Intellectual Property and Sustainable Development: *Documentation and Registration of TK and Traditional Cultural Expressions*

Muscat, Oman

26th -28th June, 2011

"TK Documentation and Defensive Protection: An Example from India"

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Traditional Knowledge

Oral or Codified

Disclosed or undisclosed

Misappropriation

Innovative Capacity & Wealth creation

Traditional Knowledge

- **Local and not Widely Understood**
  - *Unstructured in Nature*
- **Language & Access Barrier exist**
  - *Not amenable to digitization available Search Engines can not retrieve TK*

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

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)**

PROTECTING TRADITIONAL KNOWLEDGE

India

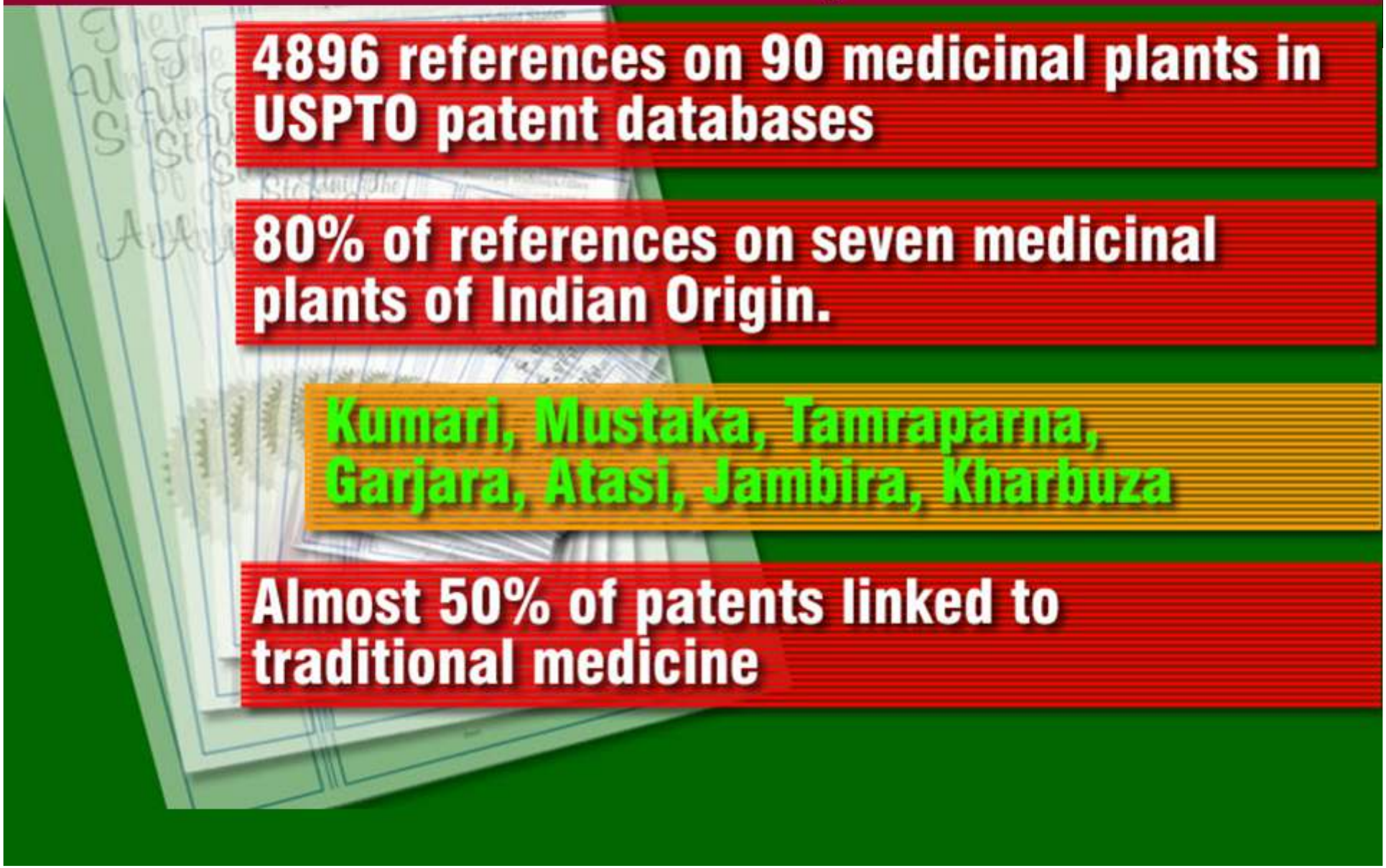
- Turmeric
- Neem
- Basmati

TKDL – TKRC - IPC

Extent of Misappropriation

(Ayurveda, Unani & Siddha)

Study Carried Out in March 2000



4896 references on 90 medicinal plants in USPTO patent databases

80% of references on seven medicinal plants of Indian Origin.

Kumari, Mustaka, Tamraparna, Garjara, Atasi, Jambira, Kharbuza

Almost 50% of patents linked to traditional medicine

STUDIES ON PATENTS ON MEDICINAL PLANTS

Studies on 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 and Structure of Classification

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	01	B	1/00
SECTION	CLASS	SUB CLASS	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

Stages of Formal Acceptance of Traditional Knowledge Classifications

Feb 2001 India **Submitted a proposal** on inclusion of traditional knowledge at International Patent Classification Union

Task force of five nations constituted by WIPO

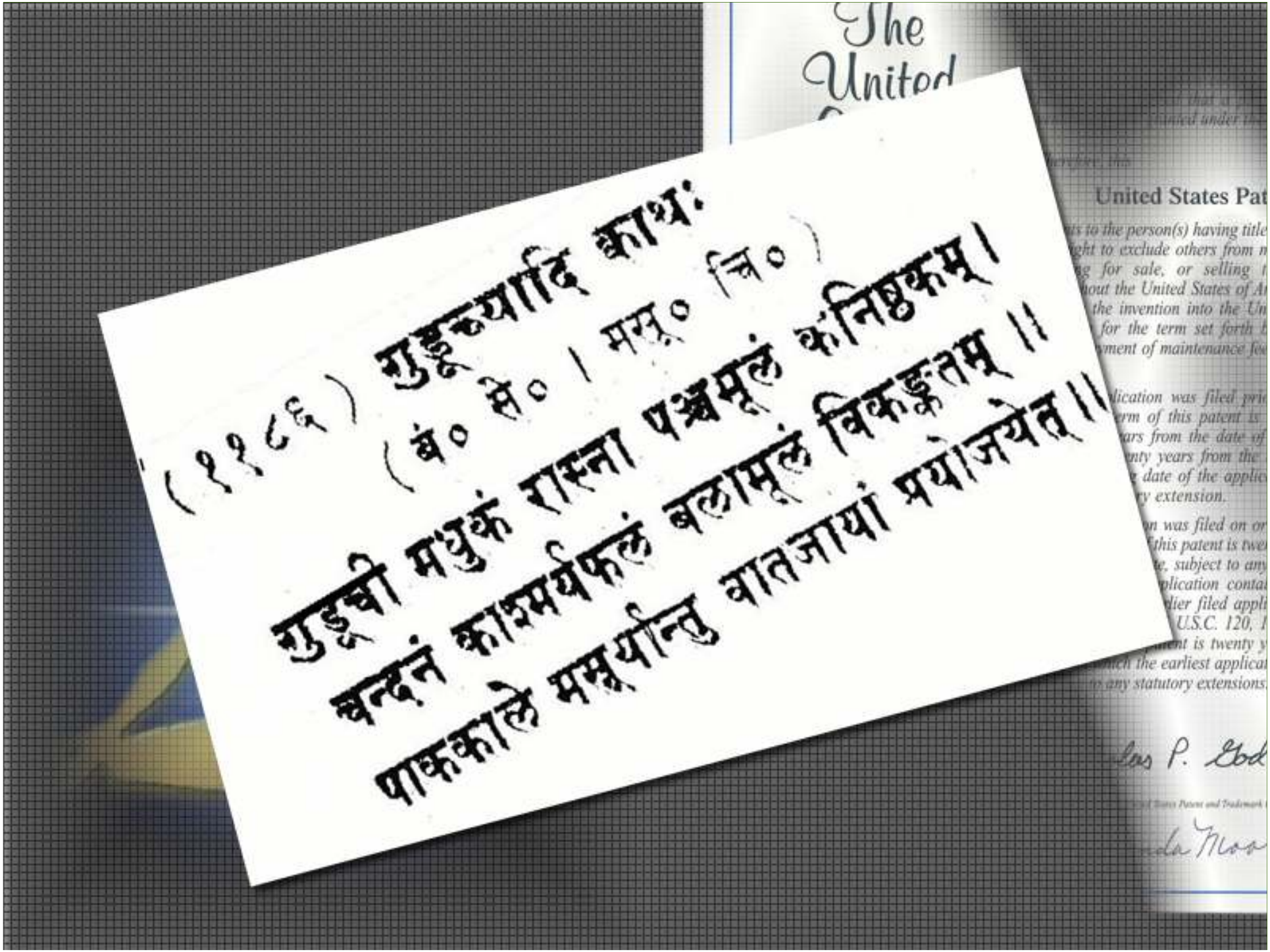
Feb 2002 Task force recommends creation of subclass in A61 linking Traditional Knowledge Resource Classification developed by India with International Patent Classification

