

GROWTH INHIBITION OF *E. COLI*, *P. VULGARIS* AND *H. PYLORI* BY ALLICIN

H.K. GARG & ASHISH SHRIVASTAVA

DEPARTMENT OF ZOOLOGY & BIOTECHNOLOGY
CHANDRA SHEKHAR AZAD GOVERNMENT POST GRADUATE COLLEGE SEHORE – 466001 (INDIA)

Allicin is an sulphur-containing compound found primarily in garlic (*Allium sativum*). Allicin isn't actually found in a whole garlic clove. Instead there is a compound called **alliin**. When the garlic is crushed or chopped, the cells break down and the alliin comes in contact with an enzyme also in the clove, called **alliinase**. The alliinase changes the alliin into allicin. This is a protective mechanism for the garlic plant. Various medicinal properties like antidiarrhoeal, antifungal, choleric and anticancer activity have been attributed to this compound in the traditional system of Indian medicine. The bioactive compound allicin has been reported to be effective in the treatment of digestive tract infection.

The present study aims at the potential antibacterial value of Allicin against pathogenic bacteria, *Escherichia coli*, *Proteus vulgaris* and *Helicobacter pylori* by disc diffusion method. Bioactive compound Allicin was isolated from the garlic. The results revealed that the Allicin compound are potent in inhibiting these bacteria and this work highlights that the inhibitory effect is on par with standard antibiotics.

Keywords: Allicin, Garlic , Disc Diffusion Method, Inhibitory effect.

References:

- **Garg, HK;** Choudhary, A (2011) Anticancer & Anti mutagenic Properties of Medicinal Plants. *National Seminar On Emerging Trends In Biodiversity & Environmental Conservation*, 39.
- **Garg, HK;** Shrivastava, A; Kalesharia, N (2011) Role of Genetic Research for Identification and Treatment of Cancer. *National Seminar On Emerging Trends In Research & Analysis for Sustainable Development*, 57.
- **Garg, HK;** Shrivastava, A (2011) Growth inhibition of *E.coli*, *P.vulgaris* and *H. pylori* by Acillin. *National Seminar On Emerging Trends In Biodiversity & Environmental Conservation*, 29.