosandra Linn. Syn. C. viscosa Linn. (Asian spiderflower)</u>	Root	- Powder	120 mg
6	<u>Piper longum Linn. (Indian Long Piper)</u>	Fruit	- Powder	120 mg
7	Rock salt	-	- Powder	120 mg
8	Gold	Calcined drug	- Powder	80 mg
9	<u>Convolvulus microphyllus Sieb. ex Spreng. Syn.: C. pluricaulis Choisy / Evolvulus alsinoides Linn. / Clitoria ternatea Linn.</u>	Whole plant	- Powder	120 mg



9	Convolvulus microphyllus Sieb. ex Spreng. Syn.: C. pluricaulis Choisy / Evolvulus alsinoides Linn. / Clitoria ternatea Linn.	Whole plant	-	Powder	120 mg
10	Aconitum chasmanthum Stapf & Holmes / Aconitum ferox Wall. ex Ser. (Indian aconite)	Rhizome	-	Powder	2.4 mg
11	Clarified butter	Cow			48 gm

3. Therapeutic composition mentioned above is prepared as **CŪRNA : (POWDER)**

Ingredients mentioned in the formulation are cleaned and dried properly. They are finely powdered and sieved. Where there are multiple ingredients, they are separately powdered and sieved. Each one of them (powder) is weighed separately, and mixed together. In industry, however, all the ingredients are cleaned, dried and powdered together by disintegrators. Mechanical sifters are also used. Salt, sugar, camphor etc., if mentioned are separately powdered and mixed in the end. Asafoetida (Higu) and salt may also be roasted, powdered and then added. Ingredients, which are to be taken fresh, are made into herbal paste, dried, and then added. Sometimes Bhṛvāṅg (trituration) with Svarasa (expressed juice of plants) or Kvṛṭha (decoction) etc. is given if indicated in the formulation.

4. A composition as described above is formulated as Powder .

5. The dose of above mentioned therapeutic composition is 12 gm .

6. Mode of administration Oral administration .

7. It is Memory enhancer , Beneficial for life span/ Providing longevity , Nutrient , Beneficial for voice , Complexion promoting , Energy providing/ Promoting Ojas , Antipoison; Alexipharmac; Antidote .

8. It is useful in the treatment of Leucoderma/Vitiligo(T) , Leprosy and other dermatoses , Diseases of abdomen , Abdominal lump , Enlargement of spleen , Malaria / Intermittent fever , Syncope/Fainting , Epilepsy , Psychosis/Insanity/Mania , Disease with Vata predominance

LIST OF DOCUMENTS WITH DATE OF PUBLICATION (PRIOR ART) :

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Caraka Samhitā - Edited & translated by P.V Sharma, Vol.-II :
Chaukhamba Orientalia, Varanasi, Edn. 5th, 2000. [Time of
origin 1000 BC-4th century]

prior art

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வயித்தியம்-எள

67 - 70

சண்டமாருதக் குழம்பு

மாருதமாங்கொடிவேலி முருங்கை வாகைமாவி சிங்கம்வேளை
பெருக்கம்வேர்மேனி, வாருதமா மழிஞ்சிவெட்டி வேம்பும்புங்கு
மருக்காரைபொற்கைபா னுயும்வேளை சாருதமா காப்ப்பாகம் விழி

முடக்கற்றானேடு சிற்றேரண்டக் காட்டுக்கொட்டை, காருதமாயி
கருணை சங்கங்குப்பி கருகொச்சிதமுதாழை வெண்ணைச்சியே. 426

கொச்சியொடுபூவரசு பெரியகொன்றை நுவலரியவெருமருத்த
காக்கைவேரும், கச்சியாங்கருஞ்சூரை செங்கத்தாரி கரிசாலைவெ
ளிரண்டுகற்றாழைபிரமி, கிச்சைசயாங்கழற்கொட்டி கருவேல்குன்றி
நிலவாகைபேய்க்குமட்டி திருகுதள்ளி, கொச்சைசயா மூக்கிரட்டை
சதூரக்கள்ளி கொடிக்கள்ளியவுரிசிறு குறிஞ்சாமே. 426

குறிஞ்சாவாங் கீழ்க்காயினெல்லி குன்றிகுலவும்வேர்வேலியிங்
றன்பருத்திக்கோவை, சிறிஞ்சான சிற்றாமுட்டிபேராமுட்டி சோந்
தைதூதுவளைக்கண்டங்காளி, கறிஞ்சானவழுதலையின் சிறுகாஞ்
சோறி கனமானபேய்க்கருடனிடகிழங்கு, இறிவான விராணிமுதல்
பலம்பத்தாக இடித்துநிழலுலர்த்தி குழித்தபிலம் வாங்கே. 427

வாங்கியே தயிலமொரு பாண்டத்தூட்டு வாகாகப் பேய்க்
குமட்டிச்சாறுநாழி, தேங்கியே திருகுற்றகள்ளிப்பாலும் செயலரசு
வகைவகைக்குநாழிவாரு, தீங்கில்லாத் தில்லம்பால் படிதாள்



कुटजादिकषायः—

कुटजं दाडिमं मुस्तं धातकीबिल्ववाल्मकम् ।
 लोध्रचन्दनपाठाश्च कषायं मधुना पिबेत् ॥३१॥
 सामे शूले च रक्ते च पिच्छाम्नावे च शस्यते ।
 कुटजादिरिति ख्यातः सर्वातीसारनाशनः ॥३२॥
 बहुशो दृष्टफलोऽयम् ॥ ३१-३२ ॥

इन्द्रयव, दाडिमफल के छिलके, मोथा, धाय के फूल, बेल के फल का गुदा, नेत्रवाला, लोध्र, लाल चन्दन और पाठा इनका कषाय बनाकर उसमें शहद मिलाकर पीना चाहिए। यह कषाय आम्रातिसार, सशूलातिसार, रक्तातिसार और पिच्छिल पदार्थयुक्त अतिसार में प्रशस्त है। यह कुटजादि कषाय प्रायः सर्व प्रकार के अतिसार को नष्ट करता है ॥३१-३२॥



Key Attributes of TKDL

AK/590



Title of Traditional Knowledge Resource

Knowledge Known Since

Kutajādikaṣāyah

200 Years

TKRC CODE :

A01A-1/1592, A01A-1/1598, A01A-1/1892, A01A-1/2130, A01A-1/480, A01A-1/530, A01A-1/635, A01A-1/67, A01A-1/989, A01A-3/19, A01B-1/37, A01D-20/110, A01D-20/41, A01D-20/94, A01D-7/14, A01D-7/40, A01D-7/60, A01F-1/1

IPC Code :

A61K35/64, A61K35/78, A61K9/08, A61P1/06, A61P1/12, A61P1/14, A61P1/16, A61P1/18, A61P17/00, A61P17/02, A61P29/00, A61P31/00, A61P33/04

DETAILS OF PROCESS / FORMULATION :

1. **Kutajādikaṣāyah** is a therapeutic single / compound formulation consisting of useful parts of following ingredient(s) : *Holarrhena antidysenterica* (Roxb. ex Flem.) Wall. ex DC. (tellicherry bark), *Punica granatum* Linn. (pomegranate), *Cyperus rotundus* Linn. / *Cyperus scariosus* R. Br. / *Cyperus arundinaceum* Baker (chaguan humatag, cocograss, kili'o'opu, nutgrass, pakopako, purple nursesedge), *Woodfordia fruticosa* (Linn.) Kurz., *Aegle marmelos* Correa ex Roxb. (Indian bael), *Coleus vetiveroides* K.C. Jacob / *Valeriana jatamansii* Jones Syn.: *V. wallichii* DC., *Symplocos racemosa* Roxb. (sweetleaf, symplocos), *Pterocarpus santalinus* Linn. f. (red sandal wood), *Cissampelos pareira* Linn. (pareira brava), Honey

