**20/05/2021**

This file described the data used in the paper **"Males perceive honest information from female released sex pheromone in a moth"**. Files were archived with *Dryad* to provide available data in the manuscript.

**To facilitate the user, the archived files correspond with their order in the original paper.**

Description list of the files:

***1. Female fecundity***

* **1a-Female fecundity\_Desc Stat.csv**

This data file contains population statistics of females' fecundity, for each of the 6 different treatments.

* **1b-1b-Female fecundity\_KW analysis.csv**

This data file contains the results of the one-way nonparametric analysis of Kruskal-Wallace method (KW). This comparison was done among all of the 6 treatments, described above.

* **1c-Female fecundity\_Pairwise comparisons.csv**

This data file contains the post-hoc analysis of the pairwise comparisons among all of the 6 treatments of females' fecundity (described above).

***2. Males source-location behavior***

* **2a-Male attraction\_Desc\_Stat.csv**

This data file contains descriptive statistics of the distributional counts of males' behavioural performances in reaching the odor-source in an olfactometer-assay. The behavioural assay includes 5 types of choice experiments: 4 biological and 1 synthetic.

* **2b-Male attraction\_Quan\_Stat.csv**

This data file contingency analysis of the distributional counts of males' behavioural in each of the 5 types of choice experiments: 4 biological and 1 synthetic (see above).

***3 & 4. Pheromonal-gland extractions***

* **3a-Gland extr-Amount\_Desc Stat.csv**

This data file contains population statistics of the pheromone amount in each of the 4 different treatments.

* **3b-Gland extr-Amount\_Quant Stat.csv**

This data file contains statistics of quantitative analysis of the pheromone amount (see above), between two mutual sub-groups of the same treatment; hence, the results describe 4 two-samples comparison of the pheromone amount.

The data if files 4a&b contain the ration between the two components of the pheromonal-blend (ZZ/ZE); the treatments are similar to those mention above for 'pheromone amount' (*Files # 3*).

* **4a-Gland extr-Z-E Ratio\_Desc Stat.csv**

This data file contains population statistics of the pheromone ratio in each of the 4 different treatments.

* **4b-Gland extr-Z-E Ratio\_Quant Stat.csv**

This data file contains statistics of quantitative analysis of the pheromone ratio (see above), between two mutual sub-groups of the same treatment; hence, the results describe 4 two-samples comparison of the pheromone amount.

***5. Association between both traits of the Pheromonal blend***

* **5-Gland extr\_Correl X4.csv**

This data file is based on the data of files # 3 & 4 in attempt to investigate the relationship between the two features of the pheromonal-blend, amount and Z/E ratio. The analysis was done on each of the 4 treatments described above in 'gland extracts' (Files # 2 & 3). Yet, the data of each mutual sub-groups (of the same treatment) was pooled.

***6. Supplementary statistics using the multivariate method of Multiple correspondence analysis (MCA).***

* **Supp-Mulivariate method\_MCA.csv**

This data file contains the quantitative plots of the multiple correspondence analysis.