

EXTRACT OF BLACK CUMIN SEEDS (*NIGELLA SATIVA* L.) AGAINST *BACILLUS SUBTILIS*

Armanto Makmun¹, Rahmawati², Desy Hardiyanti Endang Wihartati³

¹Medical of Faculty, Universitas Muslim Indonesia, Makassar, Indonesia
(armanto.makmun@umi.ac.id)

²Medical of Faculty, Universitas Muslim Indonesia, Makassar, Indonesia
(rahmawati@umi.ac.id)

³Medical of Faculty, Universitas Muslim Indonesia, Makassar, Indonesia
(Hardiyanti@umi.ac.id)

Background: Black cumin (*Nigella sativa* L.) contains active compounds with potential antibacterial properties. *Bacillus subtilis* was used as the test bacterium.

Objective: To determine the antibacterial effect of ethanol extract of black cumin seeds (*Nigella sativa* L.) against *Bacillus subtilis*.

Methods: The extract was prepared by ethanol maceration. The antibacterial test was conducted using the disk diffusion method with extract concentrations of 10%, 20%, 30%, and 40%, with tetracycline as the positive control and 10% DMSO as the negative control. The inhibition zones were measured in millimeters.

Results: All extract concentrations produced inhibition zones, with the largest zone observed at the highest concentration, although smaller than that of tetracycline.

Conclusion: Ethanol extract of black cumin seeds (*Nigella sativa* L.) has potential antibacterial activity against *Bacillus subtilis*, although its effectiveness is not yet optimal at concentrations below 40%.

Keywords: *Nigella sativa*, antibacterial activity, *Bacillus subtilis*, disk diffusion.