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### *Integration of gene-based markers in a pearl millet genetic map for identification of candidate genes underlying drought tolerance quantitative trait loci*

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Table S1 Forward and Reverse pair of primer sequences used for developing SNP markers from within the genes

SNP marker	Gene homology	Forward	Reverse
<i>Xibmsp01</i>	Ribosomal protein S17 putative	GCAGACTGAGAAGGCTTTCC	TGCTCTCCAGAAGCGGTTG
<i>Xibmsp02</i>	Coproporphyrinogen III oxidase	GGAGTACAGAGTCCGCACATT	CTTCTCAACTTTGCGACAGGT
<i>Xibmsp03</i>	CorA-like Mg <sup>2+</sup> transporter protein	CGCAACAGAATTTTGTCGG	TTACGCTGGTTGTCAAGTTG
<i>Xibmsp04</i>	Hypothetical protein	AGTGAGTCAAGATCTTCATTTTTCC	AAGGGAATGGCTTGAAGATT
<i>Xibmsp05</i>	Elongation factor TS	TCTCCTTCTCCTTGCTGATGA	GCTGAAGTTGCAGCACAGAC
<i>Xibmsp06</i>	HCO <sub>3</sub> transporter family	CGGTGCTCATGTACACATTC	TGATAGCCTGCTGCATGAAG
<i>Xibmsp07</i>	Serine carboxypeptidase III precursor	GTCCCTTGCGTGGAACAAAT	AGCTAAAGCCAGTTCCAGTG
<i>Xibmsp08</i>	Serine carboxypeptidase	ACTTGACTCCAACCTCCAAC	TGGGGATACAGATGCTGTAG
<i>Xibmsp09</i>	Uridylate kinase	ATACGCCGAAGAGCTGTCAG	AGCGTAATGGCAGTCATGTC
<i>Xibmsp10</i>	Phosphatidylinositol 3-kinase	GCTGGAGCTTGACTCGTG	CAAAGAGAAACGAAATTTCCACA
<i>Xibmsp11</i>	Acetyl CoA carboxylase	CGTCAATGGCATATCTACAC	CCATACCAATGTCATTGAGC
<i>Xibmsp12</i>	Acyl CoA oxidase	TTTTGTTATCCACAGTCCAACTC	TGCCTTAGAAGCATCTGCAA
<i>Xibmsp13</i>	Potassium transporter	GGAAGTCGTAGCAGAAGTTG	CAAGGTCTCCATCAACTGGC
<i>Xibmsp14</i>	Serine-threonine protein kinase	TCTTCAGGGATGTTCCCTACT	GAGGAAGTTTATGATGGAAGGAAA
<i>Xibmsp15</i>	Zinc finger C-x8-Cx5-Cx3-H type	TGCTACGCCAATTTCTAATGC	CCACCATCGTCAAGTACTGC
<i>Xibmsp16</i>	Pitriylsin	GAGCTCCAGATGATGAACAC	CTTGCCATAGCACCAAATGG
<i>Xibmsp17</i>	MAP kinase	CATGGCACCCTAGACATAG	GAAACTGACTTCATGATGGAG
<i>Xibmsp18</i>	CBL interacting protein kinase	ATAGATAAAACAGGTGCAGTTTCAGA	ATGACCACAGATCAGCCTTG
<i>Xibmsp19</i>	2-oxoglutarate dehydrogenase E1 component	GTGTTGGTTCCATCTCAGG	CTGCCTCATGGTTATGATGG
<i>Xibmsp20</i>	Succinyl-CoA ligase alpha subunit	GCTGAGCTTGACCTTGTTGTC	CCTGGCATGATTCCAATTTT
<i>Xibmsp21</i>	Hypothetical protein	GAACCTCATCCAACAATTCC	GCTGCTGATGTTGCTATTGC
<i>Xibmsp22</i>	<i>LHY</i>	CGAATCCTCTTGGTACCAAC	GATCGCTCTTCATGTGGTTC
<i>Xibmsp23</i>	Hypothetical protein	AAAGGACCAGTCACGTGAAG	ATAGCCTGGCCATTTCCCTC
<i>Xibmsp24</i>	Ubiquitin conjugating enzyme	CATCATTGGCCACACAAT	GAACAACCTTAAGCTGGTAGATGC
<i>Xibmsp25</i>	Proteasome a-type and b-type	GTGAAAAAGGGTCCAAAGGG	GAAGCCCCAGTAAGTCTTC
<i>Xibmsp26</i>	Catalase	GAGGTTTCGTCAAGAGGTTTCG	TCCTCGGCCTCAATAAGCTA
<i>Xibmsp27</i>	Alanine glyoxylate aminotransferase	CATTGCTCTTCATGGTGGAG	TGGAGCACTGAAGCCAGTAA
<i>Xibmsp28</i>	Glutaredoxin	CGGCCGAGGTAACACAGTC	GAGAAGCTAGGGGCAACCTT
<i>Xibmsp29</i>	Delta-1-pyrroline-5-carboxylate synthetase	GATGCAAATTTGTGGGAACC	GCCGAGACTCGAAAACAATC
<i>Xibmsp30</i>	<i>FLO</i>	AGACAGACAGCACGCACAAC	GAGCTCGACGACATGATGG

