

In-vitro investigation of synergism effect between standard Penicillin & *Dalbergia sissoo*
against *Pseudomonas aeruginosa*

Anshika Ojha¹ Sandeep Kumar Bharti², Shalini Singh³

^{1,2,3} Institute of Pharmaceutical Sciences and Research, Unnao, Uttar Pradesh

Abstract:

Antimicrobial testing of Indian topical plants, such as *Dalbergia sissoo*, revealed that the *Dalbergia sissoo* possesses antibacterial characteristics. The experiments were carried out on *Pseudomonas aeruginosa* extracts in chloroform, propanol, distilled water (dw), ethanol, acetone, and petroleum ether. With the exception of aqueous extract, only organic extracts yield the greatest outcomes. After that, several combinations of the conventional antibiotic Penicillin were used to modify the *Dalbergia sissoo* extracts. Following a minimum inhibitory concentration test, where the combinations in a 1:1 ratio increased the antibacterial property.

Key words: *Dalbergia sissoo*, Penicillin, *Pseudomonas aeruginosa*, Antibacterial activity.

1. Introduction:

Many micro-organisms function toward innate immunity at this level. In order to differentiate among microbial and host cell surfaces, or contaminated and healthy cells, such innate immune defenses use a spectrum of germ line-encoded receptors. These are not as efficient as adaptive immune responses, that because of their antigen sensitivity, can choose to be more powerful. However when an adaptive immune response grows, they may avoid the establishment or failure of an illness that includes it [1-2].