

Full Length Article

Traditional knowledge of broom preparation from Bhor and Mahad region of western Maharashtra, India

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ABSTRACT

Traditional method of broom making is still practice in the world. Brooms are very useful in cleaning floor, farm yard and separating grain during threshing. Present study was carried out in Bhor and Mahad regions of western Maharashtra and recorded 11 plant species used for broom preparation during the threshing time. Documentation of such plant resources may be useful for eco-friendly and easily degradable.

Key words: Broom preparation, Bhor region.

INTRODUCTION

Traditional knowledge and wisdom of the local people is very important to document our heritage. Traditional agriculture exists worldwide in all communities covering varied areas. Agriculture and natural resource management are of prime importance to know the agro-ecosystem of the region. Asia in general and India in particular has a unique distinction with respect to this area. A large amount of what may be considered as traditional knowledge pertaining to agriculture has today been destroyed and replaced due to modern agricultural practices. In case of developing world, Africa and Latin America are also rich in traditional knowledge. Asia in general and India in particular have a distinct traditional knowledge which is found not just as oral tradition but also in form of classical literature which is written down with its own theoretical framework and with a clear exposition of the basic principles of world views. It is high time to work on traditional agriculture for strengthening and revitalization of sustainable agriculture based on traditional knowledge and wisdom in various parts of India. During this process, we have also explored, understood and

built upon the symbiotic relationships existing between the folk knowledge and classical knowledge particularly with respect to agriculture (Swaminathan, 1996: Patil *et al.*, 2014)

Plants used in household products are one of the most interesting ones and it is not always easy for species to be identified. Brooms have been used for cleaning houses, ovens, fireplaces, yards, streets, as ritual tools as well as for some special functions since ancient time. Brooms were domestically produced and hand-made of tree branches, brushes, etc. The broom was an important tool in keeping the living area clean. Unfortunately, dust and ashes are part of life and perfect brooms do not exist. But since ancient times people's ambition to create better and better brooms has brought rich experience of used plants and brooms. This knowledge was passed on from generation to generation and so came to us.

For economic reasons, keeping cleanness in houses, areas around houses, farmyards, streets, etc. brooms are a daily necessity. Together with the use of technical instruments for cleaning streets and yards, brooms are still in use.

Planting raw material and broom manufacture continue in present days. A broom is a cleaning tool consisting of stiff fibres, some shrubs belonging to different families. In Western European countries some prominent plants mainly used are *Chamaecytisus*, *Cytisus* and *Genista* species. The plants belonging to these genera show similar dense aerial parts, very small leaves and slender green stems (Nedelcheva et al., 2007).

The Latin specific name "scoparius" means broom-like (Stearn, 2004). In different parts of the world, the plants used for brooms are called after the name of the relevant country or region: Spanish broom (*Spartium junceum* L., syn. *Genista juncea* (L.) Scop.), also known as Weaver's broom; Scotch broom (*Cytisus scoparius* (L.) Link); Atlas broom (or Moroccan broom or Pineapple broom) (*Argyrocytisus battandieri* (Maire) C. Raynaud, syn. *Cytisus battandieri* Maire); Provence broom or Spanish Gold Hardy Broom (*Cytisus purgans* (L.) Boiss.); Portuguese broom (*Cytisus multiflorus* (L'Hér.) Sweet), French broom (*Genista monspessulana* (L.) Johnson) etc. In each country or district the most frequently used plant for making brooms is called Common broom or Broom.

Home-made brooms and broom making craft are disappearing. The principal reasons are realities of the modern life: loss of the specific tasks and places which they were used. In recent years brooms are made with polymer material and they are not used in traditional farming system in rural areas.

In different regions of Maharashtra state brooms are prepared with locally available plant material. Documentation of these resources have not given attention in past. In this respect, Bhor and Mahad regions of Western Maharashtra surveyed for traditional agricultural practices and recorded brooms plants used for different operations which includes house holds as well as agriculture.

MATERIALS AND METHODS

The research was carried out in two tehsil from western Maharashtra of India.. The study area Bhor and Mahad covering an area of 892.0 sq. km. and 810 sq. km respectively.. Bhor is situated 54 km south of Pune and between 18°45' N latitude and 73° - 73°15' E. longitude. Bhor region has 185 villages and total population is 1, 54, 903. Mahad region is situated 120 km west of Bhor and

between 18° 5' N latitude and 73° 25' E. longitude. Mahad region has 182 villages and total population is 1, 85000. Larger part of the study area includes neighbouring in geographic placement countries that have historical and cultural relations as well and mutually influence. The data are collected mainly from Bhor and Mahad of western Maharashtra. The study was carried out within the course of two years (2007–2012).

