

# Medicinal Plants of India: With special reference to Odisha.

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## ABSTRACT

*In rural India, 70 per cent of the population depends on the traditional type of medicine. There are about 45,000 medicinal plant species in India, with concentrated spots in the region of Eastern Himalayas, Western Ghats and Andaman & Nicobar Island. The officially documented plants with medicinal potential are 3000 but traditional practitioners use more than 6000. India is the largest producer of medicinal herbs and is called the botanical garden of the world. Use of plants as a source of medicine has been an ancient practice and is an important component of the health care system in India. General Public, academic and government interest in traditional medicines is growing rapidly due to the increase side effects of the adverse drug reactions and cost factor of the modern system of medicine. It is estimated that about 80,000 species of plants are utilized in some form or other by the different systems of Indian medicine. Plants have been studied on the basis of clearly defined biological parameters like rasa (taste), vipaka (metabolic property), guna (quality), prabhava (biological effect) and virya (potency). The first set of stamps showing medicinal plants came out in 1997. They are - Tulsi (*Ocimum sanctum*), Haridra (*Curcuma longa*), Sarpagandha (*Rauvolfia serpentina*), and Ghritkumari (*Aloe barbadensis*). Arjun Tree (*Terminalia arjuna*) holds a reputed position in both Ayurvedic and Yunani Systems of medicine. According to Ayurveda it is alexiteric, styptic, tonic, anthelmintic, and useful in fractures, ulcers, heart diseases, biliousness, urinary discharges, asthma, tumors, leucoderma, anaemia, excessive respiration etc. According to Yunani system of medicine, it is used both externally and internally in gleet and urinary discharges. Aloe Vera has Vitamins A, B1, B2, B6, B12, C and E. In India, Aloe vera is believed to help in sustaining youth, due to its positive effects on the skin. Eucalyptus oil has medicinal properties - the well known Vicks vapo-rub is made out of eucalyptus oil. Traditionally, eucalyptus oil is known to be a good medicine for relieving nasal congestion in cold. OFDC is currently implementing a project on marketing of NTFP and medicinal plant with the financial assistance of National Medicinal Plant Board, Government of India. Under this project necessary information on marketing are collected computerized documented and disseminated amongst the various stakeholder.*

**Key words:** Medicinal plant, Eastern Himalayas, Western Ghats, Ayurveda, Traditional knowledge, OFDC, NTEP.

## Introduction

There are about 45,000 medicinal plant species in India, with concentrated spots in the region of Eastern Himalayas, Western Ghats and Andaman & Nicobar Island. The officially documented plants with medicinal potential are 3000 but traditional practitioners use more than 6000. India is the largest producer of medicinal herbs and is called the botanical garden of the world. There are currently about 250 000 registered medical practitioners of the Ayurvedic system, as compared to about 700,000 of the modern medicine system. In rural India, 70 per cent of the population depends on the traditional type of medicine, the Ayurveda.

India is a country known for ancient scripts, the number system, invention of zero and Vedas Medicines in India are used by about 60 per cent of the world's population. These are not only used for primary health care not just in rural areas in developing countries, but also in developed countries as well where modern medicines are predominantly used. While the traditional medicines are derived from medicinal plants, minerals, and organic matter, the herbal drugs are prepared from medicinal plants only.

Use of plants as a source of medicine has been an ancient practice and is an important component of the health care system in India. In the Indian systems of medicine, most practitioners formulate and dispense their own recipes; hence this requires proper documentation and research. In west also the use of herbal medicines is growing with approximately 40 per cent of population reporting use of herb to treat medical diseases within the past year. General Public, academic and government interest in traditional medicines is growing rapidly due to the increase side effects of the adverse drug reactions and cost factor of the modern system of medicine.

In India, many forms of alternative medicines are available for those who do not want conventional medicine or who cannot be helped by conventional medicine. Ayurveda and Kabiraji (herbal medicine) are two important forms of alternative medicine that is widely available in India.

Ayurvedic form of medicine is believed to be existent in India for thousands of years. It employs various techniques and things to provide healing or relief to the ailing patients. One of the things that ayurveda uses is medications of plant origin.

With the scripts in the Atharva Veda, we have evidence of a traditional use of medicinal plants that is more than 3000 years old.

