

SUPPLEMENTAL MATERIAL

**Table S1.** Growth of *Cupriavidus* sp. D39 in batch culture supplemented with various organic compounds as a sole sources of carbon or nitrogen.

Substance	Growth using a carbon source	Substance	Growth using a carbon source	Growth using a nitrogen source
Organic acids		Amino acids		
Acetate	+++	$\gamma$ -Aminobutyrate	+++	+
Citrate	+++	Alanine	+++	+
Fumarate	+++	Arginine	0	+
Indole-3-acetate	++	Asparaginate	+++	+++
Lactate	+++	Cysteine	+	+
Malate	+++	Glutamate	+++	++
Propionate	+++	Glycine	+++	+
Pyruvate	+++	Histidine	+++	++
Pyroglutamate	+++	Isoleucine	+++	+
Salicylate	+++	Leucine	+++	+
Succinate	+++	Lysine	++	+
Sugars		Methionine	0	+
Arabinose	++	Ornithine	+	+
Fructose	+++	Phenylalanine	+++	+
Glucose	++	Proline	+++	+
Ribose	++	Serine	++	+
Sucrose	++	Threonine	+++	+
		Tyrosine	+++	+
		Tryptophane	+++	++
		Valine	++	+

Note: 0, no growth; +, weak growth; ++, good growth; +++, abundant growth.

**Table S2.** The amount of amino acids ( $\mu\text{g g}^{-1}$  root dry weight) exuded by roots of cultivar Sparkle and E107 (*brz*) mutant inoculated with *Cupriavidus* sp. DG39 and treated with 80  $\mu\text{M}$   $\text{AlCl}_3$ .

Pea genotype and treatment	Alanine	Aspartic acid	Glutamic acid	Ornithine	Valine
Sparkle					
Control	9.4 $\pm$ 3.1 c	16.0 $\pm$ 2.1 b	7.2 $\pm$ 3.0 a	0.05 $\pm$ 0.02 a	42 $\pm$ 8 b
<i>Cupriavidus</i> sp. DG39	3.0 $\pm$ 2.4 ab	1.6 $\pm$ 0.5 a	6.0 $\pm$ 0.5 a	0.01 $\pm$ 0.01 a	nd
$\text{AlCl}_3$	2.4 $\pm$ 0.6 ab	2.7 $\pm$ 0.3 a	1.5 $\pm$ 0.3 a	0.03 $\pm$ 0.02 a	8 $\pm$ 2 a
<i>Cupriavidus</i> sp. DG39 + $\text{AlCl}_3$	0.7 $\pm$ 0.2 a	1.2 $\pm$ 0.2 a	7.7 $\pm$ 1.5 a	0.05 $\pm$ 0.01 a	nd
E107 ( <i>brz</i> )					
Control	25.6 $\pm$ 4.6 d	14.5 $\pm$ 3.5 b	43.7 $\pm$ 7.1 b	0.08 $\pm$ 0.02 a	91 $\pm$ 28 c
<i>Cupriavidus</i> sp. DG39	0.2 $\pm$ 0.1 a	1.1 $\pm$ 0.1 a	2.1 $\pm$ 0.2 a	0.07 $\pm$ 0.03 a	nd
$\text{AlCl}_3$	6.6 $\pm$ 2.0 bc	21.4 $\pm$ 5.8 b	46.0 $\pm$ 11.9 b	0.21 $\pm$ 0.06 b	54 $\pm$ 16 b
<i>Cupriavidus</i> sp. DG39 + $\text{AlCl}_3$	0.2 $\pm$ 0.1 a	0.7 $\pm$ 0.3 a	3.1 $\pm$ 1.7 a	0.07 $\pm$ 0.03 a	nd

Note: Different lowercase letters show significant differences between treatments (least significant difference test,  $p < 0.05$ ,  $n = 3$ ). nd stands for not detected.