

Supplementary Materials

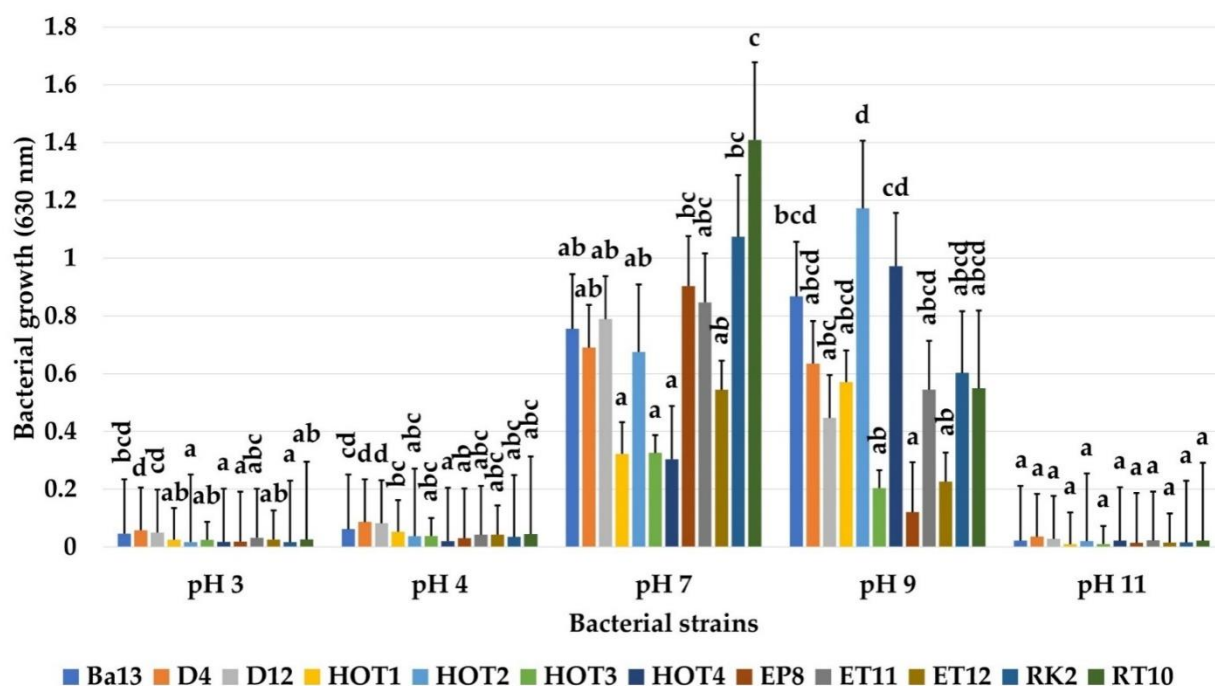


Figure S1. Effect of pH on bacterial growth (OD_{630nm}) in CMC broth (1%) of the 12 isolates tested. Results are expressed as mean-standard error of duplicate OD values. The effects of acid and alkaline concentrations corresponding to each treatment and not sharing the same letters are significantly different according to Tukey's post-hoc HSD test.

