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Evaluating awareness level regarding Mahua flowers and its culinary practices among postgraduate students: Jharkhand, India

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Abstract

Mahua is a native plant of India. This tree belongs to the family sapotaceae and the major species of genus *Madhuca* found are *Madhuca indica* and *Madhuca longifolia*. Jharkhand (the land of trees) is a state of India rich in its forest resource is blessed with large population of Mahua trees. Mahua tree has a Holi identity among trees and it is worshipped by the Tribal population of Jharkhand. It is used for many culinary preparations and is used for medicines. Young generations engaged in their own wonderland bother less about their traditional treasure if not motivated towards preserving the cultural and food heritage will end up losing many values and real transfer of the knowledge would not be passed to the next generation. The present study is an attempt to fulfil this gap in knowledge. It was found that the persons belonging to rural areas specially tribal areas were having well knowledge about this very plant and its recipes, medicinal and spiritual values.

Keywords: Mahua, tribal tradition, nutrition practices, culinary heritage, Jharkhand, India

Introduction

Mahua is one of the important trees of Central India including Jharkhand. Jharkhand has got an appreciable population of Mahua trees and it plays an important role in the socio economy of this state. Jharkhand has a large population of Mahua trees in its forests which occupies almost 21% of the total land of the state (Forest Report Jharkhand). Mahua tree is a fast growing tree that grows up to approximately 20 meters in height. The flowers are used to produce an alcoholic drink, but the flowers can be used to prepare various recipes and are also used by the tribal and non tribal population. Many parts of mahua are also used for its medicinal properties. It is considered as a holy tree by the tribal population. Mahua is a deciduous tree of dry region and native of India. The tree produces edible flowers and fruits during March to May. Collection of Mahua flowers and fruits is one of the most important sources of employment for the poor population. Mahua flowers are a good source of carbohydrates, proteins, minerals and vitamins. Various scientists worked on the utilization of Mahua and its practices. Hedge, Gunaga and Thakur (2019)^[1] worked on current trends and future prospects for utilization of mahua resources and found that the mahua is utilized for edible fruit pulp, medicinal uses, flower for edible and fermented products, leaves for fodder, oil for biofuel & by products and seed oil for cooking.. Ravi Shrey *et al.* (2018)^[2] conducted a research on economic impact of Mahua on tribal livelihood and its marketing in Chhattisgarh and stated that Mahua flowers provided 5.98 hrs of active work in a day and 22 days of employment and Mahua seeds provided 4.47 hours of active work in a day and 12days of employment. Ismaile *et al.* (2013) conducted a survey among Malaysian chefs and revealed that the young generation do not have a positive attitude and awareness regarding their traditional cuisine. Hence the Malaysian chefs deny to serve these. Young adults are more influenced by fast food ready made food and packaged and processed food. This leads to deviation from their family food and food practices. Traditional recipes have gained their identity through years of research and practices through culinary wisdom of the older and more older generation.

So, the present study was undertaken to check the awareness regarding mahua tree and mahua flower as a source of nutrition among the young adults who are generally the girl students who

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are going to be the future homemakers or the nutrition expert or decision makers of the family regarding nutrition.

Material and Methods: Survey method was done for carrying out the research. Students of post graduation were approached for evaluating awareness regarding mahua flowers as it was accessible to the researcher for the study purpose. For easy handling of the data in the pandemic period google form was selected as a tool of collecting data. The

structured questionnaire was divided into two parts-Demographic information of the respondents and their awareness. Questions were asked regarding existence of mahua plant., edible parts of mahua plant, Importance of Mahua tree, Spiritual and medicinal importance of mahua tree. The knowledge and awareness about the mahua trees (as shown in plate 1) and recipes (as shown in Plate 2) and their taste was also tested.

