

**Table S3: Bacterial pathogens**

Tested bacteria: BOR: *Borrelia burgdorferi* sensu lato, ANA: *Anaplasma phagocytophilum*, NEH: *Neorhlichia mikurensis*.

|                        | BOR | ANA | NEH | Analyzed nymphs | Infections | Infections % | 95% CI    |
|------------------------|-----|-----|-----|-----------------|------------|--------------|-----------|
| 1- Robertsau forest    | 37  | 4   | 46  | 184             | 87         | 47.3         | 39.9–54.7 |
| 2- Pourtalès park      | 7   | 0   | 6   | 79              | 13         | 16.5         | 9.4–26.9  |
| 3- Orangerie park      | 3   | 0   | 0   | 24              | 3          | 12.5         | 3.3–33.5  |
| 4- Botanical garden    | 0   | 1   | 0   | 10              | 1          | 10.0         | 0.5–45.9  |
| 5- Citadelle park      | 0   | 0   | 0   | 4               | 0          | 0.0          | /         |
| 6- Schulmeister park   | 0   | 0   | 0   | 1               | 0          | 0.0          | /         |
| 7- Neudorf forest      | 41  | 3   | 16  | 193             | 60         | 31.1         | 24.7–38.2 |
| 8- Rohrschollen forest | 39  | 2   | 9   | 162             | 50         | 30.9         | 24.0–38.7 |
| Total                  | 127 | 10  | 77  | 657             | 214*       | 32.6         | 29.0–36.3 |

**Table S3a:** Pathogen abundance for each bacterium *versus* sites.

/: insufficient data

\* The total number of infections (214) out of a total of 657 nymphs analyzed is higher than the number of infected nymphs (182) due to the presence of 32 co-occurrences in some of the infected nymphs.

|       | BOR | ANA | NEH | Analyzed nymphs | Infections | Infections % | 95% CI    |
|-------|-----|-----|-----|-----------------|------------|--------------|-----------|
| North | 44  | 4   | 52  | 263             | 100        | 38.0         | 32.2–44.2 |
| City  | 3   | 1   | 0   | 39              | 4          | 10.2         | 3.3–25.2  |
| South | 80  | 5   | 25  | 355             | 110        | 31.0         | 26.3–36.1 |
| Total | 127 | 10  | 77  | 657             | 214        | 32.6         | 29.0–36.3 |

**Table S3b:** Bacteria abundance *versus* zones (after grouping of sites).

|       | BOR | ANA | NEH | Analyzed nymphs | Infections | Infections % | 95% CI    |
|-------|-----|-----|-----|-----------------|------------|--------------|-----------|
| March | 35  | 3   | 11  | 163             | 49         | 30.1         | 23.3–37.8 |
| April | 21  | 5   | 8   | 173             | 34         | 19.7         | 14.2–26.6 |
| May   | 38  | 1   | 29  | 141             | 68         | 48.2         | 39.8–56.8 |
| June  | 33  | 1   | 29  | 180             | 63         | 35.0         | 28.9–42.5 |
| Total | 127 | 10  | 77  | 657             | 214        | 32.6         | 29.0–36.3 |

**Table S3c:** Bacteria abundance *versus* months.