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A study on aquatic and semi aquatic medicinal plants of Basargadh Pond, Ranchi, Jharkhand

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Abstract: The present communication is done for the assessment of aquatic and semi aquatic medicinal plants of Basargadh Pond, Ranchi. The pond exhibits growth of these plants and serves as chief and easily available source of medicines for neighboring inhabitants. During the course of study total 10 aquatic and semi aquatic plants have been reported from the study areas which are used to cure various diseases.

Key words: Inhabitants, cardiac, antioxidant, diseases

INTRODUCTION

The pond located in Basargadh area of Tupudana, Ranchi is polluted as it serves for multipurpose activities for local dwellers.¹ The pond supports rich aquatic vegetation including ethnomedicinal species which are being used to cure various diseases by local people.^{2,3} The present study is to analyze the medicinal uses of these aquatic and semi aquatic plants and create awareness among people about the importance of pond.⁴⁻⁸

MATERIALS AND METHODS

During the course of study the specimens were collected from the study area. After collection these specimens were soaked in formaldehyde solution and dried with the help of heavy herbarium press. After drying

herbarium sheets were prepared and identified with the help of experts and suitable literatures. The medicinal uses of these plants were recorded with the help of local people, Vaidyas and herbal practitioners. To make the study more accurate regular pond visit was taken into account. As a result of which the habit, habitat, local name, flowering/ fruiting time of the collected specimens can be encountered easily.

RESULTS AND DISCUSSION

The result is the outcome of the survey conducted from Aug, 2019 to Sep, 2020 in which total 10 aquatic and semi aquatic medicinal plants were collected. The collected specimens were identified by experts and available literatures. The information about plants and their medicinal uses for curing various diseases were gathered from local people, herbal practitioners and vaidyas which are mentioned below.

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1. *Ipomea aquatica* Forsk.

Common name-Kalmisag

Family-CONVOLVULACEAE

Parts used- Leaf

Medicinal uses- It is used against cough, diarrhoea.

Leaf of the plant is used as blood purifier. It is given to nourishing mother to promote lactation.

2. *Centella asiatica* Linn.

Common name-Bengsag

Family-APIACEAE

Medicinal uses- It is used in blood related diseases and for treating nervousness. Plant extract is used for wound healing. It is used in stomach problems, gastric disorder, ear problem, fever and amoebic dysentery. It is also used to enhance attention span and concentration.

3. *Nymphaea nouchalli*. L.

Common name-Saluk

Family-NYMPHACEAE

Parts used-Leaf

Medicinal uses-Leaves are used against dysentery and intestinal problems. It is also used in vomiting and cough.

4. *Nelumbo nucifera* Gaerth

Common name- Kamal

Family-NYMPHACEAE

Parts used- flower, seed, rhizome

Medicinal uses- It is used in cardiac problem, liver problem and fever. Seeds are used in skin diseases and rhizome is used against piles.

5. *Eichornia crassipes* Mart.

Common name-Jalkumbhi

Family-PONTEDERIACEAE

Parts used-Leaf

Medicinal uses-It is used as antioxidant.

6. *Nymphoides indicum* (L.)O.Kuntze

Common name-Kumudini

Family-MENYANTHACEAE

Parts used-Leaves

Medicinal uses-It is used against jaundice and fever.

7. *Cyperus rotundus* Linn.

Common name- Motha

Family-CYPERACEAE

Parts used-Leaves, root

Medicinal uses- It is used against vomiting, fever, dysentery, leprosy, urine contraction and stomach problem.

Root paste is used for healing wounds. The root is astringent, appetizer and diuretic.

8. *Ludwigia perennis* Linn.

Common name-Arker, prousuti gas

Family-ONAGRACEAE

Parts used-Root, leaf

Medicinal uses- Leaf is used in headache and ear pain. Root is used against fever. Decoction of plant is given to lactating mother. It is also used in treatment of parsauti fever.

9. *Enhydra fluctuans* Lour

Common name-Hingcha sag

Family-ASTERACEAE

Parts used –leaf

Medicinal uses-The leaf is used against anemia. It is antioxidant and analgesic.

10. *Eclipta alba* (L.) Hassk

Common name- Bhengraj, Kesut

Family-ASTERACEAE

Parts used-Leaf, root

Medicinal uses- Plant juice is used for treatment of jaundice, diarrhoea, throat problem, hepatic problem and fever. Root paste is applied to cure cattle wound.

CONCLUSION

During the research work a number of aquatic and semi aquatic ethnomedicinal plants were reported which has potential to cure various diseases.

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