

SUPPORTING INFORMATION

**Multifaceted Investigation of Metabolites During Nitrogen
Fixation in Medicago via High Resolution MALDI-MS Imaging
and ESI-MS**

Erin Gemperline¹, Dhileepkumar Jayaraman², Junko Maeda², Jean-Michel Ané², Lingjun
Li^{1,3,*}

¹Department of Chemistry, University of Wisconsin - Madison, Madison, WI 53706, USA.

²Department of Agronomy, University of Wisconsin - Madison, Madison, WI 53706, USA.

³School of Pharmacy, University of Wisconsin - Madison, Madison, WI 53705, USA.

*To whom correspondence should be addressed: Dr. Lingjun Li (lingjun.li@wisc.edu)

SUPPORTING INFORMATION**Table S1. Metabolites of Interest (m/z) Determined from MALDI-MSI**

114.1273	221.1853	445.2702	557.1617
118.0859	225.0840	464.9456	559.3965
119.0895	233.0412	465.9908	560.3098
133.0603	241.0577	480.9190	564.0486
140.0651	252.0500	481.2299	566.4372
155.0422	254.1019	483.2461	580.0223
156.0414	257.1462	485.2628	582.4121
156.0447	261.2167	487.9736	583.9925
156.0477	263.0395	498.1682	589.5172
158.0397	273.1203	502.9020	591.5336
158.1173	279.0136	503.9474	602.0052
171.0162	283.1618	504.3430	603.5340
180.0992	290.0849	514.1423	608.4283
191.1748	291.0831	520.3395	613.4814
192.9980	297.1777	522.3552	617.1844
196.0729	299.1359	524.0563	617.5497
198.0710	299.2802	526.3250	617.9789
203.1022	323.1934	536.1234	747.3759
208.9719	339.2886	540.3047	749.5071
210.9760	352.9188	541.3125	765.4819
214.9474	399.1441	543.3995	774.4442
217.0676	408.0072	544.3360	
217.1903	423.9813	556.2784	

Bold indicates metabolites that have been identified and are listed in Table 1

Table S2. Metabolites of Interest (m/z) Determined from ESI-MS

104.0708	166.0859
114.0915	171.0165
116.0706	175.1188
118.0863	182.0808
118.1228	192.9986
120.0807	195.0862
133.0607	203.1024
134.1176	217.0678
148.0603	387.1927
149.1242	415.2114
155.0425	

Bold indicates metabolites that have been identified and are listed in Table 1.