2. Therapeutic composition / formulation is mentioned below :



1	<i>Holarrhena antidysenterica</i> (Roxb. ex Flem.) Wall. ex DC. (tellicherry bark)	Seed	1 Part
2	<i>Punica granatum</i> Linn. (pomegranate)	Fruit rind	1 Part
3	<i>Cyperus rotundus</i> Linn. / <i>Cyperus scariosus</i> R. Br. / <i>Cyperus arundinaceum</i> Baker (chaguan humatag, cocogross, kili'o'opu, nutgrass, pakopako, purple nutsedge)	Stem tuber	1 Part
4	<i>Woodfordia fruticosa</i> (Linn.) Kurz.	Flower	1 Part
5	<i>Aegle marmelos</i> Correa ex Roxb. (Indian bael)	Fruit pulp	1 Part
6	<i>Coleus vettiveroides</i> K.C. Jacob / <i>Valeriana jatamansii</i> Jones Syn.: <i>V. wallichii</i> DC.	Root	1 Part
7	<i>Symplocos racemosa</i> Roxb. (sweetleaf, symplocos)	Stem bark	1 Part
8	<i>Pterocarpus santalinus</i> Linn. f. (red sandal wood)	Heart wood	1 Part
9	<i>Cissampelos pareira</i> Linn. (pareira brava)	Root	1 Part
*	Prakṣepa Dravya (Additives)	-	-
10	Honey	-	12 gm

3. Therapeutic composition mentioned above is prepared as **KVĀTHA** :(DECOCTION)

Kvātha (decoction) is prepared by boiling powdered plant material with required quantity of water.

A specific quantity of water is retained after boiling, which is then filtered to obtain Kvātha. It is also called Śrta, Niryūha and Kaṣāya.

* Prakṣepadravya æ The fine powder of some fragrant and other ingredients like honey, clarified butter etc. is added to kvatha, which is called Prakṣepadravya.

4. A composition as described above is formulated as Decoction / Water extract .

5. The dose of above mentioned therapeutic composition is 24-48 gm .

6. Mode of administration Oral administration .

7. It is useful in the treatment of Diarrhoea with predominance of Ama , Acute diarrhoea , with Colic , Blood dysentery , Acute diarrhoea , with Slimmi , Discharge , and All types , Acute diarrhoea

LIST OF DOCUMENTS WITH DATE OF PUBLICATION (PRIOR ART) :

Govinda Dāsa

Bhaiṣajya Ratnāvalī - Edited by Rajeshvaradutta Shastri,
Translated by Ambikaduttashastri : Chaukhamba Sanskrit
Sansthan, Varanasi, Edn. 14th, 2001. [This book contains back
references from 1000 B.C.to 18th century]

prior art

Page154



عطر و احوال فرا بادرین آن

39

جوارش تیوانج نالیف عکیم

علو نجان جبت اسهال بو ایسیر بسیار مفید بلکه اسهال خون و جگری را که ضعف در آن بسیار باشد و نزف الدم بهر عضو یک باشد نفع
عظیم دارد و صفت آن تیوانج خطائی سه شقال پوست بیخ انجبار که با طباشیر مر و اید ناسفته سوده هر یک یک شقال گل مخموم
و م الاخوین کثیرا هر یک نیم شقال کوفه بختیه سه وزن اودیه شربت سیب و لایته شربت به ولایته و یا شربت انجبار حسب اللیس
اینجه یک شقال باشیره تخم خرفه و خشخاش هر یک و شقال بخورند



312

ஆவியளிக்கும் அமுதமுறைச் சுருக்கம்

(5) குடசுப்பாலை, அதிவிடையம், கோரைக்கிழங்கு, சாதிக்காய், கீச்சு, அபின், கஞ்சா, கழற்சிப்பருப்பு, இலவம் பிசின், சீரகம், மாங்கொட்டைப்பருப்பு, வில்வப்பழம் இவைகளை சமனையாய் எலுமிச்சம்பழச் சாற்றாலாட்டி கழற்சி அளவு உருண்டை செய்து தேனில் கொடுக்கத் தீரும்.



रसतन्त्रसार व सिद्धप्रयोगसंग्रह

द्वितीय खण्ड

प्रमेह

३७२

१२. मधुमेह दमन चूर्ण ।

द्रव्य—गुडमार ८ तोले, बिनोले की मींगी ४ तोले, जामुन की गुठलियों की मींगी ४ तोले, सुखे बिल्वपत्र ६ तोले तथा शुष्क निम्बपत्र २ तोले लें ।

विधि—सबको कूट पीस-कपड़छन चूर्ण बनाकर शीशी में भर लें ।

मात्रा—२ से ३ माशे तक, जल के साथ दिन में २ समय सेवन करें ।

उपयोग—इसके सेवन से मधुमेह रोग के कारण उत्पन्न होती रहने वाली शर्करा पर अति शीघ्र काबू हो जाता है, चाहे वह शर्करा केवल मूत्र में ही उत्पन्न हुई हो अथवा उसकी उपस्थिति रक्तान्तर्गत भी हो गई हो । इसके अतिरिक्त यह अग्न्याशय और यकृत के विकारों को दूरकर मधुमेह का दमन भी करती है ।

सूचना—यदि वसन्त कुसुमाकर रस के सहपान रूप से इस चूर्ण का प्रयोग किया जाये तो मधुमेह रोग में निश्चित लाभ होने की आशा है ।





Key Attributes of TKDL

RS21/437



Title of Traditional Knowledge Resource

Madhumeha Damana Curna

Knowledge Known Since

50 Years

TKRC CODE :

A01A-1/1900, A01A-1/265, A01A-1/67, A01A-1/927, A01A-1/946, A01A-3/9, A01C-1/76, A01D-16/02, A01F-1/1

IPC Code :

, A61K 131/00, A61K 36/00, A61K 36/185, A61K 36/27, A61K 36/58, A61K 36/61, A61K 36/75, A61K 9/14, A61P 3/10, A61P 5/00, A61P 5/48, C01B 5/00

DETAILS OF PROCESS / FORMULATION :

1. Madhumeha Damana Curna is a therapeutic single / compound formulation consisting of useful parts of following ingredient(s) : **Gymnema sylvestre (Retz.) R.Br. ex Schult. (meṣaśṛṅgī, madhunāśinī)** (miracle fruit), **Gossypium herbaceum Linn. (kārṇāsa)** (Le vant cotton), **Syzygium cuminii (Linn.)Skeels (jambū)** (jambolan plum, Java plum, kavika ni India, mesegerak), **Aegle marmelos Correa ex Roxb. (bilva)** (Indian bael), **Azadirachta indica A. Juss. (nimba)** (neem)

2. Therapeutic composition / formulation is mentioned below :

1 Gymnema sylvestre (Retz.) R.Br. ex Schult. (meṣaśṛṅgī, madhunāśinī) (miracle fruit)	Leaf	96 gm
2 Gossypium herbaceum Linn. (kārṇāsa) (Le vant cotton)	Seed	48 gm

3	<i>Syzygium cuminii</i> (Linn.)Skeels (jambū) (jambolan plum, Java plum, kavika ni India, me segerak)	Endosperm		48 gm
4	<i>Aegle marmelos</i> Correa ex Roxb. (bilva) (Indian bael)	Leaf	-Non-unctuous Rough	/ Dry / 72 gm
5	<i>Azadirachta indica</i> A. Juss. (nimba) (neem)	Leaf	-Non-unctuous Rough	/ Dry / 24 gm

3. Therapeutic composition mentioned above is prepared as CŪRNA :(POWDER)

Ingredients mentioned in the formulation are cleaned and dried properly. They are finely powdered and sieved. Where there are multiple ingredients, they are separately powdered and sieved. Each one of them (powder) is weighed separately, and mixed together. In industry, however, all the ingredients are cleaned, dried and powdered together by disintegrators. Mechanical sifters are also used. Salt, sugar, camphor etc., if mentioned are separately powdered and mixed in the end. Asafoetida (Higu) and salt may also be roasted, powdered and then added. Ingredients, which are to be taken fresh, are made into herbal paste, dried, and then added.

Sometimes Bhāvanā (trituration) with Svarasa (expressed juice of plants) or Kvātha (decoction) etc. is given if indicated in the formulation.

