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Genome-wide identification of AP2/ERF transcription factors in mungbean (*Vigna radiata*) and expression profiling of the *VrDREB* subfamily under drought stress

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Supplementary Tables

Supplementary table S1: Primer sequences of respective genes. Actin was used as reference gene

Gene name	Gene locus	Forward primer (5'→3')	Reverse primer (5'→3')
<i>VrDREB1</i>	LOC106763827	ACAAGGATGGAACAAGGCGT	AACGCCTCCAAGTCATACCA
<i>VrDREB2</i>	LOC106757534	AAGAAGTCACCCCTGAAGCC	CCTAACACCTCGGTACTCGC
<i>VrDREB3</i>	LOC106757499	GTGACATTCAGATGGCTGCG	GAAACATTCCTCCTCGGCT
<i>VrDREB4</i>	LOC106757415	AGCATACGATCAAGCTGCGA	CGGTTAGCGTCTTTGGGTCA
<i>VrDREB5</i>	LOC106761021	CAATGCCACCAATCCCCCAT	TCCGAAGGAGAATAGGCCGT
<i>VrDREB6</i>	LOC106760881	TTCGTTTTCGTGGACTCGGT	CAGACCCTCCAAGGCAATGT
<i>VrDREB7</i>	LOC106762422	AACCAACGCTCTTCTCGGC	AGGGTGTGGGATTCTGCTG
<i>VrDREB8</i>	LOC106761449	TGGTACAAGCCAAGAAGTTCAG	TAGCCACACCCTTCTCTTCAGTAAA
<i>VrDREB9</i>	LOC106760845	ATACGCAAGAAAGCGACCCA	GTGGCTGGAATTAGCGGAGT
<i>VrDREB10</i>	LOC106760760	TTCGCCACCCCTTTTTGAAG	TTTTGGCCCGCACATTAACC
<i>VrDREB11</i>	LOC106764103	AACAACCTCCTCCTGGTCGTC	CAACCTCGGCAACTCGATGA
<i>VrDREB12</i>	LOC106764353	TCACTTCTGFCACCTCCTCCA	AACGCCTCCAAGTCATACCA
<i>VrDREB13</i>	LOC106764547	ATTTCGTACCCTTTGCTGAAG	TTGTCTTGGCATTTCGACCA
<i>VrDREB14</i>	LOC106764361	ATTTCGCCACCCCATATTGAAG	GCCCTGGCACCAACATTA
<i>VrDREB15</i>	LOC106767271	CTCGGCTCAGTGTCTTAGGT	GATTCCTTTGTAGCGCGTGG
<i>VrDREB16</i>	LOC106767743	ACCCCACTACAGAGGAGTT	GTCCGGCGTAGGAAAAGTTC
<i>VrDREB17</i>	LOC106768065	TATCCAGTCCCGCGTCAAA	TTGTTGTGGCTGGCTTCAGG
<i>VrDREB18</i>	LOC106767997	ACGACAGAAACTGCCCTAGTC	CCGTGGGGGAAAGATGCTTA
<i>VrDREB19</i>	LOC106771694	ACTCTGGCTTGGCTCCTTTG	ATGTGGGGGAGGTTGAGGTA
<i>VrDREB20</i>	LOC106771839	CTACCGCTTTTGCACACGTT	TGTGGGTCGGTGGAAAACAT
<i>VrDREB21</i>	LOC106773910	ACCCATTATTGAAAAGGAGGGT	ACTCATCAAAATGGCGGCTT
<i>VrDREB22</i>	LOC106773963	CCAATCCATTTGCCTCTGCC	CCACGCTAACCCAATTCCT
<i>VrDREB23</i>	LOC106777427	TCAGGAACCAACAAGCACCA	CCCATTTGCCCAATTTTCGT
<i>VrDREB24</i>	LOC106777101	CCCTCAGACGTGGATGCAAA	TGCATATCCTCCCACTCGTTG
<i>VrDREB25</i>	LOC106777506	TCTCAACCTCCCTCACTCCG	TTTCAGCCTTCAATTCGCG
<i>VrDREB26</i>	LOC106777272	AAGCGAGCTGGGAGAAAGAT	TGTTGGAACTCGCATCTCG
<i>VrDREB27</i>	LOC106777034	AGCCCAAGCCAGATTATGC	GTAACCAAGCCACCTGCAC
<i>VrDREB28</i>	LOC106777002	CCCCGACCTTCTTGTGGAG	GGAGAGCATCAACTCTGGCA
<i>VrDREB29</i>	LOC106754950	AGAAGAGCAGCATTACCTCCG	CACCACTTGCTGTGGAGGAG
<i>VrDREB30</i>	LOC106754092	TCAACTTTCCCGACGAGGTG	ACTGCCATCCGCTTTTCATCA
<i>Actin</i>	LOC106775698	CGAAACTCTGCCGCTGTTG	TTAAAACCTTCCGCGAATGAAG

Supplementary table S2: List of identified AP2/ERF TFs in mung bean

S.No.	Protein ID	Subfamily	S.No.	Protein ID	Subfamily
1	XP_014497967.1	AP2	37	XP_014511607.1	ERF
2	XP_014494426.1	AP2	38	XP_014499803.1	ERF
3	XP_014494427.1	AP2	39	XP_014503815.1	ERF
4	XP_014494425.1	AP2	40	XP_014520020.1	ERF
5	XP_014497966.1	AP2	41	XP_014491530.1	ERF
6	XP_014500296.1	AP2	42	XP_014495690.1	ERF
7	XP_014494914.1	AP2	43	XP_014513319.1	ERF
8	XP_014505232.1	AP2	44	XP_014513234.1	ERF
9	XP_014500105.1	AP2	45	XP_014503472.1	ERF
10	XP_014489836.1	AP2	46	XP_014507608.1	ERF
11	XP_014506698.1	AP2	47	XP_014520325.1	ERF
12	XP_014489837.1	AP2	48	XP_014516221.1	ERF
13	XP_014492747.1	AP2	49	XP_014522637.1	ERF
14	XP_014492748.1	AP2	50	XP_014519983.1	ERF
15	XP_014520079.1	AP2	51	XP_014508177.1	ERF
16	XP_014493562.1	AP2	52	XP_014513185.1	ERF
17	XP_014511177.1	RAV	53	XP_014499763.1	ERF
18	XP_014512024.1	RAV	54	XP_014500676.1	ERF
19	XP_014494962.1	ERF	55	XP_014495657.1	ERF
20	XP_014511868.1	ERF	56	XP_014503733.1	ERF
21	XP_014513046.1	ERF	57	XP_014504131.1	ERF
22	XP_014511322.1	ERF	58	XP_014492506.1	ERF
23	XP_014507402.1	ERF	59	XP_014508448.1	ERF
24	XP_014511321.1	ERF	60	XP_014499665.1	ERF
25	XP_014491591.1	ERF	61	XP_014495570.1	ERF
26	XP_014519934.1	ERF	62	XP_014516164.1	ERF
27	XP_014524365.1	ERF	63	XP_014504301.1	ERF
28	XP_014501813.1	ERF	64	XP_014500486.1	ERF
29	XP_014502645.1	ERF	65	XP_014499978.1	ERF
30	XP_014520106.1	ERF	66	XP_014504124.1	ERF
31	XP_014523726.1	ERF	67	XP_014494817.1	ERF
32	XP_014521856.1	ERF	68	XP_014494816.1	ERF
33	XP_014512457.1	ERF	69	XP_014508518.1	ERF
34	XP_014520496.1	ERF	70	XP_014520566.1	ERF
35	XP_014524360.1	ERF	71	XP_014513240.1	Soloist
36	XP_014522566.1	ERF			

Supplementary Figure

Supplementary fig. 1. Effect of seven days drought stress on 10 days old mung bean plants. (A) Plant growth, (B) root growth.

