

# Supplementary Materials: Determination of Deoxynivalenol, Its Modified Forms, Nivalenol and Fusarenon-X in Feedstuffs by the Liquid Chromatography–Tandem Mass Spectrometry Method

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**Table S1.** LC-MS/MS parameters for detection of mixed mycotoxins by the mass spectrometer.

| Analytes                                        | Precursor ion                       |       | Product ion<br>(m/z) | Collision<br>energy (eV) | Dwell time<br>(msec) | Retention time<br>(min) |
|-------------------------------------------------|-------------------------------------|-------|----------------------|--------------------------|----------------------|-------------------------|
|                                                 | form                                | m/z   |                      |                          |                      |                         |
| NIV                                             | [CH <sub>3</sub> COO <sup>-</sup> ] | 371.0 | 281.2*               | 17                       | 25                   | 3.4                     |
|                                                 |                                     |       | 311.1                | 12                       |                      |                         |
|                                                 |                                     |       | 59.2                 | 24                       |                      |                         |
| DON-3Glc                                        | [CH <sub>3</sub> COO <sup>-</sup> ] | 517.0 | 427.0*               | 20                       | 25                   | 3.9                     |
|                                                 |                                     |       | 215.2                | 33                       |                      |                         |
|                                                 |                                     |       | 457.0                | 15                       |                      |                         |
| U-[ <sup>13</sup> C <sub>21</sub> ]<br>DON-3Glc | [CH <sub>3</sub> COO <sup>-</sup> ] | 538.0 | 447.2                | 24                       | 25                   | 3.9                     |
|                                                 |                                     |       | 478.2                | 17                       |                      |                         |
| DON                                             | [CH <sub>3</sub> COO <sup>-</sup> ] | 355.1 | 295.2*               | 11                       | 25                   | 4.1                     |
|                                                 |                                     |       | 265.2                | 16                       |                      |                         |
|                                                 |                                     |       | 59.2                 | 30                       |                      |                         |
| U-[ <sup>13</sup> C <sub>15</sub> ]<br>DON      | [CH <sub>3</sub> COO <sup>-</sup> ] | 370.0 | 310.2                | 11                       | 25                   | 4.1                     |
|                                                 |                                     |       | 279.1                | 16                       |                      |                         |
| FUS-X                                           | [H <sup>+</sup> ]                   | 355.0 | 337.1*               | -10                      | 50                   | 4.9                     |
|                                                 |                                     |       | 229.1                | -18                      |                      |                         |
|                                                 |                                     |       | 175.2                | -22                      |                      |                         |
| 3-AcDON                                         | [H <sup>+</sup> ]                   | 339.0 | 231.2*               | -14                      | 30                   | 7.1                     |
|                                                 |                                     |       | 279.1                | -15                      |                      |                         |
| 15-AcDON                                        | [H <sup>+</sup> ]                   | 339.0 | 321.2*               | -10                      | 30                   | 6.8                     |
|                                                 |                                     |       | 261.2                | -12                      |                      |                         |

\* - ion used for quantitation.

**Table S2.** LC column used during the chromatographic set up.

| Columns                  | Stationary<br>Phase | Particle Size<br>(μm) | Pore<br>Size (Å) | Length<br>(mm) | Internal<br>Diameter (mm) |
|--------------------------|---------------------|-----------------------|------------------|----------------|---------------------------|
| Phenomenex Luna<br>Omega | Polar C18           | 1.6                   | 100              | 100            | 2.1                       |
| Phenomenex<br>Kinetex    | C18                 | 2.6                   | 100              | 100            | 2.1                       |
| Phenomenex<br>Kinetex    | Biphenyl            | 1.7                   | 100              | 100            | 2.1                       |
| Phenomenex Luna          | HILIC               | 5                     | 200              | 100            | 2                         |