

Wild edible plant resources of Harda District , Madhya Pradesh, India

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ABSTRACT

Harda district is located in south western part of Madhya Pradesh and it is covered by Satpura hill ranges ,extended part of Malwa plateau and Narmada valley. Harda district shows rich vegetation due to its unique phytogeographical position and variable topography .It has 3 sub division namely Khirkia, Harda and Timarni. Present study reveals 59 plant species which are used as edible foods by tribals and local inhabitants.. In all 59 plants, 23 plants are utilized as edible fruits,36 plants are used as vegetables and seeds of 7 plants are used as food during famine or drought.

Key words: Harda, phytoresources, Satpura, Malwa plateau and Narmada valley.

INTRODUCTION

In rural areas majority of people are still depend on wild plants for their various requirements. The variety of plants has been used by tribals and people residing in the remote areas of Harda district. They are well familiar with the local flora occurring in their surroundings.

Harda district is located in south western part of Madhya Pradesh and it lies between 21⁰ 54' -22⁰36' North latitude and 76⁰46' – 77⁰ 30' East longitudes. It has 3 tehsils namely Khirkia, Harda and Timarni. The southern part of the district is covered by Satpura hill ranges and extended of Malwa plateau and Narmada valley make the area unique. As per 2011 census the total population of the district is 570302. The tribals of this area include Korkus, Takur, Gound, Gujar, Vishwakarma, Jat, Bhil and Bhilala. The area is dominated by Korku tribe and Gond. The Harda district is drained by Narmada river and its tributaries. The other major tributaries of the Narmada river draining the district are Ajnal, Sukani , Midkul, Dendra, Machak, Syani, Kalimachak and Ganjal river. Soil of the area is characterized by red and black alluvium and lateritic soils. These soils are commonly known as black soils. Some part of the area is covered by sandy clay loam soil .The normal rainfall of the Harda district is 1470.222 mm.

Literature survey of wild edible plants of MP reveals that the study area is little known on wild edible plant resources. (Alawa et al,2016 ; Jadhav, 2011; Kapale, 2013; Jain et al,2012; Sandya et al,2015.).

MATERIALS AND METHOD

Systematic plant survey was carried out during 2012- 2015. Plant collection was carried out by standard method (Jain and Rao 1977) .Plant specimen were identified with the help of flora of Madhya Pradesh (Verma et. al. 1993;Singh,2001et al;Mudgal et al ,1977), flora of Marathwada (Naik 1998), flora of Indian Desert (Bhandari, 1977),and available literature. All the plant specimens have been deposited in the herbarium of PMB Gujarati Science College,Indore

RESULT AND DISCUSSION

During present study it was noted that the inhabitants especially of farming communities in rural parts consume certain wild plants in raw or cooked form. Flowers and fruits are usually consumed raw while leaves and other vegetative parts are mostly cooked. These are the main ingredients in their diets. Usually during famine it is used as complementary to main food stuff. Present study reports 59 plant species which are used as vegetables , fruit and cereals. These plants are distributed in 46 genera and 35 families. It is recorded that diferent plant parts (leaves, underground parts and flowers) of 36 species are used as vegetables followed by 23 plants as fruits and seeds of 7 plant species are consumed as food grains. The wild edible plant resources of the area understudy have been enlisted under various category.

1. Fruits: *Aegle marmelos* (L.) Correa, *Annona reticulata* L., *Annona squamosa* L., *Buchanania cochinchinensis* (Lour.) M. R. Almeida, *Citrullus colocynthis* (L.) Schrad., *Cucumis prophetarum* L., *Dioscorea pentaphyla*,L., *Diospyros melanoxylon* Roxb., f., *Ficus racemosa* L., *Ficus virens* Aiton, *Grewia abutilifolia* Vent. ex Juss, *Grewia damine* Gaertn., *Grewia flavescens* Juss., *Grewia hirsuta* Vahl., *Grewia sapida* Roxb. ex DC., *Grewia tenax* (Forssk.) Fiori., *Grewia tiliifolia* Vahl., *Mangifera indica* L., *Phoenix sylvestris* (L.) Roxb., *Phyllanthus emblica* L., *Pithecellobium dulce* (Roxb.) Benth., *Solanum torvum* Sw., *Syzygium cumini* (L.) Skeels, *Syzygium salicifolium* (Wight) J. Graham, *Tamarindus indica* L., *Ziziphus jujuba* Mill, *Ziziphus nummularia* (Burm. f.) Wight & Arn., *Ziziphus oenopolia* (L.) Mill., *Ziziphus xylopyrus* (Retz.) Willd.etc.

2. Vegetables

a. Rhizomes / tubers: *Amorphophallus bulbifer* (Roxb.) Blume, (Dennst.), *Amorphophallus cochinchinensis*, *Cheilocostus speciosus* (J.Koenig) C.D.Specht,*Chlorophytum arundinaceum* Baker, *Chlorophytum tuberosum* (Roxb.) Baker, *Curculigo orchoides* Gaertn., *Curcuma angustifolia* Roxb., *Curcuma decipiens* Dalzell, *Dioscorea bulbifera* L., *Dioscorea hispida* Dennst., *Drimia indica* (Roxb.) Jessop, *Eleocharis dulcis* (Burm.f.) Trin. ex Hensch., *Gloriosa superba* L., *Tacca leontopetaloides* (L.) Kuntze

b. Leaves and tender shoots: *Amaranthus cruentus* L., *Amaranthus spinosus* L., *Amaranthus tricolor* L., *Amaranthus viridis* L., , *Cocculus hirsutus* (L.) Theob., *Dendrocalamus strictus* (Roxb.) Nees, *Ipomoea aquatica* Forssk., *Melochia corchorifolia* L.,, *Nymphoides indica* (L.) Kuntze, *Ottelia alismoides* (L.) Pers., *Oxalis corniculata* L., *Oxystelma esculentum* (L. f.) Sm., *Pergularia daemia* (Forssk.) Chiov., *Phyla nodiflora* (L.) Greene, *Persicaria glabra* (Willd.) M. Gomez, *Polygonum plebeium* R.Br., *Portulaca oleraceae* L., *Portulaca quadrifida* L., *Senna tora* (L.) Roxb.and *Sesbania sesban* (L.) Merr. etc.

c. Flowers: *Bauhinia purpurea* L., *Bauhinia racemosa* Lam., *Celastrus paniculatus* Willd., *Indigofera cassioides* DC., *Madhuca longifolia* var. *latifolia* (Roxb.) A. Chev., *Nelumbo nucifera* Gaertn., *Pergularia daemia* (Forssk.) Chiov., *Semecarpus anacardium* L.f., and *Woodfordia fruticosa* (L.) Kurz.

3. Seeds as cereals: *Amaranthus viridis* L., ,*Amaranthus cruentus*, *Penisetum pedicelatum*,*Coix*

aquatica Roxb., *Eleusine coracana* (L.) Gaertn., *Oryza rufipogon* Griff., *Paspalum scrobiculatum* L., *Benth.*, (Gaertn.)

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