Stages of Formal Acceptance of Traditional Knowledge Classifications

Feb 2003 International Patent Classification Union adopted 200 subgroups for publication by July, 2005

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

Oct 2004 Deliberations on IPC-TKRC Concordance list of the new main group A61K 36/00


(१९८६) गुडूच्यादि क्वाथः
(बं० से० । मसू० त्रि०)
गुडूची मधुकं रास्ना पञ्चमूलं कनिष्ठकम् ।
चन्दनं कार्ष्यफलं बलामूलं विकङ्कतम् ॥
पाककाले समूर्यान्तु वातजायां प्रयोजयेत् ॥
The United
United States Pat

Key Attributes of TKDL

BP/70 **English**

Title of Traditional Knowledge

Guducyadi Kvatha(14)

English

Knowledge Known Since

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

Attributs de clef de TKDL

RS/08 **French**

Titre de ressource traditionnelle de la connaissance **La Connaissance Connue Depuis**

Mañjiṣṭhādikvāthaḥ (Vṛhat) (08) 500 années

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

Code d'IPC : A61K35/78, A61K9/08, A61K9/14, A61P15/00, A61P17/00, A61P19/00, A61P19/02, A61P19/06, A61P21/00, A61P25/00, A61P27/00, A61P27/02, A61P29/00, A61P3/04, A61P3/06, A61P31/00, A61P31/08, A61P33/00, A61P43/00

DÉTAILS DU PROCESSUS/DE FORMULATION :

1.Ma®ji¾°h¢dikv¢thaª (V¨hat) (08) composé thérapeutique contenant des parties utiles des ingrédients suivantsRubia cordifolia (Manjichtha), Cyperus rotundus (Moustaka), Holarrhena antidysenterica (koutadja, indrayava), Tinospora cordifolia (Goudouchi), Saussurea lappa (Koustha), Zingiber officinale (Ardraka), Clerodendrum serratum (Bharangi), Solanum xanthocarpum (Kantakari, Lakchamana (Drogue en remplacement) (Chwéta)), Acorus calamus (vatcha), Azadirachta indica (Nimba), Curcuma longa (Haridra), Berberis aristata (dârouharidrà), Trichosanthes dioica (Patôla), Picrorhiza kurroa (Katouki), Marsdenia tenacissima (Mourva), Embelia ribes (Vidangà), Pterocarpus marsupium (Beedjaka (âsana)), Plumbago zeylanica (Tchitraka), Asparagus racemosus (chatàvari , médàmahâméda (Drogue en remplacement)), Gentiana kurroo (Trâyamana Trâyanti), Piper lingum (Pippali), Holarrhena antidysenterica (koutadja, indrayava), Adhatoda vasica (Vatcha), Eclipta alba (Bhringaràdja), Cedrus deodar (dévadàrou = le cèdre (déodar)), Cissampelos pareira (Patha), Acacia catechu (Khadira), Pterocarpus santalinus (Rakta chandana), Operculina turpethum (Trivrta), Crataeva nurvala (Varuna), Swertia chirayita (Kiràtatikta), Psoralea corylifolia (Bakouci), Cassia fistula (argavadha), Streblus asper (Sakhôtaka), Melia azedarach (Mahànimba, Kaidrya?), Pongamia pinnata (Karandja, Naktamàla, Oudkirya), Aconitum heterophyllum (ativicha), Coleus vettiveroides (haribéra), Citrullus colocynthis (Indravarouni), Hemidesmus indicus (Sariva (Outpala sariva)), Fumaria parviflora (Parpata bhédà (U)), Fagonta cretica (Dhanavayassa), Terminalia chebula (Haritaki), Terminalia bellirica (Bibheetaka), Emblica officinalis (Amalki)

2. formulation composé thérapeutique est mentionnée ci-dessous

Schlüssel-Attribute von TKDL

RS/08 **German**

Titel traditionellem Wissen Hilfsmittel **Wissen Seit dem Bekannt**

Mañjiṣṭhādikvāthaḥ (Vṛhat) (08) 500 Jahre

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 Code : A61K35/78, A61K9/08, A61K9/14, A61P15/00, A61P17/00, A61P19/00, A61P19/02, A61P19/06, A61P21/00, A61P25/00, A61P27/00, A61P27/02, A61P29/00, A61P3/04, A61P3/06, A61P31/00, A61P31/08, A61P33/00, A61P43/00

DETAILS DES PROZESSES/DER FORMULIERUNG :

1.Ma®ji¾°h¢dikv¢tha³ (V¨hat) (08) ist eine therapeutische , die aus folgenden Zutaten bestehtRubia cordifolia (Manjistha), Cyperus rotundus (Mustaka), Holarrhena antidysenterica (Kutajha, Indrajava), Tinospora cordifolia (Guduki), Saussurea lappa (Kustha), Zingiber officinale (Ardraka), Clerodendrum serratum ('Bharangi), Solanum xanthocarpum (Kantakari, Lakschmana (Ersatzdroge) (Schweta)), Acorus calamus (Vaka), Azadirachta indica (Nimba), Curcuma longa (Haridra), Berberis aristata (Daruharidra), Trichosanthes dioica (Patola), Picrorhiza kurroa (Katuki), Marsdenia tenacissima (Murwa), Embelia ribes (Vidanga), Pterocarpus marsupium (Bijaka (Asana)), Plumbago zeylanica (Kitraka), Asparagus racemosus (Satavari, MedaMahameda (Ersatzdroge)), Gentiana kurroo (Trajamana, Trajanti), Piper lingum (Pippali), Holarrhena antidysenterica (Kutajha, Indrajava), Adhatoda vasica (Vasa), Eclipta alba (Bhringaraja), Cedrus deodar (Devadaru), Cissampelos pareira (Patha), Acacia catechu (Khadira), Pterocarpus santalinus (Rakta-Tschandana), Operculina turpethum (Trivrita), Crataeva nurvala (Varuna), Swertia chirayita (Kiratatikta), Psoralea corylifolia (Bakuzi), Cassia fistula (Argavadha), Streblus asper (Sakhotaka), Melia azedarach (Mahanimba, Kädrja?), Pongamia pinnata (Karanja, Naktamala, Udkirja), Aconitum heterophyllum (Ativisa), Coleus vettiveroides (Haribera), Citrullus colocynthis (Indrawaruni), Hemidesmus indicus (Sariva (Utpala sariva)), Fumaria parviflora (Parpata-Bheda (U)), Fagonta cretica (Dhanvaiasa), Terminalia chebula (Haritaki), Terminalia bellirica (Bibhitaka), Emblica officinalis (Amalki)

