

Supplementary Material

Genome-wide identification, phylogeny and expression analysis of the *R2R3-MYB* gene family in quinoa (*Chenopodium quinoa*) under abiotic stress

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Table S1 Analysis of physicochemical properties of *CqMYB* gene family members.

Gene Name	Sequence ID	Number of Amino Acid	Molecular Weight	Theoretical pI	Instability Index	Aliphatic Index	Grand Average of Hydropathicity	Genomic Location	Gene Length	Cellular Location
CqMYB1	AUR62014700	361	40994.54	5.56	46.85	61.61	-0.739	Chr01:29230709-29232325	1617	Nuclear
CqMYB2	AUR62014701	389	43657.46	5.85	45.88	74.24	-0.713	Chr01:29251135-29252695	1561	Extracellular (Secreted)
CqMYB3	AUR62014702	289	32548.63	6.96	50.96	80.66	-0.55	Chr01:29266367-29267601	1235	Nuclear
CqMYB4	AUR62025185	290	33134.73	9.15	60.24	77.97	-0.746	Chr01:33677299-33678885	1587	Nuclear
CqMYB5	AUR62035635	316	35190.75	6.76	38.8	68.58	-0.656	Chr01:40858568-40859748	1181	Nuclear
CqMYB6	AUR62024945	323	36549.72	6.18	45.07	64.92	-0.684	Chr01:43863420-43864879	1460	Nuclear
CqMYB7	AUR62018324	275	31208.91	6.45	47.97	71.64	-0.737	Chr01:52950335-52952093	1759	Nuclear
CqMYB8	AUR62034402	355	40035.32	6.31	63.5	56.62	-0.917	Chr01:55368584-55371653	3070	Nuclear
CqMYB9	AUR62034437	174	19773.71	9.94	58.55	76.44	-0.85	Chr01:56993995-56994905	911	Nuclear
CqMYB10	AUR62009487	93	10654.22	9.51	65.68	82.8	-0.569	Chr01:112163569-112164106	538	Nuclear
CqMYB11	AUR62023242	210	23981.24	8.86	51.63	72.1	-0.818	Chr01:115359629-115360925	1297	Nuclear
CqMYB12	AUR62004326	299	33910.15	6.27	58.66	67.22	-0.709	Chr01:117660814-117663341	2528	Nuclear
CqMYB13	AUR62004517	174	19849.68	8.85	41.22	80.8	-0.723	Chr01:119721541-119723328	1788	Nuclear
CqMYB14	AUR62004628	324	35105.33	8.7	39.71	67.47	-0.594	Chr01:121234523-121236001	1479	Nuclear
CqMYB15	AUR62012494	283	32081.53	6.07	52.82	63.07	-0.745	Chr02:4646640-4648322	1683	Nuclear
CqMYB16	AUR62012493	319	35828.9	5.9	46.68	74.04	-0.691	Chr02:4665414-4666996	1583	Nuclear
CqMYB17	AUR62012492	295	33140.38	6.44	49.81	79.66	-0.567	Chr02:4678693-4679935	1243	Nuclear
CqMYB18	AUR62017171	316	35159.78	6.76	37.49	69.49	-0.618	Chr02:23053646-23054800	1155	Nuclear
CqMYB19	AUR62028989	289	32959.58	9.05	61.29	81.97	-0.697	Chr02:35554623-35556156	1534	Nuclear
CqMYB20	AUR62039999	282	32014.15	8.95	51.41	84.4	-0.733	Chr02:51890833-51892321	1489	Nuclear
CqMYB21	AUR62039339	373	41992.03	6.41	49.48	76.81	-0.659	Chr03:43043309-43044814	1506	Nuclear
CqMYB22	AUR62034368	282	32146.86	9.49	56.86	55.39	-0.983	Chr03:52994683-52996318	1636	Extracellular (Secreted)
