



सत्यमेव जयते

भारत सरकार

Government of India

भौगोलिक उपदर्शन पत्रिका

GEOGRAPHICAL INDICATIONS JOURNAL



बौद्धिक सम्पदा
भारत

INTELLECTUAL
PROPERTY **INDIA**

भौगोलिक उपदर्शन रजिस्ट्री

बौद्धिक सम्पदा अधिकार भवन

जी.एस.टी. रोड, गिण्डी, चेन्नै - ६०० ०३२

Geographical Indications Registry,
Intellectual Property Rights Building,

G.S.T. Road, Guindy, Chennai - 600 032.



GOVERNMENT OF INDIA
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OFFICIAL NOTICES

Sub: Notice is given under Rule 41(1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002.

1. As per the requirement of Rule 41(1) it is informed that the issue of Journal 142 of the Geographical Indications Journal dated 16th December, 2020 / Agrahayana 25, Saka 1942 has been made available to the public from 16th December, 2020.

PUBLIC NOTICE

No.GIR/CG/JNL/2010

Dated 26th February, 2010

WHEREAS Rule 38(2) of Geographical Indications of Goods (Registration and Protection) Rules, 2002 provides as follows:

“The Registrar may after notification in the Journal put the published Geographical Indications Journal on the internet, website or any other electronic media.”

Now therefore, with effect from 1st April, 2010, The Geographical Indications Journal will be Published and hosted in the IPO official website www.ipindia.nic.in free of charge, Accordingly, sale of Hard Copy and CD-ROM of GI Journal will be discontinued with effect from 1st April, 2010.

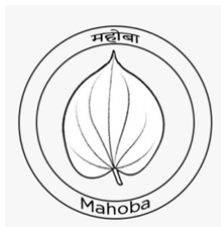
Registrar of Geographical Indications

G.I. APPLICATION NUMBER – 401

Application Date: 05-02-2013

Application is made by Chaurasiya Samaj Sewa Samiti at Pan Mandi, Mahoba, District: Mahoba – 210 407, Uttar Pradesh, India for Registration in Part A of the Register of Mahoba Desawari Pan under Application No. 401 in respect of Mahoba Desawari Pan falling in Class – 31 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

- A) Name of the Applicant : Chaurasiya Samaj Sewa Samiti
- B) Address : Chaurasiya Samaj Sewa Samiti,
Pan Mandi, Mahoba,
District: Mahoba – 210 407,
Uttar Pradesh, India.
- C) Name of the Geographical Indication : MAHOBA DESAWARI PAN



- D) Types of Good : Class 31 - Pan
- E) Specification:

- The green heart shaped leaf of betel vine is known as "*Pan*". Use of Betel leaves is very old tradition in Indian subcontinent. From the ages we know that chewing of Betel leaves are very beneficial for digestive system. Description of Pan or Tambul is mentioned in many old texts such as: from Vatsyan's Kamsutra to Kalhan's Rajtarnagani, from Bhav Praksh to Sushruta Samhita.
- According to the study of numerous Anthropologists, the traces of Betel leaves were said have been found in spirit caves of Northwest Thailand, which dates back to 5500 to 7000 B.C. The oldest historical book of Sri Lanka, 'Mahawamsa' written in Pali talks about the leaves of the Betel vine. There are certain other findings in human skeletons dating back to 3000 BC in countries like Philippines and Indonesia, indicating the use of Betel leaves even before thousands of years.

The traditional practice of chewing Betel leaves has been mentioned in the many pre-historic books of the Indian mythology and the most predominant among them are Raghuvansa written by Kalidas and Kama-Sutra written by Vatsyayana.

In one of the oldest text named Sakta-tantra, Betel leaves have been denoted as one of the important ways of attaining siddhi.

In these ancient texts Betel leaves were referred as Tambulika, Tambuladhikara, Tambuladayini, and Tambuladyaka and so on. Ayurvedic encyclopedias like Charaka Samhita and Sushruta Samhita have also indicated the many uses of Betel leaves. In chapters 28-46

of Sushruta Samhita Betel leaves are described as “aromatic, sharp, hot, acrid and beneficial for voice, laxative, appetizer, beside this they pacify vata and aggravate pitta.”