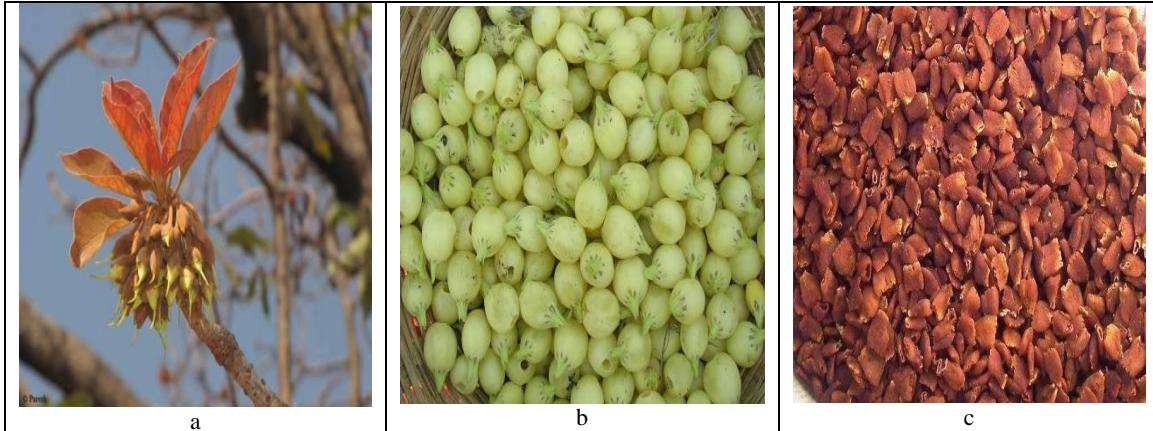


Plate 1: a. Mahua flower at flowering stage. b. Mahua flower dropped down from the tree c. Sun dried Mahua flowers.



Plate 2: Recipes of Mahua flower

Result

The result of the research is presented in the form of bar diagram, pie charts and graphs.

Part I - Demographic Information of Respondents

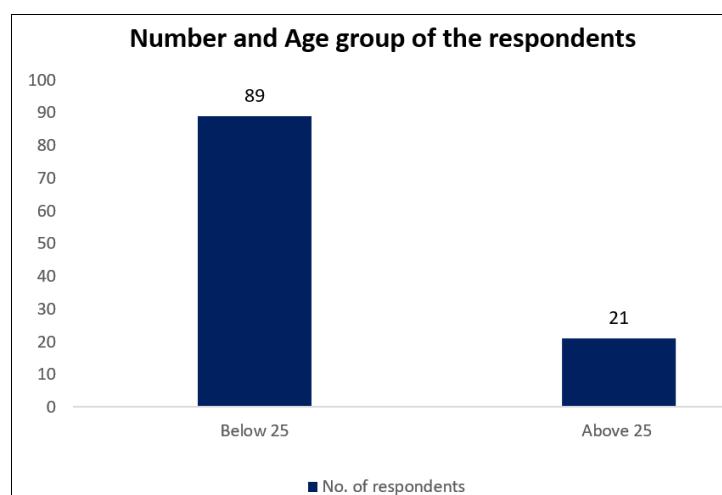


Fig 1: Number and age group of the respondents

The age of respondents varied from 20 years to 31 years. Majority of students were in the age group 20-22. Seventy nine (79%) respondents were below 25 years and (21%) were above 25 years of age.

Ninety one point three percent respondents (91.3 %) were

females and 8.7% respondents were male. Among the respondents 92 percent respondents belonged to non- tribal community while % of the respondents belonged to tribal community. 75.6 % of the respondents were living in urban area while 24.4% of respondents were living to rural area.