4. A composition as described above is formulated as Powder (cūrna) .

5. The dose of above mentioned therapeutic composition is 2-3 gm .

6. It is given with adjuvant of Water (jala/udaka) .

7. Mode of administration : Oral administration (auśadhi pāna) .

8. Time of administration 2 Time(s) per day .

9. It is useful in the treatment of Diabetes mellitus (madhumeha)

LIST OF DOCUMENTS WITH DATE OF PUBLICATION (PRIOR ART) :

Rasatantrasārah Evam Siddhaprayogasamgrahaḥ; part II; Krishan Gopal Ayurveda Bhawan;Edn 8th;1990 [This book contains back references from 1000 B.C.to 20th century]

prior art

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خزان اللادوبیہ

پتاس

241

مرض ذیابیطیس

جامن کے خشکوسیموں کا سفوف پانچ گرین سے پندرہ گرین تک یا اسکے سیال رسب کو ایک ڈرام سے دو ڈرام تک کی مقدار میں دینا
تین مرتبہ کھلانا نهایت مفید ہے



Value Addition – Modern Science to TKDL

- Taxonomic Information, citation, synonyms, vernacular names, habitat, geographical information
- Morphological Information
- Cytological Information
- Germplasm Information
- Phytochemistry
- Pharmacological Information
- Pharmacognostical Information
- Toxicology
- Utilization



Zoom 100%

COMPONENTS OF BIODIVERSITY DIGITAL LIBRARY

KINGDOM....Plantae
CLASS....Magnoliopsida (Dicotyledons)
FAMILY....Scrophulariaceae
GENUS....Bacopa Aubl.
SPECIES....Bacopa monnieri (Linn.) Penn.

Citation: in Proc. Acad. Nat. Sci. Philad.98:94, 1946;
 Santapau in RBSI. 16(1) : 201, 1953.
Status: Abundant
known Since: 1756
TKDL TKRC:
Ploidy level:
Basic No.:
Chromosome No.:



SYNONYMS

LYSIMACHIA MONNIERI LINN. Cent. Pl. 2:9, 1756.
MONIERA CUNEIFOLIA MICHX. Fl. Bor-Amer. 2 : 22, 1803
 (Monneria);

VERNACULAR NAMES

English Water hyssop
Hindi Jalnim, Brahmi; Neem-jal; jal-lep.
Kannada Niru brahmi
Malayalam Nirbrahmi
Marathi Nirbrahmi
Bengali Brihmi-sak
Sanskrit Nira-Brahmi, Manduki
Tamil Nirbrahmi,
Telugu Sambrani chettu

MORPHOLOGY



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3. Chemical Constituent: Betulinic acid (InActive)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:

1. Plant Part Used: Whole plant

2. CAS Number: 11

3. Chemical Constituent: Flavonoids-Apigenin (Active)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:

1. Plant Part Used: Whole plant

2. CAS Number: 12

3. Chemical Constituent: Cynaroside and Luteolin (InActive)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:

1. Plant Part Used: Whole plant

2. CAS Number: 13

3. Chemical Constituent: Nicotine (InActive)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:

1. Plant Part Used: Whole plant

2. CAS Number: 14

3. Chemical Constituent: Hersaponin (InActive)

4. Molecular Formula:

5. Molecular Weight:

6. Melting Point:



Zoom 100%

MORPHOLOGY

Habit A spreading or ascending branches, evergreen, fleshy herb. The branches spread on moist ground and forms dense mat

Root Roots are found growing at nodes.

Leaves The Leaves obovate-oblong or spatulate, obtuse, succulent, up to 1.8 X 0.6 cm. club shaped stalkless, and fleshy. The leaves are in bitter tasting.

Flowers Flowers bluish-purplish or white with bluish veins, erect, solitary, short or long-pedicellate at the axis of the leaves. The flowers are short lived and colour lightens gradually.

Fruits The fruits are capsules. Ovoid, Glabrous, 4-5 X 3-4 mm.

Seeds The capsules break open to release numerous minute black seeds.

Flowering period Aug.-Oct.

Fruiting period Nov.-dec.

PHYTOCHEMISTRY

1. Plant Part Used: Leaves
2. CAS Number: 21
3. Chemical Constituent: Sterol (InActive)
4. Molecular Formula: C₂₆H₄₆O.H₂O
5. Molecular Weight:
6. Melting Point: 76

1. Plant Part Used: Whole plant
2. CAS Number: 1
3. Chemical Constituent: Dammaranes Bacosides A (2.5-3%) and B (InActive)
4. Molecular Formula:
5. Molecular Weight:
6. Melting Point:

1. Plant Part Used: Whole plant
2. CAS Number: 10



Zoom 100%

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 15**
- 3. **Chemical Constituent: Herpestine(alkaloid) (Inactive)**
- 4. **Molecular Formula: C34H46N2O6**
- 5. **Molecular Weight:**
- 6. **Melting Point: 116-17**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 16**
- 3. **Chemical Constituent: Jujubagenin (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 17**
- 3. **Chemical Constituent: Monnerin (Inactive)**
- 4. **Molecular Formula: C51H82O21.3H2O**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 18**
- 3. **Chemical Constituent: Sodium and Potassium salts (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 19**



Zoom 100%

- 3. **Chemical Constituent: Triterpene-Bacosine (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 2**
- 3. **Chemical Constituent: Hersaponin (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 20**
- 3. **Chemical Constituent: Betulic acid (Inactive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 22**
- 3. **Chemical Constituent: Bacoside B (Inactive)**
- 4. **Molecular Formula: C41H68O13.5H2O**
- 5. **Molecular Weight:**
- 6. **Melting Point: 203 (Decomp)**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 23**
- 3. **Chemical Constituent: Aglycone (Inactive)**
- 4. **Molecular Formula: C30H48O4**
- 5. **Molecular Weight:**
- 6. **Melting Point: 235-37**

- 1. **Plant Part Used: Whole plant**



Zoom 100%

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 24
- 3. Chemical Constituent: Saponins (InActive)
- 4. Molecular Formula:
- 5. Molecular Weight:
- 6. Melting Point:

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 3
- 3. Chemical Constituent: Monnierin (InActive)
- 4. Molecular Formula: C51H82O21.3H2O
- 5. Molecular Weight:
- 6. Melting Point: 262-63

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 4
- 3. Chemical Constituent: Alkaloids Herpestine (InActive)
- 4. Molecular Formula:
- 5. Molecular Weight:
- 6. Melting Point:

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 5
- 3. Chemical Constituent: Brahmine (InActive)
- 4. Molecular Formula:
- 5. Molecular Weight:
- 6. Melting Point:

- 1. Plant Part Used: Whole plant
- 2. CAS Number: 6



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- 3. **Chemical Constituent: Triterpenes (InActive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 7**
- 3. **Chemical Constituent: Flavonoids (InActive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 8**
- 3. **Chemical Constituent: Bacosides A (Active)**
- 4. **Molecular Formula: C41H68O13.4H2O**
- 5. **Molecular Weight:**
- 6. **Melting Point: 232-34(DECOMP.)**

- 1. **Plant Part Used: Whole plant**
- 2. **CAS Number: 9**
- 3. **Chemical Constituent: Bacogenin (InActive)**
- 4. **Molecular Formula:**
- 5. **Molecular Weight:**
- 6. **Melting Point:**

GEOGRAPHIC DISTRIBUTION

ADILABAD
DEHRADUN Robers Cave

HABITAT



HABITAT

Marshy , Semi Aquatic ,

SOURCE OF ORIGIN

Old Literature The Wealth of India; A Dictionary of Raw Materials & Industrial products; NISCOM.CSIR. New Delhi

KNOWLEDGE HOLDERS

Institute Khanuja S.P.S

MAIN USAGE

Whole plant Improve intellect,The plant is reported to be useful in treating biliousness, inflammations, epilepsy, insanity, tumour, ulcers, flatulence, constipation, asthma, bronchitis, skin diseases, leprosy, lecuderma, sterility, fever anf general debility.

