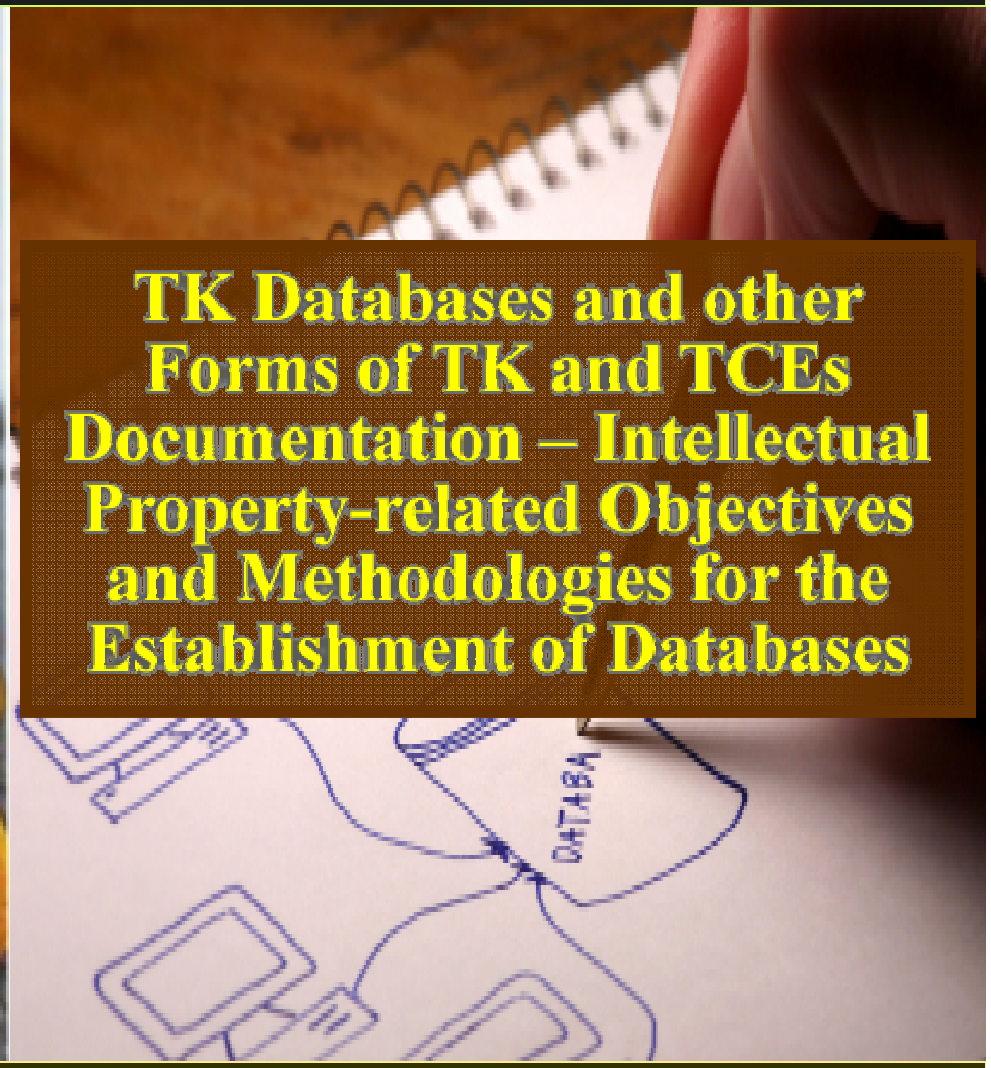
WIPO Regional Seminar on Intellectual Property (IP) and Traditional Knowledge (TK), Genetic Resources (GRs) and Traditional Cultural Expressions (TCEs)
Bangkok, Thailand -December 16 and 17, 2009



TK Databases and other Forms of TK and TCEs Documentation – Intellectual Property-related Objectives and Methodologies for the Establishment of Databases

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

Traditional Knowledge

- Oral or Codified
- Disclosed or undisclosed
- Misappropriation
- Innovative Capacity & Wealth creation

TK Databases and Registers

- Objectives
  - –Defensive
  - –Positive
  - –Stake holders
  - –National and local control
  - –International recognition

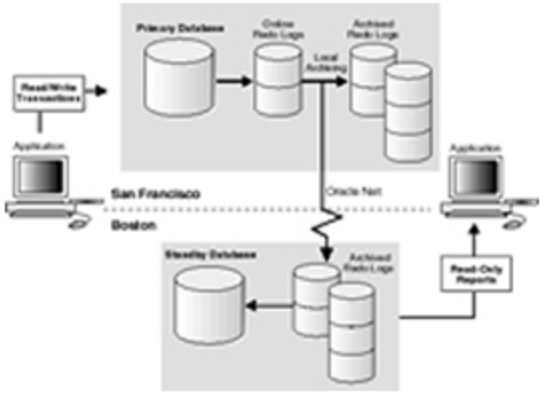
Nature & Complexities of TK/Biodiversity Documentation Projects

- *Identification & Involvement of holder(s), confidence & trust*
- *Ownership & practical model on sharing of the benefits*
- *Unequal partnership & Alliance*
- *Technological and Societal Barriers*
- *Customary laws, abuse & morality*
- *Safeguarding vs encouragement of misappropriation*
- *Disclosed vs undisclosed TK*
- *Standard & Format*

Databases/ Registries

- Functionalities
  - Different Vocabularies
  - Information exchange
  - Capacity Building
  - Stake holders identification & participation
  - Decentralized functioning

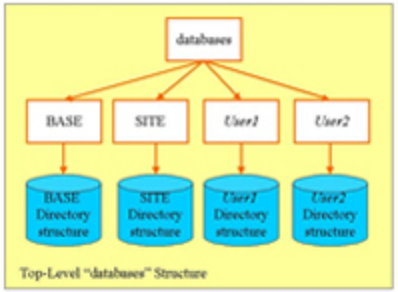
Classification/Standards Setting up of TK Databases/Registries



Classification

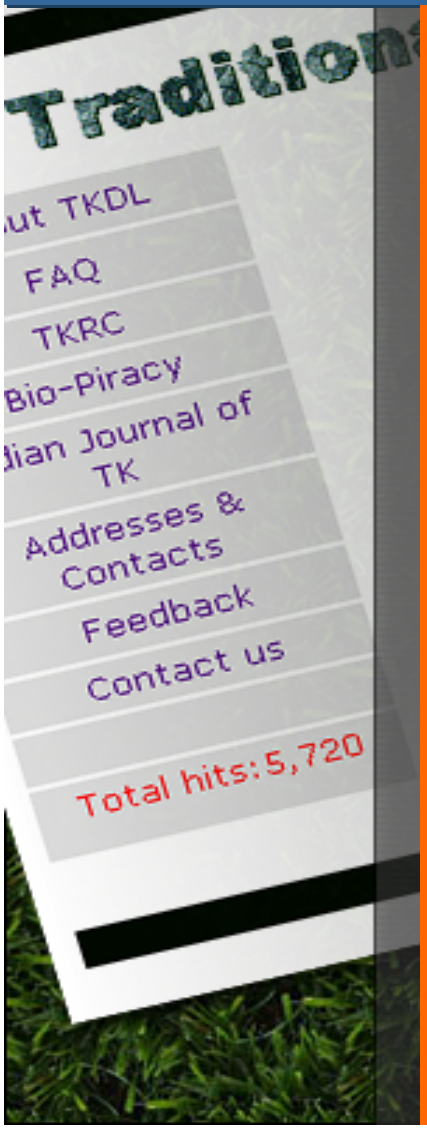
Database/ Registries Schema

Directories/ Schemes



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	61	K	35	78
Section	Class	Sub Class	Group	Sub Groups

