

DNA extraction, PCR and phylogenetic tree construction

DNA were extracted according to the instruction of Bacterial genomic DNA Extraction Kit by Shanghai Sangon Biological

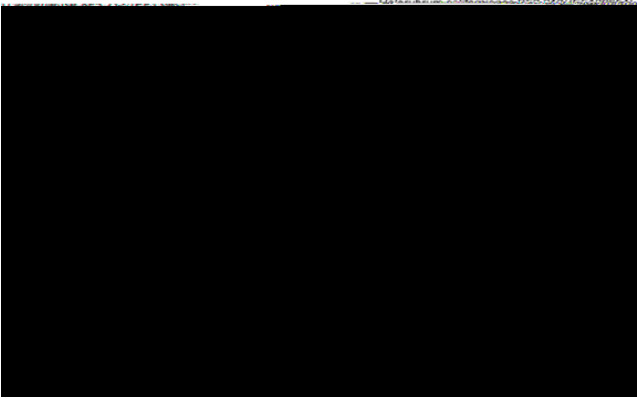


Figure 2 Phylogenetic tree showing the position of HMC halophilic

acidic lake, but alkaline environments were more suitable for the survival of halophilic bacteria [22]. The high archaeal diversity in YC could be due to the fact that some kinds of halorubrum can tolerate the

-
- 23 Yin S, Wang Z, Xu JQ, Xu WM (2015) *Halorubrum rutilum* sp. Nov. isolated from a marine solar saltern. *Arch Microbiol* 197: 1159-1164.
- 24 Rivadeneyra MA, Delgado R, Párraga J, Ramos-Correnza A (2006) Precipitation of minerals by 22 species of moderately halophilic bacteria in artificial marine salts media: Influence of salt concentration. *Folia Microbiol (Praha)* 51: 445-453.
- 25 Van de Vossenberg JL, Driessen AJ, Grant WD (1999) Lipid membranes from halophilic and alkali-halophilic archaeal have a low H⁺ and Na⁺ permeability at high salt concentration. *Extremophiles* 3: 253-257.
- 26 Kushner DJ (1978) Life in high salt and solute concentrations: Halophilic bacteria. *microbial life in extreme environments* 1978: 317-368.