GERMPLASM INFORMATION

- 1. Plant Part: Whole plant**
- 2. Institute Name: National Bureau of Plant Genetic Resources (NBPGR), New Delhi**
- 3. Accession Number: 11**

- 1. Plant Part: Whole plant**
- 2. Institute Name: National Institute of Science Communication And Information Resources, (NISCAIR), New Delhi.**
- 3. Accession Number: 100**

PHARMACOLOGICAL INFORMATION

Plant Parts used as Drug: LEAVES

- 1. Drug Form: Paste**
- 2. Test Model: External**
- 3. Dosage:**
- 4. Drug Description:**

5. Mode of administration:
6. Mode Of Action:
REMEDY FOR RHEUMATISM
The paste of leaves is used for rheumatism

Plant Parts used as Drug: WHOLE PLANT
1. Drug Form: Extract
2. Test Model: Learning Performance
3. Dosage:
4. Drug Description: Saponin; Bcoside A & B.
5. Mode of administration:
6. Mode Of Action:
THERAPEUTIC
Treatment with plant extract improve maze learning in rats.

Plant Parts used as Drug: WHOLE PLANT
1. Drug Form: Mixture
2. Test Model: Dose administered on cat
3. Dosage: 0.5mg/kg
4. Drug Description: Brahmine
5. Mode of administration: Different dose
6. Mode Of Action:
THREPTIC
Brahmine is highly toxic; when administered at a dose of .5 mg/kg body wt. of cat, it produse a fall in blood pressure.

PHARMACOGNISTICAL INFORMATION

Plant Part used: WHOLE PLANT
1. Macroscopic Characters: Herb -- Creeping, glabrous, succulent herb, rooting at nodes; stem-thick, soft, glabrous, branches ascending. Leaves-Sessile, ovate-oblong or spatulate, entire, nerves obscure and lower surface dotted with black specks; Flower- Blue or white with purple veins, axillary and solitary on long pedicels. Capsules - Ovoid, blabrous
2. Microscopic Characters: Leaf-More or less isobilateral structure; epidermis with striated cuticle;

2. **Microscopic Characters:** Leaf-More or less isobilateral structure; epidermis with striated cuticle; stomata on both surfaces; epidermal cells have walls and glandular hairs on both surfaces, smaller on conical stalk and larger with 8-celled head; few prismatic crystals of Ca.Oxalate in mesophyll; no distinct midrib present; vascular bundles surrounded by bundle sheaths. Distinct bundle sheath surrounds vascular bundle of midrib. Transverse section shows lack of differentiation of mesophyll in the palisade and spongy layers. Both the epidermii show anisocytic type of stomata and glandular hairs.
3. **Powder Characters:**
4. **Histochemical Characters:**
5. **Drug Description:** Crude drug
6. **Organoleptic Characters:**
7. **Chemical Components:** Bacoside A (2.5 - 3%), Bacoside B and other bacosides, Hersaponin, Betulic acid, Monnierin, Alkaloids - Brahmine(0.01-0.02%) and Herpestine; Flavonoids; Saponin, D-mannitol, Nicotine, Saponins-Monierin, Sapogenins-Bacogenin A1-A4. Bacosine
8. **Finger Printing:**

Plant Part used: LEAVES

1. **Macroscopic Characters:** Obovate-oblong or spatulate, obtuse, succulent, entire nervous obscure and lower surface dotted with black specks.1.8 X 0.6 cm.
2. **Microscopic Characters:** Leaf more or less isobilateral structure; epidermis with striated cuticle; stomata on both surface; epidermal cells have wavy walls and glandular hairs on both surfaces,smaller on conical satlk and larger with 8-celled head; few prismatic crystals of Ca. oxalate in mesophyll; no distinct midrib present; vascular bundal surrounded by bundle sheaths.
3. **Powder Characters:**
4. **Histochemical Characters:** Transverse section shows lack of differentiation of mesophyll in the palisade and spongy layers.
5. **Drug Description:** Crude drug
6. **Organoleptic Characters:**
7. **Chemical Components:** Bacoside A, Bacoside B,Brahmine
8. **Finger Printing:**

TOXICOLOGICAL INFORMATION



Zoom 100%

DIGITAL HERBARIUM

1.Name Of Institute: National Institute of Science Communication And Information Resources, (NISCAIR), New Delhi.
2. Field Number: 2
3. Accession Number: 2
4. Barcode: ||563789||
5. Date of Collection: 10/11/04
6. Local Name: Brahmi
7. Locality: Niscair
8. Collected By: Dr T. K. Mukherjee
9. Identified By: Dr. Bala Subramaniam

1.Name Of Institute: National Institute of Science Communication And Information Resources, (NISCAIR), New Delhi.
2. Field Number: 1
3. Accession Number: 1
4. Barcode: ||1890||
5. Date of Collection: 10/11/04
6. Local Name: Brahmi
7. Locality: Patel Nagar
8. Collected By: Dr. Bala Subramaniam
9. Identified By: Dr. H.B.Singh

1.Name Of Institute: National Institute of Science Communication And Information Resources, (NISCAIR), New Delhi.
2. Field Number: 3
3. Accession Number: 3
4. Barcode: ||2345||25
5. Date of Collection: 10/11/04
6. Local Name: Brahmi
7. Locality: Patel Nagar
8. Collected By: Dr H.B.Singh
9. Identified By: Dr T.K.Mukherjee



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9. Identified By: Dr T.K.Mukherjee

BIBLIOGRAPHIC REFERENCES

- (1) THE INDIAN PHARMACEUTICAL CODEX , Mukherji, B.
- (2) THE AYURVEDIC PHARMACOPOEIA OF INDIA , Anonymous
- (3) MEDICINAL PLANTS OF INDIA , Anonymous
- (4) ILLUSTRATED MANUAL OF DRUGS USED IN AYURVEDA , Sarin, Y. K.
- (5) DATABASE ON MEDICINAL PLANTS USED IN AYURVEDA , Sharma P.C., Yelne M.B, Dennis T.J.
- (6) INDIAN HERBAL PHARMACOPOEIA , Anonymous
- (7) THE FLORA OF DELHI , Maheshwari J.K. , 1963 , 254
- (8) THE USEFUL PLANTS OF INDIA , Ambasta S.P. , 65
- (9) THE USEFUL PLANTS OF INDIA , Ambasta S.P. , 1992 , 65
- (10) THE USEFUL PLANTS OF INDIA , Ambasta S.P. , 1992 , 254
- (11) THE USEFUL PLANTS OF INDIA , Ambasta S.P. , 1992 , 65
- (12) INDIAN J. PHARM. , Chopra et al. , 1956 , 18 , 369
- (13) WOI , Anonymous
- (14) WOI , Anonymous , 1988 , 2 : B , 2
- (15) WOI , Anonymous , 1988 , 2 : B (Revised) , 2





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- (16) WOI , Anonymous , 1988 , 2 :B , 2
- (17) WOI , Anonymous , 1988 , 2 :B (Revised) , 2
- (18) WOI , Anonymous , 1988 , 2: B (Revised) , 3



Bacopa monnieri



Brahmi

Bacopa monnieri (Linn.) Penn.



Citrullus colocynthis



Indravāruṇī

Citrullus colocynthis (Linn.) Schrad.



Alternanthera Sessilis



Acorus calamus



Piper longum



بیاض کبیر

حصہ دوم

33

حب بخار موسمی بخاروں کے لئے نہایت مفید ہے۔ تپ لرزہ کی باری بہت جلد رک جاتی ہے۔ اگر بخار کے موسم میں احتیاطاً اس کا استعمال کیا جائے تو انسان بخار سے بچا رہتا ہے۔ یہ نسلوچین ایکٹولہ کنٹریٹہ یعنی کونین، چھ ماشہ گوند بولیمین ماشہ ست گلوچہ ماشہ سب دواؤں کو کوٹ چھان کر پانی سے نم کر کے مٹر کے دانہ کے برابر گولیاں بنائیں، ایک یا دو گولی صبح دوپہر اور شام کے وقت پانی کے ساتھ استعمال کریں اور بخار کے وقت اس کو نہ دیں مگر اس کو حفظاً ناقصہ م کے طور پر استعمال کرنا چاہیں تو ایک گولی کھانا کھانے کے بعد کھالیا کریں۔



Key Attributes of TKDL

MA3/95



Title of Traditional Knowledge Resource

Knowledge Known Since

Habb-e-bukhar

50 Years

TKRC CODE :

A01A-1/13, A01A-1/1966, A01A-1/272, A01A-1/472, A01C-1/76,
A01D-20/46, A01F-2/15, A01F-2/16, B01D-24/02, B01D-24/69

IPC Code :

