

KAZI NAZRUL UNIVERSITY



RANIGANJ GIRLS' COLLEGE

DEPARTMENT OF GEOGRAPHY

B.Sc HONOURS 1st SEMESTER

ACADEMIC YEAR: 2021-2022

COURSE NAME : ENVIRONMENT STUDIES

COURSE CODE : AEE101

REG. NO : 113211220016

**TOPIC OF THE NAME : QUALITATIVE STUDY OF
MEDICINAL PLANTS**

**PLANT NAME : NAYANTARA
(CATHARANTHU ROSEUS)**

Raniganj Girls' College

Course Name: Environment Studies

Course Code: AEE101

Topic of the project: QUALITATIVE STUDY OF MEDICINAL PLANTS

A Project Report

Submitted by Semester-I students

(Academic Year 2021-22)

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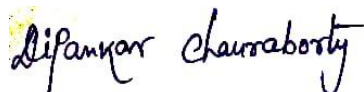
CERTIFICATE

This is to certify that this project titled “QUALITATIVE STUDY OF MEDICINAL PLANTS” submitted by the students for the award of degree of B.A. Honours/ Program is a bonafide record of work carried out under my guidance and supervision.

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Place: Raniganj

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State Aided College Teacher-II, Department of Geography

Signature of the supervisor with designation and department

**QUALITATIVE STUDY OF
MEDICINAL PLANT**



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REGISTRATION CERTIFICATE

This is to certify that **JOYSHREE GORAI**
Son/Daughter of **SAMAR GORAI**
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is registered as a student of this University,
His/Her registration number is **113211220016 of 2021-22**



Registrar

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Aims and Objective of the project

Aims and Objective of Medicinal Plants :

1. Promotion of cultivation and conservation of Medicinal Plants. To identify the plants to be conserved / cultivated in-situ at the different agro-climatic regions of the State and those to be cultivated / conserved in the fields (Ex-situ)
2. To develop cultivation techniques (agro-techniques) including Quality Plant Materials, Irrigation, Fertilizer, Plant protection. Post harvest collection and Processing, which are cost effective in different agro-climatic regions of the State.
3. Cultivation of some medicinal plants which fair well only in the forest ecosystem as intercropping in and around the forest areas.
4. To creat optimum awareness and interest amongst the common people about Medicinal Plants.
5. To increase public awareness about the efficacies of herbal drugs.

Medicinal Plants, also called medicinal herbs, have been discovered and used in traditional medicine practices since prehistoric times. Medicinal plants such as Aloe, Tulsi, Neem, Noyantara, Patharkuchi, Turmeric and Ginger etc. cure several common ailments. These are considered as home remedies in many parts of the country.

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Materials and Methods used

NAYANTARA PLANT (Catharanthus Roseus)

Catharanthus roseus (L.) which is an important medicinal plant of the family Apocynaceae is used to treat many of the fatal diseases contains a virtual copious amount of useful alkaloids, used diabetes, blood pressure, asthma, constipation, cancer and menstrual problem. There are about two common cultivars of *C. roseus* which is named on the basis of their flower colour that is the pink flowered "Rosea" and the white flowers "Alba". *Catharanthus roseus* which is proudly known as the Madagascar periwinkle is found to be a species of *Catharanthus* native and also endemic to Madagascar. The synonyms of the plant name include *Vinca rosea*, *Ammocallis rosea* and *Lochnera rosea*, other English names occasionally used for the plant include Cape Periwinkle, Rose Periwinkle, Rosy Periwinkle and "Old Maid".

In case of high blood pressure, boil one gram of Noyantara plant and 1 gram of dried roots, 2 grams of raw tumeric in a cup of water, boil it and take a quarter of it. Worm infestation is reduced by playing the decoction for 5/6 days and worms can be cured by playing 15/20 days. It also controls diabetic diseases. Or, in case of high blood pressure, playing Noyantara leaves for seven days lower the blood pressure.

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Reason for choosing the medicinal plant: "Noyantara"

The reasons for choosing this plant has many qualities and benefits. This tree has flowers in almost all season and this flower is useful in all kinds and pujas. Noyantara flowers come in many colours, such as white, pink, purple etc. The leaves and roots of this plant are very useful. like - diabetes, blood pressure, cancer etc. Coming from the Apocynacea family, Sadabahar goes by the botanical name *Catharanthus roseus*. It is of evergreen origin and grows to a height of 1-2.5 m. Although the plant is native to Madagascar, it is found to be growing throughout the world. The flower of Sadabahar usually come in two varieties, one dark pinkish-purple and the other milky white.



How it has been parented?

