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## Species diversity of acetic acid bacteria at Khanom-Mu Ko Thale Tai National Park, Nakhon Si Thammarat Province

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During the course of study of the species diversity of acetic acid bacteria at Khanom-Mu Ko Thale Tai National Park, Nakhon Si Thammarat Province, one hundred and eighty-three strains were isolated from one hundred and seventy-nine collected samples. Seventy-nine strains were selected to analyze the 5' ends of 16S rDNA sequences for identification. In phylogenetic trees based on these sequences, seventy-one strains had their identification confirmed as acetic acid bacteria. A phylogenetic tree based on the sequences showed that nineteen strains should be classified into two new genera in the family *Acetobacteraceae*. The other fifty-two strains were assigned to six known species of three genera, *Acetobacter*, *Asaia* and *Gluconobacter*, based on 16S rRNA gene sequences, namely *A. tropicalis*, *As. bogorensis*, *As. lannensis*, *G. cerinus*, *G. frateurii* and *G. oxydans*. However, additional phenotypic and genetic characteristics have to be further characterized before proposing the new taxa, especially DNA-DNA hybridization compared with the type strains of closely related taxa.