

---

**Supplementary material**

**Optimising methods for the recovery and quantification of di- and tripeptides in soil**

*Sandra Jämtgård<sup>A,B,E</sup>, Nicole Robinson<sup>B</sup>, Thomas Moritz<sup>C</sup>, Michelle L. Colgrave<sup>D</sup>,  
and Susanne Schmidt<sup>B</sup>*

<sup>A</sup>Department of Forest Ecology and Management, Swedish University of Agricultural Sciences, SE-901 83 Umeå, Sweden.

<sup>B</sup>School of Agriculture and Food Science, The University of Queensland, Brisbane, Queensland 4072, Australia.

<sup>C</sup>Umeå Plant Science Centre, Department of Forest Genetics and Plant Physiology, Swedish University of Agricultural Sciences, SE-901 83 Umeå, Sweden.

<sup>D</sup>Commonwealth Scientific and Industrial Research Organisation (CSIRO) Agriculture and Food, 306 Carmody Road, St Lucia, Queensland, 4067, Australia.

<sup>E</sup>Corresponding author. Email: [sandra.jamtgard@slu.se](mailto:sandra.jamtgard@slu.se)

**Table S1. List of amino acid analysis parameters**

Q1 is the precursor ion for the MRM transition, i.e. Q1  $m/z$  → Q3  $m/z$  171 (product ion). LC retention time is shown in the final column.

Amino acid	Q1 ( $m/z$ )	Q3 ( $m/z$ )	Retention time (min)
Histidine	326.1	171	2.67
Asparagine	303.1	171	3.07
Arginine	345.1	171	3.24
Serine	276.1	171	3.44
Glutamine	317.1	171	3.55
Glycine	246.1	171	3.59
Aspartic Acid	304.1	171	4.00
Glutamic acid	318.1	171	4.37
Threonine	290.1	171	4.51
Alanine	260.1	171	4.90
Proline	286.1	171	5.47
Tyrosine	352.1	171	7.13
Lysine	487.2	171	6.91
Methionine	320.1	171	7.12
Valine	288.0	171	7.20
Norvaline	288.0	171	7.37
Isoleucine	302.1	171	8.01
Leucine	302.1	171	8.09
Phenylalanine	336.1	171	8.29