It is estimated that about 80,000 species of plants are utilized in some form or other by the different systems of Indian medicine. The knowledge about plants and plant products is detailed, sophisticated, and has evolved into a separate shastra itself, called Dravya Guna Shastra. Plants have been studied on the basis of clearly defined biological parameters like rasa (taste), vipaka (metabolic property), guna (quality), prabhava (biological effect) and virya (potency). The codified traditions have about 25,000 plant drug formulations that have emerged from such studies. In addition to this, over 50,000 formulations are believed to be existing in the folk and tribal traditions. All these point to the deep passion for and exhaustive knowledge about medicinal plants that have existed in this land from time immemorial.

Many herbs and spices are used in Indian cooking, such as onion, garlic, ginger, turmeric, clove, cardamom, cinnamon, cumin, coriander, fenugreek, fennel, ajowan (ajwain), anise, amchur, bay leaf, hing (asafoetida) etc. Ayurvedic medicine uses all of these either in diet or as an medicine. Some of these medicinal plants have been featured on Indian postage stamps.

The first set of stamps showing medicinal plants came out in 1997. The set had four stamps showing four different medicinal plants - Tulsi (*Ocimum sanctum*), Haridra (*Curcuma longa*), Sarpagandha (*Rauvolfia serpentina*), and Ghritkumari (*Aloe barbadensis*).



Continuing with the series that began on 28th October 1997, the Department of Posts now brings out another set of four stamps on the medicinal plants of India. The stamps featuring in this set are on Guggulu (*Commiphora wightii*), Brahmi (*Bacopa monnieri*), Ashwagandha (*Withania somnifera*) and Amla (*Emblica officinalis*).



Guggulu (*Commiphora wightii*) is an armed shrub or small tree found in the arid and semi-arid zones of India, particularly Rajasthan. The oleo gum resin from its stem constitutes an important therapeutic agent used in the treatment of various categories of ailments like neurological conditions, leprosy, skin diseases, heart ailments, cerebro vascular diseases and hypertension.

is found in moist or wet places for treating the diseases of the power. Brahmi-formulations are disorders, constipation and



Brahmi (*Bacopa monnieri*) is a herb that spreads on ground, having fleshy stems and leaves. It all parts of India. Brahmi is useful brain and to improve memory prescribed in rheumatism, mental bronchitis. It is also a diuretic



Amla (*Emblica officinalis*) is a medium sized deciduous tree found throughout India. It yields a globose pale yellow fruit known for its varied medicinal properties. It is regarded as an digestive, carminative, laxative, anti-pyretic and tonic. It is prescribed in colics, jaundice, hemorrhages, flatulence and many other disorders.



Ashwagandha (*Withania somnifera*) is a small or medium sized shrub found in the drier parts of India. It is a nervine tonic, anabolic and aphrodisiac. It is used also to treat general weakness and rheumatism.

**Some of the medicinal plants that we find in India along with their scientific names.**

**Air Plant** (Kalanchoe pinnata/ Bryophyllum pinnatum)  
**Aloe Vera** (Aloe Vera)  
**Amaltas** (Cassia fistula)  
**Apple Mangrove** (Sonneratia caseolaris)  
**Arjun Tree** (Terminalia arjuna)  
**Arni** (Clerodendrum phlomidis)  
**Arrow Leaf Pondweed** (Monochoria hastata)  
**Arrowleaf Dock** (Rumex hastatus)  
**Ashwagandha** (Withania somnifera)  
**Asian Spider Flower** (Cleome viscosa/icosandra)  
**Banchalita** (Leea asiatica)  
**Bandicoot Berry** (Leea indica)  
**Bara Gokhru** (Pedalium murex)  
**Barbados Cherry** (Malpighia glabra)  
**Barringtonia** (Barringtonia acutangula)  
**Bell Weed** (Dipteracanthus prostratus)  
**Bellyache Bush** (Jatropha gossypifolia)  
**Bengal Sage** (Meriandra benghalensis)  
**Bhringaraj** (Eclipta prostrata/erecta/alba)  
**Bichchhoo** (Meriandra benghalensis)  
**Bilimbi** (Averrhoa bilimbi)  
**Bird's Head Birthwort** (Aristolochia ornithocephala)  
**Black Nightshade** (Solanum nigrum)  
**Brahmi** (Bacopa monnieri)  
**Bush Grape** (Cayratia trifolia)  
**Cabbage Palm** (Sabal palmetto)  
**Calabash Tree** (Crescentia cujete)  
**Castor Oil Plant** (Ricinus communis)

