



## **Bioassay of Endophytic Bacteria from Tea (*Camellia sinensis*) against Foodborne Disease Bacteria**

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**Abstract :** Tea (*Camellia sinensis*) is the second largest type of beverage in the world that contain lots of antioxidants and antibacterial. Tea has endophytic bacteria which has ability to inhibit growth of pathogenic bacteria, like Foodborne Disease (FD) Bacteria. The objective of the research was studied the potency of endophytic bacteria as antibacterial against Foodborne Disease bacteria. The step of this research includes collecting sample and isolation, antibacterial assay of endophytic bacteria and identification based on 16S rDNA sequence. A3, A4, A6 and A7 isolates showed the inhibition activity against *Bacillus cereus* (ATCC 11778), *Staphylococcus aureus* (ATCC 25923), *Salmonella thypimurium* and *Eschericia coli* (ATCC 25922). The highest inhibition zone were A6 and A7 isolates against *Salmonella thypimurium* sequentially are  $14,6 \pm 3,7$  mm and  $12,7 \pm 5$  mm. A6, A3, and A4 isolates were identified as *Alcaligenes faecalis* B IV 2L44 (98.95 %), *Bacillus cereus* GTC 02826<sup>T</sup> (99.97 %), and *Bacillus stratosphericus* 41KF2a<sup>T</sup> (99.33 %) respectively, but A7 isolate was unidentified bacteria.

**Keywords :** Antibacterial, *Camellia sinensis*, endophytic bacteria, Foodborne disease.

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