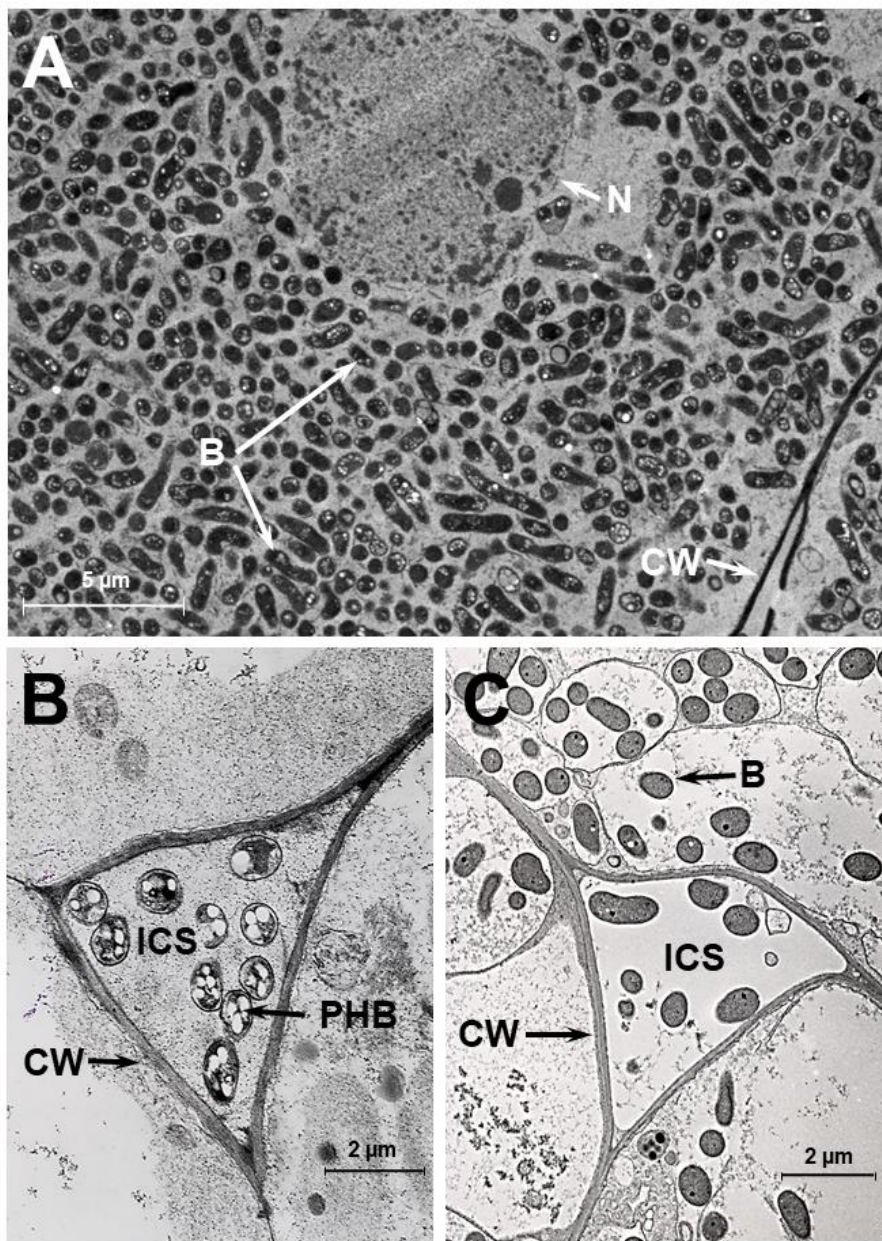


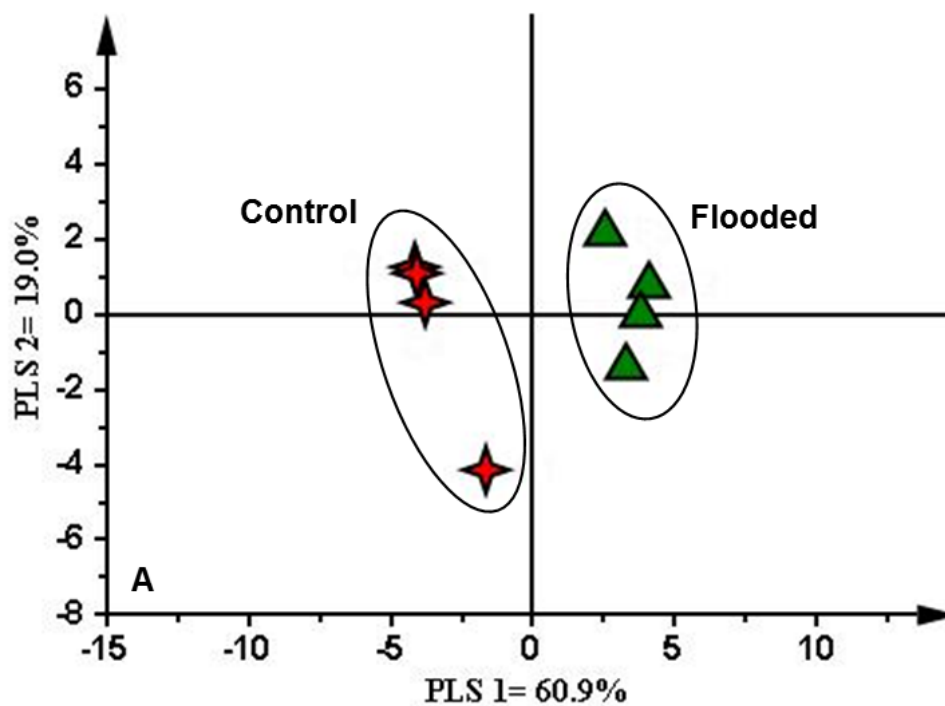
**Supplemental Table 1.** Particulars of the metabolites identified by LC-MS and IC-MS in flooded and non-flooded nodules.