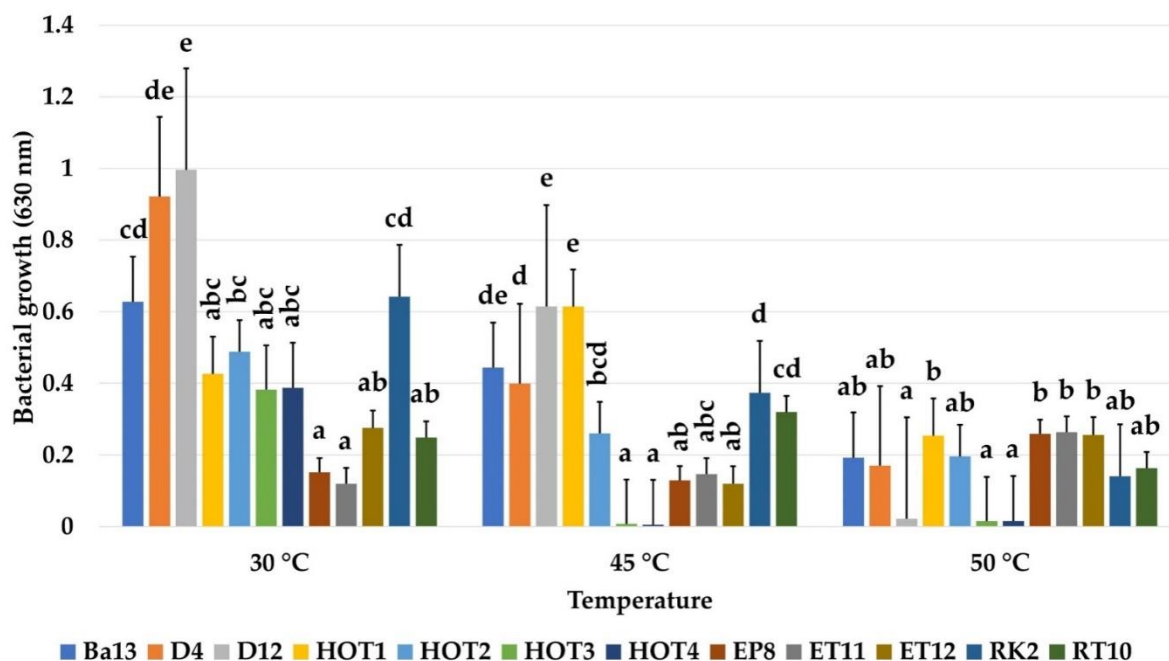


Figure S2. Effect of temperature on bacterial growth (OD_{630nm}) of the 12 isolates tested. Results are expressed as mean-standard error of duplicate OD values. The growth temperature effects corresponding to each treatment and not sharing the same letters are significantly different according to Tukey's post-hoc HSD test.

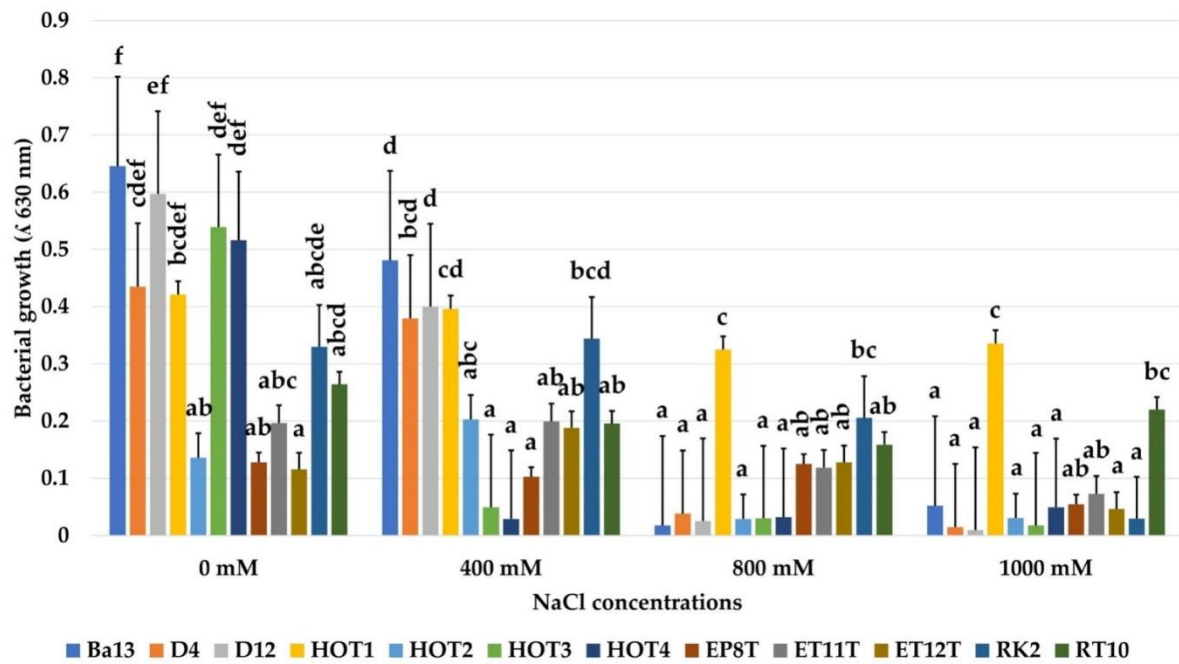


Figure S3. Effect of salinity on bacterial growth (OD_{630nm}) of the 12 isolates tested. Results are expressed as mean-standard error of duplicate OD values. The effects of the saline concentrations corresponding to each treatment and not sharing the same letters are significantly different, according to the post-hoc Tukey HSD test.

