

**Antibacterial activity of *Kaluduru (Nigella sativa)* crude oil against *Staphylococci* organisms isolated from mastitis cows**

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Mastitis of cattle causes a massive economic loss worldwide. The treatment of mastitis is generally considered to be limited because of low cure rates and the cost of milk discarded during the withdrawal period. The use of antibiotics to treat mastitis may lead to the development of resistant bacteria and residual effect of antibiotics in milk. Therefore, many research studies are being carried out to find non-antibiotic approaches in order to reduce the use of antibiotics. In the traditional veterinary medicine, medicinal herbs are used to treat animal diseases and it is believed to be a natural and safe therapeutic method. In this in-vitro study, the *Kaluduru (Nigella sativa)* oil was examined for its antibacterial activity against the commonest mastitis pathogen, *Staphylococci*, with a view to developing a herbal remedy for *Staphylococcus* mastitis. In this study, 42 *Staphylococci* organisms (of which 70% constituted of pathogenic *Staphylococci*) isolated from clinically infected milk samples were investigated. The disc-diffusion assay was used to detect the antibacterial activity. All the organisms tested were susceptible to *Kaluduru* oil as evidenced by the inhibition zone sizes obtained. In conclusion, the antibacterial effect of *Kaluduru* oil was significant and this study suggests the potential therapeutic value of *Kaluduru*. However, this *Kaluduru* oil should be further examined through proper pharmacological and clinical investigations in order to be considered as an alternative therapy for *Staphylococcus* mastitis.

**Key words:** *Kaluduru*, *Nigella sativa*, Mastitis, *Staphylococcus*, Antibacterial activity

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