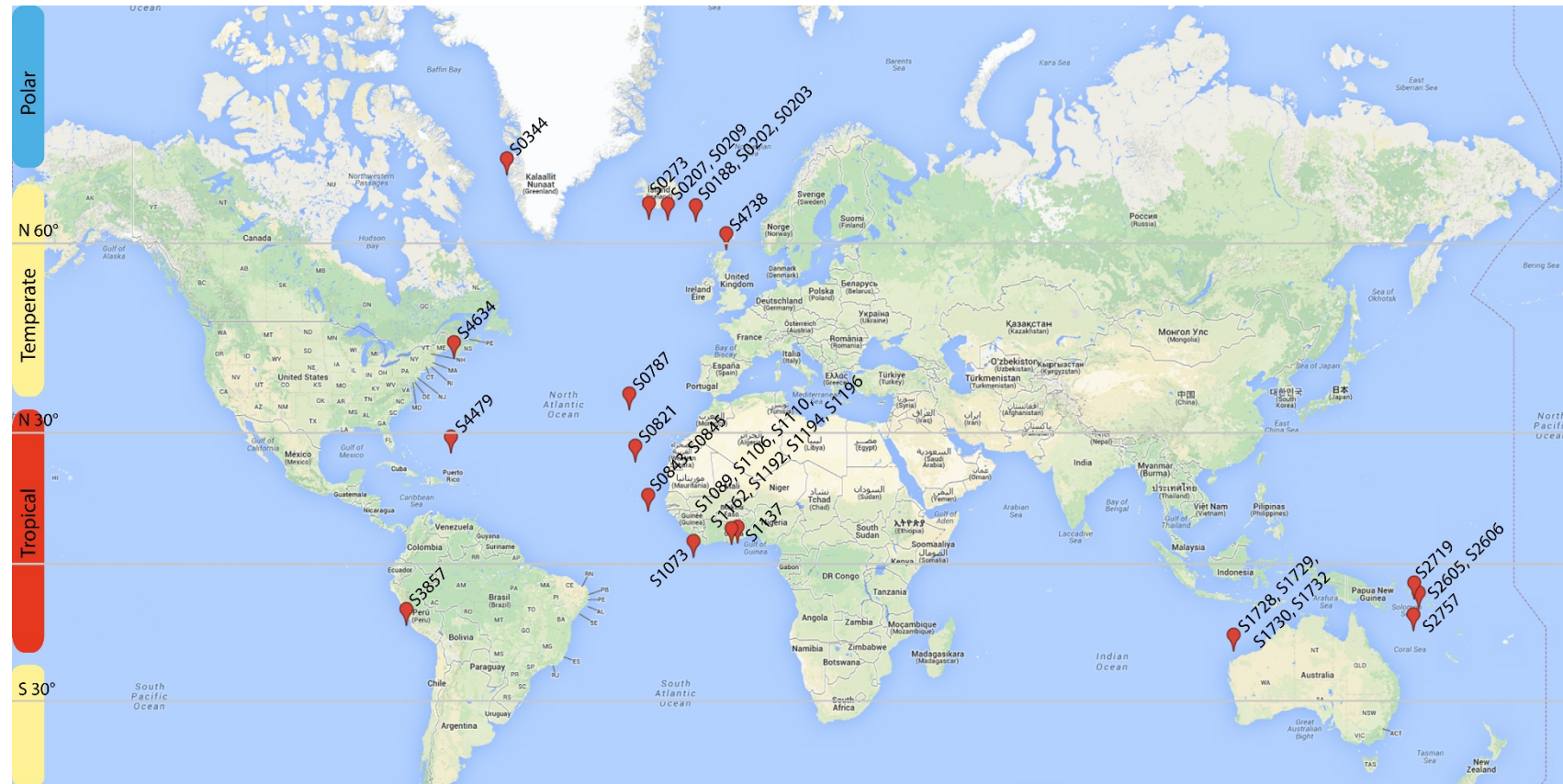


Supplementary Information

Table S1. Screening for general AHL response using AHL standards in well assay against *C. violaceum* (*Cv*) and *A. tumefaciens* (*At*) with three 10-fold dilutions; +++ strong, ++ medium, + weak, – no response. HSL = homoserine lactone.