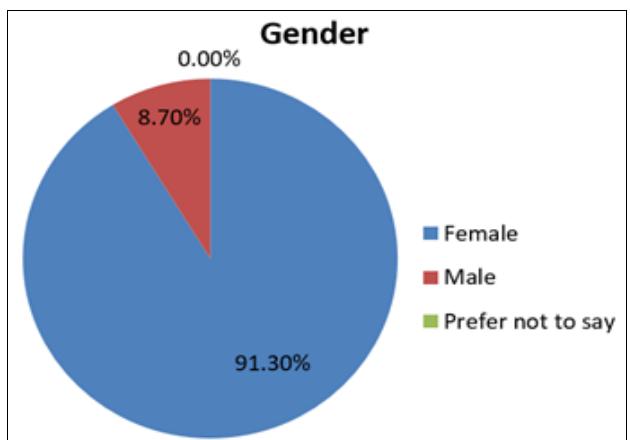


Fig 2: Gender of respondents

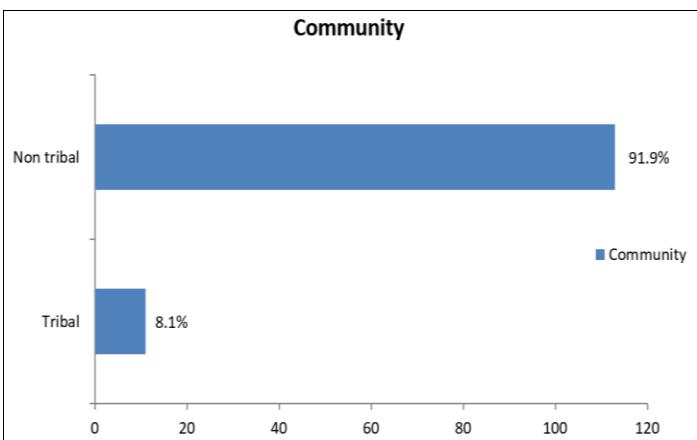


Fig 3: Community of the respondents

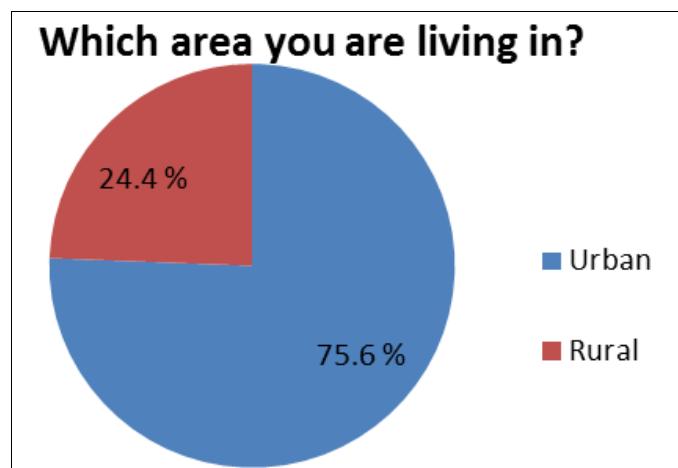


Fig 4: Living area of respondents

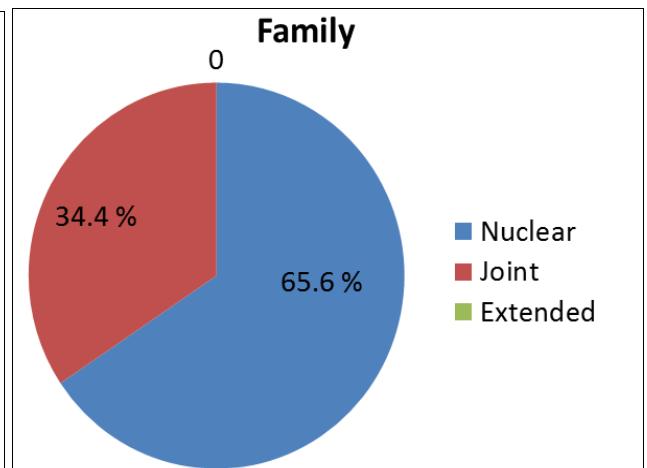


Fig 5: Family Type of respondents

Sixty five point six percent (65.6%) respondents belonged to nuclear family and thirty four point four percent (34.4%) belonged to nuclear family.

Part II- Awareness regarding mahua flower among postgraduate students

Fifty seven point five (57.5%) respondents answered that they can recognize Mahua trees and 42.5% respondents

answered that they can not recognize mahua trees. The respondents were asked whether they know about what are the parts of mahua tree which are edible. Fifty one point three percent (51.3%) respondents answered that both mahua flower and fruits are edible, 23.5 % respondents answered that mahua fruits are edible 17.4% respondents answered that mahua flowers are edible and only 7.8 respondents answered that other parts are also edible.