A61K 36/48, A61K 36/59, A61K 36/899, C01B 5/00, A61P 29/00,
A61P 33/06, A61P 33/00, A61P 29/00, A61P 29/00, A61P 43/00

DETAILS OF PROCESS / FORMULATION :

1. **Habb-e-bukhar** is a therapeutic single / compound formulation consisting of useful parts of following ingredient (s) : Bambusa arundinacea (Retz.) Roxb. Syn.: B. bambos Voss (bamboo), Acacia arabica Willd., Tinospora cordifolia Miers (tinospora), Water

2. Therapeutic composition / formulation is mentioned below :

1 Bambusa arundinacea (Retz.) Roxb. Syn.: B. bambos Voss (bamboo)	Exudate	12 gm
2 Acacia arabica Willd.	Exudate	3 gm
3 Tinospora cordifolia Miers (tinospora)	Stem	6 gm

3. Therapeutic composition mentioned above is prepared as HUBOOB.Huboob (pills) are medicinal preparations made by mixing powdered drugs in a suitable binder(Water/Oil/Resin of plant) and made into round and uniformly shaped balls of the required size.To avoid the sticking of the lubdi during the rolling between the fingers lubricants like Raughan Zard or Raughan-e-Kunjad is applied.

4. A composition as described above is formulated as Pills .

5. The dose of above mentioned therapeutic composition is 1-2 Pills .

6. Mode of administration : Oral administration .

7. Time of administration Morning , Afternoon , and In the evening .

8. It is useful in the treatment of seasonal fever , Malaria / Intermittent fever , and used for prevention of Fever/Pyrexia

LIST OF DOCUMENTS WITH DATE OF PUBLICATION (PRIOR ART) :

Kabiruddin

Bayaz-e- Kabir Volume II

prior art

Page33



Citation from TKDL references through Third Party Observations

United States of America – Total No. of Application 10

1. Asthma/allergy therapy using nigella sativa;
2. Method of treatment or management of stress;
3. Hydroxylated Polymethoxyflavone Compositions;
4. Agents for sequestering serum aging factors and uses therefore;
5. Cosmetic herbal compositions;
6. Composition and method for facilitating the healing of non-healing and slow-healing wounds and ulcerations;
7. Compositions for diabetes treatment and prophylaxis
8. Bioactive compositions from theacea plants and processes for their production and use;
9. Compositions of bakuchiol and methods of making the same
10. Methods Of Treating Epiphora

Citation from TKDL references through Third Party Observations

Japan - Total No. of Application 5

1. Anti-Inflammatory Agent;
2. Skin aging-preventing or improving agent;
3. Sleep-Improving Composition;
4. Composition for treating hepatitis c;
5. Senescence Inhibitor

Great Britain - Total No. of Application 3

1. Treatment of inflammatory bowel disease
2. Polyphenol Extraction Process
3. Method and system for producing medicinal alcohol as a prophylactic or remedy for cancer, HIV, AIDS and autoimmune diseases

Citation from TKDL references through Third Party Observations

Italy - Total No. of Application 3

1. A process for the preparation of ferutinine from ferula genus plants
2. Cancer treatment using natural plant products or essential oils or components from some pistacia species
3. Methods and composition for treating sore throat

Germany - Total No. of Application 2

1. Use of preparations, purifications and extracts of aloe
2. Skin treatment composition

Citation from TKDL references through Third Party Observations

India - Total No. of Application 2

1. Biotherapeutics for mitigation of health disorders from terminalia arjuna
2. Process for producing enriched fractions of tetrahydrocurcumin and tetrahydrotetrahydroxy-curcumin from the extracts of curcuma longa

Netherlands - Total No. of Application 1

1. Functional berry composition

New Zealand - Total No. of Application 1

1. A Composition for the treatment of Skin Diseases.

Citation from TKDL references through Third Party Observations

Australia Total No. of Application 1

1. Cysteine protease from ginger (zingiber) as a food improver and anti-inflammatory

China Total No. of Application 1

1. Medicaments and food for treatment or prevention of obesity and/or diabetes containing cicer arietinum extract

Cyprus Total No. of Application 1

1. Treatment and prevention of inflammation

Kenya Total No. of Application 1

1. Herbal compositions for treatment of diabetes

Citation from TKDL references through Third Party Observations

Spain Total No. of Application 1

1. Natural product in cream with anti-vitiligo therapeutic properties

South Korea Total No. of Application 1

1. Nelumbinis semen extract for preventing and treating ischemic heart disease and pharmaceutical composition and health food containing the same

Bulgaria Total No. of Application 1

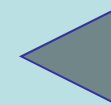
1. Therapeutical composition for the treatment of dermatosis comprising an extract of calendula officinalis and hypericum perforatum

Citation from TKDL references through Third Party Observations

Denmark Total No. of Application 1

1. Method for altering the metabolism characteristic of food products

Normal oppositions i.e. without TKDL and TKDL Access Agreement



EPO PATENT NO: EP436257- (Neem)

Title	Method for controlling fungi on plants by the aid of hydrophobic extracted neem oil
Applicant & Country	Thermo Trilogy Corporation, 9145 Guilford Road Columbia, Maryland 21046-1883, USA
Date of Filing	20 December 1990
Date of Grant	04 August 1994
Date of Opposition	14 September 1994
Opposed by	National and International NGOs
Final Rejection	8 March 2005
Period between Grant & Rejection	10 Years

Normal oppositions i.e. without TKDL and TKDL Access Agreement



US PATENT NO: 5894079- (Enola Beans)

Title	Field bean cultivar named enola
Applicant & Country	LARRY M. PROCTOR, DELTA, CO. USA
Date of Filing	15 November 1996
Date of Grant	13 April 1999
Date of Opposition	20 December 2000
Opposed by	International Center for Tropical Agriculture
Rejection at USPTO	2008
Rejection at US Federal Court	10 July 2009
Period between Grant & Rejection	10 Years

Normal oppositions i.e. without TKDL and TKDL Access Agreement




EPO PATENT NO: EP301749 – (Monsanto soybean)

Title	Particle-medicated transformation of soybean plants and lines
Applicant & Country	Monsanto Company, 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, USA
Date of Filing	20 July 1988
Date of Grant	02 March 1994
Date of Opposition	6 October 1994
Opposed by	Rural Advancement Foundation International (Canada)
Final Rejection	6 July 2007
Period between Grant & Rejection	13 Years

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1520585 (Anti Cancer - Pistacia Vera)

Title	Cancer treatment using natural plant products or essential oils or components from some pistacia species
Applicant & Country	DATA MEDICA PADOVA S P A, Italy
Date of Filing	24 September 2004
Date of intention to grant	19 February 2009
Date of Third Party observation	08 July 2009
Notice setting aside Intention to grant	14 July 2009
Period between Third Party observation and setting aside Intention to grant	1 Week 

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1747786 (Anti-Vitiligo Cream)

Title	Natural Product Cream with Anti-Vitiligo Therapeutic Properties
Applicant & Country	PERDIX EUROGROUP S L, Spain
Date of Filing	24 July 2006
Date of Intention to grant	March 2009
Date of Third Party observation	01 July 2009
Notice setting aside Intention to grant	27 July 2009
Period between Third Party observation and setting aside Intention to grant	3 Week 

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1607006 (Cardio Vascular Tonic)

Title	Cardio Vascular Tonic
Applicant & Country	UNILEVER NV, Netherlands
Date of Filing	18 June 2004
Date of Third Party observation	09 July 2009
Application deemed to be withdrawn	04 August 2009
Period between Third Party observation and withdrawal of application by applicant	3 Week



Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1781309

(Composition for Heart Disease and Health Products)

Title	Nelumbinis semen extract for preventing and treating ischemic heart disease and pharmaceutical composition and health food containing the same
Applicant & Country	Purimed Co., Ltd. Seoul, Korea
Date of Filing	09-June-2005
Date of Third Party observation	09-July-2009
Application deemed to be withdrawn	18-Sept-2009
Period between Third Party observation and setting aside Intention to grant	9 Week



Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP2044850

(Method for altering the Metabolism Characteristic of Food Products)

Title	Method for altering the Metabolism Characteristic of Food Products
Applicant & Country	CLARA S APS, DENMARK
Date of Filing	19-Sept-2007
Date of Third Party observation	12-August-2009
Applicant withdraw his application	30-Oct-2009
Period between Third Party observation and setting aside Intention to grant	11 Week 

EPO Examination based on TKDL Evidence

EPO PATENT APPLICATION NO: EP1906980 (Method of Treatment or Management of Stress)

Title	Method of Treatment or Management of Stress
Applicant & Country	NATREON INC, USA
Date of Filing	27-July-2006
Date of Third Party observation	05-June-2009
EPO Examination Report	



Perdix Eurogroup S.L.
Frai Rosendo Salvado 13 pta 5,4^oQ
15701 Santiago de Composteia
A Coruña
ESPAGNE

Application No. 06 015 343.4 - 2107	Ref. PERDIX-PATENT	Date 04.06.2009
Applicant Perdix Eurogroup S.L.		