### Arjun Tree



The common name is Arjun .Its botanical name is Terminalia arjuna.It belongs to a family called Combretaceae (rangoon creeper family) In Indian mythology, Arjun is supposed to be Sita's favourite tree.. Arjuna is a large, evergreen tree, with a spreading crown and drooping branches. Grows up to 25 m height, and the bark is grey and smooth. Leaves are sub-opposite, 5-14 × 2-4.5 cm in size, oblong or elliptic oblong. Flowers small, white, and occur on long hanging racemes. Fruit is 2.3-3.5 cm long, fibrous woody, glabrous and has five hard wings, striated with numerous curved veins. Flowering time of the tree is April-July, in Indian conditions.

### Some of its medicinal uses are:



Every part of the tree has useful medicinal properties. Arjun holds a reputed position in both Ayurvedic and Yunani Systems of medicine. According to Ayurveda it is alexiteric, styptic, tonic, anthelmintic, and useful in fractures, uclers, heart diseases, biliousness, urinary discharges, asthma, tumours, leucoderma, anaemia, excessive perspiration etc. According to Yunani system of

medicine, it is used both externally and internally in gleet and urinary discharges.

### Amaltas

The common name of this medicinal plant is Amaltas, Golden shower tree, Indian Laburnum. Its botanical name is *Cassia fistula*. It belongs to family called Caesalpiniaceae (Gulmohar family). This native of India, is one of the most beautiful of all tropical trees when it sheds its leaves and bursts into a mass of long, grape-bunches like yellow gold flowers. A tropical ornamental tree with a trunk consisting of hard reddish wood, growing up to 40 feet tall. The wood is hard and heavy; it is used for cabinet, inlay work, etc. It has showy racemes, up to 2' long, with bright, yellow, fragrant flowers. These flowers are attractive to bees and butterflies. The fruits are dark-brown cylindrical pods, also 2' long, which also hold the flattish, brown seeds (up to 100 in one pod) These seeds are in cells, each containing a single seed. A postal stamp was issued by the Indian Postal Department to commemorate this tree.

**Its medicinal uses are:** The sweet blackish pulp of the seedpod is used as a mild laxative

### Asian Spider Flower



The common name of this medicinal plant is Asian spider flower, Yellow spider flower, Cleome, Tickweed, Bagra (Hindi). Its botanical name is *Cleome viscosa/icosandra*. It belongs to family called Capparaceae (caper family). It is usually tall annual herb, up to a meter in height, more or less hairy with glandular and eglandular hairs. Leaves 3-5-foliolate, petiolate; leaflets obovate, elliptic-oblong, very variable in size, often 2-4 cm long, 1.5-2.5 cm broad, middle one largest; petiole up to 5 cm long. Racemes elongated, up to 30 cm long, with corymbose flowers at the top and elongated mature fruits below, bracteate. Flowers 10-15 mm across, whitish or yellowish;

pedicels 6-20 mm long; bracts foliaceous. Sepals oblong-lanceolate, 3-4 mm long, 1-2 mm wide, glandular-pubescent. Petals 8-15 mm long, 2-4 mm broad, oblong-obovate. Stamens 10-12 (rarely more, up to 20), not exceeding the petals; gynophore absent. Fruit 30-75 mm long, 3-5 mm broad, linear-oblong, erect, obliquely striated, tapering at both ends, glandular-pubescent, slender; style 2-5 mm long; seeds many, 1-1.4 mm in diam., glabrous with longitudinal striations and transverse ridges, dark brown.

### Some of its medicinal uses are:

The leaves are diaphoretic, rubefacient and vesicant. They are used as an external application to wounds and ulcers. The juice of the leaves has been used to relieve earache. The seeds are anthelmintic, carminative, rubefacient and vesicant. The seed contains 0.1% viscosic acid and 0.04% viscosin.

### Aloe Vera



The common name of this medicinal plant is Aloe vera, Medicinal aloe, Burn plant, Hindi: Gheekumari. Its botanical name is *Aloe vera*. It belongs to family called Asphodelaceae (Aloe family). Its Synonyms are *Aloe barbadensis*, *Aloe indica*, *Aloe vulgaris*. Aloe, a popular houseplant, has a long history as a multipurpose folk remedy. Commonly known as Aloe vera, the plant can be snapped off and placed on cuts and burns for immediate relief. Aloe vera is a clump forming

succulent whose fleshy gray-green leaves are arranged in a vase shaped rosette atop a very short stem.

