



## Phytochemical compound from *Coccinia indica*, its relevance to antimicrobial and anti-inflammatory activities

• Rashmi Kumari • Jaya Keshri • Anushka  
• Isha Gaurav

Received : November 2016

Accepted : March 2017

Corresponding Author : Isha Gaurav

**Abstract :** The present study attempts to evaluate the phytochemical constituent of aqueous, ethanol and methanol extract of leaves of *Coccinia indica*. The phytochemical screening which involves both the qualitative and quantitative analysis revealed either the presence or absence of secondary metabolites; Alkaloid, Tannin, Saponin, Protein, Phenol, Terpenoid, Flavonoid in all the three extracts of *C.indica*.

The leaf extract of this plant shows antimicrobial activities against common pathogen by agar-well diffusion method. The sample extract were used against *Staphylococcus spp* and *Aspergillus spp*. Methanolic extract of *C.indica* leaves showed zone of inhibition.

### Rashmi Kumari

B.Sc. III year, Botany (Hons.),  
Session : 2014-2017, Patna Women's College,  
Patna University, Patna, Bihar, India

### Jaya Keshri

B.Sc. III year, Botany (Hons.),  
Session : 2014-2017, Patna Women's College,  
Patna University, Patna, Bihar, India

### Anushka

B.Sc. III year, Botany (Hons.),  
Session : 2014-2017, Patna Women's College,  
Patna University, Patna, Bihar, India

### Isha Gaurav

Asst. Prof., Deptt. of Botany,  
Patna Women's College, Bailey Road,  
Patna – 800 001, Bihar, India.  
E-mail : [ishagaurav86@gmail.com](mailto:ishagaurav86@gmail.com)

In the leaf extract of *C.indica* anti-inflammatory property have also been noticed. During this study the presence of heavy metals were noticed in small quantity.

**Keyword:** *Coccinia indica*, Alkaloid, Tannin, Flavonoid, Phenol.

### Introduction :

There are hundreds of medicinal plants that have a long history of curative properties against various diseases and ailments. However, screening of plant for their activity is very essential and needs urgent attention in order to know the value of the plant. (Syed et.al. 2009)

*Coccinia indica* belongs to the family cucurbitaceae, commonly called little gourd. It is indigenous to Bengal and other parts of India. The plant has been used extensively in ayurvedic and unani practice in the Indian subcontinent. (Khadabadi and Deokate 2012). It is an annual creeper which is found spreading on ground and twining around the trees. Leaves are triangular or pentagonal in shape.