

**KAJIAN PENGENDALIAN CEMARAN *Salmonella sp.* PADA UDANG PUTIH  
(*Litopenaeusvannamei*) MENGGUNAKAN ANTIMIKROBA ALAMI DARI BUAH  
TOMAT CHERRY (*Lycopersicumcerasiformae Mill.*)**

*(STUDY CONTROL OF Salmonella Sp. CONTAMINATION ON WHITE SHRIMP  
(Litopenaeusvannamei) USING NATURAL ANTIMICROBIAL FROM EXTRACT OF CHERRY  
TOMATOES FRUITS (Lycopersicumcerasiformae Mill.)*

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## ABSTRACT

### ***STUDY CONTROL OF Salmonella Sp. CONTAMINATION. ON WHITE SHRIMP (Litopenaeusvannamei) USING NATURAL ANTIMICROBIAL FROM EXTRACT OF CHERRY TOMATOES FRUITS (Lycopersicumcerasiformae Mill.***

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White shrimp (*Litopenaeusvannamei*) is one of the most widely produced of fishery commodities in Indonesia. The white shrimp's production in Indonesia is increasing every year, but the exports of it face obstacles and rejection, it is caused by the contamination of *Salmonella sp.* One of the alternative ingredients which is safe and natural used to reduce contamination of *Salmonella sp.* on white shrimp besides using antibiotics is extracts of cherry tomatoes fruit and leaves. This study aims (1) to find out the inhibitory power extracts of cherry tomato fruits on the contamination of *Salmonella sp.* on white shrimp (*Litopenaeusvannamei*), (2) to determine the best concentration for the extract of cherry tomatoes fruits in the inhibition of the contamination of *Salmonella sp.* on white shrimp (*Litopenaeusvannamei*).

The research design was RAKL using single factor and six repetitions. The data were analyzed by variance analyzed and the Smallest Differential Test (BNT) at the level  $\alpha$  5%. The results showed that extracts of cherry tomatoes fruits has inhibitory effect against the contamination of *Salmonella sp.* on white shirmp. Tomato fruits extract is able to inhibit the growth of *Salmonella sp.* with the diameter of the inhibitory area 17.29 mm with strong antimicrobial activity. The

best extract of cherry tomatoes fruits concentration on decreasing the contamination *Salmonella sp.* on white shrimp is 100% for each. Extracts of cherry tomatoes fruits could reduce the contamination of *Salmonella sp.* on white shrimp, with total decrease by cherry tomatoes extract is  $2,66 \times 10^7$  CFU/ml (97,06%).

Keywords: Antimicrobial, *Salmonella sp.*, Antibiotic, Inhibitory, Extract of Cherry Tomatoes Fruits, White Shrimp, Contamination, Smallest Differential Test