Human Necessities

Medical or Veterinary Science; Hygiene

Preparation for Medical, Dental or Toilet Purposes

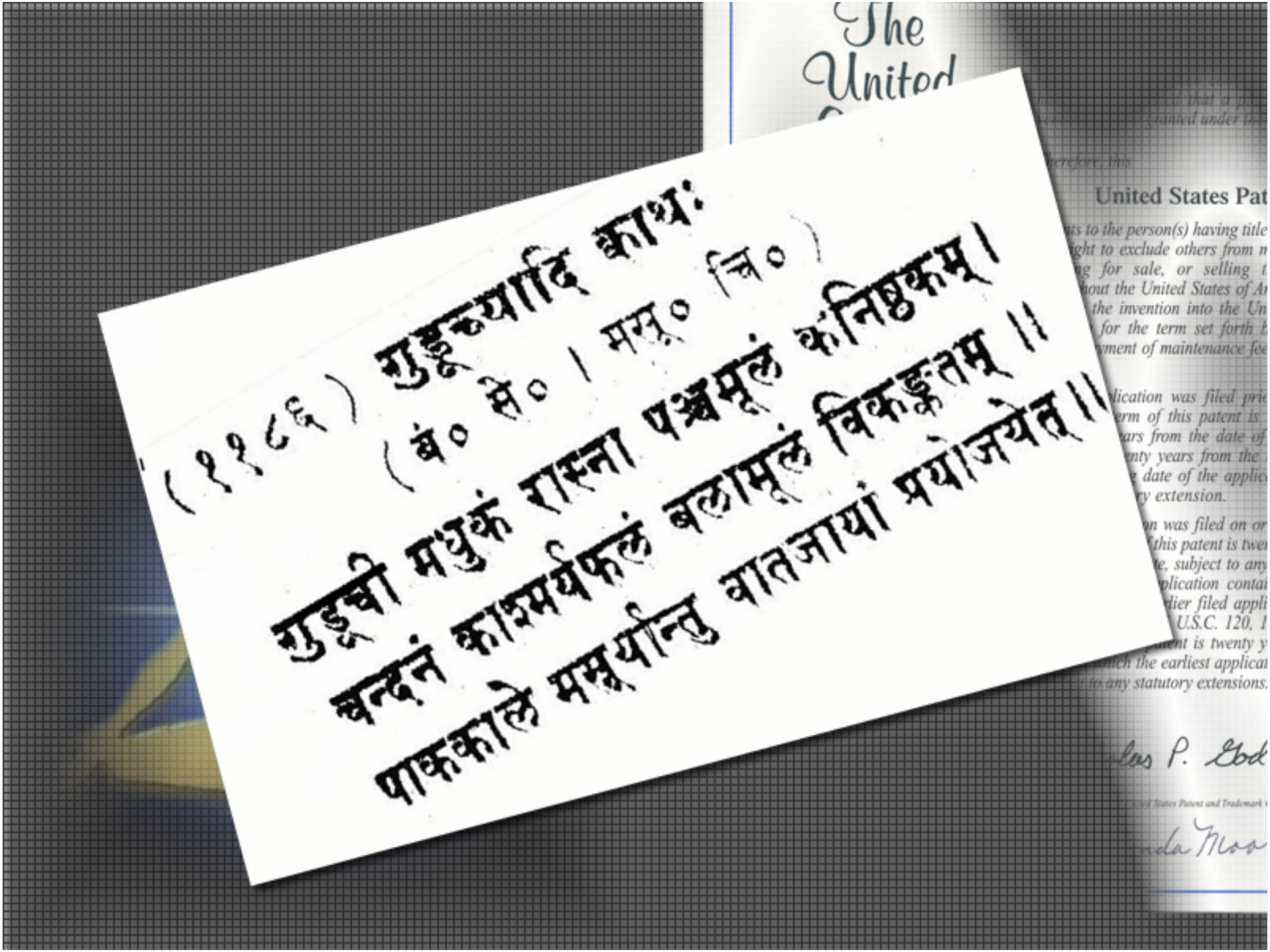
Extracts of Animal, Plant orMicro-organisms

Materials from Plants

TKRC Classification Symbol

A SECTION	01 CLASS	B SUB CLASS	1/00 Main group Or 1/21 Sub group GROUP SUB GROUP

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


(११८६) गुडूच्यादि क्वाथः
(बं० से० । मसू० चि०)
गुडूची मधुकं रास्ना पञ्चमूलं कनिष्ठकम्।
चन्दनं काश्मर्यफलं बलामूलं विकङ्कतम् ॥
पाककाले समूर्यान्तु वातजायां प्रयोजयेत् ॥
The
United States Pat

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

pp 13

従来の知識資源のタイトル

Mañjiṣṭhādikvāthaḥ (Vṛhat) (08)

Japanese

その後知られている知識

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.Ma®ji¾° hedikvetha[a] (V¨hat) (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・セッラタム（バランギ），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・ライブス（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（トラヤマッナ、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），タカサブロウ・アルバ（ブリッンガラジャ），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），センブリ・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），トリカブト・ヘテロフィッラム（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）），フュマリア・パルヴィフロラ（パルパタ・ベーダ），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・オフィシュナリス（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
  - Incase 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$).

TKDL has made unparalled 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

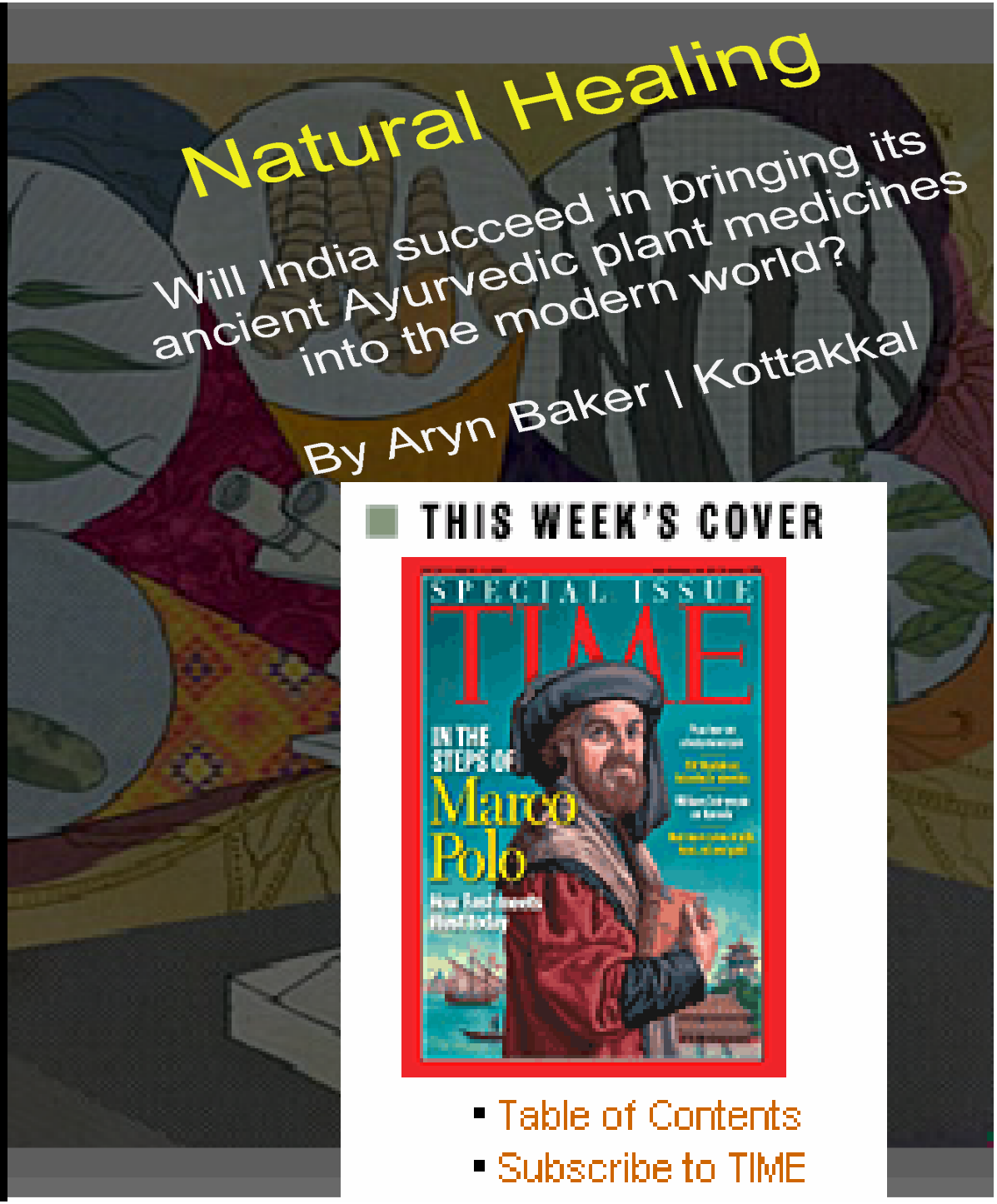
TKDL & WORLD HEALTH ORGANIZATION

Regional consultation on Development of Traditional Medicines in the South East Asia Region, Pyongyoung, 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



