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***Halomonas Xiaochaidanensis* sp. nov., a Halotolerant Bacterium Isolated from Xiaochaidan Lake of Qadam Basin, China**

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A short-rod-shaped halotolerant bacterium, designated CUG00002^T, was isolated from the sediment of Xiaochaidan Lake of Qadam Basin, China, using R2A medium. The cells are Gram-negative, aerobic and forming creamy and circular colonies with diameter of 1-2mm on R2A agar when incubated at 30°C for 3days. The strain can grow at 4-40 °C (optimum 30 °C) and at pH of 6-10 (optimum pH8). Growth can occur in 0-15% (w/v) NaCl with 3% (w/v) being optimum. 16S rRNA gene-based phylogenetic analysis indicated that the strain belonged to the genus of *Halomonas* in the *Gammaproteobacteria*, showing highest similarity of 97.3% and 97.1% to *Halomonas aidingensis* Ad-1^T and *Halomonas shengliensis* SL014B-85^T, respectively. Based on the results of phenotypic, phylogenetic and biochemical analysis, strain CUG00002^T could be considered as a novel species of genus *Halomonas*, for which the name *Halomonas xiaochaidanensis* sp. nov. is proposed. The type strain is CUG00002^T (=CCTCC XXXX=KCTC XXXX).

Key words: *Halomonas xiaochaidanensis* sp. nov., Gram-negative, Halotolerant

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Table 1 Different characteristics between strain CUG00002^T and the most closely related *Halomonas* type strains

Characteristics	CUG00002 ^T	<i>H. aidingensis</i> (Liu, Wang et al. 2011)	<i>H. shengliensis</i> (Wang, Cai et al. 2007)
Temperature range (°C)	4-40	4-45	10-42
Optimum temperature (°C)	30	30-35	30
pH range	6-10	5.5-10.5	8-9
Optimum pH	8-9	6-9	8.5
NaCl range (%)	0-15	0.5-25	0-15
Optimum NaCl (%)	3	2-10	5-15
Morphology	Short rod	Cocci/Short rod	Short rod
Motility	+	+	+
H ₂ S production	-	-	+
Hydrolysis of:			
Starch	+	+	+
Urea	+	-	+
Growth on:			
Lactate	+	+	-
L-arabinose	-	-	-
Citrate	+	+	-
Glycerol	+	-	+
Mannitol	-	+	-
D-cellobiose	-	-	+
Maltose	-	+	-

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