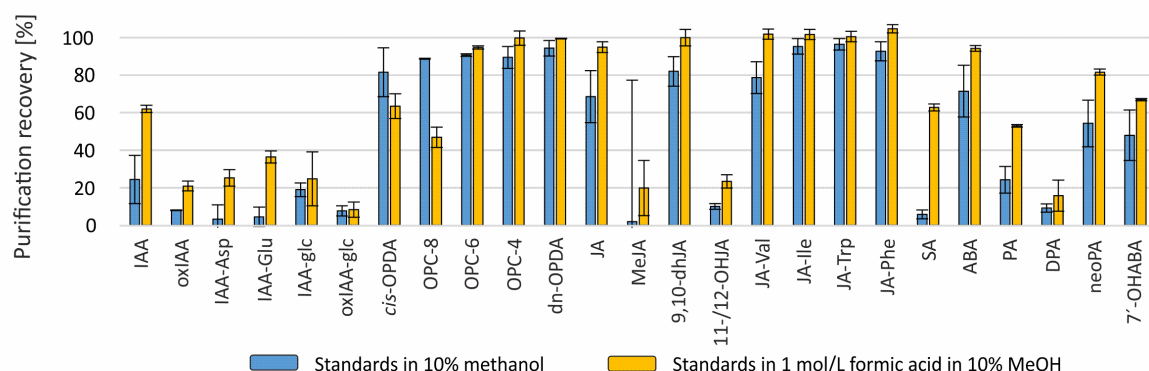
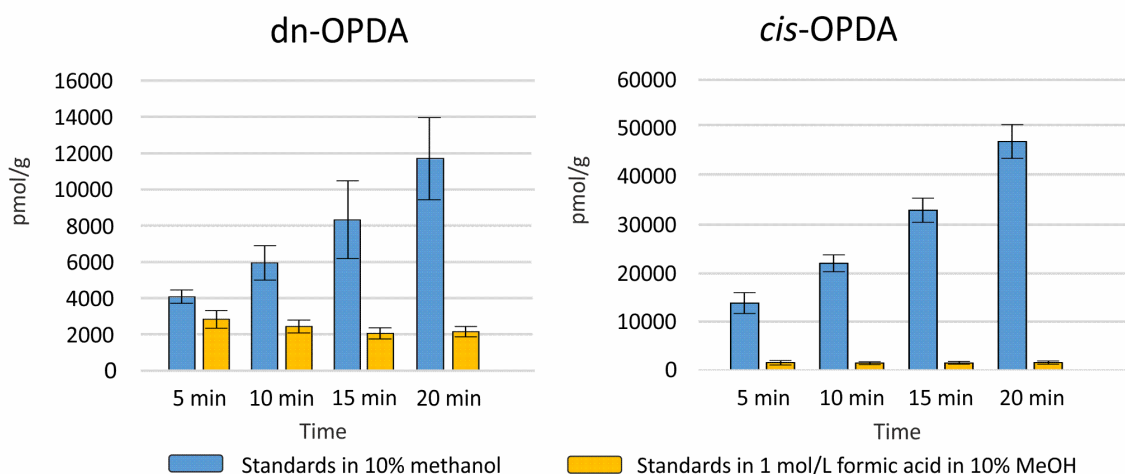


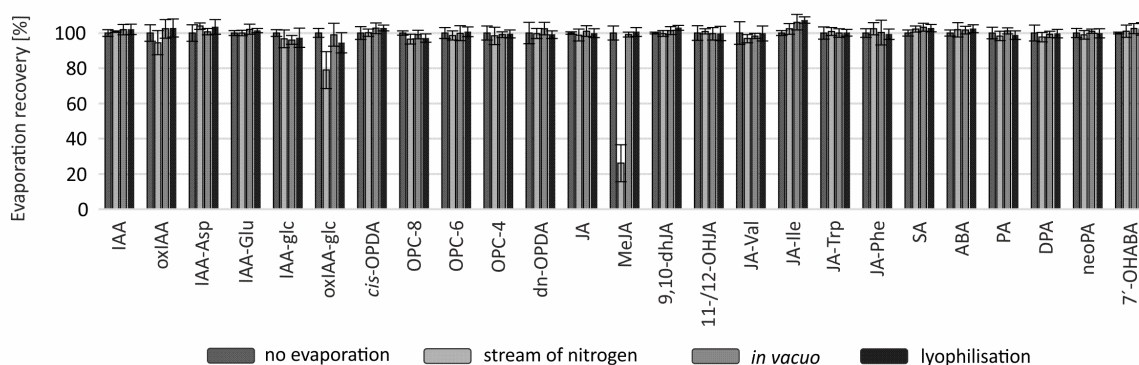
Additional file 1: Figure S1. Purification recoveries of standards in acidified and non-acidified solution. Calculated as mean area for standard solution (1 pmol) processed by microSPE divided by the area for the corresponding amount of standard without microSPE * 100. Error bars represent $\pm$ SD, n = 3.



Additional file 1: Figure S2. Endogenous levels of dn-OPDA and cis-OPDA found in 10-day-old *Arabidopsis thaliana* seedlings using different extraction conditions over time. Error bars represent $\pm$ SD, n = 4.



Additional file 1: Figure S3. Influence of the method of drying samples after purification using evaporation under a stream of nitrogen, *in vacuo* drying and lyophilisation, expressed as recovery after evaporation. Calculated as mean peak area for dried and re-dissolved standard divided by area for the standard solution at the same concentration without evaporation, expressed as a percentage. Error bars represent $\pm$ SD, n = 4.



