

## **Keragaman Genetika Bakteri Tanah Dari Rizosfer Kapas Transgenik Dan Nontransgenik Di Soppeng, Sulawesi Selatan**

### **Soil Bacterial Genetic Diversity From Rhizosfer Of Transgenic And Nontransgenic Cotton Plantation In Soppeng, South Sulawesi**

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Techniques based on amplification of 16S-rRNA genes for comparing bacterial communities are now widely used in microbial ecology. In this study, we compared bacterial genetic diversity of transgenic and nontransgenic cotton plantation soil samples to examine the effect of transgenic cotton on soil bacterial diversity. The primer 63f and 1387r specific for bacteria were used to amplify DNA extracted from two soil samples. The PCR products were cloned into pGEM-T Easy and transformed into *Escherichia coli* DH5-a. Total transformants of transgenic and nontransgenic obtained from cotton plantation soil samples were 138 and 123 respectively. Twenty transformants containing 16S- rRNA genes were selected randomly from each library to reveal their amplified ribosomal DNA restriction analysis (ARDRA) patterns employing restriction enzymes *HhaI*, *RsaI*, and *HaeIII*. The results indicated that there were 16 and 14 different ARDRA profiles derived from transgenic and nontransgenic cotton plantation, respectively.

Key words: bacterial diversity, ARDRA, transgenic and nontransgenic cotton