CqMYB23	AUR62022912	257	28420.8	7.06	39.9	70.82	-0.866	Chr04:2489446-2490219	774	Nuclear
CqMYB24	AUR62022815	424	46381.96	5.33	58.83	68.8	-0.537	Chr04:3656750-3661419	4670	Extracellular (Secreted)
CqMYB25	AUR62023165	93	10654.22	9.51	65.68	82.8	-0.569	Chr04:7345719-7346267	549	Nuclear
CqMYB26	AUR62023063	320	35836.9	6.02	50.56	67.09	-0.492	Chr04:8482580-8485006	2427	Extracellular (Secreted)
CqMYB27	AUR62039812	355	40159.47	6.73	62.19	56.34	-0.946	Chr04:38305688-38308645	2958	Nuclear
CqMYB28	AUR62026937	319	35853.54	7.14	50.28	82.19	-0.476	Chr04:43590840-43592599	1760	Nuclear
CqMYB29	AUR62026930	281	32453.32	5.6	54.12	72.85	-0.707	Chr04:43908627-43910085	1459	Nuclear
CqMYB30	AUR62030563	328	36762.1	6.15	48.05	74.6	-0.608	Chr04:48322906-48324791	1886	Nuclear
CqMYB31	AUR62030594	322	36266.33	6.05	42.53	65.47	-0.641	Chr04:48791649-48793185	1537	Nuclear
CqMYB32	AUR62015789	278	31045.11	4.66	43.37	65.86	-0.805	Chr05:1828216-1831632	3417	Extracellular (Secreted)
CqMYB33	AUR62039601	288	32522.85	9.45	54.63	54.55	-0.965	Chr05:26817325-26825749	8425	Extracellular (Secreted)
CqMYB34	AUR62004818	259	29257.64	9.01	39.09	64.79	-0.848	Chr05:64073632-64076278	2647	Nuclear
CqMYB35	AUR62006826	979	110304.16	5.18	49.52	71.71	-0.889	Chr05:75698011-75707043	9033	Nuclear

CqMYB36	AUR62006 590	551	60205.67	5.15	59.05	65.5	-0.602	Chr05:77869872- 77875115	5244	Nuclear
CqMYB37	AUR62019 295	313	34713.3	5.89	45.47	65.72	-0.628	Chr05:80371790- 80374271	2482	Nuclear
CqMYB38	AUR62032 801	300	33562.21	8.75	76.97	55.67	-0.755	Chr06:5626269- 5628439	2171	Extracellular (Secreted)
CqMYB39	AUR62035 882	99	11426.2	10.26	63.81	75.86	-0.637	Chr07:23789439- 23790654	1216	Nuclear
CqMYB40	AUR62040 017	333	37293.47	6.75	47.8	65.86	-0.803	Chr07:33453717- 33455365	1649	Nuclear
CqMYB41	AUR62002 596	305	34510.92	5.58	46.72	59.48	-0.836	Chr07:59581972- 59583968	1997	Nuclear
CqMYB42	AUR62002 136	235	26617.38	4.23	60.72	65.53	-0.586	Chr07:66733310- 66734494	1185	Nuclear
CqMYB43	AUR62002 080	360	39790.96	6.86	46.36	77.83	-0.506	Chr07:67421099- 67422562	1464	Nuclear
CqMYB44	AUR62001 998	341	38482.35	6.3	44.53	78.97	-0.633	Chr07:68166064- 68167917	1854	Nuclear
CqMYB45	AUR62015 992	283	31777.51	7.65	49.44	62.05	-0.722	Chr07:78061260- 78063179	1920	Nuclear
CqMYB46	AUR62015 989	229	26572.19	8.98	50.96	67.73	-0.774	Chr07:78110601- 78112844	2244	Nuclear
CqMYB47	AUR62001 838	182	21070.95	5.18	61.53	65.22	-0.678	Chr07:105044444 -105045445	1002	Nuclear
CqMYB48	AUR62011 751	287	33025.57	5.7	54.07	67.28	-0.771	Chr08:639830- 641315	1486	Nuclear
CqMYB49	AUR62011 870	286	32264.98	5.61	53.48	63.11	-0.772	Chr08:2061735- 2064221	2487	Nuclear
