

**Table S5: Molecular diversity (represented by different diversity statistical measures) detected by 478 genic and genomic microsatellite markers and 380 TF gene-derived SNP markers among 94 cultivated and wild accessions within and between *Cicer* species**

Within species	Genetic distance of microsatellite markers			Genetic distance of SNP markers			Genetic distance (microsatellite + SNP) markers		
	Minimum	Maximum	Mean	Minimum	Maximum	Mean	Minimum	Maximum	Mean
<i>C. arietinum</i>	0.1303 (ICCX810800- ICCV96970)	0.409 (ICC4958- IC296132), (ICCX810800- ICC4958)	0.3057	0.1033 (ICCV2- IC296131), (ICC95334- IC296131), (ICCV96329- IC296131)	0.2403 (ICCX810800- IC296131)	0.2171	0.1131 (ICCV96329- BG2024)	0.3057 (ICCX81080 0-ICC4958)	0.2585
<i>C. reticulatum</i>	0.2719 (ILWC229- ILWC219)	0.8418 (ILWC290- ILWC257)	0.6629	0.1178 (ILWC233- ILWC229)	0.6419 (ILWC237- ICC17160)	0.4102	0.2149 (ILWC229- ILWC219)	0.674 (ILWC237- ICC17160)	0.519
<i>C. echinospermum</i>	0.1597 (ILWC288- ICC17159)	0.7224 (ILWC35- IG135418)	0.4932	0.1034 (ILWC245- IG135418)	0.3333 (ILWC239- ICC17159)	0.2621	0.1859 (ILWC288- ICC17159)	0.455 (IG135418- ICC17159)	0.3798
<i>C. judaicum</i>	0.1455 (ILWC211- ILWC20)	0.9188 (ILWC45- ILWC30)	0.6784	0.1036 (ILWC278- ILWC273)	0.7556 (ILWC283- ILWC31)	0.2798	0.1289 (ILWC211- ILWC20)	0.8486 (ILWC38- ILWC283)	0.4634
<i>C. bijugum</i>	0.1444 (ILWC227- ILWC209)	0.74 (ILWC32- ILWC228)	0.4908	0.1444 (IG136792- ILWC209)	0.74 (IG136792- ILWC240)	0.4908	0.1336 (ILWC240- ILWC8)	0.5295 (ILWC32- ILWC42)	0.3523
<i>C. pinnatifidum</i>	0.1625 (ILWC248- ILWC226)	0.7323 (ILWC9- ILWC250), (ILWC29- ILWC289)	0.563	0.1037 (ILWC289- ILWC236)	0.92 (ILWC49- ILWC250)	0.2308	0.1504 (ILWC248- ILWC226)	0.5036 (ILWC49- ILWC250)	0.3927

Between species	Genetic distance (microsatellite + SNP) markers		
	Minimum	Maximum	Average
<i>C. arietinum</i> - <i>C. reticulatum</i>	0.1131 (ICCV96329-BG2024)	0.879 (ILWC36-ICCV2), (ILWC36-ICC4958)	0.6834
<i>C. arietinum</i> - <i>C. echinospermum</i>	0.1131 (ICCV96329-BG2024)	0.8796 (ICCV2-ILWC245), (ILWC45-PhuleG515)	0.6625
<i>C. arietinum</i> - <i>C. judaicum</i>	0.1131 (ICCV96329-BG2024)	0.9106 (ILWC283-ICCV96329)	0.6979
<i>C. arietinum</i> - <i>C. bijugum</i>	0.1131 (ICCV96329-BG2024)	0.8117 (ILWC42-ICCV2)	0.6418
<i>C. arietinum</i> - <i>C. pinnatifidum</i>	0.1131 (ICCV96329-BG2024)	0.8307 (ILWC250-ICCV2)	0.6651
<i>C. arietinum</i> - <i>C. microphyllum</i>	0.1131 (ICCV96329-BG2024)	0.7828 ( <i>microphyllum</i> -ICCV96970)	0.4362
<i>C. reticulatum</i> - <i>C. echinospermum</i>	0.1859 (ILWC288-ICC17159)	0.7546 (ILWC245-ICC17160)	0.6468
<i>C. reticulatum</i> - <i>C. judaicum</i>	0.1286 (ILWC211-ILWC20)	0.9441 (ILWC283-ICC17160)	0.6767
<i>C. reticulatum</i> - <i>C. bijugum</i>	0.1336 (ILWC8-ILWC240)	0.7878 (ILWC285-ICC17160)	0.6387
<i>C. reticulatum</i> - <i>C. pinnatifidum</i>	0.1504 (ILWC248-ILWC226)	0.7965 (IG136820-ICC17160)	0.6724
<i>C. reticulatum</i> - <i>C. microphyllum</i>	0.2149 (ILWC229-ILWC219)	0.8602 ( <i>microphyllum</i> -ILWC36)	0.6543
<i>C. echinospermum</i> - <i>C. judaicum</i>	0.1286 (ILWC211-ILWC20)	0.8486 (ILWC38-ILWC283)	0.61
<i>C. echinospermum</i> - <i>C. bijugum</i>	0.1336 (ILWC8-ILWC240)	0.6265 (ILWC32-IG135418)	0.5443
<i>C. echinospermum</i> - <i>C. pinnatifidum</i>	0.1504 (ILWC248-ILWC226)	0.6803 (ILWC246-ILWC250)	0.5863
<i>C. echinospermum</i> - <i>C. microphyllum</i>	0.1859 (ILWC288-ICC17159)	0.8658 ( <i>microphyllum</i> -ILWC288)	0.5803
<i>C. judaicum</i> - <i>C. bijugum</i>	0.1286 (ILWC211-ILWC20)	0.8933 (ILWC32-ILWC283)	0.5862
<i>C. judaicum</i> - <i>C. pinnatifidum</i>	0.1286 (ILWC20-ILWC211)	0.8857 (ILWC22-ILWC283)	0.6151
<i>C. judaicum</i> - <i>C. microphyllum</i>	0.1286 (ILWC211-ILWC20)	0.9289 ( <i>microphyllum</i> -ILWC283)	0.6076
<i>C. bijugum</i> - <i>C. pinnatifidum</i>	0.1336 (ILWC8-ILWC240)	0.6313 (ILWC49-ILWC228)	0.6473
<i>C. bijugum</i> - <i>C. microphyllum</i>	0.1336 (ILWC8-ILWC240)	0.8782 (ILWC277- <i>microphyllum</i> )	0.6018
<i>C. pinnatifidum</i> - <i>C. microphyllum</i>	0.1504 (ILWC248-ILWC226)	0.8192 ( <i>microphyllum</i> -ILWC49)	0.6375