The Washington Times

India makes moves to reclaim heritage fro

piracy'

By David Orr
LONDON SUNDAY TELEGRAPH
September 23, 2005

teleg

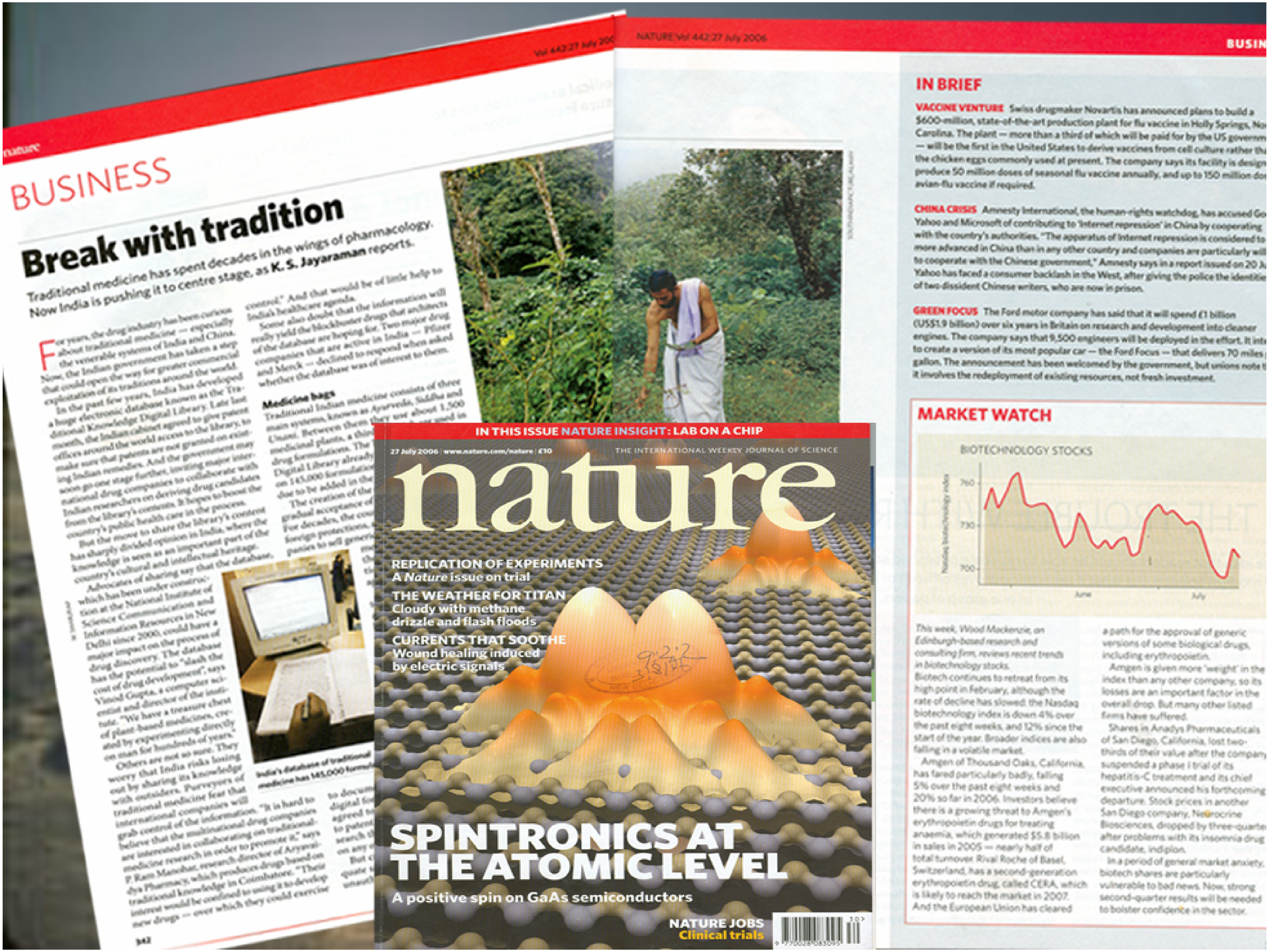
India ado
yoga pos
By Davi
(Filed: 18/09/2005)

BBC NEWS

BBC NEWSWednesday, 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.stmIn 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 director ………..The mammoth Indian encyclopaedia may finally give alternative medicine the shot in the arm it sorely needs

WSJ.com THE WALL STREET JOURNAL. ONLINE

http://yaleglobal.yale.edu/display.artic
Eric BellmanThe Wall Street Journal, 19 Decemb
government is taking a small step toward that goal by buil
to catalog more than 100,000 traditional herbal medicines and thousan
plants and yoga positions. The 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
stitute. "Now we have a mechanism through which we can prevent


Vol 442|27 July 2006
nature
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.
NATURE|Vol 442|27 July 2006
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, No
Carolina. The plant — more than a third of which will be paid for by the US governm
— will be the first in the United States to derive vaccines from cell culture rather th
the chicken eggs commonly used at present. The company says its facility is design
produce 50 million doses of seasonal flu vaccine annually, and up to 150 million do
avian-flu vaccine if required.
CHINA CRISIS Amnesty International, the human-rights watchdog, has accused Go
Yahoo and Microsoft of contributing to 'Internet repression' in China by cooperating
with the country's authorities. "The apparatus of Internet repression is considered to
more advanced in China than in any other country and companies are particularly will
to cooperate with the Chinese government," Amnesty says in a report issued on 20 Ju
Yahoo has faced a consumer backlash in the West, after giving the police the identitie
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 int
to create a version of its most popular car — the Ford Focus — that delivers 70 miles
gallon. The announcement has been welcomed by the government, but unions note t
it involves the redeployment of existing resources, not fresh investment.
MARKET WATCH
BIOTECHNOLOGY STOCKS
760
730
700
June
July
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-quarte
after problems with its insomnia drug candidate, indiplon.
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.
IN THIS ISSUE NATURE INSIGHT: LAB ON A CHIP
27 July 2006 | www.nature.com/nature | £10
THE INTERNATIONAL WEEKLY JOURNAL OF SCIENCE
nature
REPLICATION OF EXPERIMENTS
A Nature issue on trial
THE WEATHER FOR TITAN
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

Possible Other National TKDL and Indian Technical Cooperation

- **South Africa**
  - **High level delegation from Department of Science & Technology visited during Dec., 2003**
- **African Regional Industrial Property Organisation**
  - **Delegation visited during May – June 2004 for replicating TKDL for ARIPO Member States.**
- **Govt. of Thailand**
  - **Delegation visited during July 2009 for Joint Workshop between Public Health Department, Thailand & TKDL Unit, CSIR, India.**
- **Govt. of Mongolia**
- **Govt. of Cambodia**
- **Govt. of Malaysia**
- **Govt. of Indonesia**

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*

Contact: Peter Pappas or Jennifer Rankin Byrne
Phone: (571) 272-8400 or peter.pappas1@uspto.gov;
jennifer.rankin_byrne@uspto.gov;

November 23, 2009

Press Release, 09-30

Signing of TKDL Access Agreement at Hall of Flag at the US Chamber of Commerce Washington DC on 23rd Nov 2009

(L-R) Mr. V.K. Gupta, Director, TKDL, Prof. Sameer K. Bramhchari, DG CSIR, Ms. Sharon Barner, Deputy Under Secretary of Commerce for Intellectual Property, USPTO and Mr. Ajay Shankar, Secretary , Department of Industrial Policy & Promotion, GOI

India Grants Access to U.S. Patent Examiners for New Traditional Knowledge Search Tool

WASHINGTON – The Commerce Department's United States Patent and Trademark Office (USPTO) today announced that the Government of India has granted the agency's patent examiners access to a new digital database containing a compilation of traditional Indian knowledge. Access to the Traditional Knowledge Digital Library (TKDL) is important for both India and the United States to prevent misappropriation of traditional knowledge.

