

## Supplementary Material

# Plant-Root Exudate Analogues Influence Activity of the 1-Aminocyclopropane-1-Carboxylate (ACC) Deaminase Gene in *Pseudomonas hormoni* G20-18<sup>T</sup>

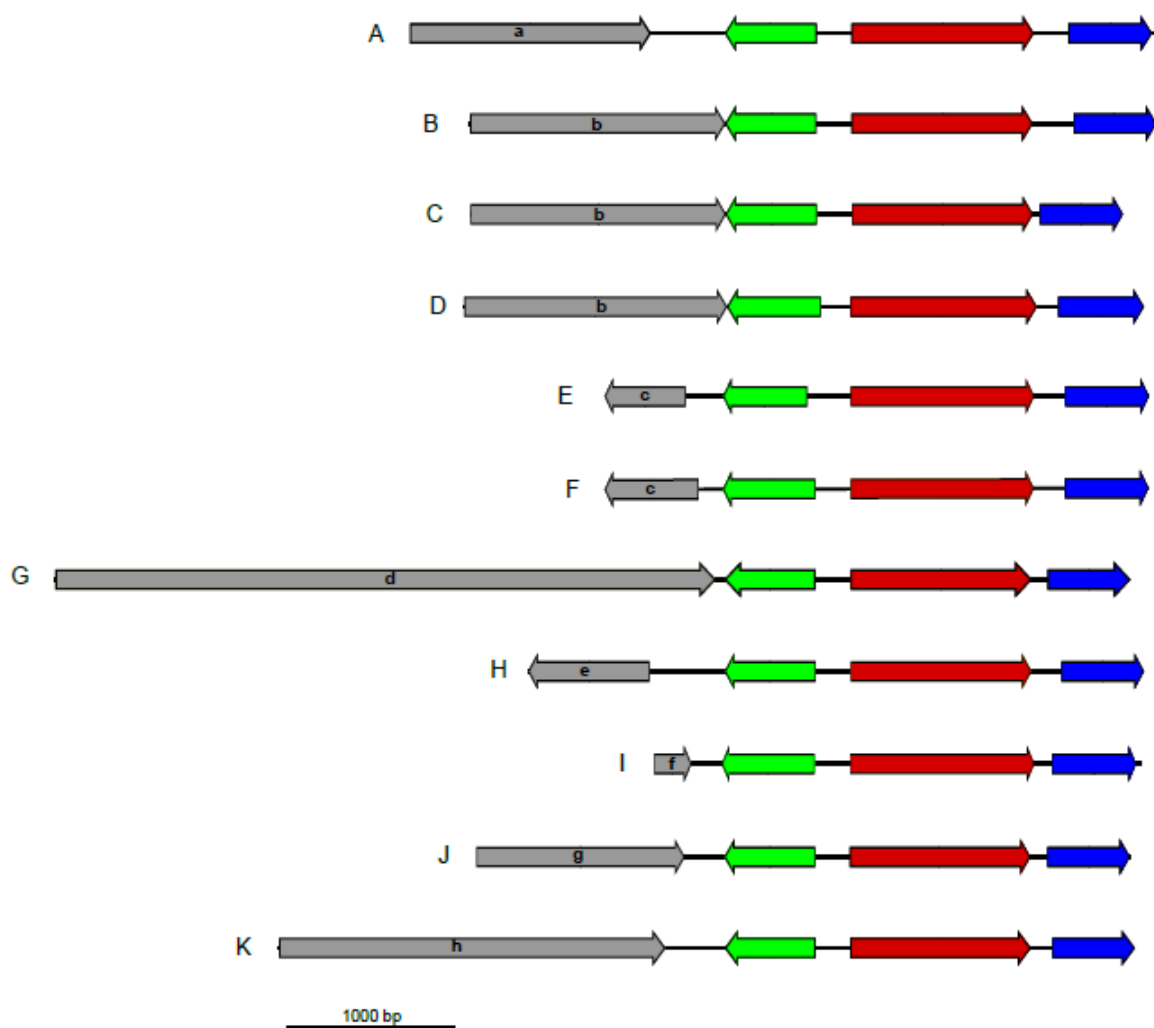
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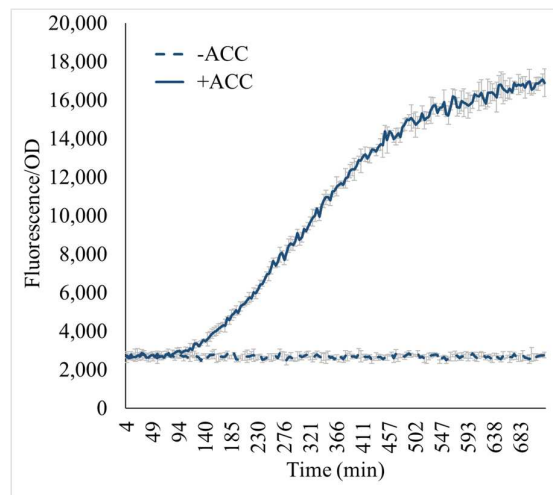
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Supplementary Figure S1