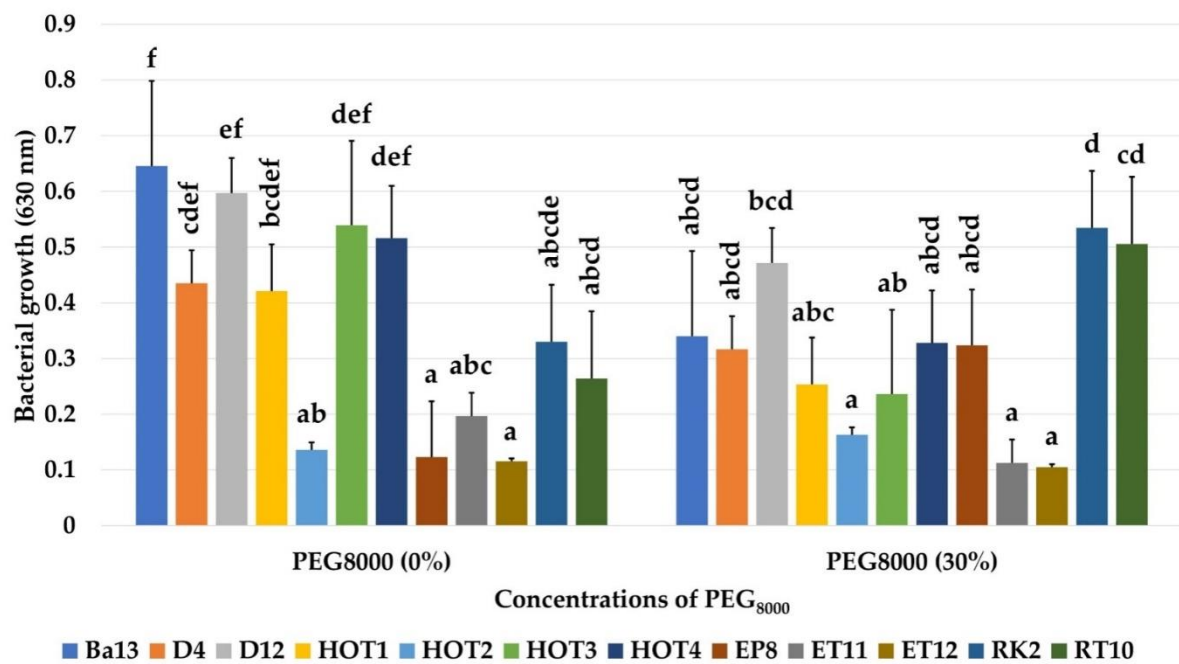


Figure S4. Effect of water activity on bacterial growth (OD_{630nm}) of the 12 isolates tested. Results are expressed as mean-standard error of duplicate OD values. The effects of the PEG₈₀₀₀ concentrations corresponding to each treatment and not sharing the same letters are significantly different according to Tukey's post-hoc HSD test.