"The USPTO has long been concerned about attempts to patent traditional knowledge, not only because it may result in an incorrectly granted patent, but also because it removes knowledge from the public domain," said Sharon Barner, Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the USPTO.

This database will be an important addition to the growing array of search tools on traditional knowledge from around the world that is already available to USPTO examiners. These tools include dictionaries, formularies, handbooks, and historical or classical works, as well as databases such as the TKDL. USPTO examiners use these tools to help prevent the patenting, and thereby misappropriation, of existing traditional knowledge. A listing of some of these publicly available traditional knowledge tools can be found on the USPTO's Web site at: http://www.uspto.gov/web/offices/dcom/olia/tradknowledge.html.

"We have urged countries to create, and make available to examiners around the world, digital libraries of their traditional knowledge to prevent erroneous patent grants," Barner said. "India's TKDL is just such a library, and we are pleased that our examiners now have access to it."

The new database, developed jointly by India's Council of Scientific & Industrial Research (CSIR) and the Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy (AYUSH), includes over 200,000 traditional medicine formulations on Ayurveda, Unani and Siddha comprising 30 million pages. The TKDL contains text-searchable English-language translations of these sources, permitting USPTO examiners to search thousands of years of India's accumulated traditional knowledge. The TKDL also contains translations into French, German, Japanese and Spanish, from these sources, originally written in Hindi, Sanskrit, Arabic, Persian and Urdu.

The misappropriation of traditional knowledge through the mistaken issuance of patents has been a growing concern with the rise of the global economy and the increasing importance of intellectual property. A few high profile cases brought significant attention to this matter, prompting efforts by a number of countries to create digital traditional knowledge databases accessible to patent examiners around the world. If a patent application attempts to claim an invention within the existing traditional knowledge, a patent examiner will reject the application provided they can find evidence proving the prior existence of that knowledge. Searching the TKDL will provide access to just the sort of evidence needed by examiners to establish that proof.

PRESS RELEASE

TKDL Access Agreement with USPTO

- **Signed on the sidelines of the state visit of Hon'ble Prime Minister to Washington on 23/11/2009.**
- **Provider (CSIR) would assist User (USPTO) in Search & Examination as and when needed.**

Times of India – Press Release

TIMES NATION

THE TIMES OF INDIA, NEW DELHI
THURSDAY, SEPTEMBER 17, 2009

India foils Spanish co's patent bid for Vitiligo cure

Kounteya Sinha | TNN

New Delhi: India has for the first time ever managed to foil a bio-piracy bid in a record three weeks time.

Thanks to the recently created Traditional Knowledge Digital Library (TKDL), which has till now completed documenting over two lakh medical formulations of Ayurveda, Siddha and Unani to save them from piracy, European Patent Office (EPO) has cancelled its earlier "intent to grant patent" order to a Spanish company on use of melon extract to cure vitiligo (leucoderma) — a disease that causes skin de-pigmentation to almost 65 million people globally.

Interestingly, under India's ancient Unani system of medicine, *hakeems* have for hundreds of years been using melon extract to cure this disease. Michael Jackson was world's most famous vitiligo patient. After studying India's documents available in TKDL which confirmed "evidence of prior art", EPO has decided against granting patent for the anti-vitiligo cream to the Spanish company Perdix group SL.

Earlier patent related challenges made by India lasted years. Among the famous were patent application over neem's anti-fungal properties which took India 10 years to revoke, the patent application on the wound healing properties of turmeric which took three years, and that of Basmati rice against an US-based company which took well over a year.

A health ministry official said: "This is victory for us. TKDL, which has documented and translated knowledge of traditional Indian medicines from Hindi, Sanskrit, Arabic, Persian, Urdu and Tamil to five international languages — English, Japanese, French, German and Spanish — will help in fighting foreign companies and countries from claiming patents over information and practices already available in India." In order to confirm EPO's order, TOI scanned through its website and found that application no. EP1747786 titled, "Natural product in cream with anti-vitiligo (leucoderma) therapeutic properties", was filed by Perdix Euro group SL, Spain, in July 2006.

Understanding Disorder

What is Vitiligo?

- Vitiligo is a pigmentation disorder in which melanocytes in the skin are destroyed. As a result, white patches appear on the skin in different parts of the body

Who is affected by vitiligo?

About 65 mn people have vitiligo. Half the people who have vitiligo develop it before age 20

- **Indian hakeems** under the Unani system have been using an extract from melon for hundred years to cure

What causes it?

- There is evidence that people with vitiligo inherit a group of three genes that make them susceptible to depigmentation. Some say vitiligo is a disease in which a person's immune system reacts against the body's own organs or tissues. So proteins called cytokines that are produced within the body alter their pigment producing cells and cause these cells to die

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)
  - Monsonto 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)

Cont…

Tangible Results of TKDL Access Agreement with EPO

- TKDL route (Less than 12 Weeks)
  - Method for altering the Metabolism Characteristic of Food Products (11 Weeks)
  - Medicaments and food for treatment or prevention of obesity and/or diabetes containing cicer arietinum extract(23 Weeks)
  - Herbal compositions for treatment of diabetes (21 Weeks)
  - Use of preparations, purifications and extracts of aloe (19 Weeks)

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

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.

Diseases and Common Indian Medicinal Plants

Malaria

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

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

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

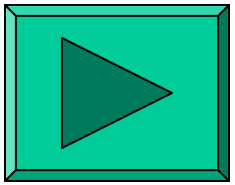
Indigenous S&T Capabilities


Thank You

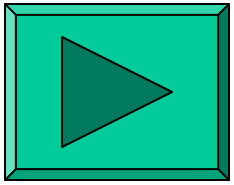
Classifications

Innovation	International Patent Classification
Trade & Services	International Trade Classification (ITC)
Economic Aspects	National Industrial Classification

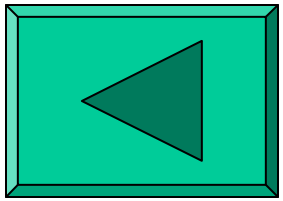
Technical Proposals on Databases and Registries of Traditional Knowledge and Biological /Genetic Resources



Common Data Fields

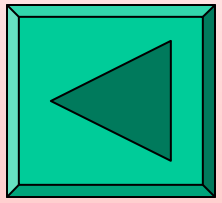


Standards



Std. WIPO/IGC/4/14
Common Data Fields

- ST-9, common data elements
  - Application Detail
  - IPC
  - Prior Art
  - Abstract or claim
- Biological specific elements
  - Distribution of biological elements
  - Access conditions
  - Arrangement with stake holders
  - Biological Information Details
  - Keywords
  - Utility
  - Bibliographic references
  - Language



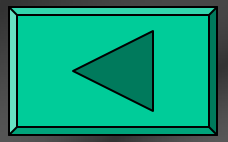
Standards

Metadata gives details about data, and is stored in a repository containing detailed description of each data element. Metadata repository permits application of some data management principles independent to its location

