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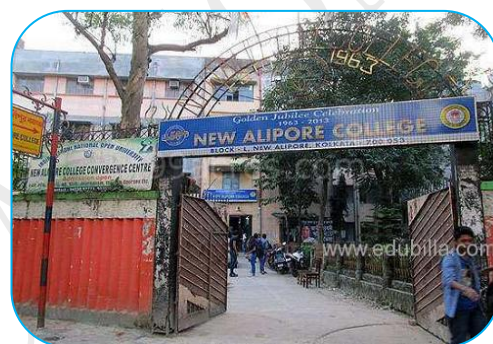
A BRIEF ACCOUNT OF PLANTS WITH MEDICINAL VALUE AT NEW ALIPORE COLLEGE CAMPUS

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ABSTRACT:

A biodiversity survey on the different medicinal plants growing throughout the New Alipore college campus was performed. We made a complete account of each species along with their scientific and local names, habit, habitat and description. The investigation recorded a total of about 50 species including species belonging to the family Acanthaceae, Acoraceae, Apiaceae, Apocynaceae, Asparagaceae, Commelinaceae, Crassulaceae, Fabaceae, lamiaceae, Lythraceae, Malvaceae, Mimosaceae, Musaceae, Papilionaceae, Poaceae, Polypodiaceae, Rubiaceae, Solanaceae, Scrophulariaceae, Vitaceae, Xanthorrhoeaceae and Zingiberaceae.



KEYWORDS: Medicinal plants, New Alipore College, campus, Survey .

INTRODUCTION

The intricate relation between plant and man probably has its origin about 2.3 million years ago during Pleistocene Epoch when man emerged as 'Ape man'. Since then plants have been the primary source of food and medicine. Herbal medicine or use of plants for medicinal purpose is now acknowledged worldwide as the safest form of alternative therapeutic practice especially in developed countries. In developing countries lack of awareness acts as major deterrence in conservation of the rich diversity of plants with medicinal properties. Therefore it is important that the existence of

plants with medicinal value be inventorized in order to sustain and increase our knowledge on the status of conservation of such species.

GEOGRAPHICAL COORDINATES OF COLLEGE

New Alipore college is a government sponsored Co-educational college affiliated to University of Calcutta. The adjacent areas to the college includes Behala, Diamond Harbor, Batanagar and Budge-Budge.

Coordinates are pair of numbers which are used to describe a particular location on the plane of a geographic coordinate system. These pair of numbers are known as lines of Latitude and longitude. The Lines of latitude are parallel lines that measure north-south position

between the poles whereas the Lines of longitude, or meridians, measure east-west position and traverse between the North and South Poles. One degree of latitude is 60 nautical miles, 69 statute miles or 111 km. and One minute of latitude is 1 nautical mile, 1.15 statute miles, or 1.85 km. The prime meridian is assigned the value of 0 degrees, and runs through Greenwich, England. Meridians to the west of the prime meridian are measured in degrees west and likewise those to the east of the prime meridian are measured to by their

number of degrees east. Alipore including New Alipore is located geographically at 22.5248°N and 88.3312°E. The Alipore area is located at an average elevation of 14 metres (46 feet) and is bordered by the following roads - AJC Bose Road to the north, D L Khan Road to the East, Diamond Harbour Road to the West and Alipore Avenue to the South.

MATERIAL AND METHODS

An intensive field study was made on the New Alipore College campus during the period of January to December 2018. A total of about 50 species under 22 families with medicinal properties were identified. The purpose of the study is to elicit information on the medicinal plants which grows naturally in and around New Alipore area especially on our college campus.

RESULTS AND DISCUSSION

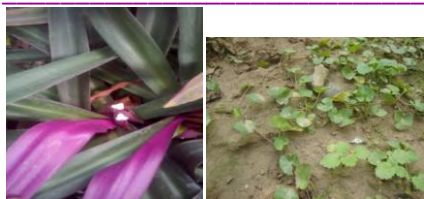
The field investigation at New Alipore College campus recorded a total of about 50 species including species belonging to the family Acanthaceae, Acoraceae, Apiaceae, Apocynaceae, Asparagaceae, Commelinaceae, Crassulaceae, Fabaceae, Lamiaceae, Lythraceae, Malvaceae, Mimosaceae, Musaceae, Papilionaceae, Poaceae, Polypodiaceae, Rubiaceae, Solanaceae, Scrophulariaceae, Vitaceae, Xanthorrhoeaceae and Zingiberaceae possessing medicinal properties.