Communication under Rule 71(3) EPC

You are informed that the Examining Division intends to grant a European patent on the basis of the above application with the text and drawings as indicated below:

IV.3. Title of the invention

The title indicated on the published patent application remains unchanged. It reads as follows:

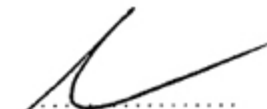
Natürliches Produkt in Cremeform mit Anti-Vitiligo therapeutischen Eigenschaften

Natural product in cream with anti-vitiligo therapeutic properties

Produit naturel crémeux avec des qualités anti-vitiligo

IV.4. Documentation

12.3.09
Date


Ludwig, Gerald
Chairman


Thalmair-De Meyere
1st examiner


Bochelen, Damien
2nd examiner

Setting aside Intention to grant

Perdix Eurogroup S.L.
Frai Rosendo Salvado 13 pta 5,4°Q
15701 Santiago de Composteia
A Coruña
ESPAGNE

Date

27-07-2009

Reference PERDIX-PATENT	Application No./Patent No. 06015343.4 - 2107 / 1747786
Applicant/Proprietor Perdix Eurogroup S.L.	

BRIEF COMMUNICATION

- Subject:
- Your letter of
 - Our telephone conversation of
 - Communication under Rule 71(3) EPC dated 04.06.2009
 - Resumption of substantive examination

The communication under Rule 71(3) EPC is set aside. In accordance with Guidelines C-VI, 14.5 substantive examination is to be resumed because

- one of the exceptions of Guidelines C-VI, 14.4.1 applies.
- the Examining Division has become aware of circumstances which are such as to render non-patentable the subject-matter claimed (Guidelines C-VI, 4.11), e.g. following observations by third parties under Article 115 EPC or because the applicant has filed further prior art.

The Examining Division has become aware of new prior art (Third Party Observation under Article 115 of the EPC).

The application claims the usefulness of a combination of five constituents for the treatment of vitiligo, one of these constituents being a 1:2 watery extract of *Cucumis melo* containing catalase and superoxide dismutase.

However, *Cucumis Melo* has been known for its anti-vitiligo property through local application in the Indian system of medicine, since long, as is evident e.g. from the **Exhibits 1-5 (TKDL abstracts)** as cited in the Third Party Observation under Art. 115 EPC.

Hence, if one ingredient, here *Cucumis melo*, was already known for the treatment of vitiligo, then it had to be expected necessarily in an obvious manner that also a combination product comprising this known active ingredient must be effective for treating vitiligo.

Thus, as long as no surprising (superior) effect of the claimed combination product vis-à-vis the already known products comprising *Cucumis melo*, as described in the **Exhibits 1-5** and in D 2, are shown by the Applicant (for instance in the form of additional technical data), inventive merits under Article 56 EPC cannot be acknowledged.



Modiano, Micaela Nadia
Dr. Modiano & Associati SpA
Via Meravigli 16
20123 Milano
ITALIE

Application No. 04 022 793.6 - 2123	Ref. 39456/GM/p	Date 19.02.2009
Applicant Data Medica Padova S.p.A.		

Communication under Rule 71(3) EPC

You are informed that the Examining Division intends to grant a European patent on the basis of the above application with the text and drawings as indicated below:

IV.3. Title of the invention

The title indicated on the published patent application remains unchanged. It reads as follows:

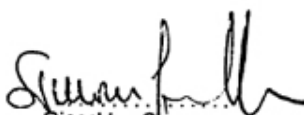
Behandlung von Krebs mit natürlichen Pflanzenprodukten, etherischen Ölen oder Inhaltsstoffen von Pistazia Arten


Cancer treatment using natural plant products or essential oils or components from some pistacia species

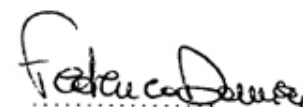
Traitement du cancer avec des produits naturels de plantes, avec des huiles essentielles ou avec des composants à partir d'espèces de pistacia

IV.4. Documentation

30.01.09
Date


Giacobbe, Simone
Chairman


Borst, Markus
1st examiner


Damiani, Federica
2nd examiner

Setting aside Intention to grant

Modiano, Micaela Nadia
Dr. Modiano & Associati SpA
Via Meravigli 16
20123 Milano
ITALIE

Application No. 04 022 793.6 - 2123	Ref. 39456/GMp	Date 14.07.2009
Applicant Data Medica Padova S.p.A.		

Communication pursuant to Article 94(3) EPC

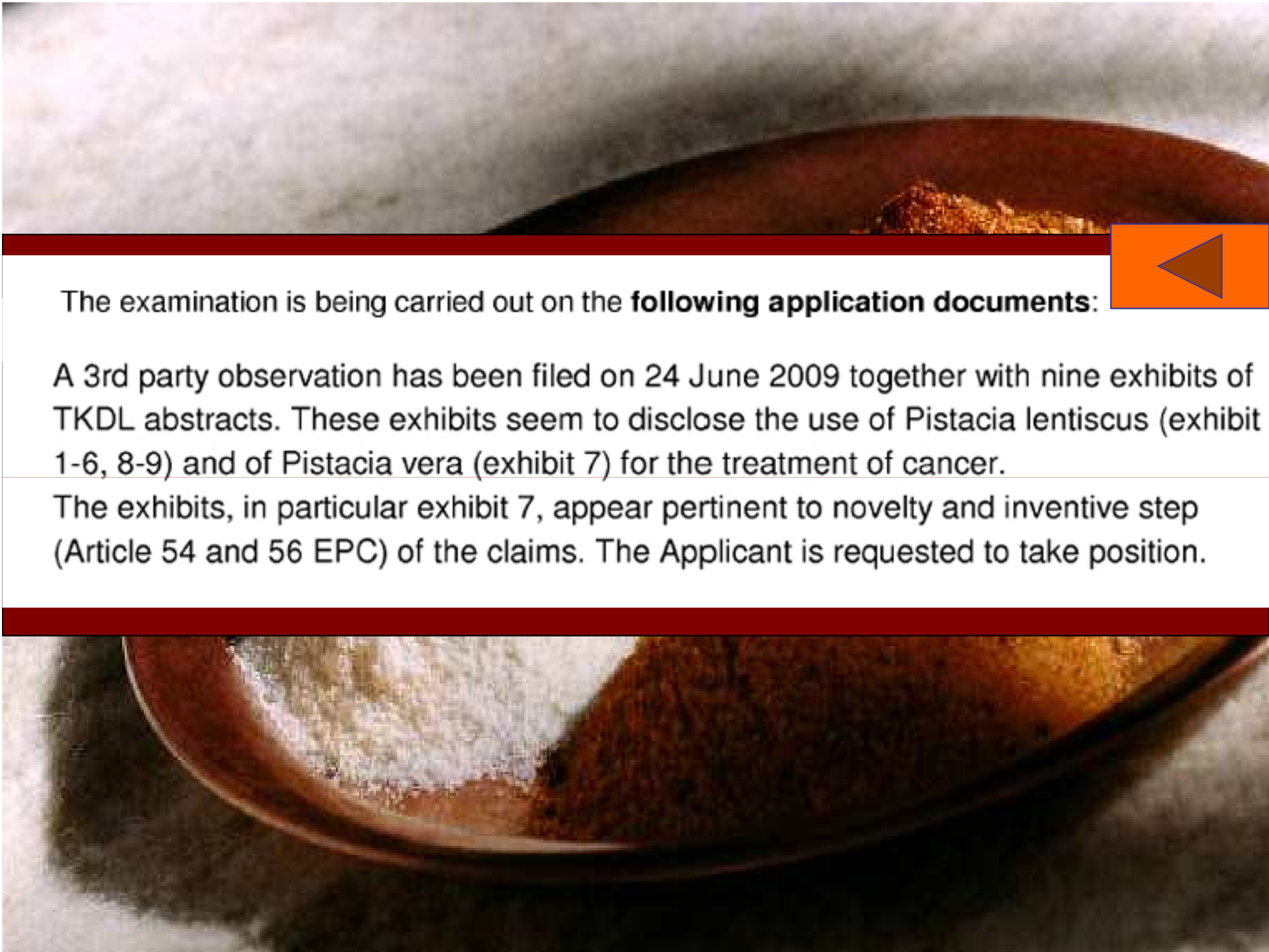
The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(2) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 126(2) and 131(2) and (4) EPC. One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (R. 50(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Art. 94(4) EPC).



