



Figure S1. Effect of EBL foliar application on the visual appearance of soybean seedlings under chromium (Cr) toxicity. (a) Cr-induced phenotypical changes on the XD-18 cultivar and mitigation effect of EBL under Cr stress. (b) Cr-induced phenotypical changes on the HD-19 cultivar and mitigation effect of EBL under Cr exposure.

Table S1. Primers information

Gene Name	Description	Forward primer	Reverse primer
		GCGCTTAGAAGAATTGA	
<i>GmHMA3</i>	Zinc-transporting ATPase	AGGGAT	GCCTTGCTTGATTCAAGTGCC
		CGCTCTGAGACTGAGCG	
<i>GmHMA8</i>	Chloroplast copper- translocating P-ATPase	ATT	CTCCATAAGCGGTCCGTGAG
		GGTCTTCTAATTGCGGT	TGACGATCCACTTCTCCTTT
<i>GmSULTR1;2b</i>	High-affinity sulfate transporter	GGC	GG
		AAGGCTTGCTATCAAGG	CTGATACTTGTTGCCTGCTG
<i>GmhPCS1</i>	Phytochelatin synthase 1 (PCS1)	AAGAGG	C
		ATCTTGACTGAGCGTGG	
<i>ACT11</i>	Cytoskeletal structural protein	TTATTCC	GCTGGTCCTGGCTGTCTCC

Table S2. Foliar application of BRs improves the chlorophyll fluorescence level such as net photosynthetic rate (Pn), transpiration rate (Tr), stomatal conductance (gs), CO₂ assimilation rate (Ci), and maximum quantum yield of PSII photochemistry (Fv/Fm) in two different soybean cultivars under chromium (Cr) stress

Genotypes	Treatments	Net photosynthetic rate	SPAD values	Transpiration rate	Stomatal conductance	CO ₂ assimilation rate	Fv/Fm
XD-18	CK	8.95±0.12a	34.7±1.43b	5.37±0.11b	0.36±0.02b	433.67±5.23b	0.56±0.02c
	BRs	9.01±0.18a	35.6±1.08ab	5.49±0.09ab	0.38±0.16a	435.97±8.07ab	0.59±0.01bc
	Cr	3.89±0.14e	13.6±0.78f	2.01±0.08f	0.16±0.01f	202.43±11.38e	0.27±0.02g
	BRs+Cr	6.32±0.29c	26.8±0.23d	3.58±0.07d	0.26±0.02d	298.76±12.62d	0.43±0.01e
HD-19	CK	8.97±0.05a	35.3±0.34ab	5.55±0.16a	0.37±0.09ab	436.31±11.43ab	0.63±0.01ab
	BRs	9.04±0.11a	36.1±0.65a	5.57±0.07a	0.38±0.08a	439.34±3.42a	0.66±0.03a
	Cr	5.54±0.13d	21.9±0.93e	2.91±0.11e	0.21±0.01e	256.31±6.75e	0.35±0.03f
	BRs+Cr	7.49±0.19b	29.7±1.54c	4.34±0.18c	0.29±0.03c	334.26±15.74c	0.49±0.02d

The same letters within a column designate there was no significant difference at a 95% probability level at the $p < 0.05$ level according to the LSD test, correspondingly.