<i>Xibmsp31</i>	<i>HD3</i>	ATCGATCTTGTGTGCAGTGG	GACCCGACATGAGGACATTC
<i>Xibmsp32</i>	Alcohol dehydrogenase 1	CTGGTGACCATGTCTTCCT	TTGGTGGTTTGGCAACATTA
<i>Xibmsp33</i>	ABA response protein	GAAGGAGAAGCACCACAAGC	CCGAGGATATCCAGATCGAA
<i>Xibmsp34</i>	<i>MADS</i> -box	GCTCGAAACACGAAACCCTA	CTGGCAGGTGACTTCTCCA
<i>Xibmsp35</i>	<i>MYC</i>	ACGAGATGTTCTCGTCCTG	CCTCCTTGTCGAGATGGTG
<i>Xibmsp36</i>	Opaque 2	GCCAGTAAGTCCATCTCCA	TAGCACGATCCACCTCATCA
<i>Xibmsp37</i>	<i>LEA</i>	ACAGCGTCTCCTTCAAGAGC	TCCGACTCCGATGTGGTACT
<i>Xibmsp38</i>	Vacuolar H <sup>+</sup> ATPase subunit c	TACCTCTTCGATGGCTACGC	CTTGACACCACAAAGACGA
<i>Xibmsp39</i>	RAB	ACCAACCAAGCCAACGAGTA	GGGTGGACTGAAATCGCTTA
<i>Xibmsp40</i>	Anion channel protein	ATGAGAAGCAGAAGGCCTCA	TCCAGATCCTTCCCACAGAG
<i>Xibmsp41</i>	Hydroxyproline rich-glycoprotein	TTTCTGCCGTCCATCTATCC	AAAGCGAAGGGCGTACTACA
<i>Xibmsp42</i>	Expressed protein	AGGCWGGAGAACTTGGAGCRCCAGTTG	GTGGYTTGCAGAAAGMCATATG
<i>Xibmsp43</i>	Actin depolymerising factor	AGTCSAARAGGMTGCACCGTTCAT	TTGAACAGCGMAACACATGYCCATAG
<i>Xibmsp44</i>	Photolyase	CCAARTTTKAGAAACCTAAGGRTGACC	ACAAGCAACAGAGTGGCGTGCAAGATGATGCATCC
<i>Xibmsp45</i>	Expressed protein	GCAGCAGCAACCGCATCC	GCGGAKAGCTCRACRTC GCCGTGCTG
<i>Xibmsp46</i>	Plectin/s10 domain	CCATGATCATCYCCAAGAAGAACCGC	ACTCCTTKGACTTGAAGCTCTGCATGAGCT
<i>Xibmsp47</i>	Hypothetical protein	GGAGCTKGAGAAGAARTTCAGTGG	CTTSCMACAATCTCAGCTGG
<i>Xibmsp48</i>	Thioredoxin peroxidase	GCTCTGAGAGGAYTRTTCATCATTGACAAGGAGGG	GGGTCRGGCTTCATYGACTTBTCCCCAGG
<i>Xibmsp49</i>	Atftsh2/8	CTCCACAAACTCGGAAAGGA	ATTTGGAGAGCCTGAGGTGA
<i>Xibmsp50</i>	Fatty acid desaturase	CCCAAATGCTCTCTTTCCTG	CACCACCTCTTCTCCACCAT
<i>Xibmsp51</i>	Hypothetical protein	AAAGCTCTCAACGTCCCAGA	GCCCTCAACTCAGGCTTCTA
<i>Xibmsp52</i>	Expressed protein	ACGAGGTGCTCTTCATCTCC	GTCCGGATCGAATTCACATT
<i>Xibmsp53</i>	PSI reaction center subunit III	GGCGATGTAGAGGAAGAGCA	TCCTCGCTCAAGAAGTACGC
<i>Xibmsp54</i>	Eucaryotic initiation factor 4A	GTACACCTGGGCGTGCTTT	CTTGTCAGTGAGCCAGTCCA
<i>Xibmsp55</i>	<i>PHYC</i>	TTCCATCCCAACCATTCTA	CCGGAACATCTCCTGGATAA
<i>Xibmsp56</i>	Elongation factor	CTGTCTTCCCAGCACACTACC	TGAGTCCTTTGGGTTCTCCA
<i>Xibmsp57</i>	Zn finger <i>WRKY</i>	CTTCAGCAGCCGATCAAAAT	ACCTCACTGGTTGTTTGCAC
<i>Xibmsp58</i>	Fe-S precursor protein	GCGAGCAGCATCYCSGCSGACCGCTCCC	TGGCARGGGCAGAKGAACTTGTCTCGGCG
<i>Xibmsp59</i>	Ycf68	ACGAGGGGACAAGGTGGT	GGCGAGAGTTGTTTGGTTTC
<i>Xibmsp60</i>	Dipeptidyl peptidase IV	GTTTATGGYGGYCCCAGTGTCAGCT	GCWAGGCCYTKCTTTATTARCCACTC
<i>Xibmsp61</i>	Peroxidase	ACCGGCTCTACAACCTCAGC	CCGCCACATCCATGTTTCTA
<i>Xibmsp62</i>	Actin	CAAGCAGCTGACGATGGTAC	GCTGAAAGAGCAGTATGCATG
<i>Xibmsp63</i>	AMP deaminase	ATCCTCAGCTCCATGTTTTT	ATTAGTCCATTGCTCAGGTG

Table 2 Forward and Reverse pair of primer sequences used for CISP markers development

Primer	Gene homology	Forward	Reverse
<i>Xibmcp01</i>	Heat Shock protein	AGGAGGTGAAGGTGGAGGTC	CATTGTTTCAACCCACATGC
<i>Xibmcp02</i>	Ribosomal protein L24	GAGTAGAGCATCACATTTGAG	CATTGCAGGCCGTGAGAAAAG
<i>Xibmcp03</i>	Transmembrane amino acid transporter	GGGTCCCTTATAAAACAAAAACA	CAAGGCACATTTCTCGTGAC
<i>Xibmcp04</i>	Transaldolase	CCCACTTCACAAGCTGCATA	CGGTTGTGTAGGCCGTTTAC
<i>Xibmcp05</i>	C2 domain	CTGAATGGAACGAGACCTTC	CTGCTGGAGTGAAGGTGAG
<i>Xibmcp06</i>	Adenosyl homocysteinase	CACCAAGCTTGCCCAAGTG	CATCATTGTCCTTGCTGAGG
<i>Xibmcp07</i>	Phosphate translocator	GCCGAATATGTATCCCTGCT	CAAGGCTAGGATGGAAGAGG
<i>Xibmcp08</i>	Phosphoglycerate kinase	TGTTGGCTTGAATGTTTTGG	GCCAGCTCAATTAGCTCCAG
<i>Xibmcp09</i>	Chlorophyll A/B binding protein	GCCATGCTCGCTGTGGTA	TACTTCTTCTCTCGGGATCCTT
<i>Xibmcp10</i>	Delta-1-pyrroline-5-carboxylate synthetase	AGATAGCAAGCCTCGCAAAA	ATCAAGAGCACACCCAAAGG
<i>Xibmcp11</i>	Protein phosphatase 1 regulatory subunit SDS22	CAAGAGCTATGGCTGGGAAG	AGACCTTCCATCTTTTGAATGC
<i>Xibmcp12</i>	Expressed protein	TGTTAGCCCTTGTTTCCTCCA	AGCAACACCAGCTGACCTTT