2. Therapeutische Mischung/Formulierung ist unten erwähnt :

1	Rubia cordifolia (Manjistha)	(Wurzel)	1	Anteil

Cualidades de la llave de TKDL

RS/08 **Spanish**

Título del recurso tradicional del conocimiento **Conocimiento Sabido Desde entonces**

Mañjiṣṭhādikvāthaḥ (Vṛhat) (08) 500 años

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

Código del IPC : A61K35/78, A61K9/08, A61K9/14, A61P15/00, A61P17/00, A61P19/00, A61P19/02, A61P19/06, A61P21/00, A61P25/00, A61P27/00, A61P27/02, A61P29/00, A61P3/04, A61P3/06, A61P31/00, A61P31/08, A61P33/00, A61P43/00

DETALLES EL PROCESO/FORMULACIÓN :

1.Ma®ji¾°h¢dikv¢tha³ (V¨hat) (08) Es una formulación compuesta terapéutica que consiste de las siguientes partes útiles de ingredientes.Rubia cordifolia Linn. (rubia, granza), Cyperus rotundus Linn. (Mustaka, Ganda-durva (Sustituto)), Holarrhena antidysenterica (Roxb. ex Flem.) Wall. ex DC. (i) nombre de un árbol Karanja), Tinospora cordifolia Miers (Guduci), Saussurea lappa Clarke (lepra), Zingiber officinale Roscoe (Ardraka/Sunthi), Clerodendrum divaricatum Jack Syn.: C. serratum Spreng. (Bharangi), Solanum surattense Burm. F. Syn.: S. xanthocarpum Schrad. & Wendl. (Kantakari, Laksamana (droga de sustituto) (Sveta)), Acorus calamus Linn. (Una especie de pez), Azadirachta indica A. Juss. (limero), Curcuma domestica Valeton Syn. C. longa Linn (Haridra, Timira (Sustituto)), Berberis aristata DC. (el árbol Devadaru color verde), Trichosanthes dioica Roxb. (el pepino), Picrorhiza kurroa Royle ex Benth. (Katuki), Marsdenia tenacissima Wight. & Arn. (Murva), Embelia ribes Burm. f. (Una sustancia vegetal, usada extensamente como vermifugo), Pterocarpus marsupium Roxb. (Bijaka), Plumbago zeylanica Linn. (Citraka), Asparagus racemosus Willd. (Satavari), Gentiana kurroo Royle (Variedad de Trayamana), Piper longum Linn. (Pippali), Holarrhena antidysenterica (Roxb. ex Flem.) Wall. ex DC. (i) nombre de un árbol Karanja), Justicia adhatoda Linn. Syn.: Adhatoda vasica Nees (bambú), Eclipta prostrata (Linn.) Linn. Syn.: E. alba (Linn.) Hassk. (nombre de un árbol gigante), Cedrus deodara (D.Don) G.Don (una especie del pino), Cissampelos pareira Linn. (hoja), Acacia catechu (Linn. f.) Willd. (Arbol Khadira), Pterocarpus santalinus Linn. f. (Rakta candana), Operculina turpethum (Linn.) S. Manso (Trivrta), Crateva nurvala Buch. -Ham. (el océanoo agua), Swertia chirayita (Roxb. ex Flem.) Karst. (Kiratatikta), Psoralea corylifolia Linn. (Bakuci), Cassia fistula Linn. (matanza de las abejas amarillas), Streblus asper Lour. (Sakhotaka), Melia azedarach Linn. (Mahanimba), Pongamia pinnata (Linn.) Pierre (Karanja, Naktamala, Udkirya), Aconitum heterophyllum Wall. ex Royle (planta venenosa pero altamente medicinal), Coleus

STATUS

Discipline	Current Status
Ayurvedic formulations	91,410
Unani formulations	1,29,170
Siddha formulations	15,290
Yoga	1,305

TKDL ready to safeguard 0.226 million medicinal formulations like Neem and Turmeric in Ayurveda ,Unani and Siddha which are present in 34 million A4 size pages, at International Level

Interest Shown by several Countries for getting develop their National TKDL

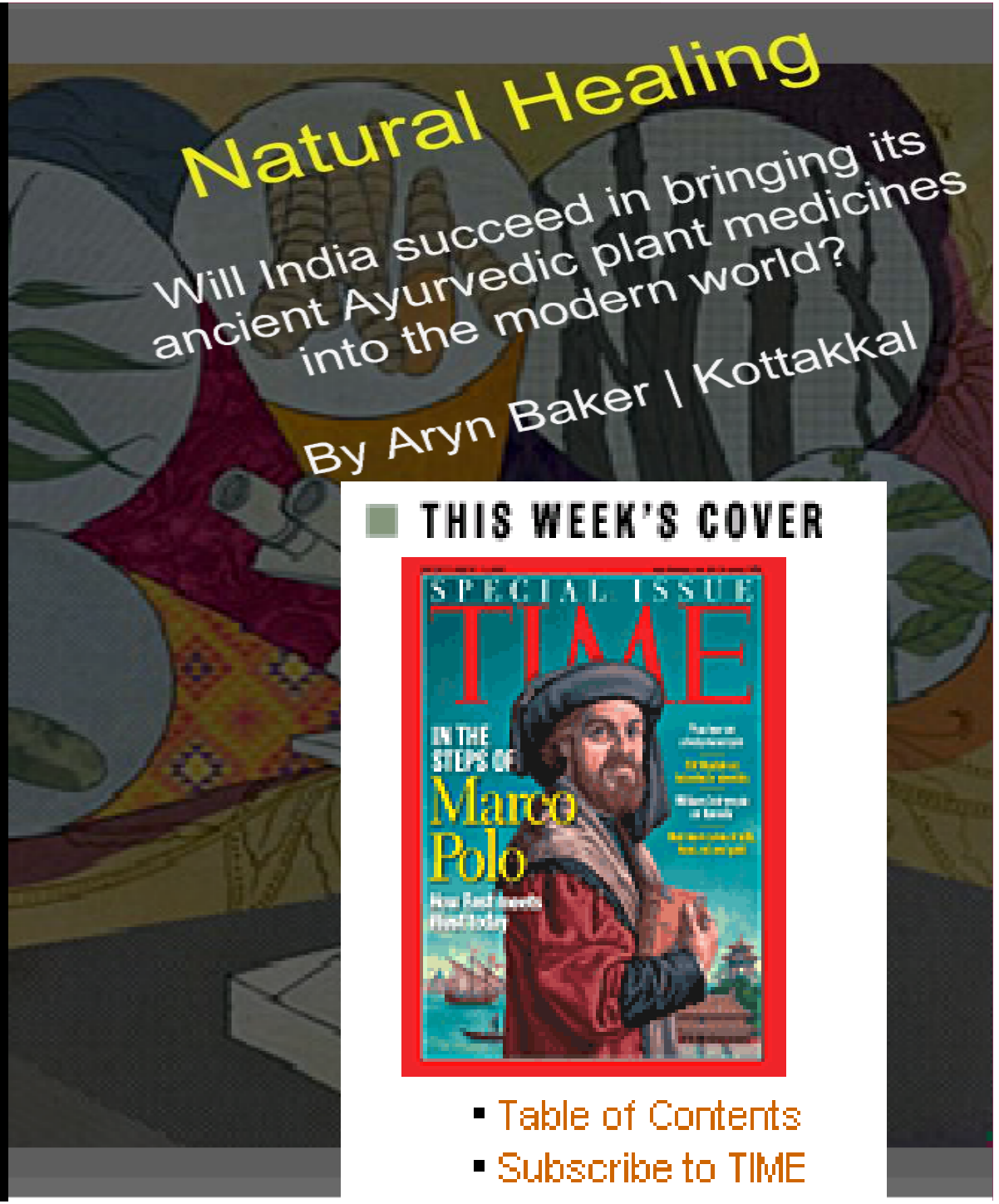
- **South Africa**
  - High level delegation from Department of Science & Technology visited during Dec., 2003
- **African Regional Industrial Property Organisation**
  - Delegation visited during May – June 2004 for replicating TKDL for ARIPO Member States.
- **Govt. of Thailand**
  - Delegation visited 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**


