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Londhe DK

Department of Botany,
Vivekanand Arts, Sardar
Dalipsingh Commerce &
Science College, Aurangabad,
Maharashtra, India

Neel RS

Department of Botany,
Vivekanand Arts, Sardar
Dalipsingh Commerce &
Science College, Aurangabad,
Maharashtra, India

Bhuktar AS

Department of Botany,
Vivekanand Arts, Sardar
Dalipsingh Commerce &
Science College, Aurangabad,
Maharashtra, India

Correspondence

Londhe DK

Department of Botany,
Vivekanand Arts, Sardar
Dalipsingh Commerce &
Science College, Aurangabad,
Maharashtra, India

Ethno-medicinal uses of some species of genus *Ipomoea* L. from Maharashtra state

Londhe DK, Neel RS and Bhuktar AS

Abstract

In the present investigation the studies were carried out for the utilization of some species of genus *Ipomoea* L. by the local people and tribes in the treatment of various diseases from Maharashtra. The information regarding their medicinal uses was collected by visiting various localities and from the local practitioners such as vaidoos and elder villagers. The results obtained are very interested and tabulated with their uses and common names.

Keywords: Ethno-medicine, *Ipomoea*, Maharashtra, vaidoos

Introduction

There are over 53 million tribal people in India belonging to 550 communities of 227 ethnic groups (Maikhuri and Gangwar 1993) [4]. These tribal communities draw their sustenance largely from forest for food, medicine and other requirements (Nautiyal *et al.*, 2000) [6]. There are many plant species are been used as medicine from ancient time.

The genus *Ipomoea* L. at the time of immemorial use as, nutritional, medicinal, fodder, as ethno-medical, ritual and agricultural evaluated by chemical studies Pereda-Miranda & Bah (2003) [7]. There are thirteen species used in the Ayurvedic preparations Khare (2007) [3]. Flowers, leaves and pedicels are eaten as a vegetable in Chinese and Malaysian vegetable soup. In Maharashtra 38 species are found (Almeida and Singh 2001; Shimpale *et al.*, 2014) [1, 9]. Among these species 15 species are found useful in ethno-medicine.

Methodology

Frequent visits have been carried out during last four to five years in various seasons to different localities. Collected specimens are preserved as herbarium by using standard method. Herbarium specimens are deposited in the VH Herbarium, Vivekanand Arts, Sardar Dalipsingh Commerce & Science College, Aurangabad. Identification of species was done by using various floras (Santapau, S.J. 1956; Karthikeyan & Kumar, 1993; Naik, V.N. 1998; Singh *et al.*, 2001; Shimpale *et al.*, 2012, 2014) [10, 8, 2, 5] and compared with previous collections available at BSI, Pune, BAMU Herbarium Department of Botany, Dr. Babasaheb Ambedkar Marathwada University Aurangabad. While visiting localities information has gathered from the local practitioners such as vaidoos and elder villagers on utilization of species in various remedies. Field data were collected on plant parts used; its collection, preparation of drugs, its dosage and administration. The local names of the plants were recorded.

Results

While carried out this investigation it was observed that, there are many rural regions in Maharashtra still away from development in transport and medicinal facilities. Even in some serious diseases people rely on plant remedies. Since ancient time vaidoos and elder people in villages, treating patients with folk medicines. There are number of plant species been used in ethno medicine. In present investigation 15 species of genus *Ipomoea* L. found useful in various diseases. In Table-1 these species enumerated with their botanical name, common name, part used and medicinal uses.

Table 1: Ethnomedicinal uses of some species of genus *Ipomoea* L.

