

# Traditional Practice of Medicinal Plants in Contai Sub Division, East Midnapur District, West Bengal, India

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## ABSTRACT

The paper deals with excellent information about medicinal practice with indigenous knowledge of rural people in Contai sub division Midnapur (East) district, West Bengal state, India. A total of forty three medicinal plants are practiced for various ailments. The data was collected during our field trips on the basis of interviews, observations and discussions with village elderly persons, local practitioners and women folk. In the study twenty three medicinal species belonging to ten families had been recorded for curing forty four number of diseases. Among of them the most important easily available species found viz. Terminalia arjuna, Coccinia indica, Azadirachta indica, Aegle marmelos, Ocimum sanctum, Adhatoda vasica, Andrographis paniculata, Centella asiatica, Datura metal, Ricinus communis, Ficus bengalensis, Ficus hispida, Cocos nucifera, Cynodon dactylon etc.

**Keywords:** Indigenous knowledge, medicinal plants, Folklore, local practitioners, Contai.

## INTRODUCTION

Medicinal plants play an important role in supporting healthcare system in India. According the world Health Organization (WHO), 80% of the rural population in developing countries utilizes locally available medicinal plants for their primary health care needs<sup>1</sup>. About 8000 species of medicinal plants are in current use by local communities all over India. About 90% of the country's medicinal plants are found in forest habitats<sup>2</sup>. Only Traditional

knowledge Digital Library (TKDL) are repository of 1200 formulations of various systems of Indian medicine, such as Ayurveda, Unani and Siddha and 1500 Yoga postures (asanas), translated into five languages – English, German, French, Spanish and Japanese<sup>3</sup>. Many herbs and minerals used in Ayurveda were described by ancient Indian herbalists such as Charak and Sushruta during the 1<sup>st</sup> millennium BC<sup>4</sup>. The traditional knowledge of medicinal

plants has been recorded in numerous literature<sup>5,6</sup>. In India, there are more than 7000 species, which have been identified as medicinal plants.<sup>7</sup> The medicinal plants have traditionally occupied an important position in the socio-cultural, spiritual and medicinal area of the people and it is generally transmitted orally through a community, family and individuals until collected<sup>8</sup>. Some studies of ethno botany in west Midnapur are available<sup>9</sup> but no such documentation are available in East Midnapur district. Therefore such study was formulated and the aim of the study into record the medicinal plants used in different diseases of rural people of Contai, Midnapur (East) district.

### Methodology

The study was carried out in different blocks of Contai subdivision (21°46'), Midnapur (East) district, about 200 km west from Kolkata of West Bengal. This subdivision (6m elevation) constitutes southern most part of Midnapur district. This area is famous for its tourism, cashew crop, fishing and processing industries. The study was conducted through extensive survey and field observations in different remote villages of Contai sub division. Information was gathered through questionnaire, consultation and interviews with selected knowledgeable persons, local physicians & women folk. During collection of information, local name, useful parts, method of preparation and uses of medicinal plants were noted for relocation of plant in near future. The specifics were identified with help of available literature.

### Enumeration

The rural people of this area use a large number of medicinal plants. The records of collected plants were enumerated with their scientific name, family, local name, method of preparation, mode of

administration and their uses. In the study plant species belonging to families were found to be used for various diseases (Table 1). The rural people mainly used leaf, root, bark, rhizome, stem, fruit, seed and latex of these plants as medicine for various ailments. The reported plants were mostly administered as decoction, extracts, paste, juice and poultice. Of these plants stems and stem barks are used in 09 cases; leaves are used in 18 cases; roots, rhizomes and bulbs are used in 05 cases; seeds and seed oil are used in 08 cases; latex are used in 02 cases and flower is used only in 01 case. See table 1.

### DISCUSSION & CONCLUSION

From the present investigation, it was found that some of medicinal plants have other therapeutic effects which are mentioned in different research paper and Ayurvedic pharmacopoeia. As for examples, *Embolia officinalis* is antioxidant, immune modulator & rejuvenator<sup>10</sup>. *Calotropis procera* latex is reported to contain cardiac steroid glucoside<sup>11</sup>. Fumes of *Curcuma longa* are used during hysteric fits<sup>12</sup>.