| Name | Concentration of Dilutions in $\mu\text{mol L}^{-1}$ for <i>Cv</i> Assay | | | Concentration of Dilutions in $\mu\text{mol L}^{-1}$ for <i>At</i> Assay | | | AHL Response in Extract Well Assay | | | | | | |
|--|--|------|------|--|------|------|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | FW | 1 | 1:10 | 1:100 | 1 | 1:10 | 1:100 | <i>Cv</i> | <i>Cv</i> | <i>Cv</i> | <i>At</i> | <i>At</i> | <i>At</i> |
| | | | | | | | | 1 | 1:10 | 1:100 | 1 | 1:10 | 1:100 |
| C4-HSL; <i>N</i> -Butyryl-DL-HSL | 171 | 4089 | 409 | 41 | 4089 | 409 | 41 | +++ | ++ | – | – | – | – |
| C6-HSL; <i>N</i> -Hexanoyl-DL-HSL | 199 | 50 | 5.0 | 0.50 | 5019 | 502 | 50 | +++ | ++ | – | +++ | ++ | – |
| C8-HSL; <i>N</i> -Octanoyl-DL-HSL | 227 | 44 | 4.4 | 0.44 | 4.4 | 0.44 | 0.044 | ++ | + | – | +++ | +++ | – |
| C10-HSL; <i>N</i> -Decanoyl-DL-HSL | 255 | 3133 | 313 | 31 | 39 | 3.9 | 0.39 | + | + | – | +++ | +++ | – |
| C12-HSL; <i>N</i> -Dodecanoyl-DL-HSL | 283 | 3176 | 318 | 32 | 353 | 35 | 4 | + | – | – | ++ | ++ | – |
| C14-HSL; <i>N</i> -Tetradecanoyl-DL-HSL | 311 | 3211 | 321 | 32 | 3211 | 321 | 32 | – | – | – | ++ | ++ | ++ |
| C18-HSL; <i>N</i> -Octadecanoyl-L-HSL; oDHL | 367 | 2721 | 272 | 27 | 2721 | 272 | 27 | – | – | – | ++ | – | – |
| 3-OH-C4-HSL; <i>N</i> -(3-Hydroxybutyryl)-L-HSL; HBHL | 187 | 5342 | 534 | 53 | 5342 | 534 | 53 | + | – | – | ++ | ++ | – |
| OH-C6-HSL; <i>N</i> -(3-hydroxy-hexanoyl)-L-HSL | 215 | 4.6 | 0.46 | 0.05 | 46 | 4.6 | 0.46 | + | – | – | ++ | ++ | – |
| OH-C12-HSL; <i>N</i> -(3-hydroxy-dodecanoyl)-L-HSL | 299 | 3340 | 334 | 33 | 3.3 | 0.33 | 0.033 | ++ | + | – | ++ | ++ | – |
| O-C4-HSL; <i>N</i> -(3-Oxobutyryl)-L-HSL; OBHL, 3-oxo-C4-HSL | 185 | 5400 | 540 | 54 | 5400 | 540 | 54 | +++ | + | – | ++ | ++ | – |
| O-C6-HSL; <i>N</i> -(beta-Ketocaproyl)-L-HSL | 213 | 47 | 4.7 | 0.47 | 4.7 | 0.47 | 0.047 | +++ | + | – | ++ | ++ | – |
| O-C8-HSL; <i>N</i> -(3-oxo-Octanoyl-L)-HSL | 241 | 41 | 4.1 | 0.41 | 4.1 | 0.41 | 0.041 | +++ | + | – | +++ | +++ | +++ |
| O-C10-HSL; <i>N</i> -(3-oxo-decanoyl-L)-HSL | 269 | 371 | 37 | 3.7 | 3.7 | 0.37 | 0.037 | + | + | – | +++ | +++ | ++ |
| O-C12-HSL; <i>N</i> -(3-oxo-dodecanoyl-L)-HSL | 297 | 336 | 34 | 3.4 | 3.4 | 0.34 | 0.034 | – | – | – | +++ | +++ | ++ |
| 6-Ph-3-oxo-C6-HSL; <i>N</i> -(6-Phenyl-3-oxohexanoyl)-L-HSL; PhOHL | 289 | 346 | 35 | 3.5 | 3.5 | 0.35 | 0.035 | + | – | – | +++ | +++ | +++ |

Figure S1. World map with sampling sites of the AHL-positive *Vibrionaceae* strains and approximate climate zones. Geographic data is available in Table 1. Map data ©2014 Google.



© 2014 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).