S. No.	Name of the Species	Common Name	Part Used	Medicinal Uses
1	<i>Ipomoea alba</i> L.	Shankhpushpi, Sakankali, Moon flower	Leaves, Root bark, Seed, Whole plant	1) Root bark is used as a purgative. 2) Whole herb is used in snakebite. 3) Aerial parts used as anti-pyretic, hypotensive, emollient. 4) Leaves used to treat headache.
2	<i>Ipomoea aquatica</i> Forssk.	Nadishaka, Nalichibhaj, Kalyan, Kadambi, Kalaka	Leaves, Flowers, Whole plant	1) Leaf extract is used as hypoglycaemic, antioxidant, antidiabetic, control jaundice and liver disorders. 2) Flower juice is applied once daily in early morning around the eye to cure black ring around the eyes. 3) Whole plant paste is applied over the body to cure itching. 4) Leaf paste is taken with curd as an antidote for dog bite.
3	<i>Ipomoea asarifolia</i> (Desr.) Romer & Schultes	Bhumilatha.	Leaves, Flower, Stem	1) Leaf extract is used in subcutaneous parasitic infection. 2) Flower used in kidney, diuretic, rheumatism disorder. 3) Stem powder is used in eye treatment.
4	<i>Ipomoea batatas</i> L.	Ratalu, Shakaria, Kanagi, Sweet potato	Leaves, Root.	1) Leaf decoction is used in asthma, burns, catarrh, fever, stomach distress and tumours. 2) Root contain antidiabetic, antioxidant, antiproliferative properties.
5	<i>Ipomoea carica</i> L.	Garvel, Bhaura, Coastal morning glory, Messina creeper.	Leaves, Flower, Whole plant	1) Leaf and flower extract is used as anti-microbial, anti-inflammatory, anti-allergic, cytostatic and anti-oxidant. 2) Whole plant is used in coastal area for jaundice, fever, biliousness, bronchitis, liver complain.
6	<i>Ipomoea carnea</i> Jacq.	Beshram, Bush Morning glory, Mahananda.	Leaves, milky juice.	1) Leaf is used as to treat muscle strain.
7	<i>Ipomoea eriocarpa</i> R.Br.	Raanbhovari, Maalghanti, Tiny morning glory, woolly fruited morning glory.	Leaves, Whole plant	1) Leaves extract is used as anti-inflammatory, anti-arthritis, anti-diabetic. 2) Whole plant used in folk medicine on ulcer, fever and rheumatism.
8	<i>Ipomoea mauritiana</i> Jacq.	Giant potato, Bhui-Kohla.	Leaves, Roots	1) Leaves are useful in diarrhea, female sterility, good for pregnancy and to avoid miscarriages. 2) Root powder is taken orally to control diabetes, hyperlipidemia. 3) Roots useful in gangrenous and neurotic ulcers, venereal diseases.
9	<i>Ipomoea nil</i> (L.) Roth.	Neelpushpi	Seeds	1) Seeds are useful in anti-inflammatory, carminative, depurative, purgative, vermifuge, inflammations, constipation, dyspepsia, bronchitis, fever, skin diseases, scabies and splenopathy.
10	<i>Ipomoea obscura</i> (L.) Ker-Gawl.	Pungali, Pilibonvari, Bokadi, Obscure morning glory.	Leaves, Seeds	1) Leaf juice is administered for Snake bite and dysentery. 2) Seeds are used as cleaning agent, to improve difficult breathing, relieve pain and to improve vision.
11	<i>Ipomoea pes-carpae</i> (L.) R. Br.	Maryada-vel, Patti Lata, Railroadvine.	Leaves	1) Leaves are useful in fatigue, strain, arthritis, rheumatism, menorrhagia, anti-inflammatory, anti-hemolytic, antispasmodic, anticancer activities and skin diseases. 2) Leaves useful in inhibition of platelet aggregation, diarrhea, vomiting and piles.
12	<i>Ipomoea pes-tigridis</i> L.	Panchpati, Vagh-padi.	Leaves, Roots, Whole plant	1) Leaf paste applied twice in a day with coconut oil to cure pimples. 2) Roots are used as an antidote to snakebite and headache. 3) Whole plant is used in hemiplegia and used to treat gripe and malarial fever.
13	<i>Ipomoea purpurea</i> (L.) Roth.	Purple morning glory	Whole plant	1) Whole plant used as laxative, hallucinogen, purgative and syphilis.
14	<i>Ipomoea quamoclit</i> L.	Vishnukranti, Cypress vine, Star glory	Whole plant	1) Whole plant is applied externally on carbuncles. 2) Juice of whole plant used along with other ingredients in case of blood dysentery, piles and body weakness.
15	<i>Ipomoea violaceae</i> L.	Kinarvel, Beach moonflower	Seeds	1) Seeds are used in creation of D-Lysergamide for making psychoactive drugs.