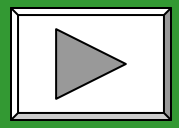
XML encodes a description of document in DTP. Permits structured and unstructured information. XML process has the intelligence in processing

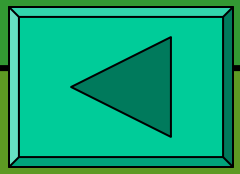
Image & Audio visual format

Monochrome	TIFF/Group IV
Colour	GIFF/JPEG
Multimedia	MPEG



Standards TKDL India

Country Codes	**International Subscribers Dialing**
National Geographic Classification	**National Industrial Classification**
Bibliography	



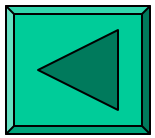
BIBLIOGRAPHY

BOOKS

Author	Title of book	Volume number	Publisher	Year of Pubn.	Page No.
L.V. Aloskar	Glossary of Indian Medicinal Plants with Active Principles	I (A-K)	NISCAIR	1992	17-18

JOURNALS

Author	Year of Publica-tion	Title of Paper	Jourl. name	Vol. No.	Issue No.	P. No.
H.B. Singh	2004	Scanning Electron Microscopic Studies on the Scopes of Athyrioid ferns from the Western Ghats, South India	Phytomor-phology	54	3&4	215-222



Section A – Ayurveda

Class

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

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

- 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 (*Kalpana*) 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-SAṂHITĀ

ऐन्द्री मत्स्याख्यको ब्राह्मी वचा ब्रह्मसुवर्चला। पिप्पल्यो लवणं हेम शङ्खपुष्पी विषं घृतम्॥ २४॥
एषां त्रियवकान् भागान् हेमसर्पिर्विषैर्विना। द्वौ यवौ तत्र हेम्नस्तु तिलं दद्याद्विषस्य च॥ २५॥
सर्पिषश्च पलं दद्यात्तदैकध्यं प्रयोजयेत्। घृतप्रभूतं सक्षौद्रं जीर्णे चान्नं प्रशस्यते॥ २६॥
जराव्याधिप्रशमनं स्मृतिमेधाकरं परम्। आयुष्यं पौष्टिकं धन्यं स्वरवर्णप्रसादनम्॥ २७॥
परमोजस्करं 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)

Aindrī, matsyākhyaka, brāhmī, vacā, brahma-suvarcalā, pippalī, lavaṇa, śaṅkhapuṣpī, 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.

Aindra Rasayana - Microsoft Internet Explorer

Key Attributes of TKDL

BP/1833

Title of Traditional Knowledge Resource

Aindrīrasāyanam

Knowledge Known Since

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

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 Saṁhitā - Edited & translated by P.V Sharma, Vol.-II : Chaukhamba Orientalia, Varanasi, Edn. 5th, 2000. [Time of origin 1000 BC-4th century]	prior art	Page22

சண்டமாருதக் குழம்பு

மாருதமாங்கொடிவேலி முருங்கை வாகைமாவி லிங்கம்வேளை
பெருக்கம்வேர்மேனி, வாருதமா மழிஞ்சிவெட்டி வேம்பும்புங்கு
மருக்காரைபொற்கையா னும்வேளை சாருதமா காய்ப்பாகல் வீழி

மூடக்கற்றாழை சிற்றாரண்டக் காட்டுக்கொட்டை, காருதமாமீ
கருணை சங்கங்குப்பி கருகொச்சிதழுதாழை வெண்ணெச்சியே. 425

கொச்சியொடுபூவரசு பெரியகொன்றை நுவலரியவெருமருந்த
காக்கைவேரும், கச்சியாங்கருன்சூரை செங்கத்தாரி கரிசாலிவெள்
ளிரண்டுகற்றாழைபிரமி, கிச்சையாங்கழற்கொட்டி கருவேல்குன்றி
நிலவாகைபேய்க்குமட்டி திருகுகள்ளி, கொச்சையா மூக்கிரட்டை
சதுரக்கள்ளி கொடிக்கள்ளியவுரிசிறு குறிஞ்சாமே. 426

குறிஞ்சாவாங் கீழ்க்காயினெல்லி குன்றிகுலவும்வேர்வெளியின்
றண்பருத்திக்கோவை, சிறிஞ்சான சிற்றாமுட்டிபேராமுட்டி சோத்
தைதூதுவளைக்கண்டங்காரி, கறிஞ்ஞானவழுதலையின் சிறுகாஞ்
சோறி கனமானபேய்க்கருடனிடகிழங்கு, இறிவான சிராளிமுதல்
பலம்பத்தாக இடித்துநிழலுலர்த்தி குழித்தபிலம் வாங்கே. 427

வாங்கியே தபிலமொரு பாண்டத்தூட்டு வாகாகப் பேய்ச்
சுமட்டிச்சாறுகாழி, தேங்கியே திருகுற்றகள்ளிப்பா லும் செயலாக
வகைவகைக்குகாழிவாரு, தீங்கில்லாத் தில்லம்பால் படிதான்

कुटजादिकषायः—

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

इन्द्रयव, दाडिमफल के छिलके, मोथा, धाय के फूल, बेल के फल का गूदा, नेत्रबाला, लोध, लाल चन्दन और पाठा इनका क्वाथ बनाकर उसमें शहद मिलाकर पीना चाहिए। यह कषाय आमातिसार, 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
Kuṭajādikaṣāyaḥ	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. Kuṭajādikaṣāyaḥ 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 nutsedge), Woodfordia fruticosa (Linn.) Kurz., Aegle marmelos Correa ex Roxb. (Indian bael), Coleus vettiveroides 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	Holarrhena antidysenterica (Roxb. ex Flem.) Wall. ex DC. (tellicherry bark)	Seed	1	Part
2	Punica granatum Linn. (pomegranate)	Fruit rind	1	Part
3	Cyperus rotundus Linn. / Cyperus scariosus R. Br. / Cyperus arundinaceum Baker (chaguan humatag, cocograss, kili'o'opu, nutgrass, pakopako, purple nutsedge)	Stem tuber	1	Part
4	Woodfordia fruticosa (Linn.) Kurz.	Flower	1	Part
5	Aegle marmelos Correa ex Roxb. (Indian bael)	Fruit pulp	1	Part
6	Coleus vettiveroides K.C. Jacob / Valeriana jatamansii Jones Syn.: V. wallichii DC.	Root	1	Part
7	Symplocos racemosa Roxb. (sweetleaf, symplocos)	Stem bark	1	Part
8	Pterocarpus santalinus Linn. f. (red sandal wood)	Heart wood	1	Part
9	Cissampelos pareira 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 Śṛta, 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

قرابادین اعظم و اکمل

جوارش تیواج تالیف حکیم

علو یخان جهت اسهال بواسیر بسیار مفید بلکه اسهال خون وجگری راکه ضعف دران بسیار باشد ونزف الدم هر عضو کهیه باشد نفع عظیم دارد **وصفت آن** تیواج خطائی سه مثقال پوست بیخ انجبار کهر باطباشیر مرواریدنا سفته سوده هر یک یمثقال گل مختوم دم الاخوین کتیرا هر یک نیم مثقال کوفته بیخته سه وزن اودویه شربت سیب ولایتی شربت به ولایتی ویا شربت انجبار وحب الآس آمیخته یک مثقال باشیرهٔ تخم خرفه وخشخاش هر یکی دمثقال بخورند

(5) குடசப்பாலை, அதிவிடையம், கோரைக்கிழங்கு, சாதிக்காய், சுக்கு, அபின், கஞ்சா, கழற்சிப்பருப்பு, இலவம் பிசின், சீரகம், மாங்கொட்டைப்பருப்பு, வில்வப்பழம் இவைகளை சமனெடையாய் எலுமிச்சம்பழச் சாற்றுலாட்டி. கழற்சி அளவு உருண்டை செய்து தேனில் கொடுக்கத் தீரும்.