The leaves are up to 18 in long and 2 in wide at the base, slightly grooved on top, and terminating in a sharp point. The leaves have small grayish teeth on the margins. The main rosette gets up to about 2 ft high, and the plant continually produces little offset rosettes. In winter and spring, medicinal aloe bears small tubular yellow flowers on branched stalks up to 3 ft tall. The real Aloe vera has yellow flowers, but many of the clones available have orange flowers. Although Aloe Vera is a member of the Lily family, it is very-cactus like in its characteristics.

#### **Some of its medicinal uses are:**

Aloe Vera contains over 20 minerals, all of which are essential to the human body. The human body requires 22 amino acids for good health -- eight of which are called "essential" because the body cannot fabricate them. Aloe Vera contains all of these eight essential amino acids, and 11 of the 14 "secondary" amino acids. Aloe Vera has Vitamins A, B1, B2, B6, B12, C and E. In India, Aloe vera is believed to help in sustaining youth, due to its positive effects on the skin. Hence it is called ghee kunvar or ghee kumaari.

#### **Eucalyptus**



The common name of this medicinal plant is Eucalyptus, Safeda (Hindi) . Its botanical name is Eucalyptus spp. It belongs to family called Myrtaceae (Myrtle Family) .Eucalyptus is a diverse genus of trees (rarely shrubs), the members of which dominate the tree flora of Australia. All eucalypts are evergreen, although some species have deciduous bark. On warm days vaporized eucalyptus oil rises above the bush to create the characteristic distant blue haze of the Australian landscape. Eucalyptus oil is highly flammable (trees have been known to explode) and bush fires can travel easily through the oil-rich air of the tree crowns.

Eucalypts exhibit leaf dimorphism. When young, the leaves are opposite and often roundish and occasionally without petiole. When several years old, the leaves become quite slender and with long petiole.

Eucalyptus flowers typically vary from white, cream, pink, yellow, or red depending upon the species. The flower petals and stamens are fused into a cap called an operculum — as the flower opens the cap is shed. The flowers appear as a fuzzy, cream-yellow ball of stamens. After flowering, hard, woody seed pods develop and are often key to identifying the plant species. Typically, these seed heads remain on the tree until released by fire or the plants

#### **Some of its medicinal uses are:**

Eucalyptus oil has medicinal properties - the well known Vicks vapo-rub is made out of eucalyptus oil. Traditionally, eucalyptus oil is known to be a good medicine for relieving nasal congestion in cold.

#### **Medicinal Plants in Odisha**

OFDC is currently implementing a project on marketing of NTFP and medicinal plant with the financial assistance of National Medicinal Plant Board, Government of India. Under this project necessary

information on marketing are collected computerized documented and disseminated amongst the various stakeholder. We also organize workshop & Seminar to make aware the primary growers, collectors and trader about the pricing and marketing of the NTFP and medicinal plant. Marketing Linkages are also established between growers and traders. A six monthly newsletter on marketing of NTFP & Medicinal Plants is regularly being published from the OFDC under the project.

The project has developed databank on various aspects of marketing of NTFP and medicinal plants and the same has been distributed to thousands of beneficiaries. Under this project a list of NTFP and medicinal plant in Orissa has been prepared. This information are also disseminated among various beneficiaries through our field functionaries.

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#### List of Important Medicinal Plants and their uses

NB: (Fam - Family, T – Tree, H – Herb, C – Climber, S- shrub)

Plant	Common name / Maturity period	Botanical Name or Family	Parts Used	Average Price( Rs. / Kg )	Medicinal Use
	Amla ( T ) After 4th year	Emblica officinalis Fam - euphorbiaceac	Fruit	Rs 15 – 45/kg	Vitamin – C, Cough , Diabetes, cold, Laxativ, hyper acidity.
	Ashok ( T ) 10 years onward	Saraca Asoca Fam : Caesalpinanceac	Bark Flower	Dry Bark Rs 125/kg	Menstrual Pain, uterine, disorder, Deiabetes.
	Aswagandha ( H ), One year	Withania Somnifera Fam: Solanaccac	Root, Leafs	Rs 140/ Kg	Restorative Tonic, stress, nerves disorder, aphrodisiac.
	Bael / Bilva (T)After 4-5 year	Aegle marmelous Fam: Rutaccac	Fruit, Bark	Fruit – Rs 125 / kg Pulp – Rs 60 / Kg	Diarrhoea, Dysentry, Constipation.
	Bhumi Amla ( H), with in one year	Phyllanthous amarus Fam : euphorbiaccac	Whole Plant	Rs 40 / Kg	Aenimic, jaundice, Dropsy.