Discussions

The present study showed that numbers of plant species are having medicinal importance in the study region. Among 15 species recording in present investigation eight species viz., *Ipomoea aquatica*, *batatas*, *carica*, *carnea*, *eriocarpa*, *nil*, *obscura* and *quamoclit* are commonly found, *alba*, *pes-tigridis* and *purpurea* are occasionally found, *pes-carpae* is frequently found while *aserifolia*, *mauritiana* and *violaceae* are rarely found in region explored. The traditional healers who prepare remedies also serve as diagnosticians, identifying causes of illness before prescribing treatment. The dose given to the patient depends on age, physical status and health conditions of the patient. The method of

use of plant varies according to nature of disease. In the majority of the cases, a decoction of various parts of plants used is administered for treating a disease or diseases. Most of the decoctions are made just by crushing the plant parts but some are made by boiling plant parts in water, decanting of the liquid and drinking after cooling paste of some plants is plastered to cure pimple and some skin diseases. In the recent years it was observed that traditional knowledge of plants in many communities from this region is changing because of rapid socioeconomic cultural changes. The indigenous knowledge from communities and local peoples regarding uses of these plants needs to be secured. Appropriate mechanisms for effective benefits

sharing of potential values of this knowledge need to be developed. Documentation of this knowledge is valuable both for the communities and their future generations and for scientific consideration of wider uses of the knowledge.

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References

1. Almeida MR. *Flora of Maharashtra*. Thomas Paul Almeida for Blatter Herbarium, St.Xavier's College, Mumbai. 2001; 3B:317-337.
2. Karthikeyan S, Kumar A. Flora of Yavatmal District Maharashtra. Botanical Survey of India, Calcutta. 1993, 163-165.
3. Khare CP. *Indian Medicinal Plants An illustrated dictionary*. Springer publication New York, 2007.
4. Maikhuri RK, Gangwar AK. Ethnobiological notes of the Khasi and Garo tribes of Meghalaya, north east India. *Economic Botany*. 1993; 47:345-357.
5. Naik VN. *Flora of Marathwada*. Amrut Prakashan, Aurangabad. 1998; 1:583-596.
6. Nautiyal SK, Rao Maikhuri RK, Semwal RL, Saxena KG. Traditional knowledge related to medicinal and aromatic plants in tribal societies in a part of Himalaya. *Journal of Medicinal and Aromatic Plant Sciences*. 2000; 23/4A & 23/1A:528-441.
7. Pereda-Miranda R, Escalante-Sanchez E, Escobedo-Martínez C. Characterization of lipophilic pentasaccharides from beach morning glory (*Ipomoea pes-caprae*). *J Nat Prod*. 2005; 68: 226-230.
8. Santapau SJ. *Flora of Purandhar*. Oxford Book and Stationary Co.-New Delhi. 1956, 84-86.
9. Shimpale VB, Kare MA, Londhe DK, Bhuktar AS. On the occurrence of *Ipomoea tenuipes* (Convolvulaceae) in India *Rheedea*. 2014; 24(2):117-119.
10. Shimpale VB, Kshirsagar PR, Pawar NV. *Ipomoea ochracea* (Convolvulaceae) – A new record for India. *Rheedea*. 2012; 22(2):99-102.
11. Singh NP, Lakshminarasimhan P, Karthikeyan S, Prasanna P. *Flora of Maharashtra State. Dicotyledones*. Botanical Survey of India, Calcutta. 2001; 2:454-473.