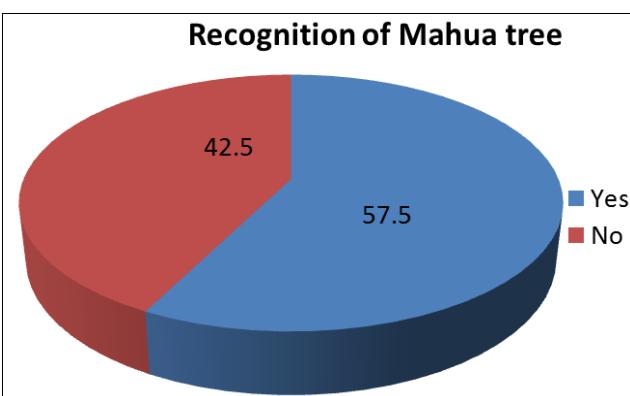


Fig 6: Recognition of Mahua Tree

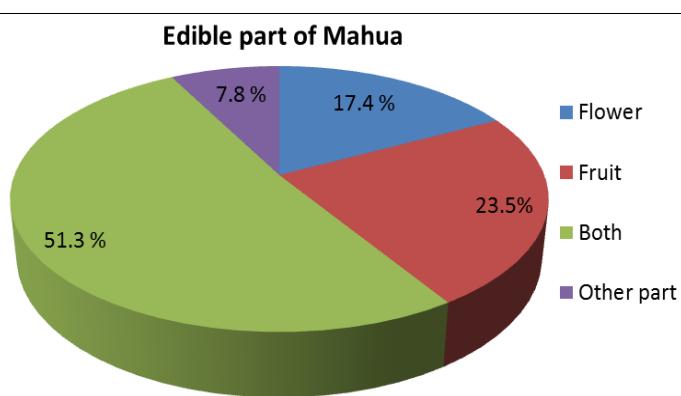
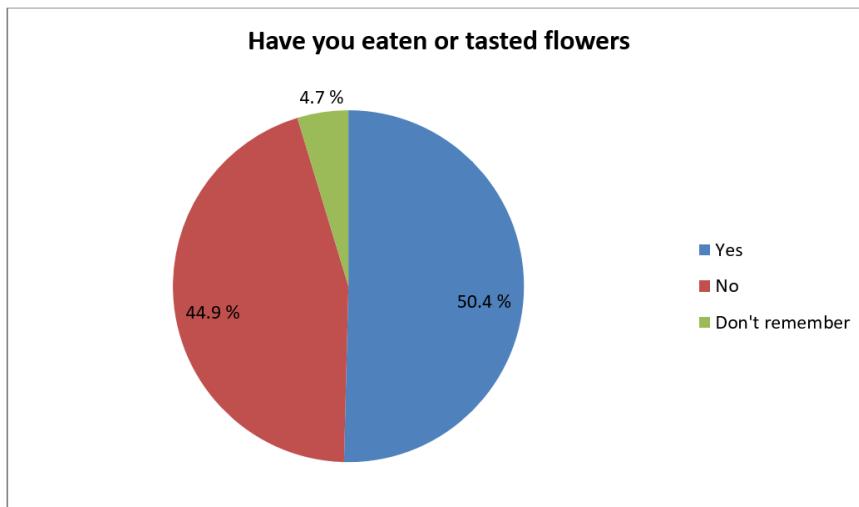
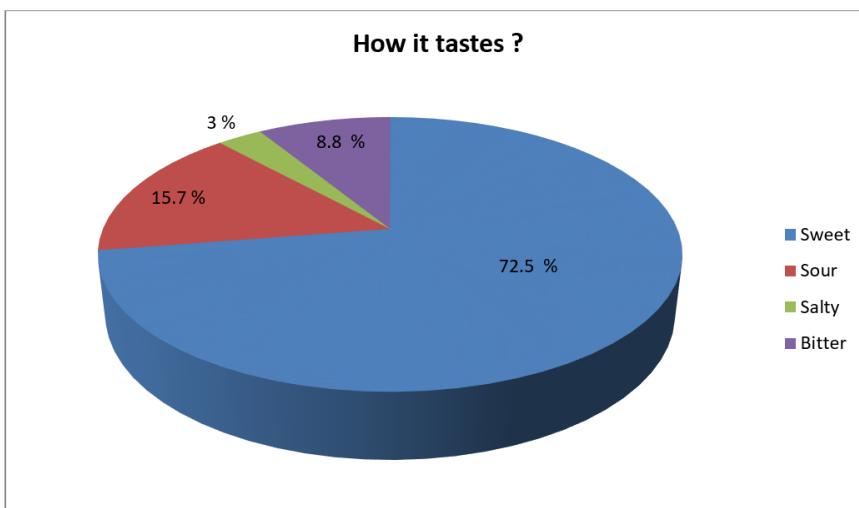