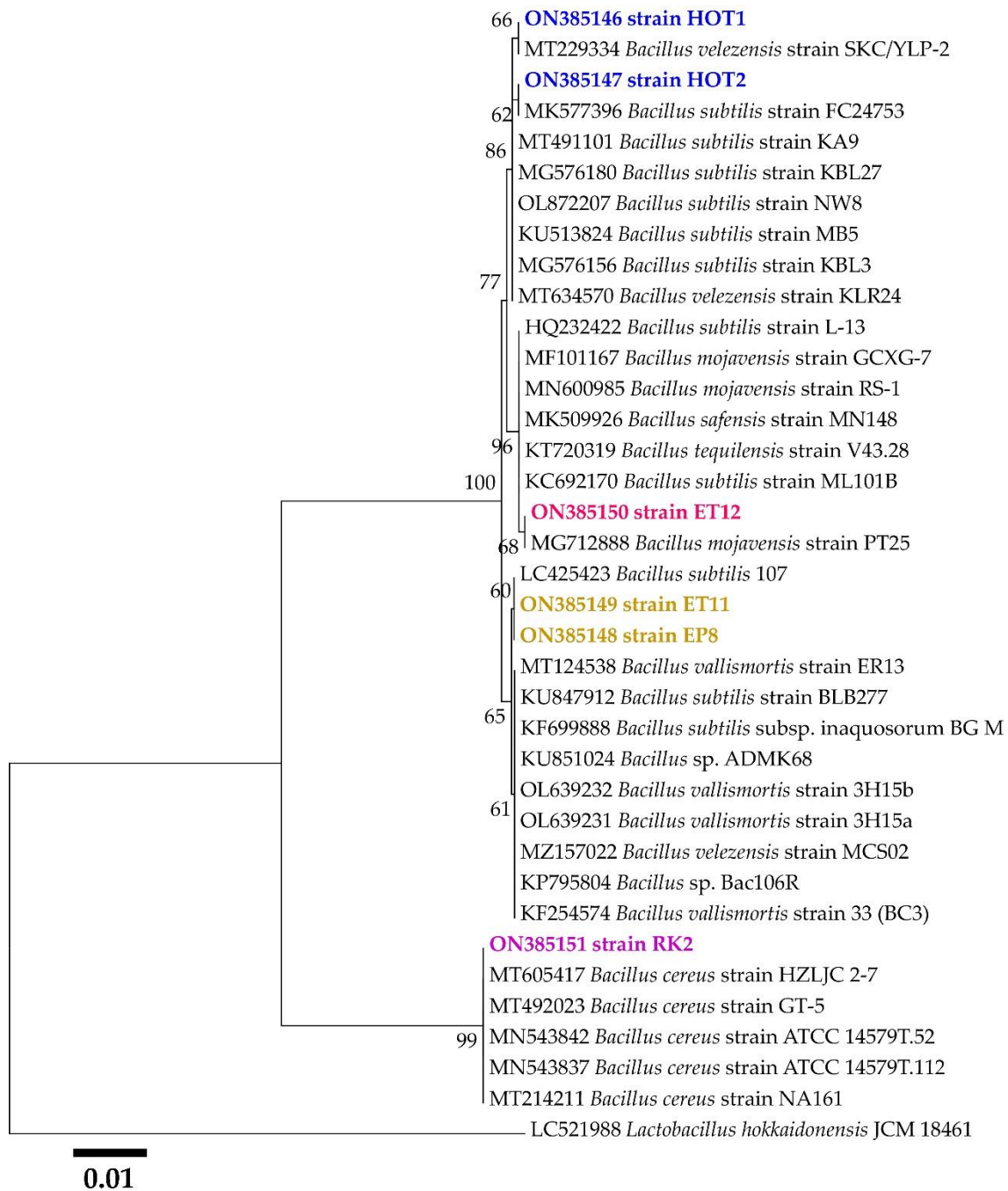
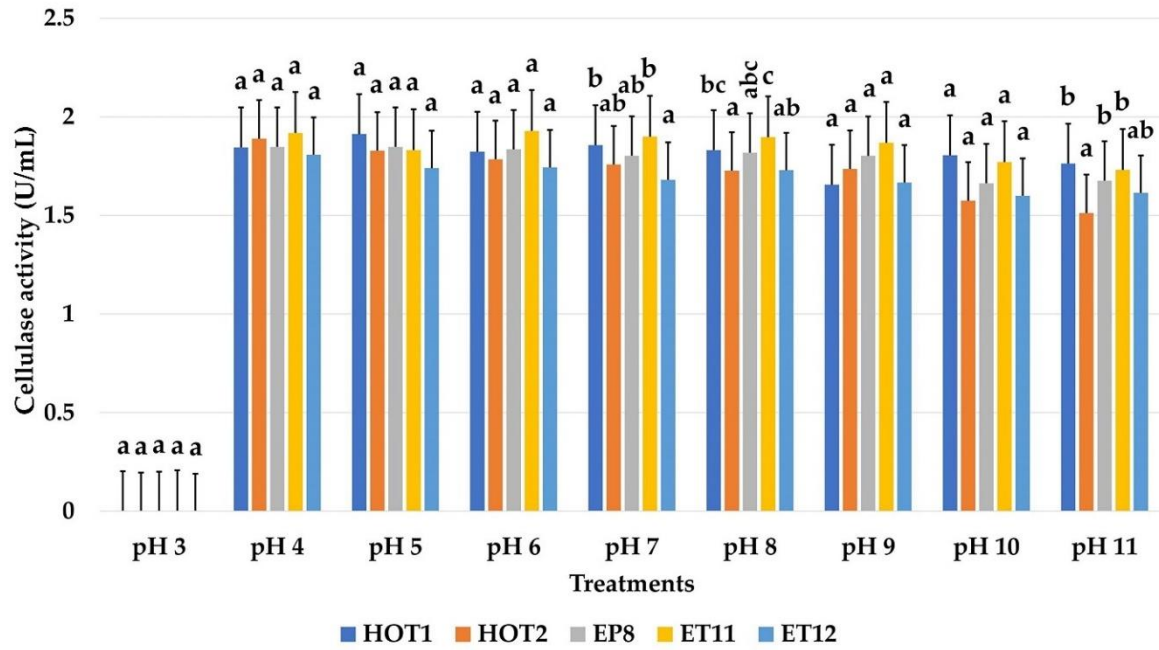
