

**Molecular phyto medicine.**

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**ABSTRACT**

*Salmonella typhi* related enteric fever is still an endemic in all parts of India. Worldwide 16 million cases are estimated to occur annually with 60000 deaths, primarily children below 7 years most affected. Even the most effective Fluroquinolone antibiotic adaptable strains have emerged. So focusing on a lead molecule would yield far fetching benefits to mankind as a whole. The present study was done with for assessing the anti-microbial efficacy of a crude plant extract *Solanum xanthocarpum* was used since it is ubiquitous in nature. A serendipitous observation was made as the plant species exhibited (ie) crude extract of *Solanum xanthocarpum* was highly potent against MDR stains of *Salmonella typhi*. This is in accordance with the in-vitro studies carried out at ARMATS BIOTEK, Chennai. Agar diffusion was used to determine the minimum inhibitory constant values. Broth dilution assay was meant to assess the percentage of viable cells. MTT- cytotoxicity assay yielded complementary results. Amongst the two *Gram positive* and two *Gram negative* strains utilized a highly effective MIC values and low percentage of viable cells was obvious in MDR – resistant strain of *Salmonella typhi*. The concept of drug development for a new candidate lead molecule falls under this purview. If this phytochemical purported to possess the activity of antibiosis against *Salmonella typhi* was isolated purified and characterized for structure activity relation, [SAR-analysis]. It would ultimately pave way for an antibiotic that is affordable, cost effective and reliable in terms of Pharmokinetic and toxicological profile.