- These beneficial effects, taste, and aroma are mainly contributed by the essential oil present in the leaves of betel-vine. This oil can be extracted from the leaves by various methods, but the betel leaf oil extractor is an efficient and economic option.
- **Chemistry of Betel leaf oil:** The oil yield may range from 0.09% to 1.1% (wb) depending upon variety, extraction method, pretreatment, curing, agro-climatic conditions, etc. Betel oil is constituted by about 30–60 compounds which include eugenol, isoeugenol, methyl eugenol, safrole, chavicol, hydroxychavicol, chavibetol, anethole, estragole, germecrene-D, etc. The oil possesses good antioxidant and antimicrobial properties at a very low concentration (>0.20 µl/ml), and the susceptible microorganisms include gram-positive and gram-negative bacteria, and fungi, such as *Aspergillus*, *Candida*, *Escherichia*, *Penicillium*, *Salmonella*, *Staphylococcus*, *Streptococcus*, *Vibrio*, etc. species.
- In India Betel vine has many cultivars like: Bangla, Desawari, Kapuri Meetha, Sanchi etc. Desawari cultivar is most common in Madhya Pradesh and Uttar Pradesh.
- As compare to cultivar Bangla, Deswari cultivar has a slightly warm, followed by light sweet taste.
- Leaves of Desawari cultivar yield 0.12 percent (Desi Desawari) to 0.14 percent (Mahoba Desawari) of yellow colored oil.
- The specific gravity of this oil is 1.0002 which is lower then oil of cultivar Bangla but higher then other major cultivars.

Chemical Composition of Betel Leaf Cultivars

Constituent/Cultivar	Desawari
	(mg/g fresh wt.)
Water soluble sugar	21.00
Acid soluble sugar	22.13
Phenol	10.30
Chlorophyll a	0.83
Chlorophyll b	0.71
Total Chlorophyll	1.54
	(Percent dry weight)
Protein	19.56
Nitrogen	3.13
Phosphorus	0.35
Potassium	2.33
Calcium	0.82
Magnesium	0.75
	(Parts per million)
Manganese	54
Copper	20
Zinc	32
Iron	1812

- Desawari cultivar itself has four types: Desi, Mahoba, Malawi and Karuwalli. Among those cultivars of betel vines cultivar Mahoba Desawari is very much area specific. The leaves of Mahoba Desawari are crisper then Desi Desawari.
- **Mahoba Desawari Pan** is a local and traditional cultivar of betel, that is grown in Mahoba District of Uttar Pradesh and parts of adjacent Chhatarpur district of Madhya Pradesh.
- Its leaf is very popular among pan chewers worldwide due to special aroma and very less fibrous soft leaf with almost completely chewable and swallowable material.

- The size of leaf of Mahoba Desawari Pan is much larger than the 'Maghai Pan'. Usually the size leaf of Mahoba Desawari Pan is about 6 to 9 inches in length and 5 to 8 inches in width. In optimum conditions some leaves may grow up to 11 inches in length and 10 inches in width. A normal Mahoba Desawari Pan leaf has 7 veins, with a middle vein and three veins on each side of middle vein. In very rare cases, the number of side veins may increase up to 4 on each side.
- The plant of Mahoba Desawari Pan is a perineal serpentine vine or creeper, which normally grows up to 8-10 feet in height. Normally each vine has 30 to 50 leaves. The harvest begins in month of May-June and continues until the onset of extreme winters during the months of December-January.

F) Description:

In India, Betel leaf plays an important part of culture. Betel leaf was known as Tambul or Pan. In India Betel leaf chewing is in practice from 400 BC. As per different ancient books of Ayurveda, and Charaka, Sushruta Samhitas, and Kashyapa Bhojanakalpa, the practice of chewing Betel Leaf after meals became common between 75 AD and 300 AD. In 13th Century European traveler Marco Polo recorded betel chewing among kings and nobles in India.

Importance of Betel Leaf has been described in many ancient books of Ayurveda. Use of Betel Leaf was known for centuries for its curative properties. In Chinese folk medicine also betel leaves are used for the treatment of various disorders and claimed to have detoxification, antioxidation, and antimutation properties. There are number of research experiments on Betel Leaf, where the leaf extract, fractions, and purified compounds are found to play a role in oral hygiene, and to have various properties including anti-diabetic, cardiovascular, anti-inflammatory/immunomodulatory, anti-ulcer, hepato-protective, anti-infective, etc.

