

**THE POTENTIAL OF NEEM EXTRACT,  
*Azadirachta indica* AS NATURAL PESTICIDE ON ANTS,  
*Ochetellus spp.***

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## ABSTRACT

### **THE POTENTIAL OF NEEM EXTRACT, *Azadirachta indica* AS NATURAL PESTICIDE ON ANTS, *Ochetellus spp.***

Pest is known to be a vector to various of diseases and usually is controlled by using chemical based insecticide. Chemical based insecticide can give harm to human's health. *Azadirachta indica*, also known as neem tree has great potentials in the fields of pest management as natural bio-pesticide. Therefore, the objectives of this research are to study the potential of *Azadirachta indica* used as natural pesticide against pest such as ant. Also to compare the effectiveness between neem seeds extract and neem leaves extract as natural pesticide. The crude extract of neem leaves and neem seeds were prepared for the treatment toward ants along with positive control which was citronella and distilled water as the negative control. 360 ants of *Ochetellus spp.* were captured and trapped in a container. The behaviour of the ants after exposed to both neem extract and citronella solutions was positive compared to distilled water. The effectiveness for citronella is 100 % while neem leaves extract and neem seeds extract were 68.89% and 77.78% respectively. Hence, both of neem extracts can give an alternative method for controlling pest such as ants as it contains natural compound such as azadirachtin which have the ability to act as natural insecticide. Based on statistical analysis, the result also shows that there is not enough evidence to support the claim of previous study that the neem seed extract is more effective than the neem leaves extract. Difference in trees maturity, application technique and perhaps environmental factors would probably contribute to these inconsistencies.