Additional file 1: Table S1. Range of sample weights (1 – 2 – 4 – 6 – 8 mg of FW or 0.1 – 0.2 – 0.4 – 0.6 – 0.8 mg of DW) in which the analyte was quantified, R2** of regression of sample weight and analyte level found in sample.

	<i>Populus tremula x alba</i> (FW)	<i>Arabidopsis thaliana</i> (FW)	<i>Brassica rapa</i> (FW)	<i>Solanum Lycopersicum</i> (FW)	<i>Nicotiana tabacum</i> (FW)	<i>Triticum aestivum</i> (FW)	<i>Picea abies</i> (FW)	<i>Physcomitrium patens</i> (FW)	<i>Stichococcus bacillaris</i> (DW)
IAA	1 – 8 mg, 0.9980	1 – 8 mg, 0.9962	1 – 8 mg, 0.9997	1 – 8 mg, 0.9962	1 – 8 mg, 0.9968	1 – 8 mg, 0.9989	1 – 8 mg, 0.9996	4 – 8 mg, 0.9949	0.1 – 0.8 mg, 0.9968
oxIAA	ND	1 – 8 mg, 0.9992	ND	ND	ND	ND	ND	1 – 8 mg, 0.9996	ND
IAA-Asp	6 – 8 mg	4 – 8 mg, 0.9985	ND	ND	ND	ND	ND	ND	ND
IAA-Glu	1 – 8 mg, 0.9978	2 – 8 mg, 0.9820	ND	ND	ND	ND	2 – 8 mg, 0.9864	1 – 8 mg, 0.9985	ND
IAA-glc	ND	1 – 8 mg, 0.9993	ND	ND	ND	ND	4 – 8 mg, 0.9999	ND	ND
oxIAA-glc	ND	1 – 8 mg, 0.9993	1 – 8 mg, 0.9927	ND	ND	ND	ND	6 – 8 mg	ND
cis-OPDA	1 – 8 mg, 0.999	1 – 8 mg, 0.9983	1 – 8 mg, 0.9988	1 – 8 mg, 0.9996	ND	1 – 8 mg, 0.9943	1 – 8 mg, 0.9963	1 – 8 mg, 0.9991	ND
OPC-8	ND	ND	ND	ND	ND	ND	ND	ND	ND
OPC-6	ND	ND	ND	ND	ND	ND	ND	ND	ND
OPC-4	ND	1 – 8 mg, 0.9967	ND	ND	ND	ND	ND	ND	ND
dn-OPDA	ND	1 – 8 mg, 0.9988	ND	ND	ND	ND	ND	ND	ND
JA	1 – 8 mg, 0.9936	1 – 8 mg, 0.9987	1 – 8 mg, 0.9993	1 – 8 mg, 0.9968	1 – 8 mg, 0.9965	1 – 8 mg, 0.9997	1 – 8 mg, 0.9969	ND	ND
MeJA	ND	ND	ND	ND	ND	ND	ND	ND	ND
9,10-dhJA	ND	ND	4 – 8 mg, 0.9972	4 – 8 mg, 0.9903	4 – 8 mg, 0.9995	4 – 8 mg, 0.9998	ND	ND	0.1 – 0.8 mg, 0.9966
Sum of 11-OHJA and 12-OHJA	ND	2 – 8 mg, 0.9904	1 – 8 mg, 0.9948	ND	6 – 8 mg	1 – 8 mg, 0.9959	ND	ND	
JA-Val	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ja-Ile	2 – 8 mg, 0.9989	1 – 8 mg, 0.9979	1 – 8 mg, 0.9983	1 – 8 mg, 0.9979	2 – 8 mg, 0.9955	2 – 8 mg, 0.9950	1 – 8 mg, 0.9979	ND	0.4 – 0.8 mg, 0.9998
JA-Trp	ND	ND	ND	ND	ND	ND	ND	ND	ND
JA-Phe	ND	ND	ND	ND	ND	ND	ND	ND	ND
SA	2 – 8 mg, 0.9999	2 – 8 mg, 0.9991	1 – 8 mg, 0.9981	1 – 8 mg, 0.9970	ND	1 – 8 mg, 0.9969	2 – 8 mg, 0.9973	1 – 8 mg, 0.9998	0.2 – 0.8 mg, 0.9937
ABA	1 – 8 mg, 0.9965	2 – 8 mg, 0.9994	1 – 8 mg, 0.9996	1 – 8 mg, 0.9986	1 – 8 mg, 0.9986	1 – 8 mg, 0.9998	1 – 8 mg, 0.9994	4 – 8 mg, 0.9996	0.1 – 0.8 mg, 0.9998
PA	2 – 8 mg, 0.9999	ND	1 – 8 mg, 0.9988	1 – 8 mg, 0.9999	1 – 8 mg, 0.9996	4 – 8 mg, 0.9973	ND	ND	ND
DPA	ND	ND	1 – 8 mg, 0.9927	ND	ND	ND	6 – 8 mg	ND	ND
neoPA	ND	ND	4 – 8 mg, 0.9979	1 – 8 mg, 0.9997	1 – 8 mg, 0.9996	4 – 8 mg, 0.9986	1 – 8 mg, 0.9990	ND	0.4 – 0.8 mg, 0.9904
7'-OHABA	ND	ND	2 – 8 mg, 0.9985	4 – 8 mg, 0.9962	ND	ND	1 – 8 mg, 0.9995	ND	ND

ND – not detected in any amount of plant matrix

Additional file 1: Figure S4. Design and dimensions of 3D printed 96-place microSPE holder.

