

## **Ethnomedicinal Studies of Some Weeds in Crop Fields of Marathwada Region, India**

**J.A. Dhole\*, N.A. Dhole\*\* and S. S. Bodke\***

\*Department of Botany, Yeshwant Mahavidyalaya, Nanded-431605

\*\*School of Life Sciences, S.R.T.M. University, Nanded-431606

*Email: [jyotidhole.2008@rediffmail.com](mailto:jyotidhole.2008@rediffmail.com)*

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### **Abstract**

The aim of the present work was the identification and documentation of ethnomedicinal weeds growing in crop fields in the Marathwada region of India ( $70^{\circ} 5' - 78^{\circ} 5'$  E longitude and  $17^{\circ} 5' - 20^{\circ} 5'$  N longitude). Our survey was also aimed at the possibility of discovering new ways by which such plants could be better utilized for the welfare of human health. A total of 20 species of plants representing 18 Genera and 12 families were collected. In addition to the first hand collection of ethnomedicinal information from the inhabitants of the area, additional traditional uses were obtained through a study of the pertinent literature. Our results suggest the weeds of these fields were mostly ones which were common, unwanted and easily grown in any place. However, our results also show that there are many ways of properly utilizing such weedy species in the promotion of human welfare. Moreover, the collection of these medicinal weeds provided farmers with a most welcomed additional income.

**Key words:** Weeds, Ethnomedicinal weeds, survey, Marathwada region.

### **Introduction**

Plants are generally rich sources of many natural herbal products which have mostly used for human welfare especially in tonic to loss of viability or debility and also reduce the human pain and suffering many diseases. The World Health Organization (WHO) has estimated that up to 80% of the world's populations rely on plants for their primary Health care (Ramesh, 2008; Akaneme et al., 2008). From the ancient period man has been used several different plants to cure the all body pain and different diseases. Now a days throughout the world several thousands of plants mostly weed plant are medicinal but very few drug plant are cultivated (Upma Dobhal et al., 2006). Many of the drugs used in modern medicine were initially used in crude form in traditional uses and other useful biological activity (Iwu et al., 1999).

On the literature most drug obtained from weeds plant various phytochemical survey are now seen as the first step towards the discovery of useful drugs now the tropical rain forests have been identified as a potential source due to diverse richness in flora. (Ikram, et.al, 1998)

In India many unwanted plants so called weeds. Weeds are very common, dominant and wide spread in the crop fields. In India particular in Marathwada region of the Maharashtra state, diversity of unwanted plant in crop fields is vary common, dominant and easily available. Marathwada region comprising of seven districts viz.

Aurangabad, Beed, Jalna, Latur, Nanded, Osmanabad and Parbhani forms the part of the vast Deccan plateau of India and its located at 70° 5'-78° 5' E longitude and 17° 5'-20° 5' N longitude. Weeds also occupy almost all open spaces. They spread like wildfire and grow abundantly in the crop fields, forest and roadsides. Weeds are growing all types of weather conditions but the monsoon is most conducive for their growth. The weed diversity in the crop fields would be great rich source of medicines and drugs. The local people will be able to make an extra profit by selling the medicinal weeds.

## Methodology

Weed was collected in different crop fields of Marathwada region. The collected plants are identified by using "The Flora of Marathwada" (Naik, 1998), Flora of Bombay presidency (Cooke, 1958); Flora of Maharashtra (Almeida, 1996). The herbarium was prepared, labeled and stored in the herbarium of the department. The identified weeds were further studied for their medicinal value or properties. In India particular in Marathwada region of the Maharashtra state, diversity of unwanted plant in crop fields is vary common, dominant and easily available. But proper utilization of such weeds plant particular welfare of human beings is least reported. Department of Botany Yeshwant Mahavidyalaya, Nanded got the information was gathered by contacting the farmers ,local peoples, hakims, well aged people, vaidyas, Aurvedic doctors were interviewed to knowledge of the Ethnomedicinal uses of these weed plants and used different reference books literature (Retnam *et.al.*,2006; Dhiman,2006; Dyamock *et.al.*,2005; Prajapati *et.al.*,2003; Jain,1991; Khare,2004) .

## Result and Discussion

Out of 57 studied problematic weeds, 18 weeds are of medicinally important and used as cure many different diseases. All the weeds are arranged in their Vernacular name, Botanical name, family and Ethnomedicinal uses summarized as following Table no. 1. Weeds are tremendously grow in crop fields and these problems are almost always face the every farmer but now a days these problematic, unwanted weeds can one of the major additional source of the Ethnomedicinal importance of the human diet. These weeds are also used vaidyas for different formulation and maximum pharmaceutical industries to synthesis different drug from weeds. those plant we call the unwanted weeds now in future that plant we will have been call edible food or medicinal plant and they are not going to cut and cultivate fields. therefore, automatically increase the biodiversity of weeds and used for the welfare of human health and will be able to cure different major and miner diseases.

