

Table S1 Primers used for quantitative RT-PCR analysis

Gene	Gene ID	Forward primer (5'-3')	Reverse primer (5'-3')
β-actin	60	GTTGCTATCCAGGGCTGTGC	GCATCCTGTCGGCAATGC
p53	7157	CCCCTCCTCAGCATCTTA	ACAAACACGCACCTCAA
p21	1026	GCTTGCCCCAGATTCTACTACAG	ACCAAATGCGTGTCCCTCA
CDK2	1017	CGCTTCATGGAGAACTTC	ATGGCAGAAAGCTAGGCC
CDK4	1019	CTGGACACTGAGAGGGCAAT	TGGGAAGGAGAAGGAGAACG
Cyclin E	898	CAGGGTATCAGTGGTGCGA	CACAGAGACAGCTGGATTG
Bax	581	TTTGCTTCAGGGTTTCATCC	CAGTTGAAGTTGCCGTCAGA
Bcl-2	596	CATCCATTATAAGCTGTCGCA	TGCCGGTTCAGGTACTCAGT
Caspase 3	836	GTGCTATTGTGAGGCGGTTG	TCCAGAGTCCATTGATTGCGCTT



Figure S1. The morphology of (A) *Lycium ruthenicumMurr.* (LRM) and (B) *Lycium Barbarum*. (LB).

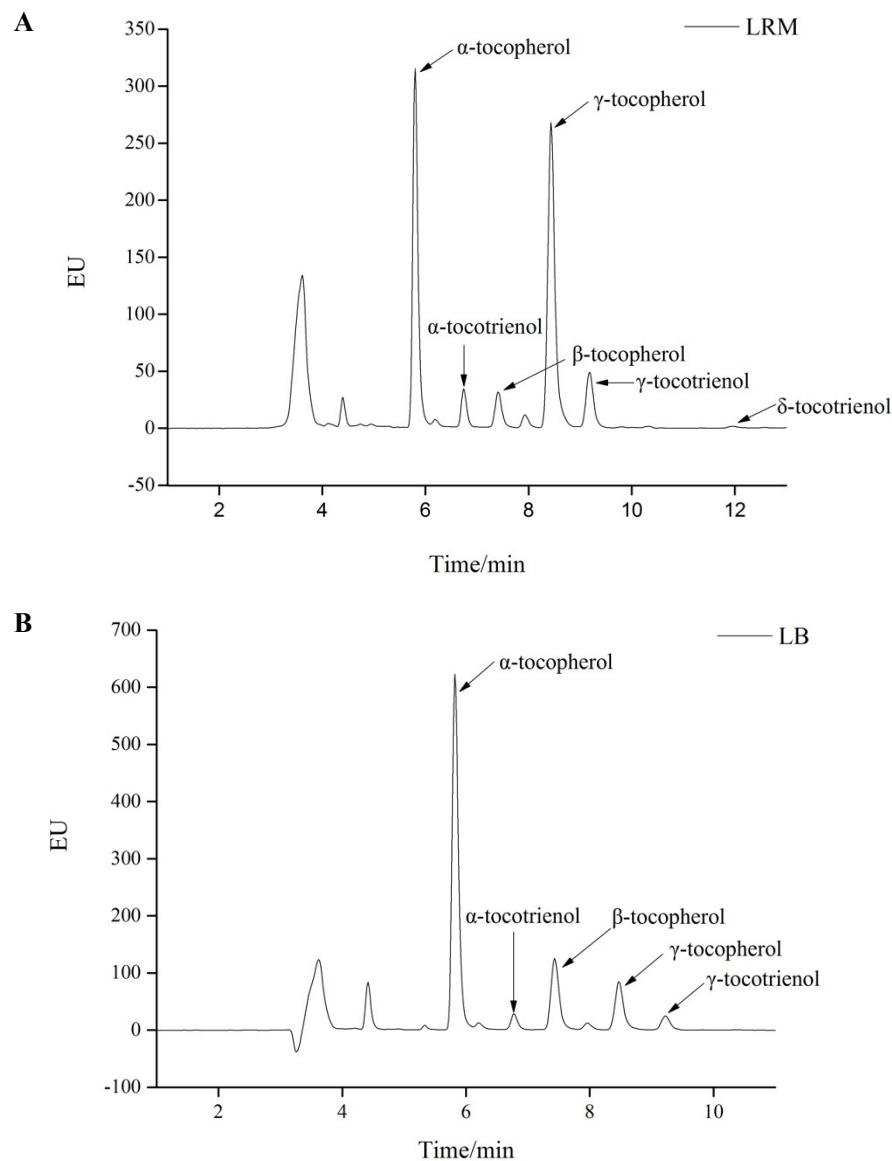


Figure S2. HPLC chromatogram of V_E profile in two goji berry varieties: LRM (A) and LB (B).