Amino – Acid and Protein Composition (g/100g protein) of Leaves

Amino acid	Desawari
Aspartic acid	12.4
Threonine	6.8
Serine	8.3
Glutamic acid	9.3
Proline	6.6
Glycine	9.6
Alanine	8.0
1/2 Cystine	Tr.
Valine	5.3
Methionine	1.2
Iso leucine	4.9
Leucine	8.3
Throsine	2.8
Phenylalanine	3.7
Histidine	2.0
Lysine	3.8
Ammonia	3.4
Araginine	3.7
Protein δ (dry wt.)	14.8

(Tr – traces, Less than 0.1%)

Physicochemical Characteristics of the Essential Oil

Parameter/Cultivar	Desawari
Refractive Index	1.5104
Specific gravity	1.0002
Specific rotation in alcohol	+4.2
Saponification valus (after the separation of phenois)	118
Phenol content (Percentage)	51.00
Solubility on 90% ethyl alcohol	1:1

Hydrocarbons and Oxygenated compounds in the oil

Cultivar	Desawri
Monoterpene percent	2.82
Sesquiterpene hydrocarbons percent	11.42
Oxygenated compounds percent	75.70

Composition of Essential Oil

Cultivar	Desawari
Percent Oil (Fresh wt.)	0.12
(A) Monoterpenes	
Thujene	-
Camphene	-
Sabinene	-
β- Myrcene	-
β- Ocimene	0.36
Bornylene	-
∞-Pinene	-
Trans β- Ocimene	-
Υ-terpinene	0.51
Terpinolene	-
Allo ocimene	-
Terpinene	-
β- Phellandrene	0.39
Limonene	0.37
p-Cymene	0.35
2,66 Trimethyl	-
1- Methylene	0.42
Cyclo Hex 2 – ene	-
Pinene	0.42
(B) Sesqueter penses	
Υ-Cadinene	1.10
Δ-Cadinene	-
∞-Cadinene	-
β- Salinene	2.57
β- Elemene	2.60

γ-Elemene	0.86
Cis-caryophyllene	3.30
Trans-caryo-	-
Phyllene	-
Aroma dendrene	-
∞-Cubebene	0.46
β-Cubebene	0.53
(C) Oxygenated Compounds	Alcohols
Linalool	0.23
∞-terpineol	0.32
Terpinen – I-OL	-
∞-Costol	-
Δ-Cadinol	-
3,7,11,15 Tetra	-
Methyl – 2 –hexa-	-
Decan – I – OL	-
Geraniol	-
(D) Aldehydes	
Decanal	-
(Capric aldehyde)	
Decanal	-
(Laural aldehyde)	
Stearaldehyde	-
(E) Acids	
Hexadecanoic acid	-
(F) Oxides	
1, 8 cineole	-
Caryophyllene oxide	1.63
(G) Phenol	
Eugenol	20.47
Isoeugenol	-
Chavicol/Chavi betol	-
(H) Phenolic ethers	
Methyl eugenol	1.90
Methyl chavicol	5.81
Anethole	-
1, 3 Benzodioxole	45.34
(5) – 2-Propeny I	-
(I) Esters	
Eugenol acetate	-
Methyl benzoate	-

G) Geographical area of Production and Map as shown in page no: 31

Mahoba Desawari pan is grown in Mahoba District of Uttar Pradesh and parts of adjacent Chhatarpur district of Madhya Pradesh.

H) Proof of Origin (Historical records):

- Since centuries Mahoba Pan been cultivated by very active and progressive 'Tamboli' community of old Chandel Empire. Nowadays this Tamboli society is known as Chaurasia community.
- Betel leaf cultivation is very old tradition of Mahoba area. According to a status report of

MSME, betel cultivation in Mahoba, began in 9th century during era of Chandel kings of Mahoba.

