

## Table S1. Supplementary Materials: *Fusarium graminearum* in Stored Wheat: Use of CO<sub>2</sub> Production to Quantify Dry Matter Losses and Relate This to Relative Risks of Zearalenone Contamination under Interacting Environmental Conditions

Esther Garcia-Cela, Elsa Kiaitsi, Michael Sulyok, Angel Medina and Naresh Magan

Table S1. Statistical results p-values.

|  | Wilconxon/Kruskal-Wallis Tests (Rank Sums) |        |           |          | Nonparametric Comparisons for each pair using Wilcoxon Method |          |        |           |          |        |
|--|--|--------|-----------|----------|---|----------|--------|-----------|----------|--------|
|  | DML  | ZEN    | alpha-ZOL | beta-ZOL | Level - Level   | DML      | ZEN    | alpha-ZOL | beta-ZOL |        |
| Natural wheat                                  | T  | <.0001 | 0.0081    | 0.0175   | 0.0333  | 25-10    | <.0001 | 0.0013    | 0.0071   | 0.0071 |
|  |  |        |           |          |   | 15-10    | 0.0002 | 0.0195    | 0.0424   | 0.0786 |
|  |  |        |           |          |   | 20-10    | 0.0005 | 0.0722    | 0.1217   | 0.0788 |
|  |  |        |           |          |   | 25-15    | 0.126  | 0.0685    | 0.1662   | 0.0788 |
|  |  |        |           |          |   | 25-20    | 0.2855 | 0.1821    | 0.1662   | 0.2454 |
|  |  |        |           |          |   | 20-15    | 0.665  | 0.777     | 0.8939   | 0.9395 |
|  | aw   | 0.001  | 0.0326    | 0.1043   | 0.0188  | 0.95-0.9 | 0.0011 | 0.0134    | 0.0785   | 0.0261 |
| Natural wheat + <i>F. graminearum</i>          | T  | <.0001 | <.0001    | 0.0007   | <.0001  | 25-10    | <.0001 | <.0001    | 0.0004   | <.0001 |
|  |  |        |           |          |   | 15-10    | <.0001 | <.0001    | 0.0123   | 0.0002 |
|  |  |        |           |          |   | 20-10    | 0.0011 | 0.0001    | 0.0191   | 0.0022 |
|  |  |        |           |          |   | 25-15    | 0.0226 | 0.012     | 0.0286   | 0.0051 |
|  |  |        |           |          |   | 25-20    | 0.665  | 0.0247    | 0.0788   | 0.0165 |
|  |  |        |           |          |   | 20-15    | 0.795  | 0.3401    | 0.4967   | 0.1725 |
|  | aw   | 0.0003 | 0.2301    | 0.0516   | 0.1126  | 0.95-0.9 | 0.0004 | 0.0791    | 0.0153   | 0.0335 |
| Irradiated grain wheat + <i>F. graminearum</i> | T  | 0.0001 | <.0001    | <.0001   | <.0001  | 25-10    | <.0001 | <.0001    | <.0001   | <.0001 |
|  |  |        |           |          |   | 15-10    | 0.0003 | <.0001    | <.0001   | <.0001 |
|  |  |        |           |          |   | 20-10    | 0.0141 | <.0001    | <.0001   | <.0001 |
|  |  |        |           |          |   | 25-15    | 0.1166 | <.0001    | 0.0001   | <.0001 |
|  |  |        |           |          |   | 25-20    | 0.1572 | <.0001    | 0.0001   | 0.0004 |
|  |  |        |           |          |   | 20-15    | 0.8777 | <.0001    | 1        | 0.0029 |
|  | aw   | <.0001 | 0.9325    | 0.9603   | 0.6707  | 0.95-0.9 | 0.0002 | 0.6647    | 0.6978   | 0.2729 |
|  |  |        |           |          | 0.95-0.93   | 0.0005   | 0.8652 | 1         | 0.8025   |        |
|  |  |        |           |          | 0.93-0.9  | 0.0135   | 0.8651 | 0.9837    | 0.8922   |        |

Red numbers p<0.01. Orange numbers p<0.05. Only positives samples were used in the analysis.