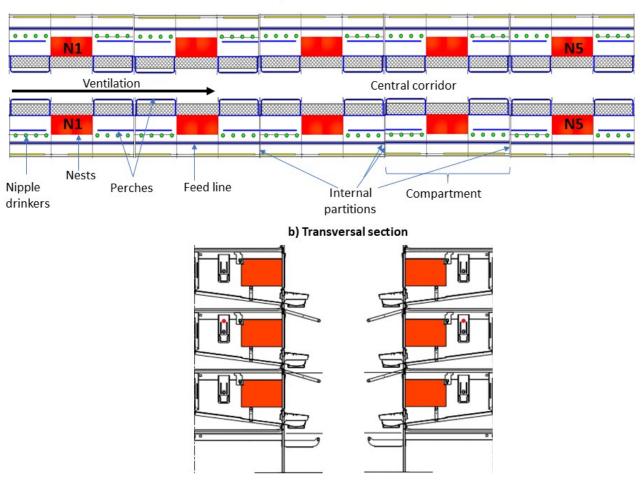
## **Supplemental Material**

**Figure S1:** Schematic representation of the aviary system used in the experimental trial: a) view from above; b) Transversal section



a) View from above

**Figure S2:** Aviaries used in the Control (C) group: Presence of the transversal partitions (4 per tier and side of the aviary) dividing each tier and side into 5 compartments. The red arrow shows on of the partitions.



**Figure S3:** Aviaries used in the Lateral Movement (LM) group. The red arrow shows the point where one of the transversal partition was removed.



**Figure S4:** Aviaries used in the Vertical Movement (VM) group: detail of one of the metal ramps that were installed between the different tiers of the aviary.



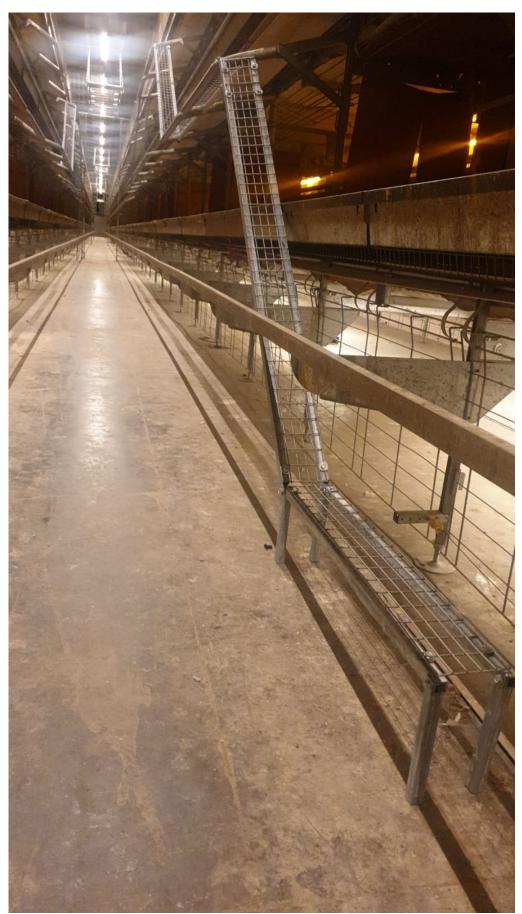
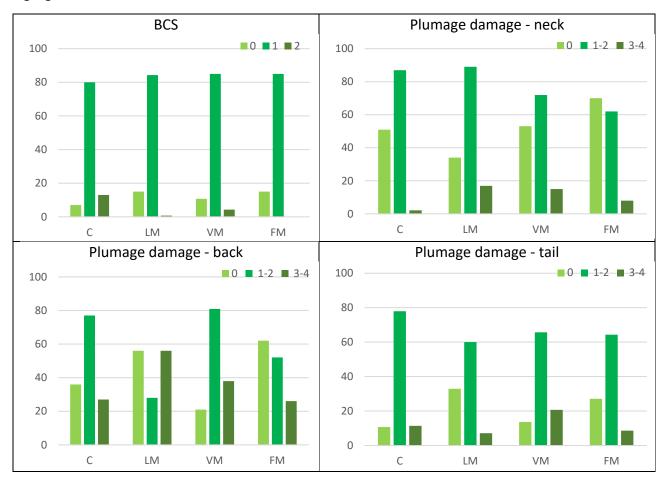


Figure S5: Overall view of the empty aviary with the ramps installed



**Figure S6:** Graphical representation of the class distribution (%) for the statistically significant parameters highlighted in Table 2

**Figure S7:** Egg distribution (expressed as a percentage) in the experimental groups across the nests over the entire trial (percentage ± standard deviation). C=Control, LM=Longitudinal Movement, VM=Vertical Movement, FM= Freedom of Movement, top, middle and lower tier of the aviary. Nests were numbered from 1 to 5 starting from the main entrance of the building and according to the direction of the ventilation (See figure S1).