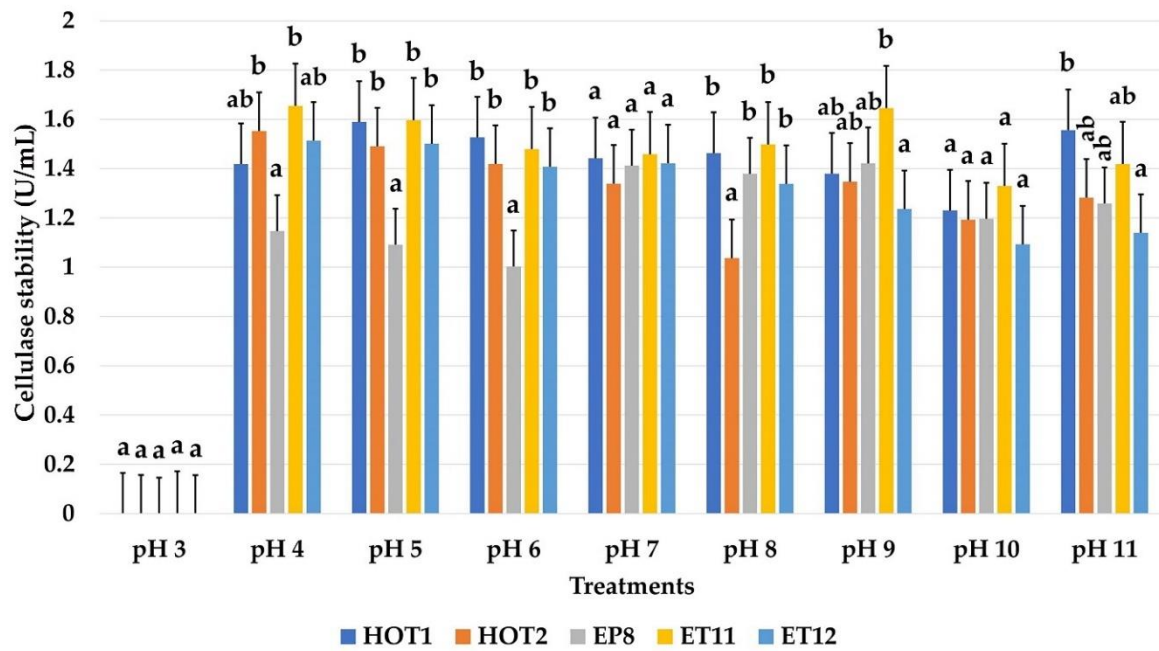