Table 1. Account of medicinal plants at New Alipore College campus with family and uses :-

Sl. No.	Scientific name	Local name	Family	Use (s)
1	<i>Nerium odorum</i>	Raktakarabi	Apocynaceae	Used in epilepsy, leprosy, malaria.
2	<i>Heliconia rostrata</i>	False bird of paradise	Musaceae	Used to treat skin cancer.
3	<i>Mimosa pudica</i>	Lajjabati	Mimosaceae	Used in urinary infection.
4	<i>Centella asiatica</i>	Thankuni pata	Apiaceae	Plants are used to treat stomach problem.
5	<i>Setcreasea pallida</i>	Purple heart	Comelinaceae	Anti-inflammatory, antitoxic.
6	<i>Costus speciosus</i>	Keumuk	Zingiberaceae	Used as anthelmintic.
7	<i>Crotalaria juncea</i>	Shon	Papilionaceae	Source of natural fibres, leaves are antiseptic.
8	<i>Cymbopogon citratus</i>	Gandhabena	Poaceae	Leaves are antiseptic & used in curing sore throat.
9	<i>Rostellularia japonica</i>	NeelKantha	Acanthaceae	Used in treatment of rheumatism.
10	<i>Hygrophyla spinosa</i>	Kulekhara	Acanthaceae	Used in treatment of jaundice.
11	<i>Adhatoda vasica</i>	Basak	Acanthaceae	Used as expectorant.
12	<i>Andrographis paniculata</i>	Kalmegh	Acanthaceae	Leaf juice is used as anthelmintic
13	<i>Asparagus racemosus</i>	Satomul	Asparagaceae	Root used to treat on diarrhoea.
14	<i>Ureria picta</i>	Sankarjata	Fabaceae	Used in treatment of fever.
15	<i>Ecbolium linneanum</i>	NeelKantha	Acanthaceae	Used in gout, dysuria & rheumatism
16	<i>Physalis minima</i>	Tepari	Solanaceae	Used as antihelminthic, antifertility, hypoglycemic, antiulcer, antibacterial, anti-inflammatory, analgesic, antipyretic, antimalaria

17	<i>Datura metel</i>	Dhuturaa	Solanaceae	Antispasmodic, fruits are poisonous
18	<i>Rhoeo discolor</i>	Oyster plant	Commelinaceae	Antitumoural, used in liver cancer.
19	<i>Ocimum sanctum</i>	Tulsi	Lamiaceae	Leaf extract is used in cough & cold.
20	<i>Wedelia trilobata</i>	Bhringaraj	Asteraceae	Used in bronchitis, abdominal pain.
21	<i>Bryophyllum pinnata</i>	Patharkuchi	Crassulaceae	Leaves used to treat tumour.
22	<i>Aloe vera</i>	Ghritokumari	Xanthorrhoeaceae	Decoction of leaf used as skin tonic.
23	<i>Allamanda cathartica</i>	Harkakra	Apocynaceae	Used in curing rheumatism
24	<i>Ixora coccinea</i>	Rukmini	Rubiaceae	Used as traditional medicine.
25	<i>Vinca rosea</i>	Nayantara	Apocynaceae	Roots of white flower bearing plants are used in diabetes.
26	<i>Lawsonia inermis</i>	Henna	Lythraceae	Leaves are used as hair dye.
27	<i>Malachra capitata</i>	Ban Bhindi	Malvaceae	Bark used as traditional medicine
28	<i>Leonurus sibiricus</i>	Raktadron	Lamiaceae	Leaf juice used in ear pain.
29	<i>Leucus aspera</i>	Shetdron	Lamiaceae	Used as anti dotes of snake bite & leaf juice used as nasal drop, headache.
30	<i>Ruellia tuberosa</i>	Neelghanta	Acanthaceae	Leaves are used in bladder stone.
31	<i>Rauwolfia serpentina</i>	Sarpagandha	Apocynaceae	Seeds are used in hypertension.
32	<i>Bacopa monnieri</i>	Brahmi	Scrophulariaceae	Used for nerve & memory tonic.
33	<i>Sida rhombifolia</i>	Svetbarela	Malvaceae	Used in rheumatism
34	<i>Eclipta prostrata</i>	Kesuti	Asteraceae	Leaves are used as hair tonic.
35	<i>Clitoria ternatea</i>	Aparajita	Fabaceae	Ethno medical plant, dye yielding.
36	<i>Hibiscus rosa - sinensis</i>	Jaba	Malvaceae	Leaves are used in hair care.
37	<i>Curcuma longa</i>	Holud	Zingiberaceae	Digestive, antiinflammatory, anticancer.
38	<i>Vitis quadrangularis</i>	Harjora	Vitaceae	Used for obesity, diabetes.
39	<i>Acorus calamus</i>	Bach	Acoraceae	Antibacterial, anticancer, antioxidant.
40	<i>Nephrolepis cordifolia</i>	Berela	Polypodiaceae	Diuretic, antibacterial, folk medicine.