#	Time	p value	Method (metabolites)	Name	Reference
1	30.33	0.0139	LC-MS (Secondary)	Ononin	MS and ref
2	33.04	0.0209	LC-MS (Secondary)	Glycetein	MS and ref
3	45.29	0.0209	LC-MS (Secondary)	Formonetin	MS and ref
4	3.87	0.0833	LC-MS (Primary)	Aspartic Acid	Standard
5	5.42	0.1489	LC-MS (Primary)	Glutamic Acid	Standard
6	8.38	0.0209	LC-MS (Primary)	Asparagine	Standard
7	9.04	0.0209	LC-MS (Primary)	Serine	Standard
8	9.51	0.7728	LC-MS (Primary)	Histidine	Standard
9	9.77	0.1489	LC-MS (Primary)	Glutamine	Standard
10	13.35	0.0433	LC-MS (Primary)	Glycine	Standard
11	15.75	0.0209	LC-MS (Primary)	Threonine	Standard
12	27.26	0.0433	LC-MS (Primary)	L -Alanine	Standard
13	31.11	0.0209	LC-MS (Primary)	GABA	Standard
14	45.33	0.7726	LC-MS (Primary)	Tyrosine	Standard
15	48.04	0.0433	LC-MS (Primary)	Valine	Standard
16	53.49	0.0433	LC-MS (Primary)	Tryptophan	Standard
17	54.27	0.0209	LC-MS (Primary)	Isoleucine	Standard
18	56.19	0.1489	LC-MS (Primary)	Leucine	Standard
				Phenylalanine	
19	77.96	0.0433	LC-MS (Primary)	Lysine	Standard
20	10.29	0.0209	IC-MS (Primary)	Glucose	Standard
21	11.43	0.0209	IC-MS (Primary)	Sucrose	Standard
22	12.15	0.2482	IC-MS (Primary)	Fructose	Standard
23	13.40	0.1489	IC-MS (Primary)	Melibiose	Standard
24	35.41	0.0209	IC-MS (Primary)	Maltose	Standard

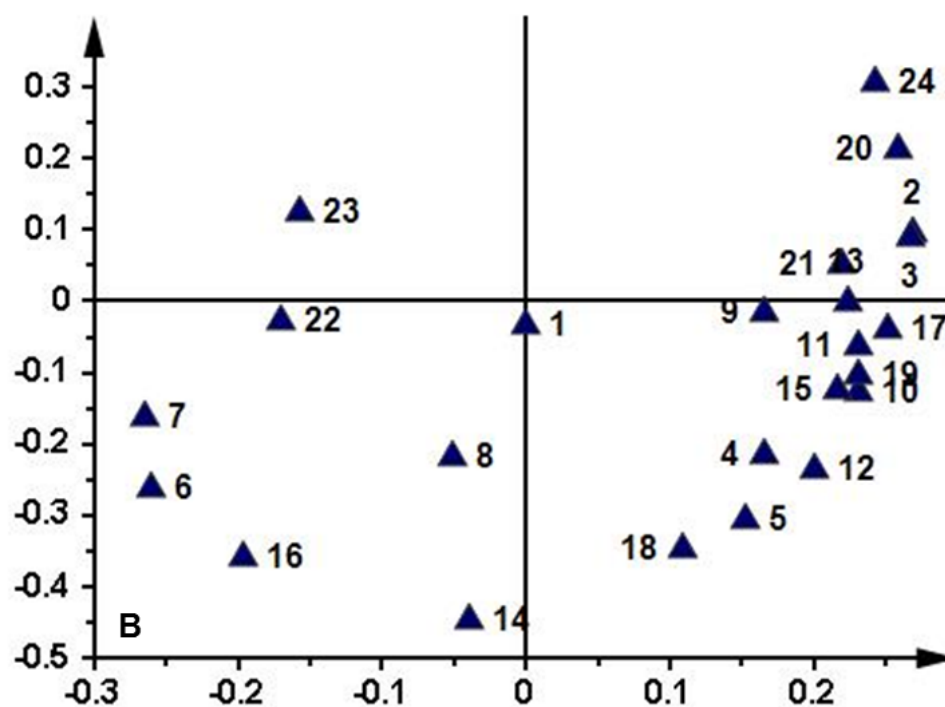


**Supplemental Figure 1.** Transmission electron micrographs of *Sesbania* nodules. A. Low magnification view of *Sesbania* flooded nodule cell harboring bacteroids with prominent polyhydroxybutyrate crystals. B. Rhizobia were also seen in the intercellular space. C. Electron micrograph of non-flooded *Sesbania* nodule cell reveal the presence of numerous bacteroids. Note the absence of polyhydroxybutyrate crystals in these bacteroids. B, bacteroid; CW, cell wall; ICS, inter cellular space; N, nucleus; PHB, polyhydroxybutyrate.

1A



1B



**Supplemental Figure 2.** Metabolic variation between non-flooded and flooded *Sesbania* nodules. (1A). PLS-DA score plot. (1B). PLS-DA loading plot. Metabolite # corresponds to those listed in Supplemental Table 1.