The examination is being carried out on the **following application documents**:

A 3rd party observation has been filed on 24 June 2009 together with nine exhibits of TKDL abstracts. These exhibits seem to disclose the use of *Pistacia lentiscus* (exhibit 1-6, 8-9) and of *Pistacia vera* (exhibit 7) for the treatment of cancer.

The exhibits, in particular exhibit 7, appear pertinent to novelty and inventive step (Article 54 and 56 EPC) of the claims. The Applicant is requested to take position.

Joppe, Hermina Laura Petronella
Unilever Patent Group
Olivier van Noortlaan 120
3133 AT Vlaardingen
PAYS-BAS

Date	17-07-2009
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Reference F7775(V)	Application No./Patent No. 04076795.6 - 2114 / 1607006
Applicant/Proprietor Unilever N.V., et al	

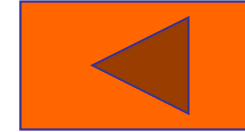
Communication pursuant to Rule 114(2) EPC

Please find enclosed observations by a third party concerning the patentability of the invention of the above-mentioned patent application. That person is not a party to the proceedings before the EPO (Art. 115 EPC).

Under Rule 114(2) EPC you may comment on the observations.

Deemed Withdrawn by Applicant

Joppe, Hermina Laura Petronella
Unilever Patent Group
Olivier van Noortlaan 120
3133 AT Vlaardingen
PAYS-BAS



Date
04-08-2009

Reference F7775(V)	Application No./Patent No. 04076795.6 - 2114 / 1607006
Applicant/Proprietor Unilever N.V., et al	

Noting of loss of rights pursuant to Rule 112(1) EPC

The European patent application is deemed to be withdrawn under article 94(4) EPC , because the invitation to file observations on the communication from the examining division was not compiled with.

Means of redress

Request for a decision (R. 112(2) EPC)

If the applicant considers that the finding of the European Patent Office is inaccurate, he may, within a (non-extendable) period of **two months** after notification of this communication, apply in writing for a decision on the matter. The application can only lead to the finding being reversed if this does not actually correspond to the factual or legal situation.

Further processing (Art. 121 EPC)

The legal consequence of the failure to observe the time limit shall be deemed not to have ensued if, within a (non-extendable) period of **two months** after notification of this communication, further processing is requested by payment of the fee prescribed under Article 2(12) of the Rules relating to Fees and the omitted act is completed (R. 135(1) EPC).

Important note to users of the automatic debiting procedure

The fee for further processing will be debited automatically on the day on which the above-mentioned omitted act is completed (see Arrangements for the automatic debiting procedure, Supplement to OJ EPO 3/2009).

Lohr, Georg
Lohr, Jöstingmeier & Partner
Patent- und Rechtsanwälte
Junkersstrasse 3
82178 Puchheim
ALLEMAGNE

Date 17-07-2009

Reference NAM2007/04EP	Application No./Patent No. 05765041.8 - 2123 / 1781309
Applicant/Proprietor Purimed Co., Ltd.	

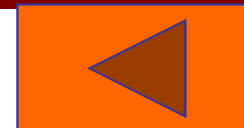
Communication pursuant to Rule 114(2) EPC

Please find enclosed observations by a third party concerning the patentability of the invention of the above-mentioned patent application. That person is not a party to the proceedings before the EPO (Art. 115 EPC).

Under Rule 114(2) EPC you may comment on the observations.

Deemed Withdrawn by Applicant

Lohr, Georg
Lohr, Jöstingmeier & Partner
Patent- und Rechtsanwälte
Junkersstrasse 3
82178 Puchheim
ALLEMAGNE



Closure of the procedure in respect of application No. 05765041.8 - 2123

18.09.09

1. The procedure in respect of the above application is closed for the following reason:

- ✓ ADWI 11/24.06.09 The time limit under Rule 112(2) EPC has expired.
No request for a decision under Rule 112(2), or for further processing under Article 121 EPC or for re-establishment of rights under Article 122 EPC has been filed.



Europäisches
Patentamt
European
Patent Office
Office européen
des brevets

European Patent Office
80298 MUNICH
GERMANY
Tel. +49 (0)89 2399 - 0
Fax +49 (0)89 2399 - 4465



Nordic Patent Service
Pilestræde 58
1112 Copenhagen K
DANEMARK

**For any questions about
this communication:**
Tel.:+31 (0)70 340 45 00

Date

25-08-2009

Reference 00460-EP-P	Application No./Patent No. 07018359.5 - 2114 / 2044850
Applicant/Proprietor Clara's ApS	

Communication pursuant to Rule 114(2) EPC

Please find enclosed observations by a third party concerning the patentability of the invention of the above-mentioned patent application. That person is not a party to the proceedings before the EPO (Art. 115 EPC).

Under Rule 114(2) EPC you may comment on the observations.

Deemed Withdrawn by Applicant

NORDIC
PATENT
SERVICE

EPO - Munich
73

03. Nov. 2009

European Patent Office
D-80298 München
Tyskland

DATE: Fri October 30, 2009
OUR REF: 00460-EP-P
YOUR REF:

1page per telefax in advance: +49 89 2399 4465

METHOD FOR ALTERING THE METABOLISM CHARACTERISTIC OF FOOD PRODUCTS
European Patent Application No. 07018359.5

Dear Sirs,

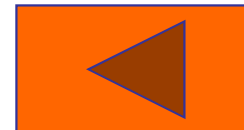
We herewith withdraw the application.

We also refer to our letter dated October 23, 2009 requesting a refund of the examination and designation fees.

Yours very truly,
Nordic Patent Service (Professional Association No. 338)



John Hård
European Patent Attorney





Europäisches
Patentamt
European
Patent Office
Office européen
des brevets

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Minoja, Fabrizio
Bianchetti Bracco Minoja S.r.l.
Via Plinio, 63
20129 Milano
ITALIE

For any questions about
this communication:
Tel.:+31 (0)70 340 45 00

Date

06-07-2009

Reference
SCB 1969EUR

Application No./Patent No.
06788803.2 - 2405 / 1906980 PCT/US2006029431


Applicant/Proprietor
Natreon Inc.

Communication pursuant to Rule 114(2) EPC

Please find enclosed observations by a third party concerning the patentability of the invention of the above-mentioned patent application. That person is not a party to the proceedings before the EPO (Art. 115 EPC).

Under Rule 114(2) EPC you may comment on the observations.