**Table no. 1. - List of Medicinal Weeds.**

Sr.no.	Botanical name	Local name	Family	Uses
1.	<i>Commelina bengalensis</i> L.	-	Commelinaceae	Plant juice is given in dysentery and paste applied to treatment of pimples and blisters on breast.  (K.Raveendra Retnam et al.2006)
2.	<i>Solanum nigrum</i> L.	Kakamachi	Solanaceae	Leaf paste and fruit decoction is given to treat rabies. Leaf preparation in

				the form of a soup is taken for treatment of diabetes, scabies, itching, ulcer, and constipation and heart problems. Root and leaves decoction are given to treatment of fever and urinary disorder, whole plant paste is used as emollient, diuretic and laxative. The root powder is mixed with honey and given to treatment of hiccups (K.Raveendra Retnam et al, 2006).
3.	<i>Solanum xanthocarpum</i> L.	Kantakari	Solanaceae	Root is used to treatment of cough, asthma, chest pain.leaves is good treatment for piles. fumigation with vapour of burning seeds is treatment of relieve toothache(S.P. Agharkar,1953).
4.	<i>Physalis angulata</i> L.	Popti	Solanaceae	Fruit are diuretic and whole plant is used to treatment of diabetes, Rhumatism, diarrhea, vomiting, asthma in children, stomah disorders (Gill, 1992).
5.	<i>Phyllanthus amarus</i> Schumach and Thonn.	Bhue awla	Euphorbiaceae	The whole plant juice is mixed with goat milk and taken internally for 3 to 4 days to cure jaundice. The plant is used as antiseptic, astringent, diuretic, febrifuge. Whole plant used to treatment of liver infection, diaerhoea, dropsy. Whole plant paste and given along with buttermilk on empty stomach in the morning to treatment of diabetes (William Dymock, 2005).
6.	<i>Euphorbia hirta</i> L.	Dudhi	Euphorbiaceae	Leaf paste is given to expel intestinal worms and to treat- ment of intestinal wounds and it is

				<p>also used as vermifuge. Decoction obtained from plant powder given to cure kidney disorders, dysentery, asthma, colic, urogenital tract. Regenerates skin, emollient antiparasite, anti-inflammatory, antimutagenic, antiviral, antibiotic, diuretic (Ramesh et al,2008)</p> <p>The plant latex is used to applied to treatment of warts.( Jigna PAREKH et al,2006)</p>
7.	<i>Euphorbia heterophylla</i> L.	Dudhani	Euphorbiaceae	The leaves are used in traditional practices as anticonvulsant, laxative, migraine and wart cures (Rodriguez, 1976).
8.	<i>Alternanthera sessilis</i> L.	-	Euphorbiaceae	Plant is bitter sweet, astringent, digestive and cure the diarrhoea, leprosy skin diseases and fever (Narayan Das Prajapati et al, 2003).
9.	<i>Portulaca oleracea</i> L.	Ghol	Portulacaceae	It contains many active biological compounds. It is edible because good source of food nutrients. It is used as bactericide and anti-inflammatory (Leung and Foster, 1996).
10.	<i>Oxalis corniculata</i> L.	chengeri	Oxalidaceae	If it is taken with one teaspoonful juice of <i>Oxalis corniculata</i> quick results are seen and within 2 to 3 days, improved appetite. Whole plant used to treatment of fever, indigestion, chronic dysentery and also useful to patients who are suffering from insomnia (Khare,C.P, 2004)
11.	<i>Bacopa monnieri</i> (L.) Wettst	Nir Brahmi	Scrophulariaceae	Nir brahmi is an important tonic for mental diseases and nervous disorders also used to treatment of urinary tract infections, high blood pressure, blood

				diseases, rheumatism, hepatitis. Antibiotic, antifungal properties are present which make it useful in healing of wounds. Leaf juice is helpful to promote the urination. In leaf juice mixed with honey once day on empty stomach to cure epilepsy. a poultice of the boiled plant is placed on the chest in acute bronchitis and children cough(William Dymock,2005);
12.	<i>Argemone maxicana</i> L.	vilayati	Papaveraceae	Plant latex used to treatment of eczema, skin diseases, psoriasis, eyes to control white patches in the eye. Very small doses of plant latex are used to treatment of jaundice. Argemone seed oil mixed with mustard oil, these are used to treatment of ulcers, skin eruptions, scabies and headache. Seed is used to antidote to snake venom. smoke of seed treat to relieve toothache(Indranil Bhattacharjee, 2006)
13.	<i>Rungia repens</i> L.	-	Acanthaceae	Leaf paste used to treatment of eczema, skin diseases, very good antidote for snake bite and scorpion sting. it also used to treatment of cure fever and cough(K Ravindra Retnam, 2006).
14.	<i>Cleome viscosa</i> L.	Piwali tilwan	Cappiridaceae	Leaf is boiled with ghee and applied to treatment of wound. Leaf juice is dropped inside the ear ache and leaf juice also used to treatment of deafness. Leaf paste is applied to reduce the swellings seed decoction

				is used to control of gastric problems. it contain glucoapparin and gluoleomin (songsak and lockwood, 2002)
15.	<i>Cassia tora</i> L.	tarota	Caesalpiniaceae	Root and leaf paste are applied all skin diseases, eczema, acne, psoriasis, boiled and cuts. leaf paste applied as prepare a good plaster to treatment of bone facture. Seed paste is mixed with lime juice to treatment of ring worms(William Dymock, 2005)
16.	<i>Merremia gegantica</i> L.	Undirkani	Convolvulaceae	Leaf and root decoction is given to treatment of malaria, urinary disorder, rheumatism, leucorrhoea constipation and root and leaf paste applied to cure rheumatic swelling and piles(William Dymock, 2005)
17.	<i>Eclipta prostrate</i> L.	maka	Asteraceae	Leaf extract used to head to relieve dandruff and to naturally blacken gray hair. leaf juice boiled with coconut oil ,cooled and these oil used to treat headaches and to promote hair growth. Plant decoction is used to treatment of jaundice, fever, urinary infections, liver enlargement (Anil Kumar Dhiman, 2006).
18.	<i>Tridax procumbens</i> L.	Jakhamjudi	Asteraceae	Leaf juices are applied over the cuts and wounds as antiseptic. The leaf paste are mixed with equal amount of turmeric paste is used to treatment of all skin infections. Whole plant used to treatment of piles. 3cm length cut root are used for inducing abortion up

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