Important preparative oil of *paederia foetida* is used for curing paralysis<sup>13</sup>. Oil of *Ricinus communis* is applied externally as emollient in seborrhoeic dermatitis<sup>14</sup>. The active ingredient moringinine of *Moringa oleifera* acts on the sympathetic nerve endings as well as on the cardiac muscles and smooth muscles<sup>15</sup>. *Datura metel* acts as analgesic, antiviral, nematocidal, anthelmintic & antispasmodic<sup>16</sup>. Starch of *Tinospora cordifolia* is used in rheumatism<sup>17</sup>.

Earlier researchers have documented 50 species of plants belonging to 30 families, which are used by the local healers and tribal community of Paschim Medinipur, West Bengal for the treatment of diverse diseases<sup>18</sup>. In this study, the documented 43 species of plants belonging to 37 families are found to be used as

traditional medicines for the treatment of various diseases. Detailed pharmacological studies of these claims are recommended for further study.

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**Table 1.** Medicinal plants used for various ailments

Plant name & family	Local name	Parts used	Uses
Adhatoda Vasica Nees Acanthaceae	Vasak	Leaves	Leaves juice 5 to 10ml intake orally in common cold, cough & fever.
Andrographis paniculata Nees Acanthaceae	Kalmegh	Stem	Stem infusion 5 to 10 ml intake in empty stomach in helminthes.
Centella asiatica Linn Umbelliferae	Thankuni	Leaves	Leaves juice or paste intake in empty stomach in amoebiasis dysentery & diarrhoea.
Curcuma longa Linn zingiberaceae	halud	Rhizome	Tender rhizome intake in diabetes & skin diseases. Dried rhizome paste eaten with hot boiled rice in chronic amoebiasis. Lukewarm Paste of rhizome powder and lime applied locally in traumatic swelling.
Datura metel Linn Solanaceae	Dhutura	Leaves, seeds	Hot Poultice of leaves compressed on the traumatic pain. Seed boiled in coconut oil and applied over body hair to remove lice in cattle.
Eclipta alba Hassk Compositae	Keshunt	Leaves	Fresh juice apply over scalp to promote hair.
Foeniculum Vulgare Mill. Apiaceae	Mouri	fruits	Fruits soaked in water overnight and drank the next morning for acidity, burning micturition & amoebiasis.
Holarrhena antidysenterica Wall Apocynaceae	Kurchi	Stem bark	Fresh bark juice uses in amoebiasis, dysentery.
Moringa oleifera Lam. Moringaceae	Sajina	Leave, Fruits, root bark	Tender leaves & fruits used as vegetables to prevent Chickenpox. Root bark paste applied locally in traumatic swelling & rheumatism.
Ocimum sanctum Linn Labiatae	Tulsi	Leaves	Leaves juice used in common cold, cough, bronchial asthma & fever. Leaves juice with common salt applied locally in pityriasis versicolor. The plant is planted in front of houses to prevent evils.
Ricinus communis Linn Euphorbiaceae	Verenda	Branch, oil	Luke warm oil massaged over abdomen in abdominal flatulence with pain especially in children. Branches used as tooth brush in bleeding gum.
Saraca indica Linn Caesalpiniaceae	Ashok	Stem bark, Flower	Decoction used for menstrual disorder.
Syzygium Cumini Skeels Myrtaceae	Jam	Seed	Seed powder taken for diabetes.
Tinospora cordifolia Miers Menispermaceae	Gulanha	Stem	Tender stem juice taken for diabetes.

