

**Table S1.** Primer sequence used in this study for qRT-PCR

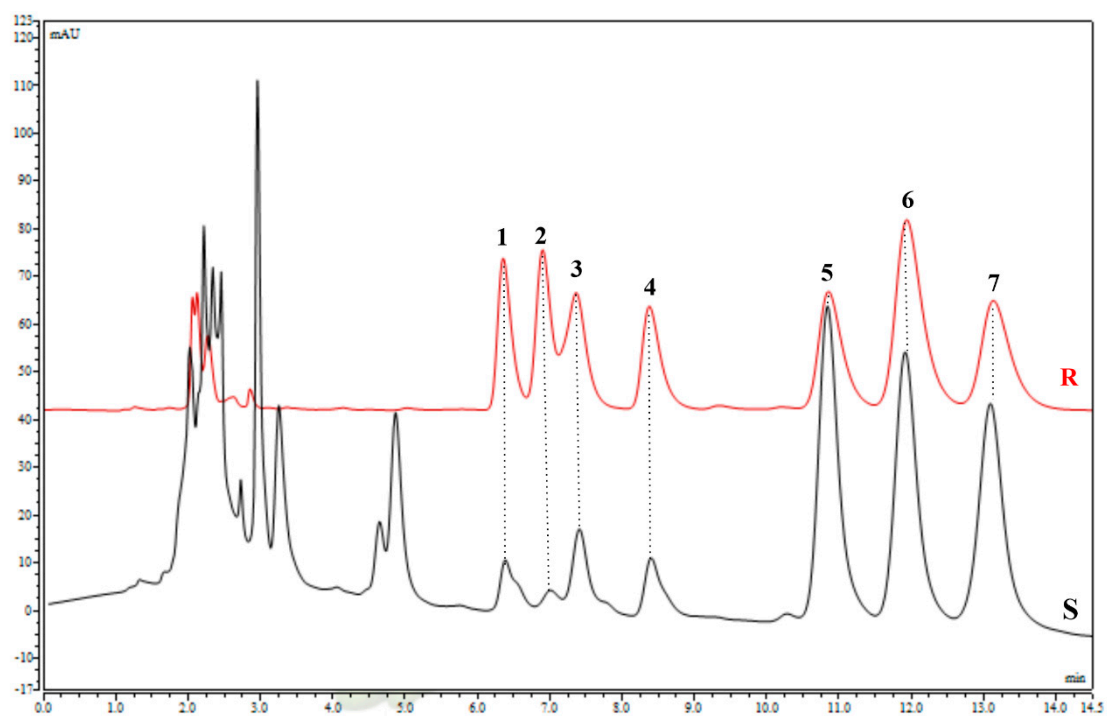
Gene	Primers
CpGAPDH	F: TGCTTCGTTCAACATCATTC R: CATAACTGGCTGCCTTCTCC
CpPMK	F: TGCCGTAGTTGCTGCTTTACTT R: TTCGTGGCTGTTTCTTGGTG
CpMVD	F: CAAGATGCTGGCGTTCAGG R: CCTTTGGTTTTCTGCGTTGG
CpMVK	F: GACACAAAAGTTGGGAGGAACAC R: GGTAGCCAGTTCATTGCTGATAGA
CpUGPase	F: TTTACCCTTGAGAACGACG R: TCTGATGGCTATGTGACCC
CpUGE	F: CGGGGTACATCTGTGCTTG R: ATGCCATACTTTGCCTTCC
CpUGDH	F: GATGCTTATGAGGCGACGAA R: GAGGCTTACCAATGGAGTAGACAAT



**Figure S1.** *Codonopsis pilosula* in the field.



**Figure S2.** Root samples of *Codonopsis pilosula* at different developmental stages (scale bar, 5 cm)



**Figure S3.** HPLC profiles of monosaccharide composition. Ms: Mixed standards; S: Sample; 1, D-mannose; 2, rhamnose; 3, D-glucuronic acid; 4, D-galacturonic acid; 5, glucose; 6, ga-lactose; 7, arabinose.