

**Supplementary Materials: *Trichoderma* versus *Fusarium* – inhibition of pathogen growth and mycotoxins synthesis**

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**Table S1.** Ions mass and retention time for individual mycotoxins

| Mycotoxin     | Molecular ion (m/z)                       | Retention time (min) |
|---------------|---|----------------------|
| NIV           | 313.127 [M+H] <sup>+</sup>                | 1.70                 |
| NIV-3G        | 492.207 [M+NH <sub>4</sub> ] <sup>+</sup> | 1.80                 |
| FUS-X         | 355.138 [M+H] <sup>+</sup>                | 5.04                 |
| DON           | 297.132 [M+H] <sup>+</sup>                | 3.21                 |
| DON-3G        | 503.178 [M+COO] <sup>-</sup>              | 3.89                 |
| 3-AcDON       | 339.841 [M+H] <sup>+</sup>                | 5.80                 |
| 15-AcDON      | 339.841 [M+H] <sup>+</sup>                | 5.80                 |
| ZEN           | 317.139 [M-H] <sup>-</sup>                | 9.44                 |
| $\alpha$ -ZOL | 319.155 [M-H] <sup>-</sup>                | 9.02                 |
| $\beta$ -ZOL  | 319.155 [M-H] <sup>-</sup>                | 8.31                 |
| ZEN-14G       | 479.193 [M-H] <sup>-</sup>                | 7.58                 |
| ZEN-14S       | 397.097 [M-H] <sup>-</sup>                | 7.24                 |

**Table S2.** Correlation coefficient, analytical ranges, limit of detection (LOD), and limit of quantification (LOQ)

| Analyte        | Correlation Coefficient ( $R^2$ ) | Analytical ranges (mg/kg) | LOQ (mg/kg) | LOD (mg/kg) |
|----------------|-----------------------------------|---------------------------|-------------|-------------|
| NIV            | 0.9949                            | 0.10-8.00                 | 0.15        | 0.05        |
| NIV-3G         | 0.9977                            | 0.10-3.20                 | 0.16        | 0.05        |
| FUS-X          | 0.9972                            | 0.10-3.20                 | 0.12        | 0.04        |
| DON            | 0.9981                            | 0.10-8.00                 | 0.12        | 0.04        |
| DON-3G         | 0.9966                            | 0.10-3.20                 | 0.18        | 0.06        |
| 3- + 15- AcDON | 0.9967                            | 0.03-1.60                 | 0.03        | 0.01        |
| ZEN            | 0.9987                            | 0.10-8.00                 | 0.03        | 0.01        |
| $\alpha$ -ZOL  | 0.9972                            | 0.03-0.80                 | 0.03        | 0.01        |
| $\beta$ -ZOL   | 0.9949                            | 0.01-0.40                 | 0.03        | 0.01        |
| ZEN-14G        | 0.9921                            | 0.10-4.00                 | 0.18        | 0.06        |
| ZEN-14S        | 0.9920                            | 0.10-4.00                 | 0.24        | 0.08        |

**Table S3.** Recovery rate (R%) and method repeatability (expressed as relative standard deviation, RSD%) for individual analytes at four different fortification levels.

| Analyte        | Fortification level (mg/kg)<br>(n = 5) | R (%) | RSD (%) |
|----------------|--|-------|---------|
| NIV            | 1                                      | 95    | 13.6    |
|                | 2                                      | 75    | 17.2    |
|                | 4                                      | 88    | 10.0    |
|                | 8                                      | 86    | 10.0    |
|                | 0.4                                    | 98    | 11.7    |
| NIV-3G         | 0.8                                    | 88    | 9.7     |
|                | 1.6                                    | 94    | 4.2     |
|                | 3.2                                    | 79    | 7.1     |
|                | 0.4                                    | 72    | 12.5    |
| FUS-X          | 0.8                                    | 77    | 14.0    |
|                | 1.6                                    | 78    | 4.0     |
|                | 3.2                                    | 85    | 5.0     |
|                | 1                                      | 100   | 9.4     |
| DON            | 2                                      | 93    | 11.6    |
|                | 4                                      | 104   | 8.3     |
|                | 8                                      | 81    | 11.0    |
|                | 0.4                                    | 84    | 14.5    |
| DON-3G         | 0.8                                    | 82    | 9.1     |
|                | 1.6                                    | 90    | 2.0     |
|                | 3.2                                    | 92    | 8.0     |
|                | 0.2                                    | 122   | 3.1     |
| 3- + 15- AcDON | 0.4                                    | 109   | 4.9     |
|                | 0.8                                    | 107   | 6.4     |
|                | 1.6                                    | 102   | 10.3    |
|                | 1                                      | 84    | 10.2    |
| ZEN            | 2                                      | 79    | 9.1     |
|                | 4                                      | 86    | 4.0     |
|                | 8                                      | 94    | 4.1     |
|                | 0.1                                    | 84    | 22.0    |
| $\alpha$ -ZOL  | 0.2                                    | 77    | 12.2    |
|                | 0.4                                    | 90    | 4.6     |
|                | 0.8                                    | 95    | 4.7     |
|                | 0.05                                   | 93    | 14.1    |
| $\beta$ -ZOL   | 0.1                                    | 80    | 16.9    |
|                | 0.2                                    | 71    | 2.3     |
|                | 0.4                                    | 76    | 6.0     |
|                | 0.5                                    | 70    | 34.8    |
| ZEN-14G        | 1                                      | 81    | 8.3     |
|                | 2                                      | 86    | 4.3     |
|                | 4                                      | 79    | 3.6     |
|                | 0.5                                    | 77    | 13.2    |
| ZEN-14S        | 1                                      | 110   | 21.7    |
|                | 2                                      | 111   | 16.9    |
|                | 4                                      | 112   | 6.2     |