Figure S5. Maximum likelihood phylogenetic tree of *Bacillus* strains based on comparison of the 16S-rRNA gene sequence of bacterial strains with some phylogenetically related strains. Supports for branches were assessed by bootstrap resampling of the dataset with 1000 replicates. *Lactobacillus hokkaidonensis* JCM was used as outgroup.



A



B

Figure S6. Effect of pH on (A) enzymatic activity and (B) stability of the strains tested. The results are expressed as the mean-standard error of the values of the enzymatic unit in duplicate. The pH effects corresponding to each treatment and not sharing the same letters are significantly different according to Tukey's post-hoc HSD test.

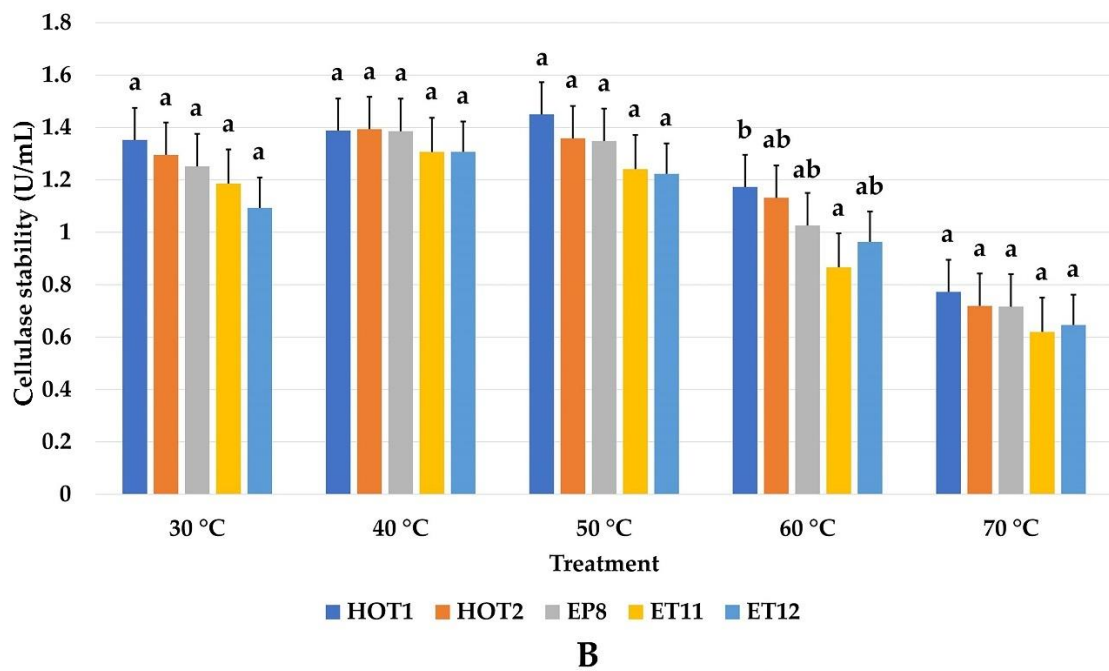
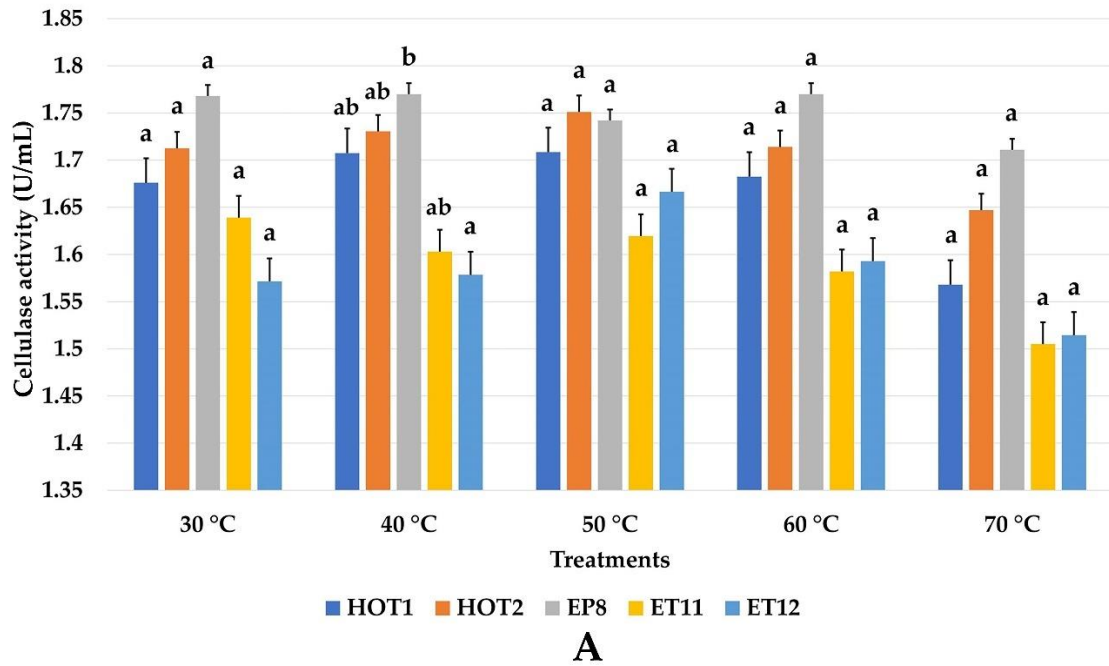


Figure S7. Effect of temperature on (A) enzymatic activity and (B) stability of the strains tested. The results are expressed as the mean-standard error of the values of the enzymatic unit in duplicate. The temperature effects corresponding to each treatment and not sharing the same letters are significantly different according to Tukey's post-hoc HSD test.

