

KAZI NAZRUL UNIVERSITY



RANIGANJ GIRLS' COLLEGE

DEPARTMENT OF MICROBIOLOGY

B.SC. HONURS 1ST SEMESTER

SESSION : 2020 - 2021

PAPER NAME : AECC CORE -1

TOPIC : MEDICAL PLANT

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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

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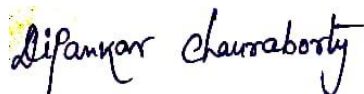
CERTIFICATE

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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This is to certify that PRIYANKA KUMARI

Son/Daughter of BALRAM YADAV

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Acknowledgement

I would like to express my special thanks of gratitude to our respectful teacher Mr. Dipankar Chakrabarty — Department of Geography, Raniganj Girls College for his sincere support and co-operation in the preparation of this project of B.Sc. honours in Microbiology, Semester-1, Environment studies (AECC-CORE-1)

Date: 7.03.2021

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Introduction

Swertia Chirayita

Swertia Chirayita, also known as Chirata, is a medical herb used to treat a variety of conditions like, diabetes, and liver disorders.

This herb is widely distributed in the temperate Himalayas, between Kashmir to Bhutan.

Swertia Chirayita is an annual, erect plant that has a height of about 0.5 to 1.5 meters.

It consists of a long erect stem that is covered by a bark. The leaves are opposite, lanceolate, and do not contain any stalks.

Swertia Chirayita has several small dark yellowish-flowers with white to pink hair-like sharp-pointed fruits.



PLANT PROFILE



Family - Crematosiphonaceae

Ayurvedic name - Kirata Hkita

Unani name - Chirata

Hindi name - Chirayata

Trade name - Chirayata

Parts used - Whole plant



Nutritional Value of Chirata:

Chirata contains several compounds that contribute to its medicine value. The compounds include Xanthones, alkaloids, and glycosides. They also consist of ophelic acid, chiratin, steric acid, oleic acid, and palmitic acid. Swertanone, amarogenin, and chiratal are other important components present in chirata.

Therapeutic Uses of Chirata:

Chirata has been used by different native population groups in several ways for various therapeutic purposes. Chirata is used in Ayurveda, Unani, and Siddha medicine to cure various health condition.

- Chirata contains liver-protectives. It eliminates toxins from the body and also facilitates the growth of new liver cells.

- This plant helps maintain normal blood sugar levels and is effective in treating diabetes.

- Chirata is helpful in the treatment of asthma and shortness of breath.

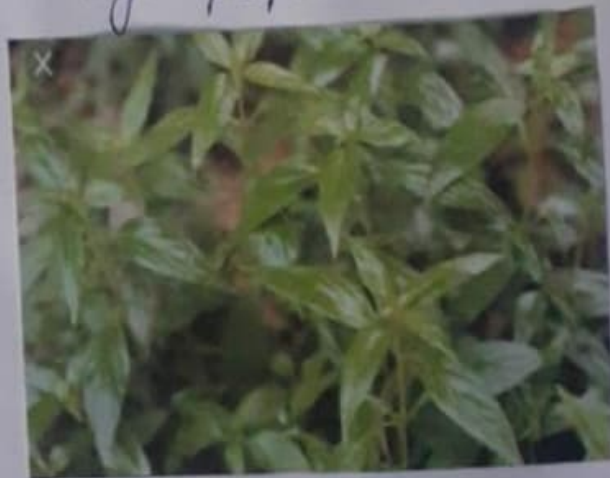
- Chirata can be used in cases of anemia to increase the count of red blood cells.

- The root of Chirata is used to cure fever, cough, asthma, pain, common cold, and weakness.

- The leaves and stem of Chirata are soaked in water, made into a paste, and used for high blood pressure and headaches.

Benefits of Chirata:

Chirata is a plant with high medicinal value. It is helpful in constipation, fever, skin diseases, worm infestation, loss of appetite, cancer, and other ailments. It is being used as a bitter tonic. It is effective in malaria and has anti-inflammatory (reduce swelling) properties.



Benefits of Chirata for Digestion:

- Chirata is helpful in various problems related to the digestive system like gastritis, indigestion (upset stomach), gas accumulation in the stomach, bloating, heartburn and stomach pain.
- It also contains laxative properties and is helpful in constipation. It is also effective in treating diarrhea.

Benefits of Chirata for fever:

Chirata help reduce body temperature in fever. The effect of Chirata for fever is comparable to that of paracetamol.

Benefits of Chirata for Skin

- Chirata plant can be made into a paste and used to treat skin diseases like eczema and acne.
- The decoction obtained from Chirata helps cure skin rashes.
- Chirata is effective in burning sensations, dryness, and itchy skin.

Benefits of Chirata Against Parasites:

Chirata contains anti-parasitic properties which help eliminate helminths (parasitic worms) and other parasites. This plant helps eradicate roundworms, flukes and tapeworms. Chirata also relieves symptoms associated with worm infection like diarrhea and liver diseases.

Benefits of Chirata on the Central Nervous System:

Chirata produces a metabolite called Swertiamartin which is used in the treatment of acute stress and anxiety due to its effect on the central nervous system. It is also effective in convulsion.

How to Use Chirata:

- Chirata decoction
- Chirata powder
- Chirata tablets
- Chirata capsules

Your Ayurvedic physician will prescribe you the form and dosage according to your health condition, age, and other factor.



Side Effects of Chirata:

No side effect are observed when Chirata is taken as a flavouring agent in food. However, there is no sufficient information to know if Chirata is safe when used in largest amounts.

Precautions & Warning to be Taken with Chirata:

Chirata is unsafe to use in the following medical conditions.

- Pregnancy and breast feeding - No adequate information is present to know whether Chirata is safe to use in pregnancy and breast feeding.
- Intestinal ulcers - It is important to avoid chirata when having intestinal ulcers as it could worsen the condition.
- Diabetes - In some people, Chirata might result in lower blood sugar level. It is essential to monitor your blood sugar levels when using as a remedy.

References:

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Conclusion

Medical plants are considered as a rich resource of ingredients which can be used in drug development either pharmacological, non-pharmacological or synthetic drugs. Apart from that these plants play a critical role in the development of human cultures around the whole world.

So, steps must be taken for the conservation of these medicinal plants. Conservation of medicinal plants can be accomplished by the ex-situ or in-situ cultivation.





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