



Determination of phytochemicals present in leaf extract of *Ocimum sanctum*, *Azadirachta indica* and *Murraya koenigii*

• Shobha Bharti • Jay Kriti Kumari • Somya Singh • Nandini Kumari

Received : March 2021

Accepted : July 2021

Corresponding Author : **Nandini Kumari**

Abstract : The aim of the study was to analyse the different parts of the chemical component in Tulsi, Neem and curry (5 gram). They are placed in the apparatus and the experiment was done separately with the methanolic and the aqueous extract. The study reveals various information about the secondary metabolites such as carbohydrates, terpenoids, flavonoids, tannins, phenols, alkaloids which are present in Tulsi, Neem and curry leaf extract. Functional groups are detected by using the FTIR. The antibacterial assay of methanolic leaf extract showed impact against the pathogenic bacterial strain and fungal strains.

Keywords: Tulsi, Neem, Curry, protein, carbohydrate, phenol, tannin, alkaloid, FTIR.

Shobha Bharti

B.Sc. III Year, Chemistry (Hons.),
Session : 2018 – 2021, Patna Women's College
Patna University, Patna, Bihar, India

Jay Kriti Kumari

B.Sc. III Year, Chemistry (Hons.),
Session : 2018 – 2021, Patna Women's College
Patna University, Patna, Bihar, India

Somya Singh

B.Sc. III Year, Chemistry (Hons.),
Session : 2018 – 2021, Patna Women's College
Patna University, Patna, Bihar, India

Nandini Kumari

Assistant Professor, Department of Chemistry
Patna Women's College, Bailey Road,
Patna – 800 001, Bihar, India
E-mail : nandini.che@patnawomenscollege.in

Introduction:

The term medicinal plant includes various types of plants used in herbalism (herbal medicine). Medicinal plant considered the main source of New pharmaceutical and Healthcare products (Ivanova et.al.,2005). Some medicinal plants like Neem, Tulsi, Curry etc. also have some bioactive molecules and antioxidants that show antibacterial and antifungal activities (Nawaz et. al, 2003).

Tulsi (*Ocimum sanctum*) is an aromatic plant native to Indian subcontinent. It is the shrubs having Oleanolic acid, Ursolic acid, rosmarinic acid eugenol, carvacrol, linalool, as a chemical constituent that have antimicrobial activities.

Azadirachta indica is also known as neem. It is belonging from the mahogany family of meliaceae.

Thus, knowing the composition and nutritional value of these three plants is important for their medicinal effect on humans.

Materials and Methods:

Fresh leaves of each plant (*Tulsi, neem, curry*) were collected from various areas of Patna. The leaves of Tulsi, neem, and curry were washed and dried in sunlight and grinded to form the powder.