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## Ethnomedicinal Plants Used in Balasore District of Odisha: A Comprehensive Report

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### ABSTRACT

#### Keywords

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A Survey was conducted with a structured schedule to gather information on traditionally used medicinal plants of Balasore district of Odisha. In addition, some interviews were also conducted with village headman and villagers to gather information. The information gathered was recorded for further studies. Twenty six different indigenous medicinal plant species are being used by rural people. Among them *Ananas comosus* (deworming), *Barleria prionitis* (wounds), *Psidium guajava* leaves and fruit (diarrhea), *Nyctanthes arbor* leaves (fever), *Lawsonia inermis* (Jaundice) etc. are used by the villagers for the cure.

### Introduction

From the time immemorial to the present, herbal medicines have been proved their importance in curing various diseases.

Statistics says that the majority of the population (roughly 80%) of Asia and South and Central America, still use herbal medicine for their primary healthcare (Kamboj, 2000;

Owoabi *et al.*, 2007). It is found that there are many drugs that are prescribed worldwide are of plant origin (Harvey, 1999; Rates, 2001).

Balasore is one of the coastal Districts of Odisha. It lies on the northernmost part of the state. The District is located at 21° 3' to 21° 59' north latitude and 86° 20' to 87° 29' East Longitude. The Balasore district is one of the ethnically blessed district of Odisha.

**Table.1** Representation of various herbal medicines used in Balasore district of Odisha

Disease	Plant used	Scientific name	Common name	Parts used	Procedure of using
1. EAR PAIN	Lemon	<i>Citrus limon</i>	LEMBU	FRUIT	Lemon juice is heated and put in the ear drop by drop for 4-5 drops
	Black tulsi	<i>Ocimum tenuiflorum</i>	KALA TULASI	LEAVES	Leaves are crushed and 4-5 drops are poured in the ear.
2. COUGH	Tulsi	<i>Ocimum sanctum</i>	TULASI	LEAVES	Equal amount of Tulsi leaves, long pepper and honey is mixed and taken orally.
	Long pepper	<i>Piper longum</i>	LABANG	FRUIT	
3. JAUNDICE	Henna	<i>Lawsonia inermis</i>	MANJUATI	LEAF, BARK, ROOTS	Leaf paste/bark decoction/Root paste is taken orally
	Abutilon	<i>Abutilon indicum</i>	PEDI PEDICA	ROOT	Root paste taken orally
4.THROAT CANCER	Ginger	<i>Zingiber officinale</i>	ADA	RHIZOME	Dried ginger is mixed with sugar and honey and taken orally 3 times a day
5. FEVER	Night jasmine	<i>Nyctanthes arbor</i>	GANGASIULI	LEAF	4-5 leaves are taken and grinded and the juice is extracted. The juice is mixed with one teaspoon full of honey and taken orally.
6. COMMON COLD	Tulsi	<i>Ocimum sanctum</i>	TULASI	LEAF	5-6 leaves are taken with one spoon of honey
7.DEWORMING	Pineapple	<i>Ananas comosus</i>	ANARAS/ SAPURI	LEAF	Leaves are crushed and the juice is taken orally
8. DIARRHOEA	Dalimba	<i>Punica granatum</i>	DALIMBA	LEAVES, FRUIT	Leaves/fruit are crushed and take orally
	Guava	<i>Psidium guajava</i>	PIJULI	LEAF, FRUIT	Paste of Leaves or fruits are taken orally
	Tamarind	<i>Tamarindus indica</i>	TENTULI	BARK	Decoction is made out of bark and taken orally
	Basang	<i>Adhatoda vasica</i>	BASANGA	LEAF	Leaves are grinded and the juice is taken orally
	Bel	<i>Aegle marmelos</i>	BELA	LEAF	3-4 leaves are taken orally
	Onion	<i>Allium cepa</i>	PIAJA	ROOT, TUBER	Taken orally
	Brinjal	<i>Solanum melogena</i>	BAIGANA	FRUIT	Goat's gall bladder is taken and inserted inside the roasted Brinjal and taken orally.
9.NIGHT BLINDNESS	Elephant foot	<i>Amorphophallus paeoniifolius</i>	OLUA	ROOT	Roasted elephant foot is taken with salt and mustard oil.
10. PILES	Bel	<i>Aegle marmelos</i>	BELA	LEAVES	Leaves are taken and crushed to extract juice and taken orally
	Indian gingseng/poison gooseberry	<i>Withania somnifera</i>	ASWAGANDHA	BARK	Decoction is made and taken orally
	Pudina	<i>Mentha arvensis</i>	PODINA	LEAF	5-6 Pudina leaves are mixed with 1 gram of ginger and salt and taken orally