A brief questionnaire, referring to the vernacular name, plant description, providing specimens from the plants and brooms, details on their use has been prepared and applied. This region is populated with communities like *Maratha*, *Kunbi*, *Mahadeokoli*, *Dhanger*, *Harijan*, *Katkari* etc. Survey was carried out from 109 informants belonging to 41 villages from Bhor and 74 informants from 35 villages from Mahad were interviewed. Most of the communities depend upon agriculture as a main occupation. Information was documented by using Participatory Rural Appraisal (PRA) techniques like observation and discussion.

The plant nomenclature is given according to Flora of Maharashtra (Sharma et al 1996, Singh and Kartikayan, 2000, Singh et al 2001). Confirmation of specimens was made with the help of AHMA herbarium. All field notes are documented on herbarium sheets. All specimens are given AHMA number and deposited at AHMA (Agharkar Herbarium of Maharashtra Association recognized by Kew), Agharkar Research Institute, G.G. Agarkar Road, Pune - 411 004, Maharashtra State, India.

RESULTS AND DISCUSSION

Brooms are prepared from different plant sources. Soft brooms from shrubs or herbs are used to clean several places inside the house as threshing floor, cellar, kitchen, oven, fire place,, etc. The function of broom is to clean floor. While performing agricultural operations in threshing yard, the grains are separated from waste threshing material. Twigs with leaves are very useful for this operation

Local classifications are result of daily experience of people using brooms. They called them soft and hard brooms, big and small brooms; depending on the type of plant part they are used. Names are given according to their use (yard broom, home broom, threshing-floor broom, etc.).

Table: Plant resources used for Brooms

Sr.No.	Local Name	Botanical Name	Family	Plants part used	Locality
1	Nirgudi	<i>Vitex nigundo</i> L.	Verbenaceae	Branches	Bhor
2	Koshir	<i>Jasminum malabaricum</i> Wt.	Oleaceae	Branches	Bhor
3	Mehandi	<i>Lawsonia inermis</i> L.	Lythraceae	Branches	Bhor& Mahad
4	Coconut	<i>Cocos nucifera</i> L.	Arecaceae	Leaf vein	Mahad
5	Necha	<i>Pteridium</i> sp.	Pteridophyta	Whole plant	Bhor
6	Khulkhuli pala	<i>Crotalaria calycina</i> Schrank	Fabaceae	Branches/whole plant	Bhor
7	Rantur	<i>Cajanus lineantus</i> (Wt. & Arn.) van der Maesen.	Fabaceae	Branches	Bhor
8	Shel/Sindi	<i>Phoenix sylvestris</i> (L.) Roxb.	Arecaceae	Branches	Bhor& Mahad
9	Davani	<i>Artemisia japonica</i> Thunb.	Asteraceae	Branches	Bhor& Mahad
10	Chikankhadii	<i>Sida acuta</i> Burm.f.		Branches	Bhor& Mahad
11	Rametha	<i>Gnidia glauca</i> (Presen.) Gilg.	Thymelaeaceae	Branches	Bhor& Mahad

The broom prepared from *Phoenix sylvestris* (L.) Roxb has been used in house cleaning and it has cultural as well as aesthetic value. Even some people prepared broom from *Thysanolaena maxima* grass (Gupta 1986). The total number of species used as brooms in study areas are 11, belonging to Verbenaceae, Lythraceae, Arecaceae, Fabaceae and Thymelaeaceae, Malvaceae, Oleaceae families from localities of Bhor and Mahad. Some plants belonging to Pteridophytes are available in western ghat region and easy for broom preparation. India has different tribal communities residing in remote places and using plant resources for broom making. Making a broom is more than a plain activity, it is an art. The observations gained on a broom plant are subsequently used in the production of eco-friendly and easily degradable form. In this connection European countries use panicle of *Sorghum bicolor* for industrial broom manufacturing.

As a result high species diversity of vascular plants in the research areas is established. It shows ecological, geographical features and different cultures associated with the variety of plants traditionally used as broom. They are used according to the specific characteristics of the areas are important for documentation of ethno-botanical knowledge.

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