WIPO has plans to Internationalise TKDL to utilise Indian TKDL as a template for other willing Countries rich in TK and GR
World Intellectual Property Organisation, Geneva
April-2010

WIPO- CSIR organised an International Conference on *"Utilization of the Traditional Knowledge Digital Library (TKDL) as a Model for the Protection of Traditional Knowledge"* in New Delhi, India, March 22 to 24, 2011

Participants from 33 developing Countries participated in the Conference

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 from

piracy'

By David

LONDON

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By Dav

(Filed:

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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.a

Eric BellmanThe Wall Street Journal, 19 Decem

government is taking a small step toward that goal by pub

to catalog more than 100,000 traditional herbal medicines and thousa

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


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.
Medicine bags
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 J 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 inte 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
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

Access to TKDL

(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

TKDL Access Agreement to International Patent Offices

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

European Patent Office	February 2009
Indian Patent Office	July 2009
German patent Office	October 2009
United States Patent and Trademark Office	November 2009

Access Agreement with USPTO was signed on the sideline of the state visit of Hon'ble Prime Minister to United states.

United Kingdom Patent and Trademark Office	February 2010
Canadian Intellectual Property Office	September 2010
IP Australia	January 2011
Japan Patent Office	April 2011
New Zealand IP Office, Korean IP Office	Being Negotiated

International Patent System and Prior-art and TKDL as prior art tool

- Any material printed in any language any where in the world.
- Need search and retrieval capabilities in respect of available TK for preventing misappropriation.
- Abilities to identify attempts on misappropriation.
  - **Global Bio-piracy Watch System**
- Understanding of National Patent laws for submissions as Third Party Observations / Pre-grant Opposition.

TKDL - Prior Art - Access Agreements

- **TKDL or similar Digital Database a Pre-requisite to identify evidence of prior art**
- **TPO submission not dependent on Access Agreement**

Global Bio-Piracy Watch System

- **Study Characteristics of each website**
- **Identify the Search Criteria**
- **Develop an Agent utility to satisfy the Search Criteria on required IPC Symbols.**
- **Establish relevance of identified Applications in TKDL database**

Identify IPC Symbols of relevance to TKDL

- **A61K 36/00 (207 Sub Groups) on Medicinal Plants.**
- **Others**
- **Number of Applications identified**
- **A61K 36/00 - 14234**
- **Others - 157773**

TKDL Outcomes

Office	No. of Cases of Misappropriation Identified in last one year and action taken
EPO	219
USPTO	196
IP Australia	43
CIPO	109
Total	567

Details of Misappropriation by MNCs identified in last One Year

Country of Origin of MNC	Number of Applications
US	148
UK	51
Germany	46
Italy	42
Japan	38
Australia	33
Canada	26
Switzerland	24
Spain	15
France	14
Netherland	10
Others *	120

**Others MNCs Countries are Denmark, New Zealand, Luxemburg, Norway, Russia, Sweden, Hungary, Austria, Singapore etc.*

TKDL Outcomes
(Cancellation/ Withdrawn/ Amendment of Claims)

No of Applications Cancelled:- 2	
Applicant Countries	**Spain, Italy**
Applications Withdrawn Based on TKDL Evidences: 42	
Applicant Countries	**Netherlands, Korea, Denmark (4), China, United States (8), Italy (3), Norway, Kenya, Germany(5), Great Britain (4), India, Israel, Switzerland, Brazil, Japan (2), Cyprus, Australia, South Korea (2), Canada, Argentina, France**
No. of Cases where Claims were Amendment:- 3	
Applicant Countries	**China, Taiwan, United States**
Total	**47**

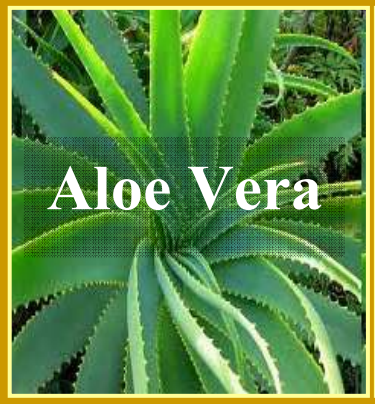
Tangible Results of TKDL Access Agreement with EPO

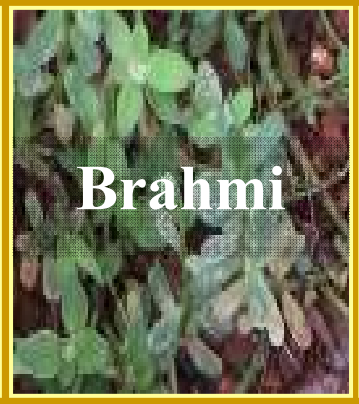
- Normal route of opposition of an international patent - (10-15 years)
  - Neem (10 years)
  - Enola Beans (10 years)
  - Monsonto soybean (13 years)

- TKDL route
  - Anti-Vitiligo Cream (3 week)
  - Chinese Traditional Medicine composition for treatment of avian influenza, method for preparation, and application thereof
  - Method for altering the Metabolism Characteristic of Food Products (11 Weeks)
  - Composition for Heart Disease and Health Products (9 Weeks)
  - Method of treatment or management of stress (40 Weeks)
  - Cosmetic herbal compositions (36 Weeks)

TKDL Out-Comes Against Bio-Piracy

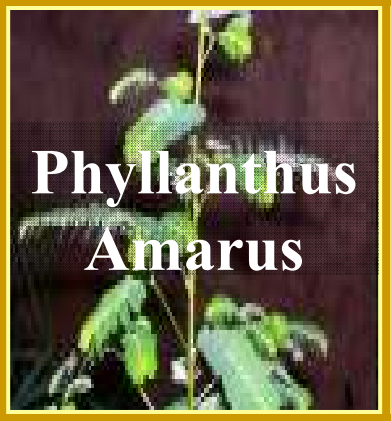
Successfully safeguarded bio-piracy attempts to patent medicinal plants (usages)

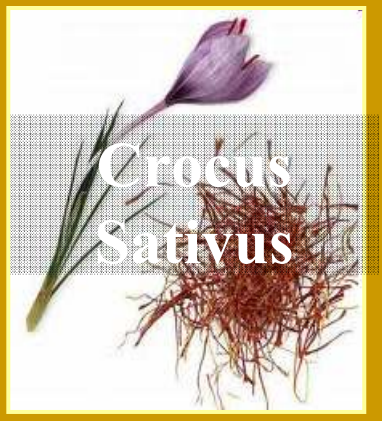




TKDL Out-Comes Against Bio-Piracy

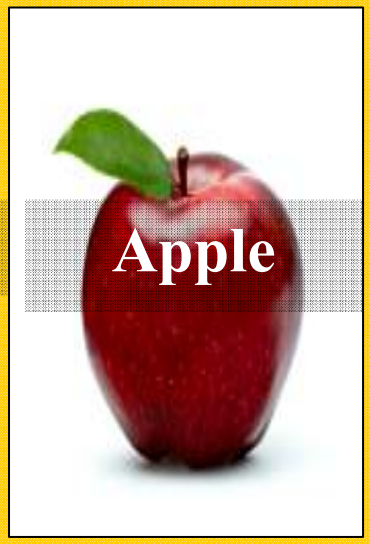
Successfully safeguarded Bio-piracy attempts to patent Medicinal Plants (usages)

