**Supplementary table 2**: Volumes of all sperm that are taken as a basis for the given means and standard deviations

|  |  |
| --- | --- |
|  | **volumetric measurements of *Philodromus dispar* (volume in µm3)** |
|   | ssTEM | SBFSEM |
| setting | Leica UC6, 20° | Leica UC6, 24° | Leica UCT, 20° | Leica UCT, 24° | Leica UCT, 20° | Leica UCT, 24° | FEI Quanta 250 FEG (SBFSEM-1) | FEI Quanta 200 FEG (SBFSEM-2) |
| resin | Spurr | Spurr | Spurr | Spurr | Durcupan | Durcupan | Durcupan | Durcupan |
| notes | - | - | - | - | - | - | 1/3 of image stack | 2/3 of image stack | 3/3 of image stack | 1/3 of image stack | 2/3 of image stack | 3/3 of image stack |
| sperm01 | 28.73 | 33.51 | 31.68 | 29.15 | 31.85 | 27.55 | 36.53 | 37.90 | 34.25 | 34.95 | 36.19 | 35.46 |
| sperm02 | 29.83 | 34.14 | 29.78 | 29.92 | 30.87 | 30.57 | 32.73 | 36.13 | 34.17 | 37.19 | 35.89 | 37.92 |
| sperm03 | 31.2 | 29.29 | 29.88 | 30.92 | 30.92 | 28.85 | 33.22 | 37.52 | 33.69 | 36.66 | 37.20 | 38.90 |
| sperm04 | 34.18 | 25.5 | 30.22 | 30.51 | 31.02 | 28.94 | 36.92 | 37.59 | 38.04 | 34.50 | 36..07 | 36.26 |
| sperm05 | 28.31 | 28.82 | 30.53 | 33.78 | 31.88 | 31.87 | 33.16 | 37.33 | 36.28 | 39.50 | 36.67 | 34.60 |
| mean | 30.45 | 30.25 | 30.42 | 30.86 | 31.31 | 29.56 | 34.51 | 37.29 | 35.29 | 36.56 | 36.49 | 36.63 |
| standard deviation | 2.37 | 3.58 | 0.76 | 1.76 | 0.51 | 1.68 | 2.03 | 0.68 | 1.83 | 1.99 | 0.57 | 1.76 |
| mean (total) | **30.47** | **35.70** | **36.56** |
| standard deviation (total) | **1.94** | **1.94** | **1.50** |