Fig 7: Edible parts of Mahua plant

**Fig 8:** Respondents who has tasted mahua flower.

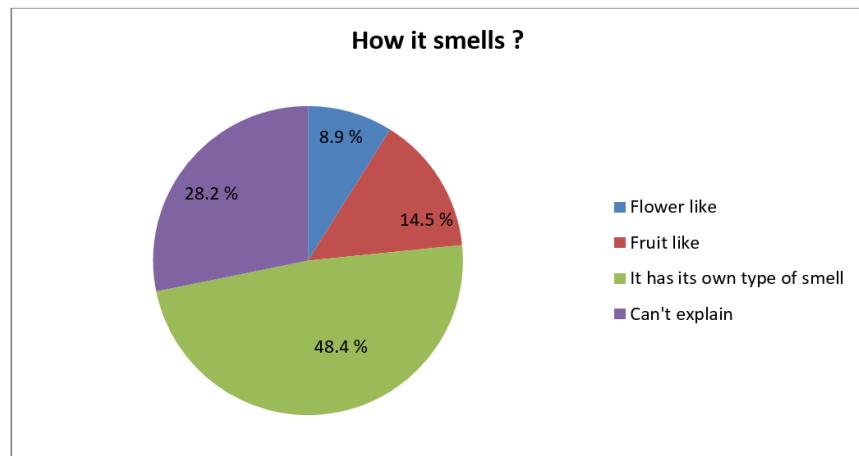
The respondents were asked that whether they have tasted the mahua flowers or not. Fifty point four 50.4% of respondents answered that they have tasted mahua flower, 44.9 % of the respondents answered that they had never tasted mahua

flower 4.7% of the respondents answered that they don't know whether they have tasted mahua flowers or they do not remember whether they have tasted or not.

**Fig 9:** Taste of Mahua flowers according to respondents

The respondents were asked about the taste of mahua flowers, they were given four options for the taste of mahua flowers that whether it is sweet, sour, salty or bitter. 72.5% of the respondents answered that it tastes sweet, 15.7% respondents

answered that it is sour 8.8% respondents answered that it is bitter and the rest answered that it is salty. This shows that 72.5% of the respondents were aware about the real taste of mahua flower.

**Fig 10:** Smell of Mahua flowers according to the respondents

Forty eight point four percent (48.4 %) respondents answered that mahua flower has its own type of smell. 28.2% respondents answered that they do not know how mahua flowers smell, 14.5% respondents answered that mahua

flowers has a fruit like smell, 8.9% respondents answered that it has a flower like smell.