१२. मधुमेह दमन चूर्ण ।

द्रव्य–गुडमार ८ तोले, बिनोले की मींगी ४ तोले, जामुन की गुठलियों की मींगी ४ तोले, सूखे 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 यकृत् 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	Knowledge Known Since
Madhumeha Damana Curna	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. (meṣaśṛṁgī, madhunāśinī) (miracle fruit), Gossypium herbaceum Linn. (kārpāsa) (Levant 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. (meṣaśṛṁgī, madhunāśinī) (miracle fruit)	Leaf	96 gm
2	Gossypium herbaceum Linn. (kārpāsa) (Levant cotton)	Seed	48 gm

3	Syzygium cuminii (Linn.)Skeels (jambū) (jambolan plum, Java plum, kavika ni India, mesegerak)	Endosperm			48 gm
4	Aegle marmelos Correa ex Roxb. (bilva) (Indian bael)	Leaf	-Non-unctuous Rough	/ Dry /	72 gm
5	Azadirachta indica 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 (Hingu) 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 (cūrṇa) .

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

prior art

خزائن الادویہ

پ ت ا س

241

مرض ذیابیطس میں

جامن کے خشک بیجوں کا سفوف پانچ گرین سے پندرہ گرین تک یا اسکے سیال رس کو ایک ڈرام سے دو ڈرام تک کی مقدار میں دن میں تین مرتبہ کھلانا نہایت مفید ہے

Value Addition – Modern Science to TKDL

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

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

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 spathulate, 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

CBDL REPORT

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

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

CBDL REPORT

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

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, inflamations, 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 cels 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 spathulate, obtuse, succulent, entire nervous obsculre and lower surface dotted with black specks.1.8 X 0.6 cm.
2. Microscopic Characters: Leaf more or less isobilateral sructure; 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 bundlle 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

CBDL REPORT

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

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

CBDL REPORT

Zoom 100%

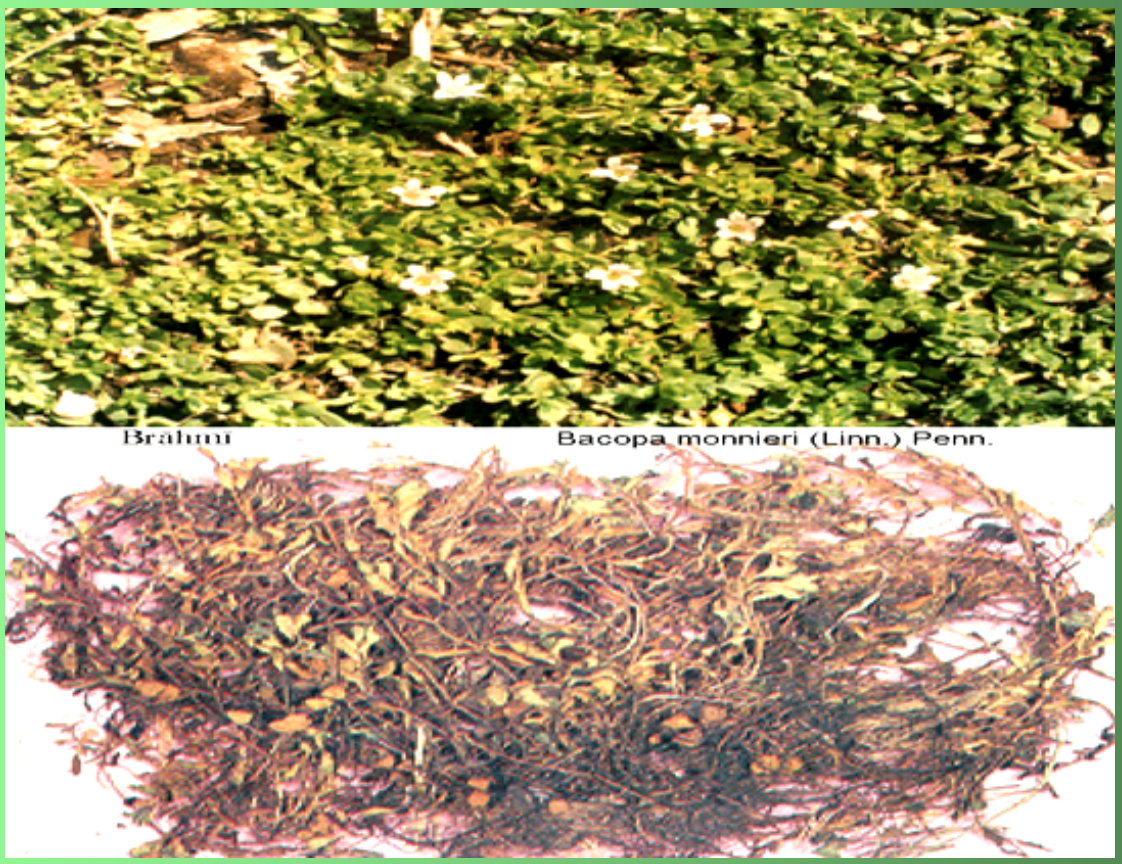
(16) WOI , Anonymous , 1988 , 2 :B , 2

(17) WOI , Anonymous , 1988 , 2 :B (Revised) , 2

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

Pages: 7

Bacopa monnieri



Citrullus colocynthis

Indravāruṇī Citrullus colocynthis (Linn.) Schrad.

Alternanthera Sessilis

Acorus calamus

Piper longum

بیاضِ کبیر

حصّہ دوم

حبِ 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۔ نسلوچین ایکتولہ۔ کنہ کنہ (یعنی کونین) چھ ماشہ۔ گوند ببول تین 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 اگر اس کو حفظ ماتقدم کے طور پر استعمال کرنا چاہیں تو ایک گولی کھانا کھانے کے بعد کھا لیا 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

4 Water - - Q.S

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

CARAKA-SAṂHITĀ

ऐन्द्री मत्स्याख्यको ब्राह्मी वचा ब्रह्मसुवर्चला। पिप्पल्यो लवणं हेम शङ्खपुष्पी विषं घृतम्॥ २४॥
एषां त्रियवकान् भागान् हेमसर्पिर्विषैर्विना। द्वौ यवौ तत्र हेम्नस्तु तिलं दद्याद्विषस्य च॥ २५॥
सर्पिषश्च पलं दद्यात्तदैकध्यं प्रयोजयेत्। घृतप्रभूतं सक्षौद्रं जीर्णे चान्नं प्रशस्यते॥ २६॥
जराव्याधिप्रशमनं स्मृतिमेधाकरं परम्। आयुष्यं पौष्टिकं धन्यं स्वरवर्णप्रसादनम्॥ २७॥
परमोजस्करं 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)

Aindrī, matsyākhyaka, brāhmī, vacā, brahma-suvarcalā, pippalī, lavaṇa, śaṅkhapuṣpī, 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.

Aindra Rasayana - Microsoft Internet Explorer

Key Attributes of TKDL

BP/1833

Title of Traditional Knowledge Resource

Aindrīrasāyanam

Knowledge Known Since

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

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 Saṁhitā - Edited & translated by P.V Sharma, Vol.-II : Chaukhamba Orientalia, Varanasi, Edn. 5th, 2000. [Time of origin 1000 BC-4th century]	prior art	Page22

சண்டமாருதக் குழம்பு

மாருதமாங்கொடிவேலி முருங்கை வாகைமாவி லிங்கம்வேளை
பெருக்கம்வேர்மேனி, வாருதமா மழிஞ்சிவெட்டி வேம்பும்புங்கு
மருக்காரைபொற்கையா னும்வேளை சாருதமா காய்ப்பாகல் வீழி

மூடக்கற்றாழை சிற்றாரண்டக் காட்டுக்கொட்டை, காருதமாமீ
கருணை சங்கங்குப்பி கருகொச்சிதழுதாழை வெண்ணெச்சியே. 425