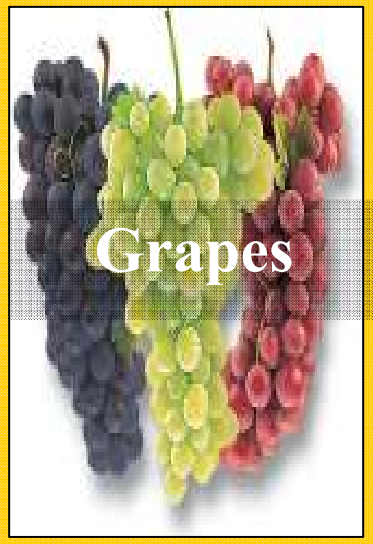


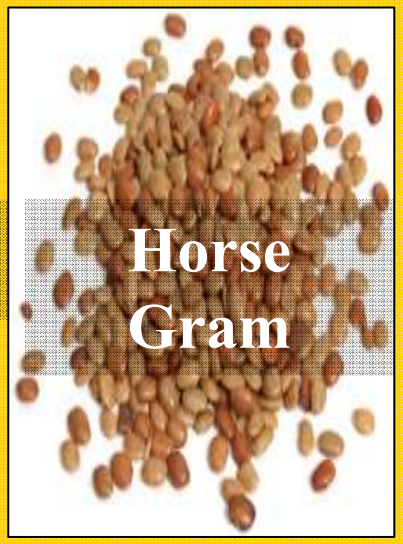


TKDL Out-Comes Against Bio-Piracy

Successfully safeguarded Bio-piracy attempts to patent Medicinal Plants (usages)







TKDL Success against Bio-Piracy attempts of MNCs

USA

1	Natreon Inc
2	Jan Marini Skin Research Inc
3	Phytrix JV, LLC

Great Britain

1	GW Pharma Limited

Netherlands

1	Unilever N.V

Italy

1	Data Medica Padova S.p.A
2	Indena S.p.A
3	Bios Line S.p.a

Brazil

1	Acha Laboratories

Cyprus

1	Bionature

Australia

1	Natbio Pty Ltd.

Korea

1	Purimed Co., Ltd
2	Seoul National University Industry foundation

Canada

1	Herbal Infusion Corporation

Israel

1	Naveh Pharma

TKDL Success against Bio-Piracy attempts of MNCs

Japan		
1	Mercian Corporation	Mercian

Germany		
1	Cognis IP Management GmbH	cognis
2	Evonik Goldschmidt GmbH	EVONIK INDUSTRIES

China		
1	Livzon Pharmaceutical	丽珠医药 LIVZON

USA		
1	Berkson, Lindsey,	Lindsey Berkson

USA		
1	Juice Beauty	Juice BEAUTY THE ORGANIC SOLUTION

TPO/Pre Grant Opposition VS Post Grant Opposition

Prerequisite of TPO: Documentation similar to TKDL

S.N.	Process	Post Grant	TPO / Pre Grant
1.	Nature	Party to Re-examination Process	Can not participate in Re-examination
2.	Cost	Highly Expensive	Zero Cost
3.	Time Period	4-13 Year	1-20 Weeks
4.	Appeal	Applicant can appeal	Can not appeal since no rights were granted

Applicability & Limitations of TKDL Model

- Applicable to Codified and Oral Knowledge.
- TKDL is a Defensive Technical Tool only.
- Access Agreement (s) are useful but not essential.
- A useful resource for new Research and new IP & Capacity Building.
- Not a substitute for an International legally binding Instrument for Protection of Traditional Knowledge and disclosure requirements submitted by Developing Countries at TRIPs Council. These instruments are essential for protection of Traditional Knowledge


Thank You

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: EP1849473 (Composition for treatment of avian influenza)	
Title	Chinese traditional medicine composition for treatment of avian influenza, method for preparation, and application thereof
Applicant & Country	Livzon Pharmaceutical Group Inc., CN, China
Date of Filing	19 Jan 2007
Date of Intention to grant	25 Feb 2010
Date of Third Party observation	20 May 2010
Notice setting aside Intention to grant	10 June 2010
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**

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

September 2009

हिन्दुस्तान

शुक्रवार, 2 जुलाई 2010 नगर, आषाढ, कृष्ण पक्ष, षष्ठी, विक्रम संवत 2067, नई दिल्ली, वर्ष 75, अंक 156, 18 पेज+ 4

पराया होते-होते बचा कमल

यूरोपीय पेटेंट ऑफिस को बताया कि भारत में 5वीं सदी से दिल के आयुर्वेदिक उपचार में इस्तेमाल होती है कमल से बनी दवाइयां

मदन जैड़ा

नई दिल्ली

आयुर्वेद में वर्णित चिकित्सा ज्ञान को भले ही देश में तरजीह नहीं मिल पाती हो लेकिन बहुराष्ट्रीय कंपनियां इनके आधार पर एलोपैथिक दवाएं बना रही हैं। कोरिया की बहुराष्ट्रीय फार्मा कंपनी मैसर्स पुरीमेड लिमिटेड ने भारतीय फूल कमल से हृदयरोग की दवा बना ली तथा यूरोप में पेटेंट दाखिल किया। लेकिन भारत ने इस प्रयास को विफल कर दिया।

भारत ने यूरोपियन पेटेंट ऑफिस को प्रमाण दिए कि देश में आयुर्वेदिक चिकित्सा पद्धति में पांचवीं शताब्दी से ही कमल से बनी दवाओं का इस्तेमाल दिल के उपचार में होता आया है।

ट्रडिशनल नालेज लाइब्रेरी (टीकेडीएल) के डायरेक्टर वी. के. गुप्ता के अनुसार मैसर्स पुरीमेड लि. ने कमल के औषधीय तत्वों से इस्केमिक हार्ट अटैक की दवा तैयार की और पेटेंट के लिए यूरोपीय पेटेंट आफिस में आवेदन किया। टीकेडीएल और यूरोपीय पेटेंट आफिस के बीच पहले ही समझौता हो चुका है। जैसे ही हमें इसकी खबर लगी हमने पूरे तथ्य यूरोपीय पेटेंट आफिस के समक्ष रखे। उन्हें बताया कि आयुर्वेद चिकित्सा शास्त्र की पुस्तकों रसयोग सागर, भेला समाहिता, सुश्रुत समाहिता एवं वंगसेना में कमल के औषधीय तत्वों से दिल की बीमारियों का उपचार का ब्यौरा है। भारत की तरफ से सवाल उठाया गया कि उपचार की जो विधि भारत में पांचवीं सदी से ही प्रचलित है, उस पर आज कोई कंपनी कैसे पेटेंट ले सकती है। डा. गुप्ता के अनुसार यूरोपीय पेटेंट आफिस ने उन्हें

सूचित किया है कि भारत द्वारा पेश तथ्यों के आधार पर पुरीमेड पेटेंट आवेदन ईपी-1781309 खारिज कर दिया है। इस बीच अपुष्ट सूत्रों से खबर मिली थी कि उपरोक्त कंपनी ने अरबों रुपये निवेश कर उक्त दवा को बनाना भी शुरू कर दिया था। दरअसल, पेटेंट फाइल करते ही दवा पर संबंधित कंपनी का अधिकार मान लिया जाता है। लेकिन पेटेंट खारिज हो जाने के अब कंपनी के सारे दावे खारिज हो गए हैं। इससे पहले टीकेडीएल से खरबूजे के छिलके, अश्वगंधा, अर्जुन, चाय की पत्तियों, ब्राह्मी, हल्दी, बंगाली चने, नीम, अलोवेरा, पुदीना तथा कलामेघा के औषधीय तत्वों से बनी दवाओं के पेटेंट यूरोपीय और अमेरिकी पेटेंट आफिसों से खारिज कराए हैं। टीकेडीएल के अफसरों का मानना है कि विदेशी पेटेंट कार्यालयों द्वारा भारतीय औषधीयों पर करीब 2000 पेटेंट हर साल दिए जा रहे हैं।

