**Allium sativum** as anticancer agent in the cell line HepG2

Rocio Rubio Lopez, Veronica Graciela Padilla Guillen and Ashutosh Sharma
Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico

The numbers of cancer cases has significantly increased in last years. As reported by the National Cancer Institute in the United States, 35% of tumors diagnosed were related to dietary habits. The present study proves the antiproliferative effect of *Allium sativum* compounds on HepG2 cancer cell line. To investigate the effect of garlic extract in cancer cells, garlic tincture were prepared by the addition of crude garlic to ethanol as organic solvent. The tincture was applied to the hepatic carcinoma cell line for a period of 9 hours at a concentration of 5, 10 and 15 µl, fixed during three periods of time intervals of 3, 6 and 9 hours. The results showed that garlic tincture treatment induced significant apoptosis in cancer cell line. These results demonstrate that garlic tincture is effective in killing cancer cells.

**Biography**

Rocio Rubio López is an undergraduate student of Biotechnology Engineering at Instituto Tecnológico y de Estudios Superiores de Monterrey, specialized in the field of molecular biology. She has interned at the Institute of Neurobiology in the Department of Functional Neuroanatomy and Neuroendocrinology at the Universidad Autónoma de México. She has an interest in phytopharmacology neurobiology, oncology and tissue culture research. She is credited with outstanding achievements by the biotechnology department.

asharma@itesm.mx

---

**Notes:**