கொச்சியொடுபூவரசு பெரியகொன்றை நுவலரியவெருமருந்த
காக்கைவேரும், கச்சியாங்கருன்சூரை செங்கத்தாரி கரிசாலிவெள்
ளிரண்டுகற்றாழைபிரமி, கிச்சையாங்கழற்கொட்டி கருவேல்குன்றி
நிலவாகைபேய்க்குமட்டி திருகுகள்ளி, கொச்சையா மூக்கிரட்டை
சதுரக்கள்ளி கொடிக்கள்ளியவுரிசிறு குறிஞ்சாமே. 426

குறிஞ்சாவாங் கீழ்க்காயினெல்லி குன்றிகுலவும்வேர்வெளியின்
றண்பருத்திக்கோவை, சிறிஞ்சான சிற்றாமுட்டிபேராமுட்டி சோத்
தைதூதுவளைக்கண்டங்காரி, கறிஞ்ஞானவழுதலையின் சிறுகாஞ்
சோறி கனமானபேய்க்கருடனிடகிழங்கு, இறிவான சிராளிமுதல்
பலம்பத்தாக இடித்துநிழலுலர்த்தி குழித்தபிலம் வாங்கே. 427

வாங்கியே தபிலமொரு பாண்டத்தூட்டு வாகாகப் பேய்ச்
சுமட்டிச்சாறுகாழி, தேங்கியே திருகுற்றகள்ளிப்பா லும் செயலாக
வகைவகைக்குகாழிவாரு, தீங்கில்லாத் தில்லம்பால் படிதான்

कुटजादिकषायः—

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

इन्द्रयव, दाडिमफल के छिलके, मोथा, धाय के फूल, बेल के फल का गूदा, नेत्रबाला, लोध, लाल चन्दन और पाठा इनका क्वाथ बनाकर उसमें शहद मिलाकर पीना चाहिए। यह कषाय आमातिसार, 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
Kuṭajādikaṣāyaḥ	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. Kuṭajādikaṣāyaḥ 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 nutsedge), Woodfordia fruticosa (Linn.) Kurz., Aegle marmelos Correa ex Roxb. (Indian bael), Coleus vettiveroides 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	Holarrhena antidysenterica (Roxb. ex Flem.) Wall. ex DC. (tellicherry bark)	Seed	1	Part
2	Punica granatum Linn. (pomegranate)	Fruit rind	1	Part
3	Cyperus rotundus Linn. / Cyperus scariosus R. Br. / Cyperus arundinaceum Baker (chaguan humatag, cocograss, kili'o'opu, nutgrass, pakopako, purple nutsedge)	Stem tuber	1	Part
4	Woodfordia fruticosa (Linn.) Kurz.	Flower	1	Part
5	Aegle marmelos Correa ex Roxb. (Indian bael)	Fruit pulp	1	Part
6	Coleus vettiveroides K.C. Jacob / Valeriana jatamansii Jones Syn.: V. wallichii DC.	Root	1	Part
7	Symplocos racemosa Roxb. (sweetleaf, symplocos)	Stem bark	1	Part
8	Pterocarpus santalinus Linn. f. (red sandal wood)	Heart wood	1	Part
9	Cissampelos pareira 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 Śṛta, 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

قرابادین اعظم و اکمل

جوارش تیواج تالیف حکیم

علو یخان جهت اسهال بواسیر بسیار مفید بلکه اسهال خون وجگری راکه ضعف دران بسیار باشد ونزف الدم هر عضو کهیه باشد نفع عظیم دارد **وصفت آن** تیواج خطائی سه مثقال پوست بیخ انجبار کهر باطباشیر مرواریدنا سفته سوده هر یک یمثقال گل مختوم دم الاخوین کتیرا هر یک نیم مثقال کوفته بیخته سه وزن اودویه شربت سیب ولایتی شربت به ولایتی ویا شربت انجبار وحب الآس آمیخته یک مثقال باشیرهٔ تخم خرفه وخشخاش هر یکی دمثقال بخورند

(5) குடசப்பாலை, அதிவிடையம், கோரைக்கிழங்கு, சாதிக்காய், சுக்கு, அபின், கஞ்சா, கழற்சிப்பருப்பு, இலவம் பிசின், சீரகம், மாங்கொட்டைப்பருப்பு, வில்வப்பழம் இவைகளை சமனெடையாய் எலுமிச்சம்பழச் சாற்றுலாட்டி. கழற்சி அளவு உருண்டை செய்து தேனில் கொடுக்கத் தீரும்.

१२. मधुमेह दमन चूर्ण ।

द्रव्य–गुडमार ८ तोले, बिनोले की मींगी ४ तोले, जामुन की गुठलियों की मींगी ४ तोले, सूखे 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 यकृत् 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	Knowledge Known Since
Madhumeha Damana Curna	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. (meṣaśṛṁgī, madhunāśinī) (miracle fruit), Gossypium herbaceum Linn. (kārpāsa) (Levant 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. (meṣaśṛṁgī, madhunāśinī) (miracle fruit)	Leaf	96 gm
2	Gossypium herbaceum Linn. (kārpāsa) (Levant cotton)	Seed	48 gm

3	Syzygium cuminii (Linn.)Skeels (jambū) (jambolan plum, Java plum, kavika ni India, mesegerak)	Endosperm			48 gm
4	Aegle marmelos Correa ex Roxb. (bilva) (Indian bael)	Leaf	-Non-unctuous Rough	/ Dry /	72 gm
5	Azadirachta indica 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 (Hingu) 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 (cūrṇa) .

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

prior art

خزائن الادویہ

پ ت ا س

241

مرض ذیابیطس میں

جامن کے خشک بیجوں کا سفوف پانچ گرین سے پندرہ گرین تک یا اسکے سیال رس کو ایک ڈرام سے دو ڈرام تک کی مقدار میں دن میں تین مرتبہ کھلانا نہایت مفید ہے

Value Addition – Modern Science to TKDL

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

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

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 spathulate, 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

CBDL REPORT

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

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

CBDL REPORT

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

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, inflamations, 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 cels 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 spathulate, obtuse, succulent, entire nervous obsculre and lower surface dotted with black specks.1.8 X 0.6 cm.
2. Microscopic Characters: Leaf more or less isobilateral sructure; 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 bundlle 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