Nature of the plant - Noyantara is a perennial herbaceous plant. The tree is one and a half to 60 to 70 cm tall. The stems are soft, juicy and dark green. Noyantara is a very small plant that grows outside very well but also finds itself at home in a summer window. Both periwinkle vinca and vinca rosea are found in garden centers from early spring to late summer but have different uses. This article focuses on periwinkle plant care, with its shiny green foliage and flowers of pink, red or white periwinkle which cover the plant all through the summer.

Frequency of watering - Water noyantara plants during the predawn or early morning hours. Watering early in the morning allows the excess water to drain away or evaporate during the daylight hours. If noyantara is watered too late in the day, the excess water remains on the plant all night. Noyantara is susceptible to fungal infections, which are caused by excess moisture. Pour water directly onto the soil when watering noyantara. Avoid watering from overhead, so that the foliage and flowers do not get wet. Water every other week, or if the top 2 inches of soil feel dry to the touch. Noyantara is very drought-tolerant and prefers its soil to be on the dry side of moist. Do not wait to

long to water, though. If a noyantara starts to wilt, it will likely die; is very difficult to nurse a wilted noyantara back to life with water.

Food and insecticides use -

The root contains bornesital, d-yohimbine, ajmalicine, olenalic acid, alstonine and wrosalic acid. The root bark contains alstonine, serpentine, vincaline I and vincaline II. The leaves contain cartharantiline, leurosine, 21-oxo-leurosine, catharanthamine, coronaridine, vindoline, vimbastine, leurosidine, vincristine, tetrahydroalstonine, lochnerine, vincarodine. Another important anthocyanidin pigment found in the flowers of rose periwinkle is rosinidin.

Conclusion

Medicinal plant is the most exclusive source of life saving drugs for majority of the world's population. They continue to be an important therapeutic aid for alleviating the ailments of human kinds. The search for defence mechanism, longevity and remedies to relieve pain and discomfort drove early man to explore these immediate natural surroundings. It led to the use of plants, animal products and minerals etc., and the development of a variety of therapeutic agents. Today, there is a renewal interest in traditional medicine and an increasing demand for more drugs from plant sources because green medicine is safe and more dependable than costly synthetic drug, many of which have adverse side effects. *Catharanthus roseus* was investigated from the ancient time for their phytochemical components and their therapeutic effect. *Catharanthus roseus* was investigated from the ancient time for their phytochemical components and their therapeutic effect. The plant contains enormous phytochemical constituents of various medicinal applications. Vinca Alkaloids has set a milestone in the History of Modern Medicine. A little of its usage in medicine has been established by numerous studies still more of its hidden properties are yet to be explored. Hence most work could be done on the above plant to reveal the unknown mysteries which would help the need of the present pharmaceutical world. *Catharanthus roseus*, more commonly known as the Periwinkle of Madagascar, is a native species to the Indian Ocean island of Madagascar, Madagascar is located off the east coast of Southern Africa.

Benifits of medicinal plant : Nayantara

1. Blood Pressure :

In this disease, the medicinal properties of Nayantara tree are especially necessary.

- If blood pressure rises, fresh juice of 5 ml Nayantara tree root should be taken once in the morning on an empty stomach.
- There are benefits to playing 3-4 days. However, after 4-5 days, the blood pressure must be checked. Then the body will be healthy.

2. Diabetes :

Noyantara plant is especially effective in controlling diabetes.

- All the benifits of alkaloids reduce the amount of blood sugar in the human body and control blood sugar levels.
- Eye drops reduce bad cholesterol in the blood.

3. Improves Heart Health :

The flower (Nayantara flower) contains an ingredient called Roserpine which keeps an eye on the heart to prevent any kinds of damage. There is no longer even the risk of suddenly catching a disease like heart attack or stroke.

BIBLIOGRAPHY

- Ajaib M, Khan ZUD, Khan N, Wahab M, Ethnobotanical studies on useful shrubs of District Kotli, Azad Jammu & Kashmir, Pakistan, Pak J Bot. 2010; 42: 1407 - 1415.
- Dr. Hemamalini Balaji, Versatile, Therapeutic effects of *Vinca rosea* Linn. International Journal of Pharmaceutical Science and Health Care, 2014, 1(4), 59 - 76.
- https://en.m.wikipedia.org/wiki/Catharanthus_roseus [webliography]
- <https://www.nhp.gov.in/introduction-and-importance-of-medicinal-plants-and-herbs-mtl> [webliography]
- <https://www.nature-and-garden.com/gardening/madagascar-periwinkle.html/amp> [webliography]

Photographs -