11. ANOREXIA	Ginger	<i>Zingiber officinale</i>	ADA	ROOT	Smell crushed onion
	Onion	<i>Allium cepa</i>	PIAJA	ROOT	
12. INSOMNIA	Sushni leaves	<i>Marsilea quadrifolia</i>	SUNSUNIA	LEAF	Cooked leaves is taken
	Callotropis	<i>Callotropis</i>	ARAKHA	MILK	5-6 drops of milk of plant is put in the thumb toe opposite to the eye affected.
13. CONJUCTIVITIS	Pudina/Mentha/Mint	<i>Mentha spp.</i>	PODINA	LEAF	Pudina leaves are mixed with black pepper and to be taken with water
14. ACIDITY	Black Pepper	<i>Piper nigrum</i>	GOLA MARICHA	DRIED FRUIT	Root paste is used applied to the joints
	Rosary pea/crab's eye	<i>Abrus precatorius</i>	RATI	ROOTS	
15. RHEUMATISM	Basang	<i>Adhatoda vasica</i>	BASANGA	LEAF	Crushed leaves are taken and applied to the joints
	Castor	<i>Ricinus communis</i>	JADA	SEED OIL	Seed oil used in the area of pain
	Basang	<i>Adhatoda vasica</i>	BASANGA	LEAF	Leaf paste is used
16. MALARIA	Beggar weed/ angel hair/ love vine	<i>Cuscuta reflexa</i>	NIRMULI	STEM	Paste of stem is taken orally
	Java grass	<i>Cyperus rotundus</i>	MUTHA	ROOT	Root paste is used
	False daisy/bhringraj	<i>Eclipta alba</i>	BHURUSUNGA	LEAF	Leaf paste is taken orally
	Night jasmine	<i>Nyctanthes arbor</i>	GANGASIULI	LEAF	4-5 leaves are taken and grinded and the juice is extracted. The juice is mixed with one teaspoon full of honey and taken orally.
17. HEADACHAE	Coat buttons/ sanjeevani	<i>Tridax procubens</i>	BISHALYAKARA NI	LEAF	Crushed and applied on the wounds and cuts superficially
18. CUTS AND WOUNDS	Black myrobalan	<i>Terminalia chebula</i>	KASA PHALA/HARIDA	FRUIT, BARK	Fruit paste and bark decoction is applied on the wound
	Percupine flower	<i>Barleria prionitis</i>	DASKARENDA	LEAF	Crushed and applied on the wound and cut
	Papaya	<i>Carica papaya</i>	AMRITA VANDA	FRUIT	Crushed to make juice and taken orally
19. TOOTHACHAE	Guava	<i>Psidium guajava</i>	PIJULI	BARK	Decoction is made by taking 100 grams of bark, boiled in 500 ml water. The water has to be boiled till it becomes 125 ml. Then the decoction is used to gargle for 2-3 times a day.
	Bullet wood/ spanish cherry	<i>Mimusops elengi</i>	BAULA	BARK	Decoction is made by taking 100 grams of bark, boiled in 500 ml water. The water has to be boiled till it becomes 125 ml. Then the decoction is used to gargle for 2-3 times a day.
20. MEMORY POWER	Brahmi	<i>Bacopa monnieri</i>	BRMHII	WHOLE PLANT	Crushed to make juice and taken orally

Some of the villages of this district are located in the remote areas, with no easy access to the hospitals for treatment of the patient. Therefore traditionally some plants are being used for the treatment.

There are a few works that has been done on herbal plants in the nearby districts (Ganguly, 2013; Ganguly and Verma, 2015; Panda *et al.*, 2016a, b; Wakchaure *et al.*, 2016; Ganguly, 2017).

### Materials and Methods

A Survey was conducted in 2016-2017 with a structured schedule to gather information on traditionally used medicinal plants of the district. In addition, some interviews were conducted with village headman and villagers to gather information. The information gathered was recorded for further studies.

The detailed information regarding local names, parts used, purpose and procedure of use were collected. The collected information was rechecked by comparing the data collected from nearby villages and were also checked with available literatures (Panda *et al.*, 2016a, b).

### Results and Discussion

The findings are presented in the Table 1.

An effort has been made to document various herbal plants and their procedure of use in various diseases in Balasore district. Twenty six different indigenous medicinal plant species are being used by rural people. Among them *Ananas comosus* (deworming), *Barleria prionitis* (wounds), *Psidium guajava* leaves and fruit (diarrhoea), *Nyctanthes arbor* leaves (fever), *Lawsonia inermis* (Jaundice), *Withania somnifera* (Piles), *Adhatoda vasica* (Rheumatism) etc. are used by the villagers for the cure.

Though the plants are used traditionally, some of these are authenticated by various workers. Others are needed to be authenticated experimentally.

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