CqMYB50	AUR62030 952	449	51219.2	5.87	51.11	66.68	-0.808	Chr08:6078633- 6084082	5450	Extracellular (Secreted)
CqMYB51	AUR62036 523	298	33850.04	9.35	48.9	56.34	-0.905	Chr08:23590744- 23594083	3340	Extracellular (Secreted)
CqMYB52	AUR62036 505	224	25715.44	6.63	55.49	59.69	-0.919	Chr08:24543088- 24548846	5759	Nuclear
CqMYB53	AUR62041 339	369	42088.3	9	64.54	71.17	-0.801	Chr08:41884975- 41886084	1110	Nuclear
CqMYB54	AUR62007 558	322	36263.4	6.01	55.41	64.57	-0.692	Chr09:512786- 514758	1973	Nuclear
CqMYB55	AUR62003 804	338	38119.9	6.23	43.85	77.93	-0.626	Chr09:6364858- 6366556	1699	Nuclear
CqMYB56	AUR62003 939	302	32842.09	8.27	55.99	65.23	-0.526	Chr09:8064670- 8065578	909	Nuclear
CqMYB57	AUR62004 043	322	36111.34	6	53.7	67.61	-0.635	Chr09:9406883- 9408853	1971	Nuclear
CqMYB58	AUR62024 713	295	33234.31	6.22	51.23	63.83	-0.745	Chr09:10778080- 10780559	2480	Nuclear
CqMYB59	AUR62023 607	885	100545.6 2	5.55	48.8	70.38	-0.933	Chr10:528494- 535457	6964	Nuclear
CqMYB60	AUR62023 549	329	36939.37	6.46	45.5	70.82	-0.696	Chr10:1242880- 1248093	5214	Nuclear
CqMYB61	AUR62033 319	299	33764.91	6.1	60.77	67.26	-0.671	Chr10:2669079- 2671614	2536	Nuclear
CqMYB62	AUR62033 340	299	33764.91	6.1	60.77	67.26	-0.671	Chr10:2885965- 2888522	2558	Nuclear
CqMYB63	AUR62022 709	322	34980.35	8.77	38.89	69.44	-0.534	Chr10:5893333- 5894772	1440	Nuclear
CqMYB64	AUR62022 338	322	36475.58	9.58	56.34	52.14	-0.926	Chr10:26028587- 26030063	1477	Extracellular (Secreted)
CqMYB65	AUR62034 976	362	40676.57	6.72	55.92	72.98	-0.707	Chr10:53553822- 53555287	1466	Nuclear
CqMYB66	AUR62035 366	177	20030.33	6.08	48.8	66.16	-0.648	Chr11:10153638- 10155457	1820	Nuclear
CqMYB67	AUR62030 018	309	34905.29	5.42	46.58	62.17	-0.811	Chr11:64076668- 64078724	2057	Nuclear
CqMYB68	AUR62028 197	360	39819.9	6.86	46.8	77.58	-0.537	Chr11:67850167- 67851644	1478	Nuclear
CqMYB69	AUR62000 115	306	33717.26	5.4	50.02	61.5	-0.606	Chr12:1668830- 1671298	2469	Nuclear
CqMYB70	AUR62000 244	556	60793.18	5.18	57.53	65.43	-0.619	Chr12:2919060- 2924349	5290	Nuclear
CqMYB71	AUR62000 484	979	110488.0 2	5.11	49.31	70.91	-0.921	Chr12:5350313- 5358877	8565	Nuclear
CqMYB72	AUR62036 035	206	22930.08	9.17	31.01	69.71	-0.568	Chr12:17645605- 17648112	2508	Nuclear
CqMYB73	AUR62020 426	123	13264.11	9.51	30.03	85.61	-0.354	Chr12:55335954- 55336455	502	Nuclear

CqMYB74	AUR62007 454	304	34037.79	4.94	50.21	73.78	-0.701	Chr13:897216- 899538	2323	Nuclear
CqMYB75	AUR62007 312	89	10229.78	8.76	56.38	75.62	-0.737	Chr13:2404819- 2405088	270	Nuclear
CqMYB76	AUR62037 317	351	40102.7	5.16	60.18	70.57	-0.778	Chr14:10673777- 10686821	13045	Nuclear
