



## Goji Extract as Antibacterial Agent and Antioxidant on Roridin E Induced Hepatotoxicity in Male Rat

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**Abstract:** *Lycium barbarum* commercially called Goji is a medicinal plant which is known to have anti-microbial, antiinflammation and antioxidant activity and this study is conducted to prove this. The extracts of dried fruit of Goji (*Lycium barbarum*) were tested for its antimicrobial activity on *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Salmonella*, *Shigella spp*, *Proteus* and *Escherichia coli*. All these tested bacterial genera showed a moderate antimicrobial activity except *Staphylococcus aureus*. Test also carried out to demonstrate the effect of exposure to Roridin E and their amelioration by *Lycium barbarum* in male rats by intraperitoneal administration of sublethal dose of roridin E (2mg / Kg). Serum analysis showed that Roridin E increased (p 0.001) the level of total antioxidants, total lipids, total cholesterol, triglycerides, HDL, Zn, and glucose in the blood. On the other hand, administration of Goji along with roridine E showed a reduction in the above mentioned factors. It is concluded that the treatment of rats with Goji extracts ameliorated the adverse effects of roridin E. Thus, Goji fruits may be used by human as antioxidant for some toxins.

**Key words:** *antioxidant, antibacterial activity, roridin E, Goji, Lycium barbarum.*

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