Plant name & family	Local name	Parts used	Uses
Zingiber officinale Rosc zingiberaceae	Ada	Rhizome	Tender rhizome paste boiled in water with common salt and then gurgle in sore throat, cough, tonsillitis.
Allium sativum Linn Liliaceae	Rasun	Bulb	Bulb paste boiled in mustard oil and then applied in forehead, throat, ear, nose in common cold, fever, cough, malaise.
Calotropis procera R.Br Asclepiadaceae	Akanda	Leaves	Hot poultice of leaves applied in arthritis rheumatism, traumatic swelling with pain.
Ficus bengalensis Linn. Moraceae	Vata	Latex	3-4 drops latex added in sugar candy is taken in chronic amoebiasis.
Terminalia arjuna W.&A. Combretaceae	Arjun	Stem bark	Bark juice or powder used in heart disease.
Terminalia chebula Retz. Combretaceae	Haritaki	Fruits	Fruits powder taken at bed time in constipation. Fruits soaked in water overnight & then next morning drank for acidity, constipation.
Vitex negundo Linn. Verbenaceae	Nisinda	Leaves	Fresh leaves used as a hot poultice in swelling and arthritis.
Aegle marmelos Rutaceae	Bel	Fruits, leaves	Unripe fruit pulp taken in diarrhoea dysentery, amebiasis, sprue. Ripe fruit pulp used in constipation. Leaves juice with honey is taken for fever.
Momordica charantia Linn. Cucurbitaceae	Karala	Fruits	Fruit juice drank in empty stomach specially for diabetes.
Piper nigrum Linn. Piperaceae	Marich	Seed	Seed chewed with common salt & then swallowed in sore throat, cough, tonsillitis and pharyngitis.
Azadirachta indica Meliaceae	Neem	Leaves, stem bark, oil	Leaves juice applied for chicken pox, measles, skin allergy etc. Stem bark decoction used to wash cut injury, wound, ulcer, boil, eczema, etc. Neem oil applied over ulcer, wound.
Carica papaya Linn. Caricaceae	Penpe	Fruit, latex	Fruit latex mixed with water taken orally to increase appetite. Boiled fruit taken in constipation & jaundice.
Oxalis corniculata Linn. .Oxalidaceae	Amrul	Leaves	Leaves used as vegetables in chronic amoebiasis
Punica granatum Linn. Punicaceae	Dalim	Leaves	Tender leaves juice mixed with honey taken in diarrhea, dysentery, especially in neonates. Fruit cover juice is also used in diarrhea, dysentery of adults.

Plant name & family	Local name	Parts used	Uses
<i>Saccharum officinarum</i> Linn. poaceae	Aakh	Stem	Stem juice taken in jaundice, burning micturition, dehydration.
<i>Coccinia indica</i> W.&A. Cucurbitaceae	Telakucha	Leaves	Leaves juice drank in empty stomach in diabetes.
<i>Cocos nucifera</i> Linn. Palmae	Narkel	Green coconut Water, oil	Green coconut water drank in dehydration. Oil applied over scalp hair to promote hair growth.
<i>Cynodon dactylon</i> Per. Graminae	Durva	Leaves	Leaves juice drank in dysentery. Leaves paste mixed with sugar applied over cut injury.
<i>Emblica officinalis</i> Gaertn. Euphorbiaceae	Amlaki	Fruit	Fruit juice taken in acidity. Fruit juice boiled in coconut oil promotes hair growth
<i>Nyctanthes arbortristis</i> Linn Nyctaginaceae	Shewli	Leaves	Leaves juice mixed with honey drank in fever of children
<i>Cinnamomum zeylanica</i> Blumae. Lauraceae	Dalchini	Stem bark	Stem bark chewed for maintaining oral hygiene & controls foul breath
<i>Paederia foetida</i> Linn. Rubiaceae	Gandal	Leaves	Leaves used as vegetables in diarrhea, amoebiasis & dysentery.
<i>Allium Cepa</i> Linn. Liliaceae	Paianz	Bulb	Crushed onion paste used locally in insect sting.
<i>Carum carvi</i> Linn. Umbelliferae	Kalojira	Seeds	Seeds covered by cloth, rubbed & then inhaled in common cold.
<i>Myristica fragrans</i> Houtt Myristicaceae	Jayphal	Seed	Seeds crushed & boiled in mustard oil & then massaged in the whole body, neck, ear, throat and forehead in common cold.
<i>Mangifera indica</i> Linn. Anacardiaceae	Aam	Fruit	Boiled green mango used as syrup to drink in summer season for avoiding sun stoke.
<i>Bacopa monnieri</i> Pennell. Scrophularaceae	Brahmi	Leaves	Leaves fried in ghee & then eaten to promote memory.
<i>Mimusops elengi</i> Linn. Sapotaceae	Bakul	Stem bark	Stem bark decoction used as gurgling in spongy gum, bleeding gum etc.
<i>Tagetes erecta</i> Linn. Compositae	Ganda	Leaves	Leaves juice applied over cut injury to stop bleeding.