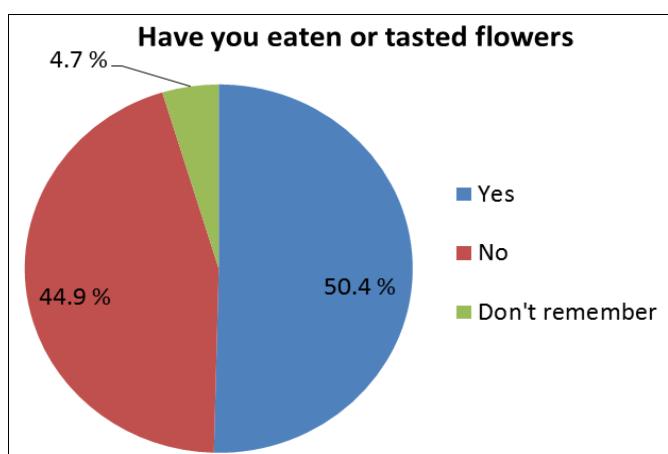


Fig 11: Response regarding tasting of mahua flower.

The respondents were asked whether they have tasted mahua flower or not. Sixty nine point four percent (69.4%) of the respondents answered that they have not tasted any recipe of mahua flower, 25.6% respondents answered that they have tasted mahua flower recipe. 5% of the respondents answered that they don't remember whether they have tasted any mahua flower recipe or not. The respondents were asked about the different uses of mahua flower prevalent in their family and area. Various mahua flower recipes were mentioned by different respondents. Most of them said that mahua flowers are edible and different recipes can be prepared using mahua flower. Mahua with chana boiled, jam, mahua latta, mahua

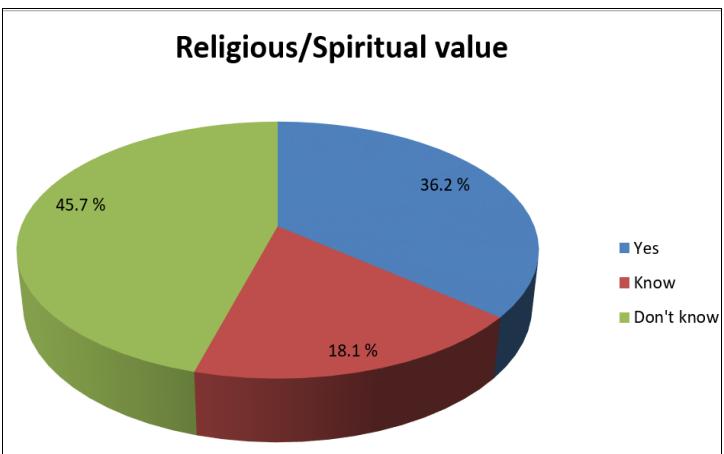


Fig 12: Religious/Spiritual importance of mahua tree

achar, mahua laddu, mahuakheer, mahuaparatha, and mahuahalwa are some important among them. The respondents were asked whether they are aware about this that mahua flower is also known for their religious or spiritual importance. Thirty six point two (36.2%) percent respondents answered that they know that mahua flowers have some religious importance, 18.1 % percent answered that there is no religious/spiritual importance of mahua tree. 45% respondents answered that they do not know whether mahua trees have religious/spiritual importance.

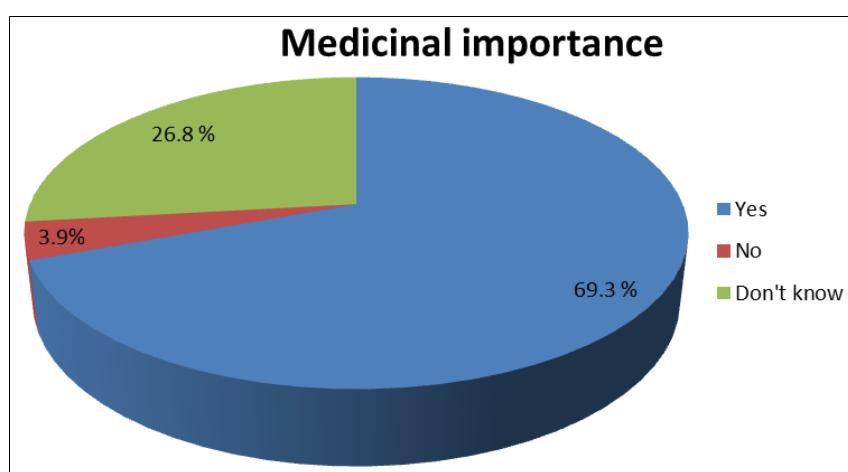


Fig 13: Medicinal Importance of Mahua trees.