CBDL REPORT

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

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

CBDL REPORT

Zoom 100%

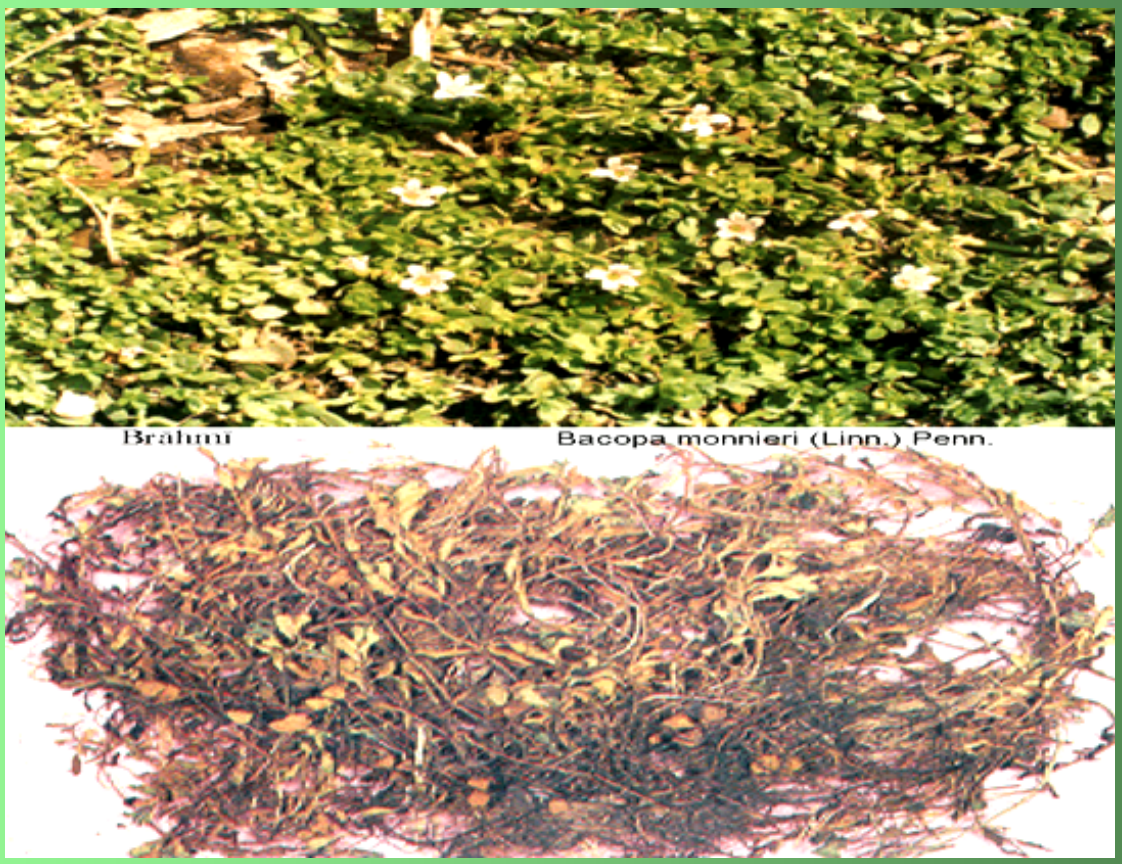
(16) WOI , Anonymous , 1988 , 2 :B , 2

(17) WOI , Anonymous , 1988 , 2 :B (Revised) , 2

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

Pages: 7

Bacopa monnieri



Citrullus colocynthis

Indravāruṇī Citrullus colocynthis (Linn.) Schrad.

Alternanthera Sessilis

Acorus calamus

Piper longum

بیاضِ کبیر

حصّہ دوم

حبِ 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۔ نسلوچین ایکتولہ۔ کنہ کنہ (یعنی کونین) چھ ماشہ۔ گوند ببول تین 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 اگر اس کو حفظ ماتقدم کے طور پر استعمال کرنا چاہیں تو ایک گولی کھانا کھانے کے بعد کھا لیا 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

4 Water - - Q.S

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 prophylatic 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 **– Set Aside**
3. Methods and composition for treating sore throat

Germany - Total No. of Application 2

1. Use of preparations, purifications and extracts of aloe **- Withdrawn**
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 tetrahydroxycurcumin and tetrahydrotetrahydroxy-curcumin from the extracts of curcuma longa

Netherlands - Total No. of Application 1

1. Functional berry composition **- Withdrawn**

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 **- Withdrawn**

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 **- Withdrawn**

Citation from TKDL references through Third Party Observations

Spain Total No. of Application 1

1. Natural product in cream with anti-vitiligo therapeutic properties **– Set Aside**

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 **- Withdrawn**

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 **- Withdrawn**

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 – (Monsonto 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 Weeks**

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 Weeks**

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 Weeks**

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 Weeks**

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1889638 (Medicaments and food for treatment or prevention of obesity and/or diabetes containing cicer arietinum extract)	
Title	Medicaments and food for treatment or prevention of obesity and/or diabetes containing cicer arietinum extract
Applicant & Country	Jumpsun Bio-Medicine (Shanghai) Co., Ltd, China
Date of Filing	06-March-2006
Date of Third Party observation	11-June-2009
Applicant withdraw his application	20-Nov-2009
Period between Third Party observation and setting aside Intention to grant	**23 Weeks**

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1807098 (Herbal compositions for treatment of diabetes)	
Title	Herbal compositions for treatment of diabetes
Applicant & Country	Amcod Limited, Mombasa, Kenya
Date of Filing	13-Sept-2005
Date of Third Party observation	01-July-2009
Applicant withdraw his application	24-Nov-2009
Period between Third Party observation and setting aside Intention to grant	**21 Weeks**

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1967197 (Use of preparations, purifications and extracts of aloe)	
Title	Use of preparations, purifications and extracts of aloe
Applicant & Country	Cognis IP Management GmbH, Germany
Date of Filing	09-March-2007
Date of Third Party observation	20-July-2009
Applicant withdraw his application	27-Nov-2009
Period between Third Party observation and setting aside Intention to grant	**19 Weeks**

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

Application No.	Ref.	Date
06 015 343.4 - 2107	PERDIX-PATENT	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

17.3.09
Date

Ludwig, Gerald
Chairman

M. Thalmair-De Meyere
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	Application No./Patent No.
PERDIX-PATENT	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.	Ref.	Date
04 022 793.6 - 2123	39456/GM/lp	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.	Ref.	Date
04 022 793.6 - 2123	39456/GM/lp	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

Reference	Application No./Patent No.
F7775(V)	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	Application No./Patent No.
F7775(V)	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	Application No./Patent No.
NAM2007/04EP	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	Application No./Patent No.
00460-EP-P	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

European Patent Office
10958 BERLIN
GERMANY
Tel. +49 (0)30 25901 - 0
Fax +49 (0)30 25901 - 840

Korga, Leokadia
Kancelaria Rzecznika Patentowego
ul. Bereniki 6/7
44-117 Gliwice
POLOGNE

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

Date
11-06-2009

Reference	Application No./Patent No.
SHXT-00802-NEP	06705724.0 - 1521 / 1889638

Applicant/Proprietor
Jumpsun Bio-Medicine (Shanghai) 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

Korga, Leokadia
Kancelaria Rzecznika Patentowego
ul. Bereniki 6/7
44-117 Gliwice
POLOGNE

Tel.:+31 (0)70 340 45 00

Date
20-11-2009

Reference	Application No./Patent No.
SHXT-00802-NEP	06705724.0 - 1521 / 1889638

Applicant/Proprietor
Jumpsun Bio-Medicine (Shanghai) Co., Ltd.

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 dated 04.06.09 was not complied 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).

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

Vossius & Partner
Siebertstraße 4
81675 München
ALLEMAGNE

Formalities Officer
Name: Mihé
Tel.: 4229
or call:
+31 (0)70 340 45 00

Date
01-07-2009

Reference	Application No./Patent No.
N1871EP	05779434.9 - 2107 / 1807098

Applicant/Proprietor
Amcod Limited

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.

For the Examining Division

Deemed Withdrawn by Applicant

Vossius & Partner
Siebertstrasse 4
81675 München
ALLEMAGNE

Formalities Officer
Name: Mihé
Tel.: 4229
or call:
+31 (0)70 340 45 00

Date
24-11-2009

Reference	Application No./Patent No.
N1871EP	05779434.9 - 2107 / 1807098

Applicant/Proprietor
Amcod Limited

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 dated 10.11.08 was not complied 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).

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

Lavé, Stéphanie
Cabinet Lavoix
2, Place d'Estienne d'Orves
75441 Paris Cedex 09
FRANCE

Formalities Officer
Name: Pfitzner
Tel.: 8032
or call:
+31 (0)70 340 45 00

Date
20-07-2009

Reference	Application No./Patent No.
VD/FW BPE 09p	07004869.9 - 2107 / 1967197

Applicant/Proprietor
Cognis IP Management GmbH

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

Lavé, Stéphanie
Cabinet Lavoix
2, Place d'Estienne d'Orves
75441 Paris Cedex 09
FRANCE

Formalities Officer
Name: Pfitzner
Tel.: 8032
or call:
+31 (0)70 340 45 00

Date
27-11-2009

Reference	Application No./Patent No.
VD/FW BPE 09p	07004869.9 - 2107 / 1967197
Applicant/Proprietor	
Cognis IP Management GmbH	

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 dated 02.04.09 was not complied 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).

Thailand Delegation

- **Bureau of Protection of Thai Traditional Medicine Knowledge and Medicine Plants**
- **Led by**
  - **Mr. Prapoj Petrakard, M.D., Senior Expert in Public Health.**
  - **Mrs. Kanchana Deewised, Director of Bureau of Protection of Thai Traditional Medicine Knowledge and Medicine Plants.**