	Brahmi ( H ) Indian penny worth/one year	Bacopa, Monnieri Fam: Scrophulariaceae	Whole plant	Rs 20 per kg	Nervous, Memory enhancer, mental disorder.
	Chiraita ( high altitude) with in one year ( H )	Swertia Chiraita Fam : Gentianaceae	Whole Plant	Rs 300-350 / per kg	Skin Disease, Burning, sensation, fever.
	Gudmar / madhunasini, after Four year ( C )	Gymnema Sylvestre Fam: Asclepiadaceae	Leaves	Rs 50 –75 per kg	Diabetes, hydrocil, Asthama.
	Guggul ( T) after 8 years	Commiphora Wightii Fam: burseraceae	Gum rasine	Rs 80 – 100 per kg	Rheuma tised, arthritis, paralysis, laxative.
	Guluchi / Giloe ( C ) With in one year	Tinospora Cordifolia Fam	Stem	Rs 20 –25 per kg	Gout, Pile, general debility, fever, Jaundice.
	Calihari / panchangulia Lily Five years	Gloriosa superba Fam: Liliaceae	Seed, tuber	Rs 60	Skin Disease, Labour pain, Abortion, General debility.
	Kalmegh/ Bhui neem ( H ) with in one year	Andrographis Paniculata Fam : scanthaceae	Whole Plant	Rs 12 - 20	Fever, weekness, release of gas.
	Long piper / Pippali ( C ) after two to three years	Piper longum Fam : Piperaceae	Fruit, Root	Rs 100 – 150 per kg Root – 150 per kg	Appetizer, enlarged spleen , Bronchities, Cold, antidote.
	Makoi ( H ) Kakamachi/ With in one year	Solanum nigrum Fam: Solanaceae	Fruit/whole plant	Rs 40 per kg Seed – 200 per kg	Dropsy, General debility, Diuretic, anti dysenteric.
	Pashan Bheda / Pathar Chur ( H ) One year	Coleus barbatus Fam : Lamiaceae	Root	Rs 40-50 per kg	Kidny stone, Calculus.
	Sandal Wood ( T ) Thirty years onward	Santalum Album Fam: santalinaceae	Heart wood , oil	Rs 350 per kg	Skin disorder, Burning, sensation, Jaundice, Cough.

	Sarpa Gandha (H) After 2 year	Ranwolfia Serpentina Fam: apocynaccac	Root	Root – Rs 60 per kg Seed – Rs 300 per kg	Hyper tension, insomnia.
	Satavari ( C ) After 2-3 year	Asparagus Racemosus Family: liliaccac	Tuber, root	Rs 20 –50 per kg	Enhance lactation, general weekness, fatigue, cough.
	Senna ( S ) With in 1 year	Casia augustifolia Fam: Liliaceae	Dry Tubers	Rs 500/kg seed Rs1200/kg dry	Rheumatism, general debility tonic, aphrodisiac.
	Tulsi (perennial) Each 3 months	Ocimum sanclum Fam: Lamiaccac	Leaves/Seed	Leaves Rs 10/kg	Cough, Cold, bronchitis,expectorand
	Vai Vidanka ( C ), 2nd year onward	Embelia Ribes Fam: Myrsinaccac	Root, Fruit, Leaves	Rs 40-50 per kg	Skin disease,Snake Bite, Helminthiasis.
	Pippermint (h) Perennial	Mentha pipertia Fam:Lamiaccac	Leaves, Flower, Oil	-	Digestive, Pain killer.
	Henna/Mehdi ( S ) 1/25 years	Lawsennia iermis Fam: lytharaceae	Leaf,Flower, Seed	L – 50 /kgPowder- Rs75 perkg	Burning, Steam, Anti Imflamatory.
	Gritkumari (H) 2nd-5th yr	Aloe Verra Fam: Liliaceae	Leaves	Fresh L- Rs 5 kgJuice 90 Per Kg	Laxative, Wound healing, Skin burns & care,Ulcer.
	Sada Bahar ( H ) Periwinkle/Nyanta ra	Vincea rosea/ catharanthusRoseus Fam :apocyanace	Whole Plant	R-Rs50 per kgL- Rs 25S- Rs 10 kg	Leukamia, Hypotensiv, Antispasmodic , Atidot.
	Vringraj ( H )	Eclipta alba Fam: Compositae	Seed/whole	Powder-Rs 60/kg	Anti-inflammatory, Digestive, hairtonic.
	Swet chitrak Perennial ( h )	Plumbago Zeylanica Fam: Plumbaginaceae	Root, Rootbar	-	Appetiser, Antibacterial, Aticacer.

