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Full Length Research Paper

Important medicinal plants with Anti-cancer properties in Mahabubnagar district, Telangana State

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The present paper documents revealed the traditional knowledge of medicinal plants that are used by the indigenous villagers residing in remote areas of Mahabubnagar district of household remedies. An ethno botanical survey was conducted to gather information about utilization of Plant resources for a treatment of cancer prevalent in tribal habitations of Mahabubnager district, Telangana state. In the present paper ten Plant species belongs to nine different families were used to treat in Cancer have been enumerated with vernacular names, scientific names, families, useful parts and habitats. These ten plant species were also used in ayurvedha, siddha, unani, homoeo and naturopathic medicines.

Key words: Medicinal plant, vernacular name, leaves, anti cancer, Mahabubnagar.

INTRODUCTION

India is the largest producer of medicinal plants. These medicinal plants besides having many natural medicinal values also provide food and shelter. Plants are less costly, easily available and there is no side effect. So in recent years, the use of traditional medicine has been increasing throughout the world. The knowledge of these medicinal plants is inheriting orally from generation to generation in tribals. The role of medicinal plants in resolving health problems is invaluable on a global level. Mahabubnagar district has one of the oldest and richest cultural traditions of using medicinal plants. The rural people of the district still depending on the traditional ethno medicine for their day to day primary health care. Several ethno botanical investigations have been conducted to explore its vast ethnomedicinal plant lore (Ammon, et al. 1993; Khan, 2009; Satish et al. 2012). The present investigation is an attempt to investigate the ethnomedicinal plants used in the district for the purpose of cancer disease.

MATERIALS AND METHODS

The authors have conducted an extensive field survey in the tribal belts and other interior villages adjoining forest areas in the district to collect ethnobotanical lore. First hand information was gathered through interactions with tribal and rural people including members of forest protection committees. Further interaction sessions and workshops were held at Amarabad and Balmmor blocks of this district where local baidyas were also invited to tap the information of medicinal plants commonly used by these traditional healers by questioners. Medicinal properties of plants were Learned through informal interviews. A number of group discussions were also conducted during the period of investigation. To ascertation the uses of these medicinal plants the earlier published scientific literature sources (Jain, 1991; Kirtikar and Basu, 1991; Ambasta et al. 1992; Chopra et al.1996).

RESULT AND DISCUSSION

The plants used for anticancer are enumerated with their vernacular name scientific name, family, useful parts and habitat were mentioned in table-1.

A total number of 10 plants of 9 families are reported to be used in anti cancer at Mahabubnagar district, Telangana state, India. Euphorbiaceae (Figure 1h&1J) contains the maximum number of species (two), followed by Araceae (one) (Figure 1a), Acanthaceae(one) (Figure 1i), Annonaceae(one) (Figure 1c), Asclepiadaceae(one)

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Table 1. List of some medicinal plants containing anticancer properties.

S.No	Vernacular name	Scientific name	Family	Useful parts	Habitat
1	Wekhanda, Sweet flag	*Acorus calamus*	Araceae	Dried rhizome and roots	Semiaquatic, aromatic herb with creeping rhizome and tuberous roots
2	Kadu-phal, Garudphal	*Anamirta cocculus*	Menispermaceae	Leaves, fruits, and seeds.	Extensive climber
3	Sitaaphalla	*Annona squamosa*	Annonaceae	Fruits, leaves roots and seeds.	Large evergreen straggling shrub with globose fruit. Seeds are brownish black
4	Kurki, Raktapushpa	*Asclepias curassavica*	Asclepiadaceae	Flower and roots	An errect simple or much branched perennial under shrub
5	Neem, Margosa	*Azadirachta indica*	Meliaceae	Flower, leaves, bark, seeds, and oil	Large evergreen tree.
6	Punarnawaa	*Boerhaavia diffusa*	Nyctaginaceae	Whole herb	Diffusely branched, pubescent, glabrous, prostrate herb
7	Saalaee, Shallaki.	*Boswellia serrata*	Burseraceae	Gum	Medium to large-sized, deciduous balsamiferous tree
8	Amla	*Emblica officinalis*	Euphorbiaceae	Dried fruit, seeds, leaves roots, bark and flowers	Medium sized deciduous tree
9	Kollasundaa, Gokshura	*Hygrophilia spinosa*	Acanthaceae	Roots, seeds and leaves	An erect stout herb, stem thickened at nodes, axillary branches reduced into spines.
10	Chiniyerandi	*Jatropa multifida*	Euphorbiaceae	Sap	Large shrub.

(Figure 1d), Burseraceae(one**)** (Figure 1g), Meliaceae(one) (Figure 1e), Menispermaceae(one) (Figure 1b) and Nictaginaceae(one) (Figure 1f). Among the plant parts whole plant preparation has been found most popular followed by leaf, root, rhizome, fruit, aerial parts, sap and gum.

Ethnobotanical uses of many of the above mentioned botanicals and their pharmacological potentials have been supported by the literature (Mazumdar et al. 1997; Hostanska et al. 2002; Khar Ashok et al. 2004; Thakkar, 2010; Harris and Ruddock, 2012). Nandu Kanande and Pankaj Kushwash (2014) have noted in a particular, some novel use of certain medicinal plants used in cancer treatment.

The information provides enough incentive to study the active principle involved in the potential crude drugs with promising therapeutic properties used by the adivasis. There is a need to take up the pharmaceutical and phytochemical investigations in order to obtain potential remedies. The knowledge of active constituent in indigenous plant drugs may lead to substantial improvements in traditional phytotherapy.

Figure 1. (a) *Acorus calamus* (b) *Anamirta cocculus* (c) *Annona squamosa* (d) *Asclepias curissavica* (e) *Azadirachta indica* (f) *Boerhaavia diffusa* (g) *Boswellia serrata* (h) *Emblica officinalis* (i) *Hygrophilia spinosa* (j) *Jatropa multifida*

CONCLUSION

A critical study of 10 species which have anticancer properties of Mahabubnagar district have been recorded. So they have in need to be conserved and utilized. As the global interest towards traditional medicines over conventional treatment is increasing, due to safe and well tolerated remedies provided by the people for the chronic illness with lesser side effects. This review targets these above medicinal plants as a potentially safe and effective plants that has important medicinal values and benefits.

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