*Pseudomonas acdR-acdS* gene clusters with flanking genes. A, *Pseudomonas* sp. G20-18; B, *P. migulae* NBRC 102157; C, *P. fluorescens* NCIMB 11764; D, *Pseudomonas* sp. UW4; E, *P. ogarae* F113; F, *P. zarinae* SWRI108; G, *P. brassicacearum* 3Re2-7; H, *P. thivervalensis* BS3779; I, *P. fuscovaginae* UPB0736; J, *P. asplenii* B21-058; K, *P. palleroniana* Q1. Color code: Green, leucine-responsive regulator, *acdR*; Red, ACC deaminase, *acdS*; Blue, transketolase; Grey, Miscellaneous genes, a, sorbosone dehydrogenase family protein; b, c-di-GMP phosphodiesterase; c, putative membrane protein; d, response regulator; e, putative peptidoglycan binding domain-containing protein; f, alpha/beta hydrolase; g, glutathione-dependent formaldehyde dehydrogenase; h, topoisomerase DNA-binding C4 zinc finger domain-containing protein.

**Supplementary Figure S1:** *acdR* and *acdS* regions in *Pseudomonas hormoni* G20-18 with flanking genes as aligned with *acdR* and *acdS* regions in other PGPR strains.



**Supplementary Figure S2:** Effect of ACC alone in M9 medium without glucose on the induction of *acdS* expression in *Pseudomonas hormoni* G20-18 deleted in *acdS* activity.