- Mahoba has been famous for its betel leaves cultivation, ever since the first Chandella ruler Chandra-Verman who adopted it as his capital. During the Moghal period the revenue assessment of Mahoba suggests a high degree of prosperity in comparison to the neighbouring 'Mahals'. According to *Ain i Akbari* by Abul Fazal, Mahoba was a major Pan producing center during Moghul era. According to 'Aine-Akbari, it had an area of 82000 Bighas yielding a revenue of over 40,42000 Dams in addition to 12000 Pans (Betel-leaves) to the Moghal Darbar.
- According to, Hamirpur- a Gazetteer being volume XXII of the District Gazetteers of the United Provinces of Agra and Oudh (Author: D.L. Drake-Brockman, Issue Date: 1909), since centuries, Betel-vine was cultivated in Mahoba area of district Hamirpur of United Province and Mahoba Pan was very famous in northern India. Minimum and maximum size of different garden fields of Mahoba Pan was varied between Five Biwas to Two Beeghas. In this document it was also mentioned that, Pan vines were very carefully sheltered from the heat of the sun and the final product (betel leaves) was extremely valuable.
- Different characteristics of betel leaf are mentioned in Bhavprakash. In successive sequence it is mentioned that, Mahoba Pan is the most famous Betel leaf.

I) Method of Production:

Cultivation Practices:

- **Soil Type:** All types of loam, sandy loam or sloping black soil with normal pH would be suitable for betel cultivation. Farmland should never be waterlogged since it will damage the betel vines.
- **Land Preparation:** After ploughing, sufficient quantity of organic manure is mixed in the soil. Then a raised bed is prepared to facilitate drainage from the field.
- **Bareja Construction:** Betel crop is very much susceptible towards extreme climatic conditions and fluctuation. So its cultivation is done in special conservatory that is called as a "Bareja". A traditional Bareja is made up of locally available materials such as bamboos, different stalks etc. Its height is about 6-7 feet. The top roof is covered with thick straw with longitudinally divided bamboo pole or strong wires. The walls and the top are covered with bamboo sticks, straws, stalks leaves even old clothes in order to protect the plants and soil surface from direct sun rays. A strong structure is built, so as to withstand strong winds and storms.
- **Planting material:** Cuttings of stems of betel vine with minimum one node with leaf are used as the propagating materials. Before planting, furrows are constructed. The width of these furrows is about 30 cm. In the furrows, ridges are constructed. In the ridges two rows of budded vine with a mother leaf are planted at 4 inches distance.
- **Spacing:** Row to row spacing of 1.5 feet to 2 feet is required and plant to plant, approximately 6 inches distance is maintained.
- **Irrigation:** Newly planted betel vine plant needs to be watered twice a day with the help of a watering cane or sprinkler. The newly planted bareja is maintained very carefully. Over irrigation is avoided. During the summer season, the new plant is irrigated almost every day and the old plants are watered weekly. During the winter season, irrigation is reduced to once in a fortnight. During rainy season, ordinarily no irrigation is required, unless there are adverse climatic conditions.
- **Fertilizer Application:** In a year, about 200 kg Nitrogen, 80 kg Phosphorus, and 60 kg of Potash is required for the cultivation. So as organic manure: Vermi-compost and Mustard cake, Neem Cake and some other de-oiled cakes are useful. Where as Chemical fertilizers are applied in four split doses. During the application of fertilizer, sufficient moisture in the field is required. Generally, half of the nutrient requirement is supplied through organic source and rest is supplied through inorganic fertilizer. Sometimes Zinc sulphate, Magnesium sulphate and other micro nutrients are also applied.

- **Harvesting:** Harvesting of leaves commences after 75 to 90 days of planting and upon their maturity. They can be harvested throughout the year. Although, it majorly depends upon the season, market conditions, financial condition of the growers and the condition of leaves. In the rainy season, frequent harvesting is carried out.
- **Pest and disease management:** All varieties of betel vine are attacked by a number of pests and many fungal and bacterial infections and they cause different types of diseases to the plant. The most common diseases are foot rot, stem rot, leaf rot and Anthracnose affecting both leaves and different parts of vines. These diseases affect root, stem and leaves to a large extent. Sometimes the affected plant dies suddenly. Among the bacterial diseases, bacterial leaf spot is more common in newly planted crop and bareja. The crop also attacked a lot by red spider mite. White-fly, Mili-bugs are also major pests of betel vine cultivation. For management of pests and diseases, plant protection measure are recommended as following:
Sanitation of Bareja after onset of Monsoon + Drenching of 1% Bordeaux mixture. Soil application of *Trichoderma viride*.
Use of 0.5% Malathion is recommended for pest attacks on betel vine of Mahoba Desawri Pan.