The respondents were asked about their knowledge that Mahua trees are also used as medicine. Sixty nine point three (69.3%) percent respondents answered that there is some medicinal importance of mahua tree, 3.9 percent respondents said there is no medicinal importance of mahua tree, 26.8% respondents answered that they do not know that whether Mahua trees have any medicinal importance or not. They were also asked about the medicinal use if they do or have seen somewhere but very few response was found for the same.

Discussion

As the respondents were limited to post graduate students only and that's too more than 80% of the respondents below 25 years, so the limitation is always there regarding the aura of knowledge related to the importance of Mahua. Since Mahua is locally very famous in Hazaribag and adjacent localities, so the research is an attempt to knowhow its awareness among the postgraduate students. Female respondents were upto some extent aware about the various recepies of Mahua. Most of the persons belonging to tribal rural areas and those living in joint families were aware about

Mahua and its uses. It is quite noteworthy that most of the respondents though belonging to post graduate students know about Mahua or have listened about it. But they were of the opinion that mahua is used only as beverage. Very few respondents knew about its medicinal, aesthetic properties or it can be used as food also. Out of 120 respondents only 29 respondents answered the name of recipes of mahua flower eaten by them. The name of recipes eaten by them are boiled chana with mahua, mahua flower jam, mahualatta, mahua flower pickle, Mahua flower laddu, mahua flowers boiled in milk, mahua flower paratha, mahua flower halwa, mahua flower kheer. Madhumita Patel and S.N. Naik, 2010 reviewed various works on flowers of *Madhuca indica* and found that collection of flowers and fruits of Mahua are important sources of employment for the poorest of the poor and the flowers are edible and rich source of sugar, protein, vitamins and minerals. Most of the peoples also opined that the smell of flowers of Mahua was unique of its kind and it had bitter taste. It was also known that most of the peoples who know about Mahua also tasted some recipes of mahua. Some respondents were of opinion that the flowers fried in ghee are eaten by peoples suffering from piles. The results are in accordance with the findings as in the wealth of India: A Dictionary of Indian raw Materials and Industrial Products-raw materials, 1962. Some respondents told that dried eatables are used in local sweet eatables prepared by tribal community and is also an instant energy provider. So there was mixture of knowledge level among the respondents about mahua.

Materials and Industrial Products- Raw Materials, Publication and Information Directorate, Council of Scientific and Industrial research, New Delhi, 1962;6:207-215.

Conclusion

Mahua apart being the rich source of nutrients are also the source of employment of the locals. Only a small segment of respondents were aware about the uses of mahua flowers but the awareness can be increased through discussions, seminars and posters etc. Also more and more documentation needs to be done after proper scientific evaluation. This is needed specially for the young population so that the rich cultural heritage of the area may be preserved.

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References

1. Hegde HT, Gunaga RP, Thakur NS. Current trends and future prospects for utilization of mahua resources, Van Sangyan. 2019;6(2):7-11.
2. Shrey R, krsishna Acharya G, Kumar Dhurwney C. Economic Impact of Mahua (*Madhuca spp.*) on Tribal Livelihood and It's Marketing In Chhattisgarh State. International Journal of Current Microbiology and Applied Sciences. 2018;7(7):3595-3601.
3. Ismail NA, Ab. Karim MS, Othman M, Abd. Halim N. The values of the traditional culinary practices towards the modernization as perceived by the Malay Chefs in Klang Valley. International Food Research Journal. 2013;20(5):2857-2864.
4. Patel Madhumita, Naik SN. Flowers of *Madhuca Indica* J.F. Gmel: Present Status and Future Perspectives. Indian journal of Natural Products and Resources. 2010;1(4):438-443
5. The Wealth of India. A Dictionary of Indian Raw