	Rakta Chitrak ( H )	Plumbago Indica Fam : plumbaginaceae	Root, Root bar	-	Indyspeipsia, colic, imflammation, cough.
	Kochila ( T )15 yrs	Strychnos nuxvomica Fam: loganiaceae	Seed	-	Nervous, Paralysis, healing wound.
	Harida ( T )	Terminalia Chebula Fam: Combretaceae	Seed	Rs. 80 per K Powder	Trifala, wound ulcer, leprosy, inflammation, Cough.
	Bahada (T)	TerminaliaBellerica Fam:comretaceae	Seed, Bark	Fruit – Rs 20/k Powder- Rs 100/k	Cough, Insomnia, Dropsy, Vomiting, Ulcer, Trifala.
	Gokhur ( H ) CrawlingPuncture Vine/1 yr	Tribulus Terrestris Fam: Lygophyllaceae	Whole Plant	Plant-Rs 10/K Fruit –Rs 15/k	Sweet cooling, Aphrodisiac, appetizer, Digestive, Urinary.
	Neem ( T )	Azardirchata – indica Fam : Mahaceae	Rhizome	Rs 45/k	Sdedative, analgesic, epilepsy, hypertensive.
	Anantamool/sariva ( S ) Indian Sarap sarilla	Hemibi smus Indicus Fam: Asclepiadaceae	Root/ Leaf	Rs 45/k root Rs 90/kPowder	Appetiser, Carminative, aphrodisiac, Astringent.
	Bach ( H ) Sweet Flag/1 yr	Acorus Calamus Fam : araceae	Rhizome	Rs 45/K	Sdedative, analgesic, tpilepsy, hypertensive.
	Vasa ( S )	Adhatoda vesica Fam : Sacanthaceae	Whole Plant	Leaf – Rs 25/ k	Antispasmodic, respiratory, Stimulant.

	Nageswar ( T ) Nag Champa	Mesua Ferrea Fam : Guttiferae	Bark, Leaf, Flower	Flower – Rs 120/k Powder Rs 175/k	Asthma, Skin, Burning, Vomiting, Dysentery, Piles.
	Benachar ( S ) Khus/khus	Vetiveria Ziziinoides Fam : Toaceae / Graminae	Root	Flower – Rs 120/k Powder Rs 175/k	Hyperdisia, Burning, ulcer, Skin, Vomiting.
	Mandukarni ( H ) Indianpennywort	Centella asiatica Fam : Umdelliferae	Whole plant	-	Antiinflammatory, Jundice, Diuretic, Diarrhoea.
	Kaincha/Creeper aidanka	Mucuna Truriens Fam : Fabaceae	Root, Hair, Seed, Leaf	-	Nervous, Disorder, Constipation, Nephroaphy, Strangury, Dropsy.
	Dalchini Perennial Shrub	Cinnamomum Zeylanicum Fam : Lauraceae	Bark, Oil	-	Bronchitis, Asthma, Cardiac, Disorder, Fever.
	Kurai ( S )	Holorheena antidysentrica Fam:apocycaceae	Bark, Seed	-	Scabies, Antipyretic, Amoibic dysentery.
	Kantakari / Akranti Perennial ( H )	Solanum Xanthocarpum Fam : Solanaceae	Whole Plant, Fruit, Seed	-	Diuretic, Antiinflammatory, Appetiser, Stomachic.