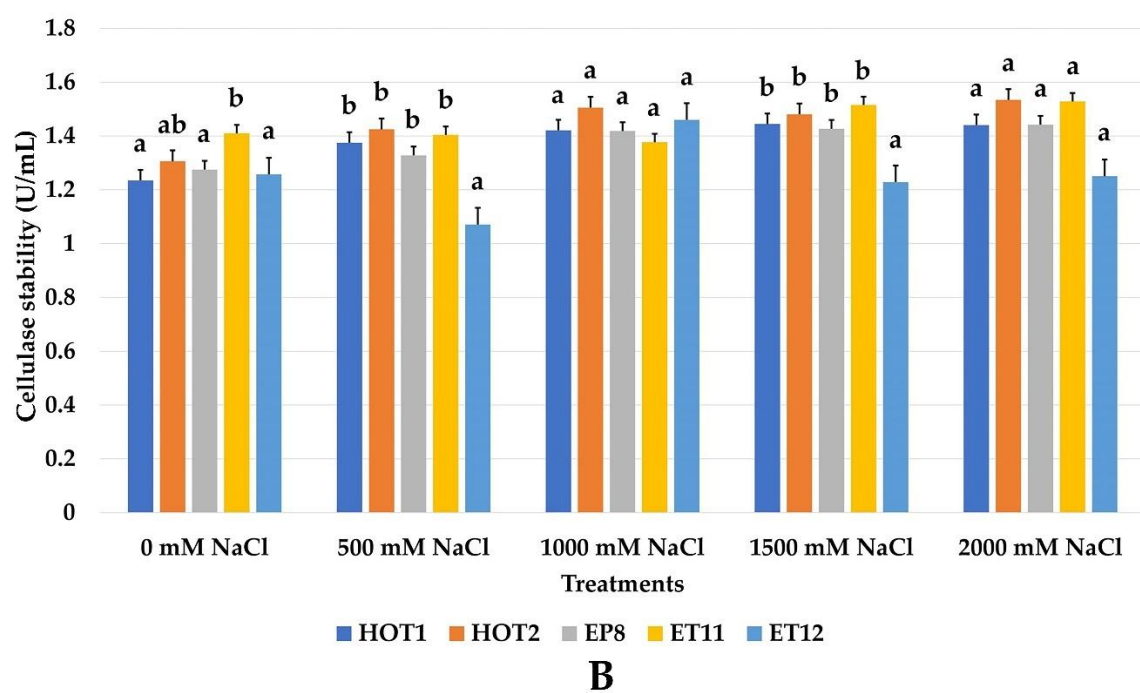
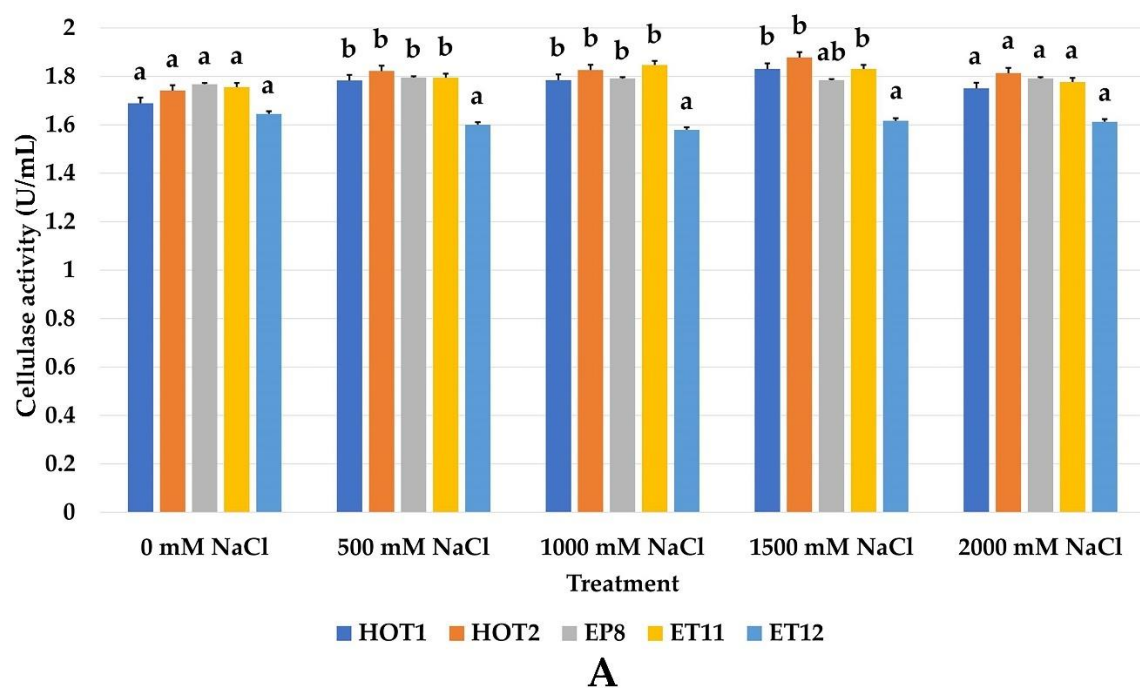
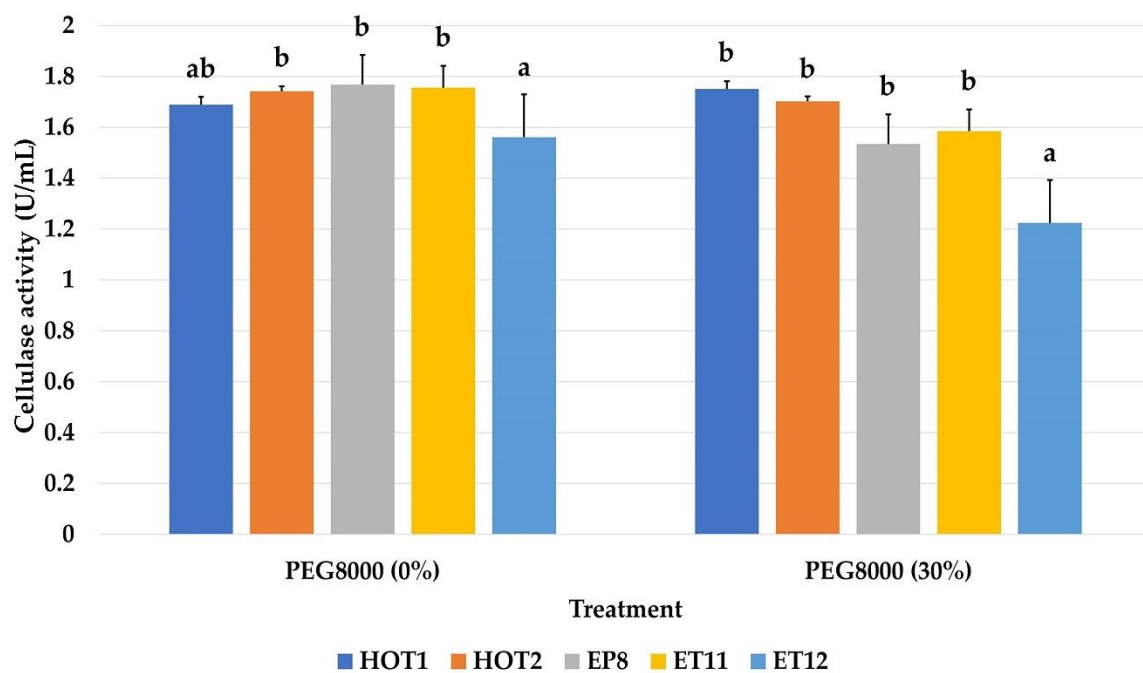
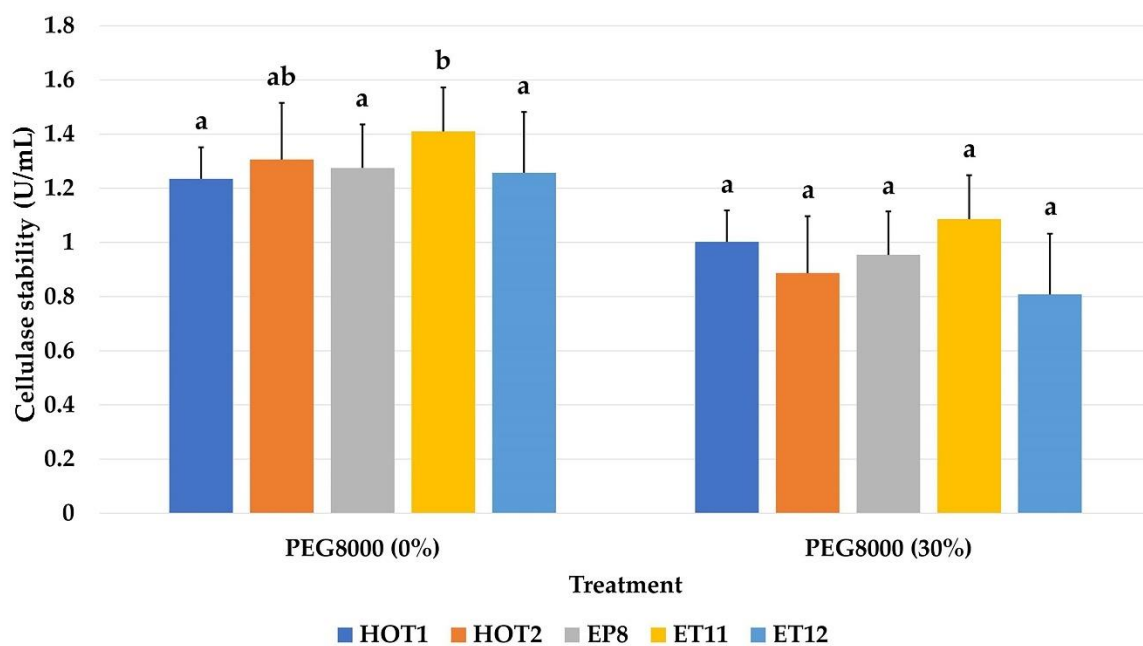


Figure S8. Effect of salinity on (A) enzymatic activity and (B) stability of the strains tested. The results are expressed as the mean-standard error of the values of the enzymatic unit in duplicate. The effects of saline concentrations corresponding to each treatment and not sharing the same letters are significantly different according to Tukey's post-hoc HSD test.



A



B

Figure S9. Effect of water activity on (A) cellulase activity and (B) stability of the strains tested. The results are expressed as the mean-standard error of the values of the enzymatic unit in duplicate. The effects of the PEG₈₀₀₀ concentrations corresponding to each treatment and not sharing the same letters are significantly different according to Tukey's post-hoc HSD test.