J) **Uniqueness:**

Mahoba Desawri Pan has some special and different characters:

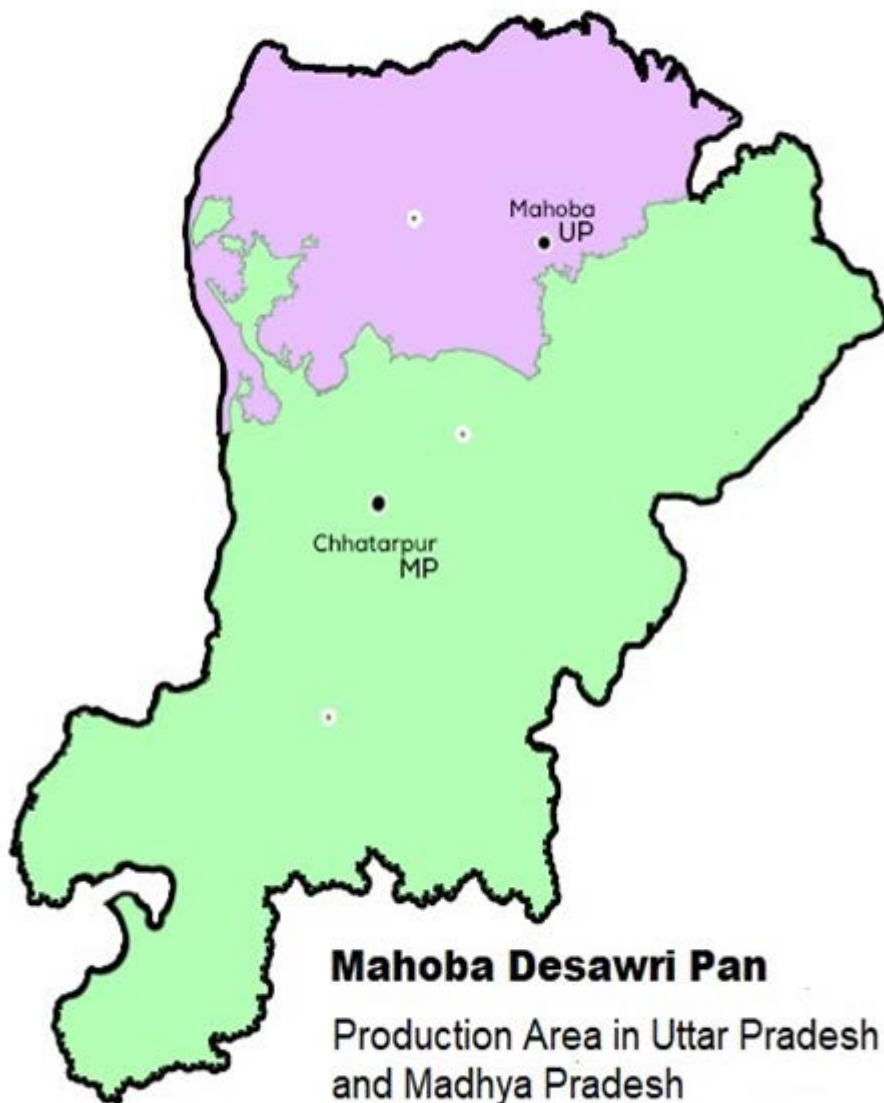
- The size of leaf of Mahoba Desawari Pan is larger than most of the other Betel leaves.
- Leaves of Mahoba Desawari Pan has special aroma which is different from other Betel leaves.
- Mahoba Desawari Pan has very less fibers in its leaf. So its leaf is completely chewable and swallowable.
- The color of Mahoba Desawari Pan is much brighter than other varieties. Its shine is very unique among all the betel leaf varieties.

K) **Inspection Body:**

1. One Representative from District Horticulture department Mahoba.
2. One Representative from Scientist from NBRI
3. One Representative from Jila Panchayat Mahoba.
4. One Representative from Chaurasiya Samaj Sewa Samiti
5. Three farmers of Mahoba Desawari Pan

L) **Others:**

Betelvine is an Important Commercial Crop of India, providing livelihood to hundreds of thousands of families engaged in its cultivation and trade. Nowhere in the world is betel leaf, so greatly valued as in the Indian subcontinent.



General Information

What is a Geographical Indication?

- It is an indication,
- It is used to identify agricultural, natural, or manufactured goods originating in the said area,
- It originates from a definite territory in India,
- It should have a special quality or characteristics unique to the geographical indication.