CqMYB77	AUR62005 744	461	51935.32	7.14	54.91	73.64	-0.691	Chr14:56272669- 56279147	6479	Extracellular (Secreted)
CqMYB78	AUR62010 054	88	10097.67	9.1	53.32	77.73	-0.716	Chr15:4834631- 4834897	267	Nuclear
CqMYB79	AUR62010 308	266	30142.62	6.27	58.99	66.35	-0.81	Chr15:7517681- 7518481	801	Nuclear
CqMYB80	AUR62025 096	601	68358.1	8.94	37.19	77.24	-0.598	Chr15:51144350- 51152649	8300	Extracellular (Secreted)
CqMYB81	AUR62025 146	241	27828.45	5.55	42.42	78.13	-0.532	Chr15:53394230- 53399336	5107	Nuclear
CqMYB82	AUR62008 157	279	31497.9	5.34	59.67	58.75	-0.786	Chr16:1001400- 1003044	1645	Nuclear
CqMYB83	AUR62008 199	456	51253.32	5.78	42.26	69.47	-0.693	Chr16:1516963- 1521722	4760	Extracellular (Secreted)
CqMYB84	AUR62008 324	361	40003.29	5.94	50.63	61.39	-0.711	Chr16:3164622- 3166340	1719	Extracellular (Secreted)
CqMYB85	AUR62008 413	135	15401.02	8.89	53.95	82.96	-0.145	Chr16:4235414- 4244190	8777	Nuclear
CqMYB86	AUR62025 762	369	42150.42	9	64.2	71.95	-0.772	Chr16:29660651- 29661760	1110	Nuclear
CqMYB87	AUR62041 017	341	39321.05	8.31	62.19	70.38	-0.807	Chr16:42585786- 42586892	1107	Nuclear
CqMYB88	AUR62037 070	99	11564.01	7.94	51.34	73.94	-0.772	Chr16:55610251- 55610718	468	Nuclear
CqMYB89	AUR62030 471	368	42228.4	8.49	61.81	71.06	-0.781	Chr16:63658228- 63659334	1107	Nuclear
CqMYB90	AUR62015 573	240	27079.75	4.24	59.92	70.29	-0.588	Chr16:70114697- 70115901	1205	Nuclear
CqMYB91	AUR62019 989	154	17669.28	10.18	55.73	70.26	-0.929	Chr16:73577738- 73578638	901	Nuclear
CqMYB92	AUR62018 693	244	27541.13	6.23	36.97	79.18	-0.609	Chr16:76204005- 76205337	1333	Nuclear
CqMYB93	AUR62027 278	306	34273.05	4.8	49.3	73.63	-0.705	Chr16:77468878- 77471222	2345	Nuclear
CqMYB94	AUR62041 580	282	32667.54	5.69	51.35	71.21	-0.752	Chr17:11172108- 11175216	3109	Nuclear
CqMYB95	AUR62039 078	268	30372.83	6.38	54.79	65.49	-0.836	Chr17:76594324- 76595130	807	Nuclear
CqMYB96	AUR62013 046	88	10097.67	9.1	53.32	77.73	-0.716	Chr17:79383184- 79383450	267	Nuclear
CqMYB97	AUR62033 728	287	33213.15	6.18	47.29	71.67	-0.752	Chr18:4040811- 4047299	6489	Nuclear
CqMYB98	AUR62009 626	182	21032.84	5.18	58.18	65.22	-0.664	Chr18:28203949- 28204945	997	Nuclear
CqMYB99	AUR62040 305	89	10081.73	9.44	70.87	81.12	-0.565	Chr00:16331410- 16331874	465	Nuclear
CqMYB100	AUR62021 197	221	25450.51	6.31	51.58	63.53	-0.76	Chr00:35625194- 35629427	4234	Nuclear
CqMYB101	AUR62021 199	283	31586.39	8.3	56.05	63.78	-0.639	Chr00:35653980- 35655799	1820	Nuclear
CqMYB102	AUR62044 763	343	38748.54	8.78	66.62	72.59	-0.734	Chr00:103013574- -103014605	1032	Nuclear
CqMYB103	AUR62038 255	288	31336.18	8.54	54.04	65.03	-0.656	Chr00:134347510- -134348466	957	Nuclear