

Table 1 Growth traits, seed yield and biochemical characteristics of *cysLc1* and *cysLc2* mutants (M₃) and control variety L 414 in *Lens culinaris* Medik. at harvest

Traits	L 414	<i>cysLc1</i>	<i>cysLc2</i>
Shoot height (cm)	30.15 ±1.2 ^a	12.06 ±1.0 ^b	12.11 ±1.2 ^b
Root length (cm)	15.9 ±0.90 ^a	3.98 ±0.78 ^b	4.01 ±0.82 ^b
Shoot dry weight/plant (g)	4.38 ±0.87 ^a	1.43 ±0.37 ^b	1.46 ±0.29 ^b
Root dry weight/plant (g)	10.11 ±1.21 ^a	2.26 ±0.32 ^b	2.35 ±0.28 ^b
Seed yield/plant (g)	0.98 ±0.17 ^a	0.28 ±0.17 ^b	0.33 ±0.19 ^b
Seed cysteine content (nmol/g fresh weight)	22.8 ±1.9 ^a	5.71 ±1.1 ^c	8.48 ±1.4 ^b
Serine acetyl transferase activity (U/mg protein)	0.66 ±0.08 ^a	0.69 ±0.12 ^a	0.70 ±0.10 ^a
O-acetylserine (thiol) lyase (nmol cysteine/ min/ mg protein)	23.2 ±1.97 ^a	4.94 ±0.98 ^c	7.06 ±0.78 ^b
GSH content (nmol/g fresh weight)	139.6 ±2.87 ^a	31.82 ±2.63 ^c	50.03 ±3.18 ^b
GSSG (nmol/g fresh weight)	20.4 ±0.91 ^b	40.11 ±1.23 ^a	38.19 ±1.18 ^a
GSH redox [GSH/(GSH+GSSG)]	0.875 ±0.11 ^a	0.443 ±0.06 ^c	0.567 ±0.07 ^b

Note: Data are means ±SE of at least four replicates. Means followed by similar alphabets at superscript are not significantly ($P>0.05$) different by ANOVA followed by Duncan's Multiple Range Test. GSH-Reduced glutathione, GSSG-glutathione disulfide or oxidized glutathione