Examples of possible Geographical Indications in India:

Some of the examples of Geographical Indications in India include Basmati Rice, Darjeeling Tea, Kanchipuram silk saree, Alphonso Mango, Nagpur Orange, Kolhapuri Chappal, Bikaneri Bhujia etc.

What are the benefits of registration of Geographical Indications?

- It confers legal protection to Geographical Indications in India,
- It prevents unauthorized use of a registered Geographical Indication by others.
- It boosts exports of Indian Geographical indications by providing legal Protection.
- It promotes economic Prosperity of Producers.
- It enables seeking legal protection in other WTO member countries.

Who can apply for the registration of a Geographical Indication?

Any association of persons, producers, organization or authority established by or under the law can apply.

The applicant must represent the interest of the producers.

The application should be in writing in the prescribed form.

The application should be addressed to the Registrar of Geographical Indications along with prescribed fee.

Who is the Registered Proprietor of a Geographical Indication?

Any association of persons, producers, organization or authority established by or under the law can be a registered proprietor. Their name should be entered in the Register of Geographical Indications as registered proprietor for the Geographical Indication applied for.

Who is an authorized user?

A producer of goods can apply for registration as an authorized user, with respect to a registered Geographical Indication. He should apply in writing in the prescribed form along with prescribed fee.

Who is a producer in relation to a Geographical Indication?

A producer is a person dealing with three categories of goods

- Agricultural Goods including the production, processing, trading or dealing.
- Natural Goods including exploiting, trading or dealing.
- Handicrafts or industrial goods including making, manufacturing, trading or dealing.

Is registration of a Geographical Indication compulsory?

While registration of Geographical indication is not compulsory, it offers better legal protection for action for infringement.

What are the advantages of registering?

- Registration affords better legal protection to facilitate an action for infringement.

- The registered proprietor and authorized users can initiate infringement actions.
- The authorized users can exercise right to use the Geographical indication.

Who can use the registered Geographical Indication?

Only an authorized user has the exclusive rights to use the Geographical indication in relation to goods in respect of which it is registered.

How long is the registration of Geographical Indication valid? Can it be renewed?

The registration of a Geographical Indication is for a period of ten years.

Yes, renewal is possible for further periods of 10 years each.

If a registered Geographical Indications is not renewed, it is liable to be removed from the register.

When a Registered Geographical Indication is said to be infringed?

- When unauthorized use indicates or suggests that such goods originate in a geographical area other than the true place of origin of such goods in a manner which misleads the public as to their geographical origins.
- When use of Geographical Indication results in unfair competition including passing off in respect of registered Geographical indication.
- When the use of another Geographical Indication results in a false representation to the public that goods originate in a territory in respect of which a Geographical Indication relates.

Who can initiate an infringement action?

The registered proprietor or authorized users of a registered Geographical indication can initiate an infringement action.

Can a registered Geographical Indication be assigned, transmitted etc?

No, A Geographical Indication is a public property belonging to the producers of the concerned goods. It shall not be the subject matter of assignment, transmission, licensing, pledge, mortgage or such other agreement. However, when an authorized user dies, his right devolves on his successor in title.

Can a registered Geographical Indication or authorized user be removed from the register?

Yes, The Appellate Board or the Registrar of Geographical Indication has the power to remove the Geographical Indication or authorized user from the register. The aggrieved person can file an appeal within three months from the date of communication of the order.

How a Geographical Indication differs from a trade mark?

A trade mark is a sign which is used in the course of trade and it distinguishes good or services of one enterprise from those of other enterprises. Whereas a Geographical Indication is used to identify goods having special Characteristics originating from a definite geographical territory.

THE REGISTRATION PROCESS

In December 1999, Parliament passed the Geographical Indications of Goods (Registration and Protection) Act 1999. This Act seeks to provide for the registration and protection of Geographical Indications relating to goods in India. This Act is administered by the Controller General of Patents, Designs and Trade Marks, who is the Registrar of Geographical Indications. The Geographical Indications Registry is located at Chennai.

The Registrar of Geographical Indication is divided into two parts. Part 'A' consists of particulars relating to registered Geographical indications and Part 'B' consists of particulars of the registered authorized users. The registration process is similar to both for registration of geographical indication and an authorized user which is illustrated below:

