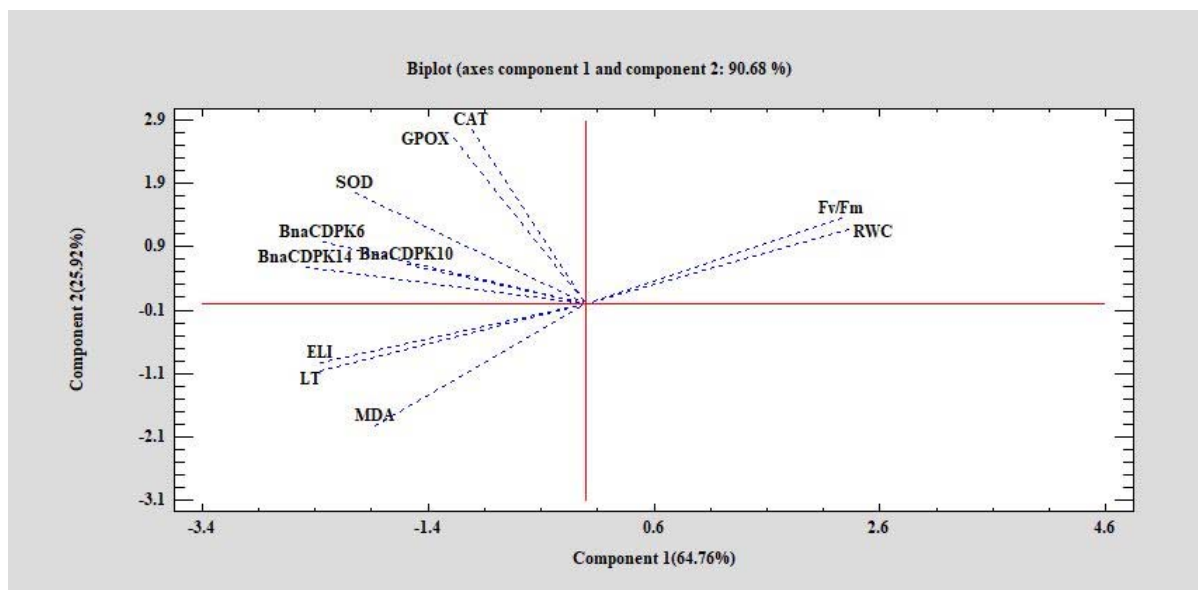


## Supplementary Material



**Figure S1.** Principal component analysis (PCA) of physiological and biochemical parameters and *BnaCDPK* genes expression in canola genotypes.

**Table S1.** Analysis of variance of leaf relative water content (RWC), electrolyte leakage index (ELI), malondialdehyde (MDA), leaf temperature (LT), maximum quantum yield of PSII ( $F_v/F_m$ ), antioxidant enzymes SOD, GPOX and CAT, and *Brassica napus* calcium-dependent protein kinases *BnaCDPK6*, *BnaCDPK10* and *BnaCDPK14* relative gene expression in canola cultivars under drought stress.  $P < .05$  (\*);  $P < .01$  (\*\*); not significant (ns).

S.O.V.	df	Mean of square										
		RWC	ELI	MDA	LCT	$F_v/F_m$	SOD	GPOX	CAT	<i>CDPK6</i>	<i>CDPK10</i>	<i>CDPK14</i>
<b>Cultivar</b>	3	144.27**	67.60**	0.20**	35.41**	0.0005**	2.29**	7.46**	1.40**	0.15**	0.017 <sup>ns</sup>	0.06**
<b>Drought</b>	2	3292.86**	5000.28**	2.47**	1203.6**	0.008**	8.89**	4.00**	0.40**	1.29**	1.02**	2.73**
<b>Cultivar × Drought</b>	6	29.43**	21.82**	0.16**	11.53**	0.0002**	1.08**	4.41**	0.51**	0.047**	0.01 <sup>ns</sup>	0.029 <sup>ns</sup>
<b>Error</b>	24	4.29	1.28	0.002	2.21	0.00001	0.07	0.03	0.01	0.017	0.014	0.016
<b>CV (%)</b>		12.91	10.25	10.3	10.80	0.4	7.75	11.44	12.41	9.73	9.16	8.44

**Table S2.** Gene Ontology of *BnaCDPK* genes.

Gene (GenBank accession number)	Arabidopsis homolog (AGI accession number)	GO - Molecular Function	GO - Biological Process	GO - Cellular Component
<i>BnaCDPK6</i> (JX122912)	<i>AtCPK6</i> (AT2G17290)	Calcium ion binding, ATP binding, protein kinase activity, kinase activity, transferase activity, nucleotide binding, metal ion binding, calmodulin binding, calmodulin-dependent protein kinase activity	Protein phosphorylation, phosphorylation, peptidyl-serine phosphorylation, protein autophosphorylation, intracellular signal transduction	Nucleus, cytoplasm
<i>BnaCDPK10</i> (JX122900)	<i>AtCPK10</i> (AT1G18890)	Kinase activity, ATP binding, transferase activity, nucleotide binding, metal ion binding, calcium ion binding, protein kinase activity	Phosphorylation, protein phosphorylation	-
<i>BnaCDPK14*</i> (XM_013896624.2)	<i>AtCPK14*</i> (AT2G41860)	Calmodulin binding, calmodulin-dependent protein kinase activity, calcium ion binding, ATP binding, protein kinase activity, kinase activity, transferase activity, protein serine/threonine kinase activity, nucleotide binding, metal ion binding, protein serine kinase activity	Peptidyl-serine phosphorylation, protein autophosphorylation, intracellular signal transduction, protein phosphorylation	Nucleus, plasma membrane, membrane, cytoplasm

\*The Arabidopsis homolog, *AtCDPK14*, was used here as there was not sufficient information was available for *BnaCDPK14*.

**Table S3.** Simple correlation coefficients.

Trait	Fv/Fm	RWC	ELI	LT	MDA	SOD	GPX	CAT	BnaCDPK6	BnaCDPK10	BnaCDPK14
Fv/Fm	1										
RWC	.981**	1									
ELI	-.967**	-.956**	1								
LT	-.968**	-.992**	.934**	1							
MDA	-.926**	-.882**	.916**	.855**	1						
SOD	-.469	-.544	.589*	.561	.237	1					
GPX	-.073	-.115	.231	.125	-.142	.870**	1				
CAT	.016	-.010	.132	.049	-.186	.772**	.891**	1			
BnaCDPK6	-.684*	-.709**	.756**	.736**	.517	.881**	.657*	.686*	1		
BnaCDPK10	-.418	-.535	.358	.616*	.169	.601*	.276	.336	.611*	1	
BnaCDPK14	-.799**	-.830**	.859**	.848**	.612*	.889**	.605*	.559	.955**	.637*	1

\*\*Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).