टीकेडीएल

टीकेडीएल- आयुर्वेद, यूनानी तथा सिद्ध पैथियों के 2.20 लाख परंपरागत चिकित्सा फार्मूलों को इसमें डिजिटल और पेटेंट फार्मेट में लिपिबद्ध किया गया है। फार्मूले अंग्रेजी, अलावा फ्रेंच, जर्मन, स्पेनिश तथा जापानी भाषाओं में हैं। यूरोप और यूएस के पेटेंट कार्यालयों से टीकेडीएल का एग्रीमेंट हो चुका है तथा अब अन्य देशों के पेटेंट कार्यालयों से भी ऐसे ही करार किए जा रहे हैं।

टीकेडीएल का फायदा

कुछ साल पूर्व यूरोप में नीम पर और अमेरिका में हल्दी पर पेटेंट कर लिए गए थे। तब भारत को इन्हें खारिज कराने में मुकदमा लड़ना पड़ा था जिसमें दस साल लगे और करीब दस करोड़ रुपये खर्च हुए। लेकिन टीकेडीएल के बनने के बाद अब जो पेटेंट खारिज हो रहे है, उनमें न तो मुकदमा लड़ना पड़ता है न ही समय की बर्बादी। सिर्फ चिट्ठी-पत्री से इन्हें खारिज किया जा रहा है।

उपेक्षा का परिणाम

- यूरोप में कमल से बनी दवा पर पेटेंट हथियाने की कोशिश विफल, भारत ने खारिज कराया दावा
- कोरियाई बहुराष्ट्रीय फार्मा कंपनी ने बना ली थी कमल के औषधीय गुणों से इस्केमिक हार्ट अटैक की दवा

July 2010

THE TIMES OF INDIA

PRICE RS 4.50 ALONG WITH MUMBAI MIRROR OR THE ECONOMIC TIMES OR MAHARASHTRA TIMES

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Danish bio-piracy bid on ginger foiled

Alert India Says We Knew All Along It Could Burn Fat

Kounteya Sinha | TNN

New Delhi: India foiled a major bio piracy bid by a Danish company to patent ginger, jeera (cumin), onion and turmeric's fat burning properties, just as it stopped China from patenting pudina's health benefits last month.

Claras ApS, a Danish company, on September 19, 2007 filed a patent application at the European Patent Office, saying its invention of turmeric, cumin, ginger and onion as slimming agents was novel. But the Council of Scientific and Industrial Research (CSIR), with the help of India's Traditional Knowledge Digital Library (TKDL), dug out formulations from ancient Ayurveda texts like *Astanga Samgraha*, *Yogaratnakarah*, *Yogatarangini* and *Gadanigrahah*, dating back to the 5th century, which contained formulations involving their use for ages in India, as fat burners.

TKDL director Dr V K Gupta submitted a letter to EPO on August 25, 2009 to inform the examiners that all the four have long been known in Indian systems of traditional medicine for their use as slimming agents or fat destroyers.

CSIR's letter to EPO said, "The patent application number EP2044850, titled method for altering the metabolism characteristic of food products, may kindly be referred to wherein the usefulness of a herbal composition of Zingiber *officinale* (ginger), Allium *cepa* (onion), Cuminum *cyminum* (cumin seed) and Curcuma *longa* (turmeric) on being added to a food product as a slimming agent by altering the digestion characteristic/metabolism characteristic of the food product has been claimed to be novel."

NOT A SLIM CHANCE

Claras ApS, a Danish company, had filed a patent application for its 'invention' of turmeric, cumin, ginger and onion as slimming agents. But the Council of Scientific and Industrial Research dug out formulations from ancient texts to prove their use for ages in India, as fat burners

The letter added, "In TKDL, there are several references where all four have been found to be used for improving digestion process and act as slimming agent. Hence, there does not seem to be any novelty or inventive step involved in the claims made in the above referred patent application." The letter was accompanied with evidence from age-old Indian medicinal texts. "Following India's intervention, the Danish company was not left with any option except to withdraw its patent and claims. Accordingly, the company decided to withdraw its three-year-old application," a health ministry official said.

TKDL is a collaborative project between CSIR and the health ministry's department of Ayush.

July 2010

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

Citation from TKDL references through Third Party Observations

United States of America – Total No. of Application 4

1. Nutritional Supplement for the Prevention of Cardiovascular Disease, Alzheimer's disease, Diabetes, And Regulation and Reduction of Blood Sugar and Insulin Resistance
2. Physiologically active composition;
3. Compositions of Plant Carbohydrates as Dietary Supplements ;
4. Derivatives of sandalwood oil and santalols for treating sores and herpes

Egypt– Total No. of Application 1

1. Lipid Fraction of Nigella Sativa L. Seeds

Citation from TKDL references through Third Party Observations

Germany– Total No. of Application 2

1. Blackberry Extract
2. Oil of coriander, oil of coriander-containing compositions having antimicrobial and antiphlogistic effects and their use

South Korea– Total No. of Application 2

1. Extract Of Herbal and Composition Containing The Same
2. Hair Growth Stimulants and the Manufacturing Method Thereof

United Kingdom– Total No. of Application 1

1. Herbal Extracts and Flavor Systems For Oral Products and Methods of Making The Same

Citation from TKDL references through Third Party Observations

India– Total No. of Application 2

1. Composition for enhancing immunity
2. Cissus Quadrangularis Plant Extracts for Treating Osteoporosis and the Extraction Process Thereof

China– Total No. of Application 2

1. Chickpea extracts as therapeutic agents and foods in the treatment and prevention of obesity and non-insulin-dependent diabetes
2. Oral pharmaceuticals or oral hygiene products comprising licorice flavonoid extract

Taiwan– Total No. of Application 1

1. Composition for inhibiting nitric oxide and/or prostaglandin E2 synthesis and method for inhibiting inflammation

Citation from TKDL references through Third Party Observations

Canada– Total No. of Application 2

1. System And Method for Promoting Hair Growth and Improving Hair and Scalp Health
2. Therapeutic composition from Goji (Lyceum barbarum l.), methods of making and using.

Total No. of TKDL Evidence filed so far(13 July 2010) in 30 Cases

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1906980 (METHOD OF TREATMENT OR MANAGEMENT OF STRESS)	
Title	Method of treatment or management of stress
Applicant & Country	Natreon Inc. 2-D Janine Place New Brunswick, NJ 08901 / US
Date of Filing	27-July-2006
Date of Third Party observation	05-June-2009
Applicant withdraw his application	25-March-2010
Period between Third Party observation and setting aside Intention to grant	**40 Weeks**

TKDL getting recognised TK as prior art by Patent Examination System

Claim of M/S Natreon	Treatment or management of stress, using a high purity extract composition comprising withanolide glycosides oligosaccharides, withanolide aglycons.
TKDL Evidences	Prior art references from Ayurveda & Unani Books (15 references) were given concerning of use of Withania Somnifera along with other medicinal plants for providing relief in insomnia, blood pressure, palpitation, perspiration, anemia, gastric ulcer, restlessness.
EPO Examination Report	Search authority agreed to use of withania Somnifera for use of insomnia, gastric ulcer, restlessness etc all stress related diseases and withania Somnifera would contain compound such as withanolide glycosides, oligosaccharides, withanolide aglycons, therefore there is no novelty in the claim
Withdrawal of Application	M/S Nateron withdrew its application of 1.2.2007 on 25.3.2010.