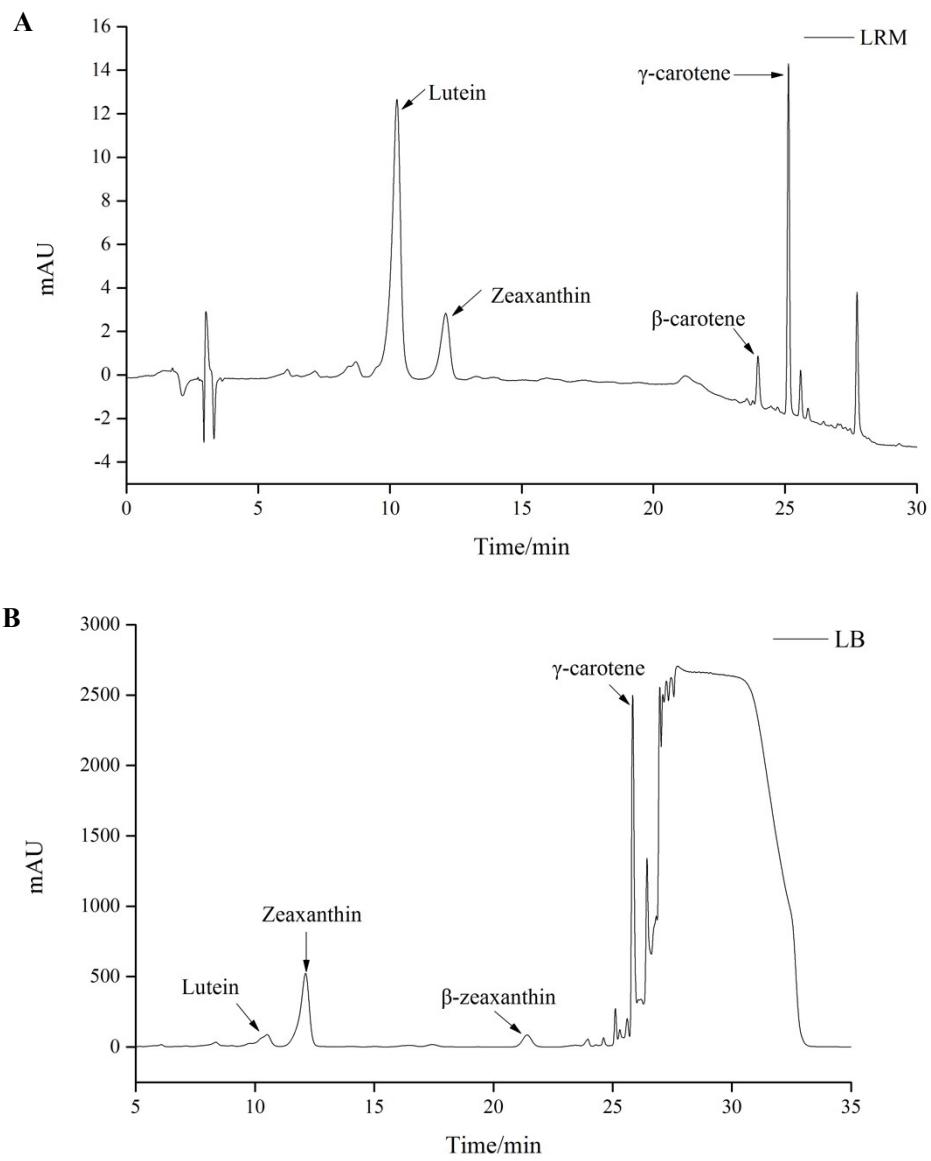


Figure S3. HPLC chromatogram of carotenoids profile in two goji berry varieties: LRM (A) and LB (B).