**Mimosa pudica****Heliconia rostrata**



Rhoeo discolor *Centella asiatica*



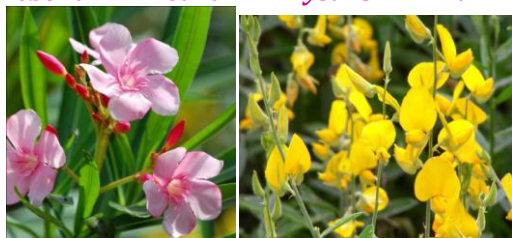
Justicia procumbens / *Rostellularia japonica* *Ureria picta*



Asparagus racemosus *Alamanda cathartica*



Ecbolium linneanum *Physalis minima*



Nerium odorum *Croton tiglium*



Hygrophyla spinosa *Cymbopogon citratus*



Adhatoda vasica *Andrographis paniculata*



Ocimum sanctum



Datura metel



Bryophyllum pinnata



Aloe vera



Ixora coccinea



Vinca rosea



Lawsonia inermis



Malachra capitata



Wedelia trilobata



Leonurus sibiricus



Leucas aspera



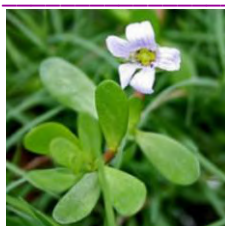
Ruellia tuberosa



Rauwolfia serpentina



Sida rhombifolia

*Bacopa monniera**Eclipta prostrate**Clitoria ternatea**Hibiscus rosa sinensis**Curcuma longa**Vitis quadrangularis**Acorus calamus**Setcreasea pallida**Nephrolepis sp*

CONCLUSION

Acculturation and modernization of the society have left a gap in the study of plants as natural source of remedy for various diseases prevalent today. People can hardly recognize and identify plants with medicinal value and as a result contributes unknowingly to its destruction. Therefore impetus should be given to spreading awareness on the existence of such plant species growing locally. With this aim in mind, the detailed survey was designed and conducted at New Alipore College campus so that it will help to enhance the repertoire of knowledge on plants with therapeutic value available to the locals. This restricted study is a small step towards enhancing knowledge about plants commonly available in and around a college campus which may be of immense therapeutic value to existing society on a larger scale.

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REFERENCES

1. Bradley J. Cardinale. 2012. Review: Biodiversity loss and its impacts on humanity. *Nature*, 486: 59.
2. Costello MJ, May RM, Stork NE. 2013. Can we name Earth's species before they go extinct? *Science* 339:413–416.
3. Economic assessment and conservation priorities of the Indian Thar desert medicinal plants, Mathur and Sundarmoorthy, *IJNPR* vol.4(3), Sept.2013, pp-283-294.
4. Godfray HCJ. 2005. Taxonomy as information science. *Proceedings of the Californian Academy of Science* 56(Suppl. I):170–181.
5. Hulme PE. 2011. Addressing the threat to biodiversity from botanic gardens. *Trends in Ecology and Evolution* 26:168–174
6. Khan, M.S., Rahman, M.M., Huq, A.M., Mia, M.M.K., Hassan, M.A. Assessment of Biodiversity of Teknaf Game Reserve in Bangladesh focusing on economically and ecologically important plant species. *Bangladesh J. Plant Taxon.* 1(1): 21-23. 1994.
7. Paria, N. D. and Chattopadhyay, S. P. (2005). *Flora of Hazaribagh District, Bihar, Vol.I and II.* Botanical Survey of India. Kolkata.
8. Rahman, A.H.M.M., Islam, A.K.R.M., Zaman, A.T.M.N., Hossain, M.D., Afza, R. Studies on the Aquatic Angiosperms of the Rajshahi University Campus. *Res. J. Agri. Biol. Sci.* 3(5): 474-480. 2007.