Availability of Withania somnifera in various countries and Usage

Sr no.	Country	Medicinal Use
1	India	As a Sedative, liver tonic, blood purifier, antidote against cobra poison and to induce abortion. For the treatment of Insomnia, hypertension, diabetes, tuberculosis, rheumatic pain, anaemia, inflammation of joints, nervous disorders, epilepsy, hiccup, cold, cough, female disorders.
2	South Africa	Alcoholism, tuberculosis and emphysema
3	Ethiopia	Cough, asthma, epilepsy
4	Somalia	Improves blood circulation, ulcer, skin disorders, sores, abcess, ear infection, fever, disturbed sleep, to repel snakes and scorpions
5	Mauritius	As a tonic, for treating Rheumatoid arthritis, skin diseases like ringworm, dysuria, gonorrhea, gangrenous inflammation of rectum (as enema), asthma.
6	Cape Verde	As Blood purifier and diuretic and for treating gonorrhea
7	Madagascar	Asthma

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1825845 (Cosmetic herbal compositions)	
Title	Cosmetic herbal compositions
Applicant & Country	Jan marini skin res inc, U.S.
Date of Filing	22-Feb-2007
Date of Third Party observation	02-July-2009
Applicant withdraw his application	08-April-2010
Period between Third Party observation and setting aside Intention to grant	**37 Weeks**

नई दिल्ली । शनिवार 17 जुलाई 2010 । आषाढ़ 26 शक 1932 । आषाढ़ शुक्ल 6/7 विक्रम 2067 । पेज 30 । मूल्य 3.50 रु. या 6 रु. द टाइम्स आफ इंडिया साहेब । www.nbt.in । www.nav

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नवभारत टाइम्स

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ब्राह्मी, अश्वगंधा पर भी थी कब्जे की तैयारी

सुरेश उपाध्याय ॥ नई दिल्ली

हिंदुस्तानियों की परंपरा में बसी ब्राह्मी पर भी नजरें गड़ा दी गई। लेकिन हल्दी, नीम, पुदीना और कमल की जंग जीतने के बाद केंद्रीय वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) की ट्रेडिशनल नॉलेज डिजिटिल लाइब्रेरी (टीकेडीएल) ने ब्राह्मी के साथ ही अश्वगंधा, चाय की पत्तियों और हल्दी पर कब्जे की विदेशी साजिश को नाकाम कर दिया है।

ब्राह्मी

अश्वगंधा

भारत की दौलत

ठंडे इलाकों में पाई जाने वाली **ब्राह्मी** चटख हरे रंग की होती है। इसका बॉटनिकल नाम बाकोपा मोनिएरी है। याददाश्त बढ़ाने के लिए आयुर्वेद में इसका इस्तेमाल सदियों से होता आया है।

अश्वगंधा का बॉटनिकल नाम विथानिया सोमनिफेरा है। यह ताकत और खूबसूरती बढ़ाने वाली दवा है। इसे गठिया की भी एक अच्छी दवाई माना जाता है। ऐसी ही एक जड़ी जिनसेंग चीन में पाई जाती है।

जेन मैरिनी स्किन रिसर्च इनकॉरपोरेशन अमेरिका की स्किन केयर प्रोडक्ट बनाने वाली कंपनी है। इसने ब्राह्मी, अश्वगंधा, चाय की पत्ती और हल्दी के संयोग से बनाए गए एक स्किन केयर प्रोडक्ट के पेटेंट के लिए आवेदन कर दिया था। कंपनी ने इन चारों को चेहरे की रौनक बढ़ाने के साथ ही झुर्रियां दूर करने वाला बताते हुए यूरोपियन पेटेंट ऑफिस (ईपीओ) में आवेदन किया था।

टीकेडीएल के निदेशक वी. के. गुप्ता बताते हैं कि जेन मैरिनी के इस कदम की सूचना मिलते ही ईपीओ में भारत की ओर से विरोध दर्ज कर दिया गया। ईपीओ को दस्तावेजों और पांडुलिपियों की मदद से बताया गया कि ब्राह्मी, अश्वगंधा, चाय की पत्ती और हल्दी का इस्तेमाल भारत में सौन्दर्य प्रसाधनों के अलावा औषधि के रूप में सदियों से किया जा रहा है। ब्राह्मी याददाश्त को बढ़ाने वाली, कोलेस्ट्रॉल को कम करने वाली और एंटी ऑक्सिडेंट (शरीर से विषैले पदार्थों को निकालने वाली) भी है। हल्दी पर कब्जा करने की एक कोशिश पहले अमेरिका में भी हुई थी। तब एक अमेरिकी कंपनी ने इसे घाव जल्दी भरने वाली दवा में इस्तेमाल करते हुए इस पर अपना कब्जा करना चाहा था। जेन मैरिनी हल्दी को सूजन कम करने वाली बताते हुए इस पर कब्जा करने की फिराक में थी।

जेन मैरिनी ने अपने प्रोडक्ट को पेटेंट कराने के लिए 2006 में आवेदन किया था। इसका विरोध करने में इतनी देरी क्यों हुई? इसके जवाब में गुप्ता बताते हैं कि यूरोपियन पेटेंट यूनियन से भारत सरकार का समझौता जुलाई 2009 में हुआ था और इसके फौरन बाद भारत एक्टिव हो गया। भारत के चैलेंज के बाद जेन मैरिनी को पीछे हटना पड़ा।

July 2010

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP2015761 (Methods and composition for treating sore throat)	
Title	Methods and composition for treating sore throat
Applicant & Country	Naveh pharma 1996 ltd, Israel.
Date of Filing	29-Mar-2007
Date of Third Party observation	24-July-2009
Applicant withdraw his application	15-April-2010
Period between Third Party observation and setting aside Intention to grant	**35 Weeks**

Impact of TKDL & TKDL Access Agreement at EPO

EPO PATENT APPLICATION NO: EP1660106 (Biotherapeutics for mitigation of health disorders from terminalia arjuna)	
Title	Biotherapeutics for mitigation of health disorders from terminalia arjuna
Applicant & Country	Avesthagen Limited , India
Date of Filing	15-Aug-2003
Date of Third Party observation	01-July-2009
Applicant withdraw his application	06-April-2010
Period between Third Party observation and setting aside Intention to grant	**38 Weeks**

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India foils China's bio-piracy bid

Shows Age-Old Use of Pudina, Kalamegha To Stop A Patent On Bird Flu Drug Using Them

Kounteya Sinha | TNN

New Delhi: India has foiled a major Chinese bio-piracy bid to patent the use of medicinal plants 'pudina' (mint) and 'kalamegha' (andrographis) for the treatment of H5N1 avian influenza or bird flu.

The Council of Scientific and Industrial Research (CSIR), with the help of India's Traditional Knowledge Digital Library (TKDL), dug out formulations from ancient Ayurveda and Unani texts, like 'Cakradattah', 'Bhaisajya Ratnavali', 'Kitaab-al-Haawi-fil-Tibb' and 'Qaraabaadeen Azam wa Akmal', dating back to the 9th century, to show that both pudina and kalamegha have been widely used in India since ages for influenza and epidemic fevers. After receiving exhaustive evidence from the CSIR that confirmed India's stand, the European Patent Office (EPO) on June 10 cancelled the decision to grant patent to Livzon, a major Chinese pharmaceutical company, on the medicinal properties of pudina and kalamegha for treating bird flu. It all began when Livzon, on January 19, 2007, filed a patent application at the EPO, claiming the usefulness of pudina and kalamegha for the treatment of bird flu. Impressed with the data, the EPO had on February 25, 2010 decided to grant patent to Livzon. However, on April 27, TKDL director V K Gupta shot off a letter to the EPO informing the examiners that the medicinal properties of pudina and kalamegha have been long known in the Indian systems of traditional medicine. The letter said, "The patent application number EP1849473, titled Chinese traditional medicine composition for the treatment of avian influenza, method for preparation, and application thereof, may kindly be referred to wherein the usefulness of andrographis (kalamegha) and mint (pudina) for the treatment of fever, detoxification and for the treatment of avian influenza, has been claimed to be novel." The letter added, "In the TKDL, there are several references where andrographis and mint are used for the treatment of influenza and epidemic fever. Hence, there does not seem to be any novelty or inventive step involved in the claims made in the above referred patent application."

