**Additional file 1**

**Semi-field and indoor setups to study malaria mosquito swarming behavior**

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**Additional file 1: Table S1: Effects of time of the day (18:00h, 19:00h or 20:00h), location (inside or outside the MERF) and their interaction on mean temperature and humidity.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Mean temperature |  | *X²* | *df* | *P* value |
|  | Time | 177 | 2 | <0.001 |
|  | Location | 249 | 1 | <0.001 |
|  | Time:Location | 40.8 | 2 | <0.001 |
|  |  |  |  |  |
| Mean humidity |  | *X²* | *df* | *P* value |
|  | Time | 59.6 | 2 | <0.001 |
|  | Location | 3.7 | 1 | 0.06 |
|  | Time:Location | 21.8 | 2 | <0.001 |

Models were set up separately.

**Additional file 1: Table S2: Effects of MERF compartments on swarming rate, the height of swarm nucleus and the time at which the swarms started.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Compartment effects | | |
|  | *X²* | *df* | *P* value |
| Swarming rate | 9.8 | 5 | 0.08 |
| Height | 78 | 5 | <0.001 |
| Start time | 69 | 5 | <0.001 |

Models were set up separately.



**Additional file 1: Figure S1.** Light stimuli used into the swarming room. **a.** Ceiling light program with LED panels dimmed from 100% to 0% with the two C2 panels turning off 5 minutes after C1 panels. **b.** Incandescent bulb light illuminating the bright wall during all the experiment.



**Additional file 1: Figure S2:** Monthly temperatures outside the MERF and in the MERF during experiments.