NOTES

DNA Relatedness among Aeromonas allosaccharophila Strains and DNA Hybridization Groups of the Genus Aeromonas

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The genomic relatedness among three Aeromonas allosaccharophila strains, including the type strain, and other Aeromonas type and reference strains that were assigned to DNA hybridization groups was estimated by DNA-DNA hybridization (competition procedure using a membrane method). All A. allosaccharophila strains were highly related (70 to 100%) to strains 289T (= CECT 4199T) and ATCC 35942. Type strains of other validated Aeromonas species, reference strains of DNA groups 8 and 11, and the Aeromonas sp. strain ATCC 43946 (enteric group 501) were 0 to 41% related to A. allosaccharophila 289T and ATCC 35942. The G+C content of A. allosaccharophila strains were in the range 55.9 to 57.3 mol%. The G+C content of the type strain was 56.9 mol%, a value somewhat lower than that reported in the original description.

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TABLE 1. Tm's and DNA base compositions of A. allosaccharophila strains and E. coli NCTC 9001

<table>
<thead>
<tr>
<th>Bacterial strain</th>
<th>Mean Tm (°C)</th>
<th>G+C content (mol%) determined</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>In this study</td>
</tr>
<tr>
<td>A. allosaccharophila 289T (= CECT 4199T)</td>
<td>77.5 ± 0.4</td>
<td>56.9</td>
</tr>
<tr>
<td>290</td>
<td>77.0 ± 0.0</td>
<td>55.9</td>
</tr>
<tr>
<td>ATCC 35942</td>
<td>77.7 ± 0.4</td>
<td>57.3</td>
</tr>
<tr>
<td>E. coli NCTC 9001</td>
<td>74.6 ± 0.0</td>
<td>50.9</td>
</tr>
</tbody>
</table>

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bound to the filters was measured in a liquid scintillation counter (Beckman Instruments, Inc.), and the percentage of reassocation was calculated as described previously (12).

The G + C content of *A. pseudocaldus* 289T (= CECT 4199T) was 56.9 mol%, which is different from that previously reported for the other mesophilic *Aeromonas* species, which are generally 38 mol% (3, 4, 9, 10, 21, 22-24).

The DNA homology values obtained between two representatives of *A. pseudocaldus* and all strains investigated are shown in Table 2. *A. pseudocaldus* 289T (= CECT 4199T) showed 70% or more DNA relatedness with the other *Aeromonas* strains. Nevertheless, very low levels of homology (0 to 35%) were obtained between this strain and the reference strains studied, representing psychrophilic and mesophilic species and representatives of DNA homology groups 4, 6, 9, 11, and 12. Accordingly, very low levels of DNA homology (0 to 41%) were obtained between this strain and the reference strains studied, representing psychrophilic and mesophilic species and representatives of DNA homology groups 4, 6, 9, 11, and 12.

**REFERENCES**


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