Following the letter, the EPO set up a three-member panel to study the evidence. On June 10, the panel decided to cancel the Chinese patent claim. TKDL is a collaborative project between the CSIR and the Union health ministry's department of Ayush.

After receiving exhaustive evidence from the CSIR on the use of pudina and kalamegha in ancient Indian formulations to treat bird flu, the European patent office had on June 10 cancelled the decision to grant patent to Livzon, a China pharmaceutical company, on the medicinal properties of the two plants

SECTION

(Whole body of knowledge is divided in eight sections)

- Section Symbol: each section is designated by capital letters A to H.
- Section Title : broad indication of the contents of the section.
- Section Contents : title is followed by the summary of the titles of its main subdivisions.

Example

Section A	:	Human Necessities
Section B	:	Performing Operations; Transporting
Section C	:	Chemistry; Metallurgy
Section D	:	Textiles; Paper
Section E	:	Fixed Constructions
Section F	:	Mechanical Engineering; Lighting; Heating; Weapons; Blasting
Section G	:	Physics
Section H	:	Electricity

Subsection

- Within section, informative heading forms subsections. *Subsections are title without symbol*
- Example:
- Section A : Human Necessities
  — covering the subject matter under:
  - Subsections : Agriculture; Foodstuffs; Tobacco; Personal of Domestic; Articles; Health; Amusement

Classes

- Each section is subdivided into Classes
  - *Class Symbol* : section symbol followed by a two digit number
  - *Class Title :* title gives an indication of the contents of the class
  - *Class Index :* gives an informative summary giving a broad survey of the contents of the class.

Example

Subsection : Agriculture

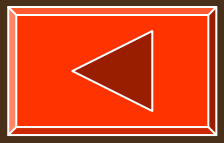
Class A 01 : Agriculture; Forestry; Animal Husbandry; Hunting; Trapping; Fishing

Subsection : Foodstuffs; Tobacco

Class A 21 : Baking; Edible Doughs

Class A 22 : Butchering; Meat Treatment; Processing; Poultry or Fish

Class A 23 : Foods or Foodstuffs; Their Treatment, Not covered by other classes



Subclasses

- Each class has one or more subclass
  - *Subclass Symbol:* class symbol followed by a capital letter
  - *Subclass Title* : indicates as precisely as possible the content of the subclass
  - *Subclass Index :* It is merely an informative summary giving a broad survey of the content of the subclass

Examples

Class A 47— Furniture; Domestic Articles or Appliances; Coffee Mills; Spice Mills; Suction Cleaners; General.

Subclass A 47 B — Tables; Desks; Office furniture; Cabi Drawers; General details of furniture

Subclass A 47 C — Chairs; Sofas; Beds

Subclass A 47 D — Furniture specially adapted for Children

Subclass A 47 F — Special furniture, fittings, or accessory shops, storehouses, bars, restaurants etc.

Groups/Main Groups

- Each subclass is further divided in Groups/Main groups
  - Group Symbol : subclass symbol followed by one-to three digit number, oblique stroke and then number 00.
  - Group Title : defines a field of subject matter considered to be useful for search purposes
  - Example :
    - C01B17/00 — Sulfur; compounds thereof.
    - B01B1/00 — Boiling apparatus for physical or chemical purposes

Subgroup

- Groups/Main groups are further divided into subgroups to make more precise the subject matter of the invention
  - *Subgroup Symbol* : Subclass symbol followed by one-to-three digit no. of its main group, the oblique stroke and then no. of at least two digits other than 00. *Any third or subsequent digit after the oblique is to be understood as decimal subdivision of the digit preceding it.*
  - *Subgroup Title :* it defines a field of subject matter within the scope of its main group. It is further preceded by one or more dots indicating the hierarchical position of that subgroup.

National Regulations & Provisions on Filling of Third Party Observation / Pre-Grant opposition in different Patent Offices

- **European Patent Office**

  Third Party Oppositions can be filed under Article 115 of EPC after the Publication of Patent Application. There is no filling fee and no time limit.

- **United States Patent and Trademark Office**

  Third Party Submission can be filed under 37CFR 1.99 within two months from the date of publication of Patent Application. Also, there is a fee of $180.

- **Intellectual Property Australia**

  Third Party Oppositions can be filed under section 27 of Australian Patent Act of 1990, between open to Public inspection and 3 months after Publication. There is no filing fee.

Cont….

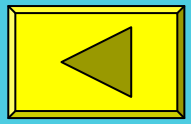
National Regulations & Provisions on Filling of Third Party Observation / Pre-Grant opposition in different Patent Offices

- **Canadian Intellectual Property Office**

  Third Party Oppositions can be filed under section 34.1 of Patent Act, after the Publication of Patent Application. There is no filing fee and no time limit.

- **Japan Patent Office**

  Third Party Oppositions can be filed under Article 13 of Patent law. The Third Party Oppositions can be submitted at any time after a Patent Application is filed and even after grant of Patent. However, any person who neither has an address nor residence in Japan can not take any procedure so it is necessary to appoint an Agent or Attorney in Japan for submitting information. There is no fee involved.



Subgroup Categorization A61K 36/00

S. No	IPC codes	IPC Categories	No. of Subgroups
1.	Algae	A61K 36/02 to 36/05	4
2.	Fungi & Lichens	A61K 36/06 to 36/09	10
3.	Bryophyta	A61K 36/10	1
	Pteridophytes	A61K 36/11 to 36/126	3
	Gymnosperms	A61K 36/13 to 36/17	5
	Angiosperms	A61K 36/18	1
	Dicotyledons	A61K 36/185 to 36/87	148
	Monocotyledons	A61K 36/88 to 36/9068	35
Total			**207**

Other Relevant IPC Symbols

S.No.	DESCRIPTION	No. of IPC SYMBOLS
1.	FLOUR OR DOUGH	6
2.	DAIRY PRODUCTS	7
3.	FOODSTUFFS & NON-ALCOHOLIC BEVERAGES	10
4.	DIAGNOSIS & SURGERY	5
5.	IMPLANT / STENTS	8
6.	DENTAL & TOILETRIES	224
7.	DEVICES	5
8.	THERAPEUTIC / CHEMICAL COMPOUNDS	144
9.	NON-METALLIC COMPOUNDS	20
10.	COMPOUNDS OF METALS	6
11.	COMPOUNDS AINING METALS	29
12.	CARBOCYCLIC COMPOUNDS	6
13.	MACROMOLECULAR COMPOUNDS	5
	TOTAL	475

Cases of Misappropriation Identified and Action taken during 2010

Patent Office	No. of Cases
• United States Patent and Trademark Office	- 196
• Intellectual Property Australia	- 43
• European Patent Office	- 219
• United Kingdom Intellectual Property Office	- 17
• Canadian Intellectual Property Office	- 109
Total	584

Misappropriation of India's TK at International Patent Offices (A61K 36/00) As per current TPO fill Update

Sr. No.	Name	No of patent applications searched
1	Austria	743
2	Australia	1627
3	Canada	994
4	China	1780
5	Spain	638
6	Finland	96
7	Japan	6502
8	Korea	326
9	Russia	57
10	Sweden	80
11	Nordic-Iceland	14
12	Nordic-Norway	184
13	Nordic-Denmark	358
14	EPO	352
15	USPTO	771
Total		14522