**ECONOMICS FOR CULTIVATION OF IMPORTANT MEDICINAL PLANTS**

ECONOMICS FOR CULTIVATION OF IMPORTANT MEDICINAL PLANTS						
Common Name	Botanical Name	Harvest	Yield Qtl/Ha	Price Rs/kg	Approx Cost Rs./Ha	ApproxNet Profit Rs./Ha

Safed Musli ( Tuber )	Chlorophytum	1yr	60Q(wet)12 Q dry	Rs.1200to Rs 2000/ DryRs 500 ( fresh )	62500	1075000
Amla ( Fruit)	Emblica officinalis	3-4Y	50-200 Q	Rs 15-45	10200	60,000 – 2,00,000
Satavari ( Tuber )	Asparagus racemosus	2Y	80-100 Q	Rs 20-50	18,000	1,90,000
Bach ( Rhizome)	Acorus Calamus	1Y	40 Q	Rs 45-50	70,000	50,000
Ashwagandha®	Withamia Somnifera	1Y	7-10Q Dry	Rs 75-100	8,000	32,000
Long Piper ( F/R)	Piper Longum	2-3 Y	15 Q spike	Rs 150	80,000	1,50,000
Sarpagandha (R)	Rowfolfia Serpentina	2 Y	15-25 Q	Rs 50-60	12,500	1,50,000
Brahmi ( herbage )	Bacopa monneri	1 Y	50 Q	Rs 20	35,000	1,65,000
Kalmegh/ Bhuineem	Andrographis Paniculata	1 Y	30 Q	Rs 12-20	15,000	35,000
Senna ( Leaves)	Cassia Augustifolia	1 Y	5-20 kg	Rs 20-25	7,000	30,000
Gudmar ( L )	Gymnema Sylvestre	4 Y	6-10 Q	Rs 30-50	20,000	35-50,000
Sadabahar ( WP)	Catharanthus roseus	1 Y	12-15 Q	Rs 20-25	10,000	12,000
Pashanbheda ( R)	Coleus Barbatus	1 Y	15-20 Q	Rs 40-50	35,000	75,000
Guluchi (stem)	Tinospora Cordifolia	1 Y	10-15 Q	Rs 20- 25	5,000	25,000
Ghritkumari ( L)	Aloe vera	1 Y	150-150 Q	Rs 15-90 Juice	45,000	1,40,000
Kalihari ( S/Tub)	Gloriosa Superba	5 Y	35 Q S/75 Q Tub	Rs 60	2,50,000	10,00,000
Liquorice ( R/UD stem )	Glycyrrhiza glabra	3 Y	75 qd/root	Rs 150	12,000	1,80,000
Baidanka ( R/Seed )	Mucuna Pruriens	1 Y	15-20 Q	Rs 10 - 15	8,500	80,000
Bhui Amla ( W/ Plant )	Phyllanthus Amarus	1 Y	15 Q	Rs 40	5,000	1,50,000
Gugul ( gumresin)	Commiphora wightii	8 Y	20Q gum	Rs 80-100	2,50,000	2,50,000
Makoy ( F/Plant)	Solanum nigrum	1 Y	15 Q	Rs 40	15,000	35,000
Vai Baidanka ( R, F, L)	Embellia Ribes	2 Y	25 Q	Rs 40-50	1,00,000	1,50,000
Ashok ( Bark/F)	Saraca Ashoca	10 Y	20 Q bark	Rs 125	15,000	35,000
Bael ( F,Bark )	Aegle Marmelos	5-6 Y	200-400 Fruit	Rs 25	10,000	1,00,000

**OFDC can console the farmers and traders on following issues:**

- Providing latest prices of medicinal plants.
- Current Demand of Medicinal Species.

- Important Species to be grown up in Orissa.
- Marketing ties up in between buyers and sellers.
- Facilities for preparation of MOU.
- Providing hints for economic calculation of medicinal species in preparation of project/scheme.
- Advises on tips of growing, processing, value addition and all aspects of marketing.
- Facilitate information on marketing through its **marketing information cell**.

### For Medicinal Plant Price

OFDC collect weekly information on prices of NTFP and Medicinal Plant, which may be available for viewer who are interested in trading of NTFP and Medicinal Plant. Any one interested to get information on latest prices of NTFP and Medicinal Plant inside and outside Odisha is required to be **registered**.

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