- D10: DATABASE TKDL "Asvagandhadi Yoga" retrieved from TKDL
Database accession no. AK11/4074
- D11: DATABASE TKDL "Asvagandhadi Curna" retrieved from TKDL
Database accession no. RG12/1062
- D12: DATABASE TKDL "Parangi Chooranam - 7" retrieved from TKDL
Database accession no. AM05/1804
- D13: DATABASE TKDL "Aswaganthathy Chooranum" retrieved from TKDL
Database accession no. SP01/75
- D14: DATABASE TKDL "Vaayu Thiratchiku Mezugu" retrieved from TKDL
Database accession no. AM05/1838
- D15: DATABASE TKDL "Safoof -e- Asgandh 1" retrieved from TKDL
Database accession no. NA2/108V
- D16: DATABASE TKDL "Amukkara Karpam" retrieved from TKDL Database
accession no. PD04/54
- D17: DATABASE TKDL "Phalasava" retrieved from TKDL Database
accession no. RS21/797



3.10 The document D10 is an entry of the Traditional Knowledge Digital Library which refers to a composition comprising *Withania somnifera* root powder, a product of sugarcane and clarified butter. This composition is useful for the treatment of insomnia.

The Search Authority considers that the *Withania somnifera* extract used in this composition will comprise withanolide glycosides, oligosaccharides and withanolide aglycones since these compounds are naturally present in *Withania somnifera* roots.

Insomnia is considered to be a chronic stress disorder.

Clarified butter is considered to comprise fatty acids and vitamins.

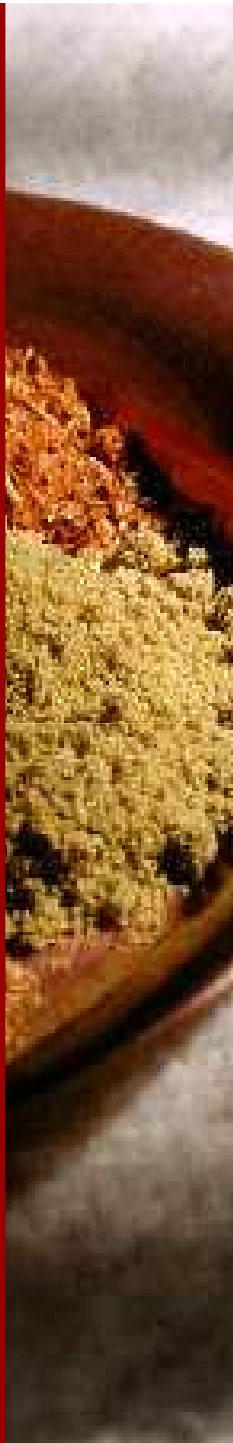
In the light of this document, the subject-matter of claims 1-4, 6-7, 10-11, 13-17, 20-26, 28 and 29 cannot be considered as novel (Article 54 EPC).

3.11 The document D11 is an entry of the Traditional Knowledge Digital Library which discloses a therapeutic composition for the treatment of insomnia which comprises a root extract from *Withania somnifera* and a root extract from *Argyria nervosa* (a plant extract). Said composition can be administered together with milk or water and is thus considered to fulfil the definition of a beverage.

The Search Authority considers that the *Withania somnifera* extract used in this composition will comprise withanolide glycosides, oligosaccharides and withanolide aglycones since these compounds are naturally present in *Withania somnifera* roots.

Insomnia is considered to be a chronic stress disorder.

In the light of D11, the subject-matter of claims 1-4, 6-11, 13-17, 20-26, 28 and 29 cannot be considered as novel in the sense of Article 54 EPC.



3.12 Documents D12, D13 and D16 are entries of the Traditional Knowledge Digital Library which disclose therapeutic compositions comprising a *Withania somnifera* root extract together with other plant extracts for the treatment of gastric ulcers or acute gastritis. The composition is in the form of a powder.

The Search Authority considers that the *Withania somnifera* extract used in these compositions will comprise withanolide glycosides, oligosaccharides and withanolide aglycones since these compounds are naturally present in *Withania somnifera* roots.

Gastric ulcers are considered to be chronic stress disorders.

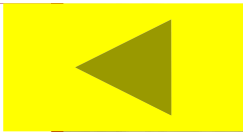
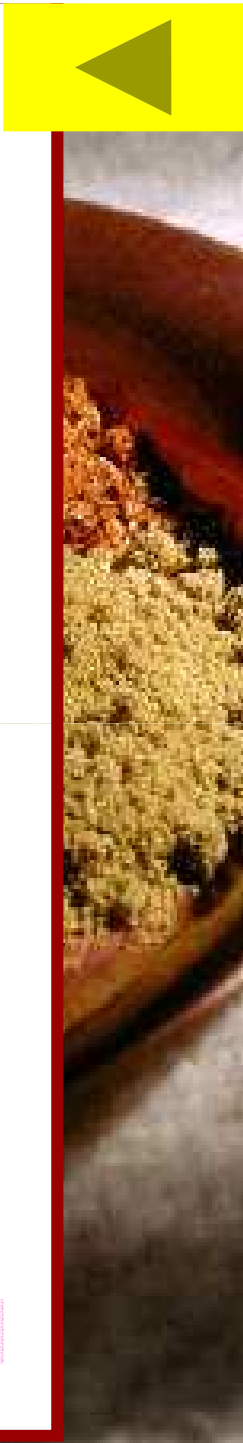
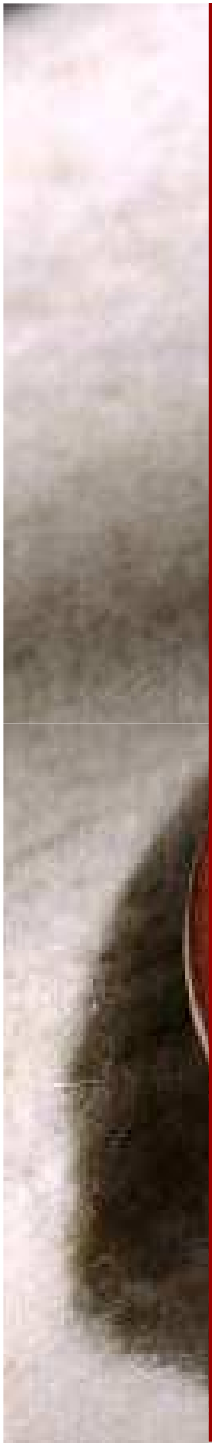
Therefore, the subject-matter of claims 1-4, 6-7, 11-17, 20-26, 28 and 29 cannot be considered as novel (Article 54 EPC).

3.13 The document D14 is an entry of the Traditional Knowledge Digital Library which discloses a therapeutic composition for the treatment of gastric ulcers and acute gastritis comprising numerous plant extracts. One of these extracts is a *Withania somnifera* root extract. The composition further comprises garlic extracts. The composition is waxy.

The Search Authority considers that the *Withania somnifera* extract used in this composition will comprise withanolide glycosides, oligosaccharides and withanolide aglycones since these compounds are naturally present in *Withania somnifera* roots.

Gastric ulcers are considered to be chronic stress disorders.

Therefore, the subject-matter of claims 1-4, 6-7, 11-17 and 20-30 cannot be considered as novel (Article 54 EPC).



3.14 The document D15 is an entry of the Traditional Knowledge Digital Library which discloses a therapeutic composition for the treatment of restlessness and depression comprising *Withania somnifera* bark, leaf, flower, fruit and root extracts, *Terminalia bellirica* root extract and a sugar cane product. The composition is formulated as a powder.

The Search Authority considers that the *Withania somnifera* extract used in this composition will comprise withanolide glycosides, oligosaccharides and withanolide aglycones since these compounds are naturally present in *Withania somnifera* roots.

Restlessness and depression are considered to be chronic stress disorders.

Therefore, the subject-matter of claims 1-4, 6-7, 10-11, 13-17, 20-26, 28 and 29 cannot be considered as novel over the teaching of D15 (Article 54 EPC).

3.15 The document D17 is an entry of the Traditional Knowledge Digital Library which discloses a therapeutic composition for the treatment of hyperacidity and insomnia comprising numerous plant extracts including a *Withania somnifera* root extract. The composition is in the form of a fermented alcoholic product and fulfils the definition of a beverage or elixir.

The Search Authority considers that the *Withania somnifera* extract used in this composition will comprise withanolide glycosides, oligosaccharides and withanolide aglycones since these compounds are naturally present in *Withania somnifera* roots.

Hyperacidity and insomnia are considered to be chronic stress disorders.

Therefore, the subject-matter of claims 1-11, 13-17, 20-26, 28 and 29 cannot be considered as novel over the teaching of D17 (Article 54 EPC).