

TITLE: 1-Aminocyclopropane-1-carboxylic acid (ACC) concentration and ACC synthase expression in soybean roots, root tips and soybean cyst nematode (*Heterodera glycines*) colonized roots.

AUTHORS: Mark L. Tucker^{1,2}, Xue Ping¹, and Ronghui Yang¹

Table S1 (supplement). FASTA file of sequences used for primer design and protein translations. Sequences include the open reading frames plus 50 nt of 3' untranslated regions.

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>GmACS2d (originally GmACS11) ORF plus 50 nt

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>GmACS6a (originally GmACS1d) ORF plus 50 nt

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>GmACS6b (originally GmACS1a) ORF plus 50 nt

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>GmACS6c (originally GmACS1e) ORF plus 50 nt

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>GmACS7a (originally GmACS1b) ORF plus 50 nt

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>GmACS9b (originally GmACS1n) ORF plus 50 nt
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>GmACS9c (originally GmACS1g) ORF plus 50 nt
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>GmACS9d (originally GmACS1h) ORF plus 50 nt

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>GmACS9e (originally GmACS1r) ORF plus 50 nt

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>GmACS9f (originally GmACS1u) ORF plus 50 nt

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>GmACS10a (originally GmACS1f) ORF plus 50 nt

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>GmACS10b (originally GmACS1o) ORF plus 50 nt

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>GmACS12a (originally GmACS1s) ORF plus 50 nt

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>GmACS12b (originally GmACS1t) ORF plus 50 nt

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gcagcca

Table S2 (supplement). Soybean ACC synthases (GmACS) and elongation factor 1b (*GmEF1b*) primers used for semi-quantitative real-time PCR.

Gene Name	Primer Name	Primer Sequence
GmACS6b	GmACS1a_f1	CTTCAAACAAGGAGATCATGGTGC
	GmACS1a_r1	TCATCATATATCAGTTACTTCTTCTAGAGGGTT
GmACS7a	GmACS1b_f1	GAACGAATGAAGAAAGAGTAATAATGGCACTA
	GmACS1b_r1	TATAACAACAACAGCATTAAATAGAACTTATCAC
GmACS7b	GmACS1c_f1	GAACGAATGAAGAAAGACTAATGGTGCTGTC
	GmACS1c_r1	GTACTATTATAAAAACAACAACATTCATAGAAC
GmACS6a	GmACS1d_f1	CTTCAAACAAGGAGGTCATGGTTC
	GmACS1d_r1	CATCGTATATCAGTTACTTCTTCTGAGATGGT
GmACS6c	GmACS1e_f1	AATCAGAACACCGAAGCCAAGAAAT
	GmACS1e_r1	CAAGCAGTATGTGTTAGAGGACTCA
GmACS9c	GmACS1g_f1	GCGGCTGATGCTGGTGCTCTGT
	GmACS1g_r1	AAATCAAATGAATTTGTGCATGAGTGACACA
GmACS9d	GmACS1h_f1	GCGGCTGAGTCTCAGAGGAATAGT
	GmACS1h_r1	TTGAATTTTATGAATTTGTGCATGAGCGACG
GmACS2a	GmACS1i_f2	TTAGGCTCAGTTTTTCTTCAAGGATGTTTGAG
	GmACS1i_r2	CGTGCAGAACCCTGATTCAATTAATCAAG
GmACS2c	GmACS1j_f2	GCTTCTCCAACCTCTAGAAGATTTGATGAGAATG
	GmACS1j_r2	AATGAAGGTATGCTTGCTGGTCCAAC
GmACS2b	GmACS1k_f2	CTTAGGCTCAGTTTCTTCTTCAAGGATATTTGAT
	GmACS1k_r2	CGCTCGAGTAGAACCCAGATCCAATC
GmACS2d	GmACS1l_f2	TTATGTCACCTCACATGATGTCACCCCA
	GmACS1l_r2	TAATGAAGGTATGCTTGCTGGTCCAAT
GmACS9a	GmACS1m_f1	GAAGCAGAGTCAAATGACAACGGGT
	GmACS1m_r1	AATGAATAAAGTTAATTCTGCATGCGTTCACA
GmACS9b	GmACS1n_f1	GAAGAGTCCAGCGACAACGGGT
	GmACS1n_r1	AGTTAATTATGCATGCGTTCAGACTT
GmACS7c	GmACS1p_f1	GAACGAATAAGGACAGAAAGCGTTT
	GmACS1p_r1	TGTAAATTTTTTATATTTGTCTTCCACAGATTA
GmACS7d	GmACS1q_f1	GAACGAATAAGGACACAAAACGTCTTTTTTTTGA
	GmACS1q_r1	ATCTCTTTGATTTTTCACGAATTAATAATAATA
GmACS9e	GmACS1r_f1	GACTCAACCATCTCTACTAGTGTCTTAAGAGGA
	GmACS1r_r1	CTCTTATTATTAAGTTGGACAGAAAACAGGCCA
GmACS9f	GmACS1u_f1	GACTCAATTACCATCTCTACTAGTGTGCGTAAGA
	GmACS1u_r1	CTATTATTAATTGGAGAGAAAACAGACTCATC
GmEF1b	GmEF1b-f	GAAGACAAAAGGCAGCAGAGGAA
	GmEF1b-r	TCCACAGATAACAAGGTCATCGACA