**Supplementary Table S1:** Wheat root exudate diversity as identified using LC-MS/MS (Excel file)

12-Hydroxydodecanoic acid CollisionEnergy:205060	LC-ESI	Orbitrap	Commercial	Trent North	JGI	M+H-H2O	199,169	0	1
12-Hydroxyjasmonate sulfate	LC-ESI	Orbitrap	Commercial	Ales Svatoš	Riya Mene	M-H	305,07	0	1
12-Oxodihydrophytydienoic acid	LC-ESI	qTof	Isolated	Claudia M	Armando A	M+H-H2O	277,216	0	1
13-OxoODE	LC-ESI	qTof	Lysate	Dorrestein	lfnothias	M+H	-1	0	1
14-(hydroxymethyl)-5,9-dimethyltetracyclo[11.2.1.0 <sup>2,7</sup> .0 <sup>3,8</sup> ]	N/A	ESI-QFT	isolated	MoNA	MoNA:VF-I	[M+H] <sup>+</sup>	305,247	0	1
14-hydroxy-14-(hydroxymethyl)-5,9-dimethyltetracyclo[11.2.1.0 <sup>2,7</sup> .0 <sup>3,8</sup> ]	N/A	ESI-QFT	isolated	MoNA	MoNA:VF-I	[M+H] <sup>+</sup>	337,237	0	1
158031 - 40.0 eV	ESI	Orbitrap	Isolated	PI	Data Collec	M+H	190,086	0	1
15-Deoxy-delta-12,14-prostaglandin J2	LC-ESI	qTof	Commercial	Neha Garg	Nicole Aios	M+H	317,211	316,204	1
16-Hydroxyhexadecanoic acid CollisionEnergy:205060	LC-ESI	Orbitrap	Commercial	Trent North	JGI	M+H-H2O	255,232	0	1
1792831 - 30.0 eV	ESI	Orbitrap	Isolated	PI	Data Collec	M-H	285,207	0	1
17-Hydroxypregn-4-ene-3,20-dione - 30.0 eV	ESI	Orbitrap	Isolated	PI	Data Collec	M+H	331,227	0	1
1-AMINOADAMANTANE	ESI	qTof	isolated	MoNA	MoNA:Mo	M+H	152,143	0	1
1-AMINOCYCLOPROPANE-1-CARBOXYLIC ACID	ESI	Orbitrap	isolated	MoNA	MoNA:Mo	M+H	102,055	0	1
1-beta-D-Glucopyranosyl-L-tryptophan	LC-ESI	qTof	Isolated	Claudia M	Armando A	M+H	367,15	0	1
1h-indole-3-butanoic acid	ESI	Orbitrap	Commercial	BMDMS-N	BMDMS-N	[M+H] <sup>+</sup>	204,1	203,095	1
1-methyl-4-(6-methylhept-5-en-2-yl)-2,3-dioxabicyclo[2.2.1]	ESI	Orbitrap	Isolated	Wolfender	Luis Quiros	M+H	237,185	236,178	1
1-methyl-4-methylidene-7-(propan-2-yl)-1,2,3,3a,4,5,6,8a-hexahydro-1H-benzocyclohepta[1,2-b]pyridine	ESI	Orbitrap	Isolated	Wolfender	Luis Quiros	M-H2O+H	203,179	220,183	1
1-methyl-N-(2-(nicotinamido)ethyl)-1H-indole-3-carboxamide	ESI	Orbitrap	Commercial	BMDMS-N	BMDMS-N	[M+H] <sup>+</sup>	323,15	322,143	1
1-METHYLNICOTINAMIDE	LC-ESI	Q-Exactive	Commercial	Alexandro	Prasad	M+H	138,08	137,071	0
1-Naphthaleneacetic acid CollisionEnergy:102040	LC-ESI	Orbitrap	Commercial	Trent North	JGI	M-H	185,061	186,068	-1
1-OLEOYL-RAC-GLYCEROL	ESI	Orbitrap	isolated	MoNA	MoNA:Mo	M+H	357,3	0	1
1-PHENYLETHANOL	ESI	Orbitrap	Commercial	Dorrestein	Fernando	M+H	123,08	122,073	1
2-(2-amino-4-hydroxy-6-methylpyrimidin-5-yl)acetic acid	ESI	Orbitrap	Commercial	BMDMS-N	BMDMS-N	[M+H] <sup>+</sup>	184,07	183,064	1
2-(2-furyl)-4-oxochromen-6-yl 3-bromobenzoate CollisionEnergy:102040	LC-ESI	Orbitrap	Commercial	Trent North	JGI	M-H	408,972	0	1
2-(3-hydroxy-5-methoxyphenoxy)-6-(hydroxymethyl)oxan-2-one	N/A	ESI-QFT	isolated	MoNA	MoNA:VF-I	[M-H] <sup>-</sup>	301,093	0	1
2-(3-oxobutyl)cyclopentane-1,3-dione	ESI	Orbitrap	Commercial	BMDMS-N	BMDMS-N	[M+H] <sup>+</sup>	169,09	168,079	1
2-(4-HYDROXYPHENYL)PROPIONIC ACID	ESI	qTof	isolated	MoNA	MoNA:Mo	M-H	165,056	0	1
2-(hydroxymethyl)-5-methoxy-4H-pyran-4-one	ESI	Orbitrap	Commercial	BMDMS-N	BMDMS-N	[M+H] <sup>+</sup>	157,05	156,042	1
2-(methylethylidene)butanedioic acid CollisionEnergy:102040	LC-ESI	Orbitrap	Commercial	Trent North	JGI	M+H-H2O	141,055	0	1