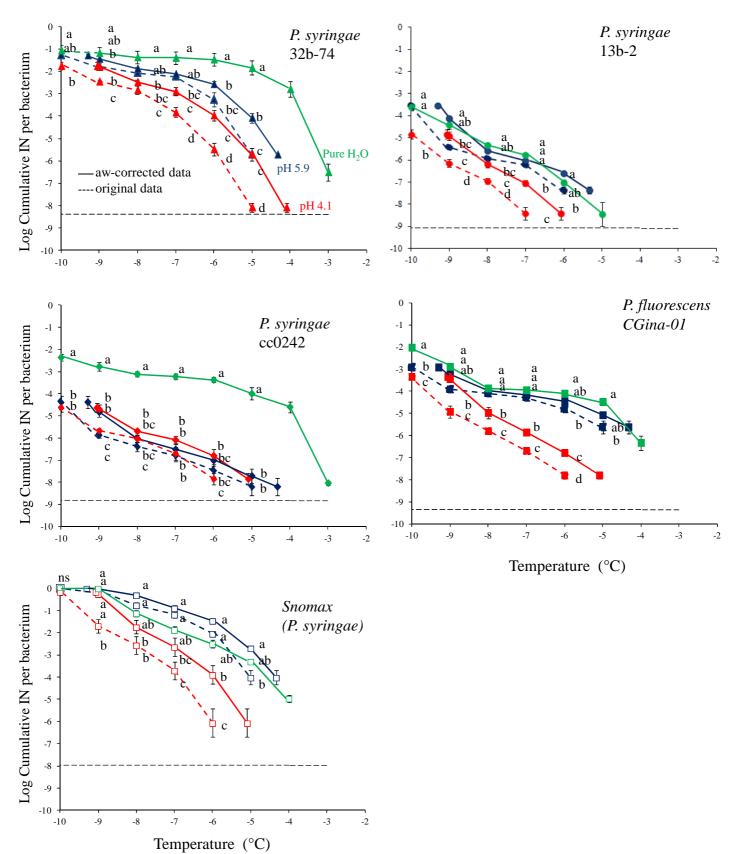
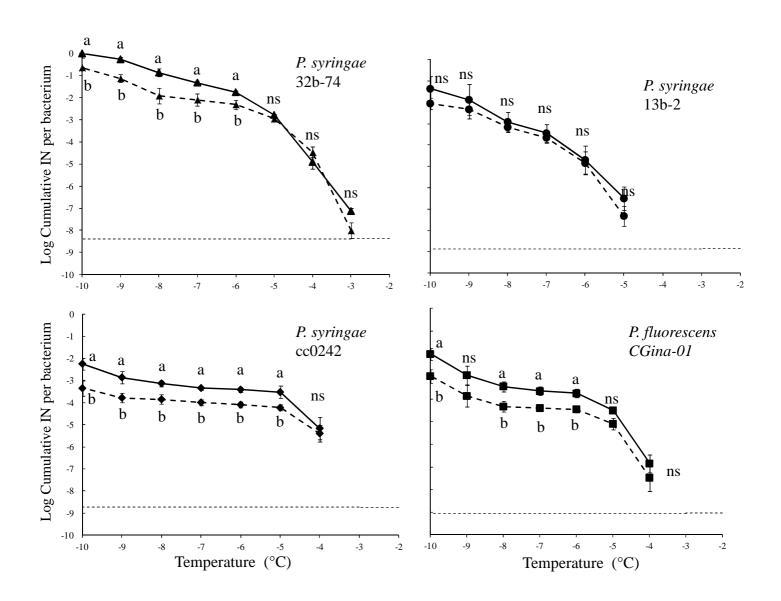


Appendix A: Diagram of the bacteria gas exposure system. RM stands for rotameter. Bacteria were loaded onto the syringe filter.



Appendix B: Ice nucleation spectra of *Pseudomonas* strains subjected to different pH: pH=4.1 (red), pH=5.9 (blue) and in distilled water as a control (green). For each pH, dotted lines correspond to original data whereas solid lines correspond to data corrected for water activity of the buffer. The horizontal line corresponds to the lower limit of detectable activity depending on the initial bacterial concentration of each experiment. Symbols are as in Figure 1. At each temperature, values associated with different letters are significantly different (p<0.05) based on Tukey's test. Errors bars indicate standard errors (n=4).



Appendix C: Ice nucleation spectra of *Pseudomonas* strains subjected to 42 h of UV-A exposure (solid line) or darkness (dotted line). The horizontal line corresponds to the lowest value of detectable activity, which depends on the initial bacterial concentration of each experiment. Symbols are as in Figure 1. INA was calculated by dividing the number of Ice Nuclei (IN) recorded after 42 h of UV-exposure by the viable cell number counted after 42h of UV exposure. At each temperature, values associated with different letters are significantly different (p<0.05) based on Tukey's test. Errors bars are standard errors (n=4).