

Supplemental Table 5. Data processing summary, including percent unannotated for 20% sampling effort of genome wide coverage. Read numbers refer to the number of individual reads for each given category.

Family	Species	Genome Size (Mbp/1C)	Raw read #	Filtered reads #	Total # reads sampled	Total # reads clustered	Percent unannotated
Bataceae	<i>Batis maritima</i>	356.97	16,618,110	15,093,764	475,960	166,079	0.27
Brassicaceae	<i>Aethionema arabicum</i>	933.99	17,515,712	13,704,622	1,245,320	920,994	2.62
Brassicaceae	<i>Meniocus linifolius</i>	899.76	19,025,676	17,900,990	1,199,680	641,961	1.66
Brassicaceae	<i>Barbarea bracteosa</i>	268.95	17,958,660	16,274,282	358,600	175,287	2.28
Brassicaceae	<i>Cakile maritima</i>	1383.87	20,109,922	17,345,778	1,845,158	1,360,159	1.77
Brassicaceae	<i>Calepina irregularis</i>	254.28	18,945,186	14,996,774	339,040	133,759	1.15
Brassicaceae	<i>Capsella bursa-pastoris</i>	420.54	19,924,400	17,596,938	560,720	287,133	2.07
Brassicaceae	<i>Cardamine hirsuta</i>	489	14,327,238	13,353,298	652,000	341,868	1.71
Brassicaceae	<i>Caulanthus amplexicaulis</i>	484.11	17,276,330	13,566,798	645,480	318,709	1.19
Brassicaceae	<i>Chorispora tenella</i>	366.75	21,426,658	17,199,758	489,000	249,923	1.37
Brassicaceae	<i>Cochlearia officinalis</i>	-	19,571,568	17,680,152	978,666	700,335	1.86
Brassicaceae	<i>Crambe hispanica</i>	660.15	17,962,804	16,030,190	880,200	483,616	1.57
Brassicaceae	<i>Descurainia pinnata</i>	371.64	21,064,170	18,911,684	495,520	242,883	1.10
Brassicaceae	<i>Descurainia sophioides</i>	195.6	14,299,738	11,722,246	260,800	94,998	1.25
Brassicaceae	<i>Eruca vesicaria</i>	709.05	19,393,468	16,238,972	945,400	573,488	1.82
Brassicaceae	<i>Erysimum cheiranthoides</i>	-	19,255,900	14,718,730	560,720	303,330	2.50
Brassicaceae	<i>Euclidium syriacum</i>	298.29	16,998,370	15,169,108	397,720	162,475	1.16
Brassicaceae	<i>Goldbachia laevigata</i>	547.68	19,699,580	18,035,220	730,238	387,040	1.24
Brassicaceae	<i>Guillenia lasiophylla</i>	621.03	11,213,854	9,994,886	828,040	405,402	1.50
Brassicaceae	<i>Hirschfeldia incana</i>	552.57	23,055,074	21,141,192	736,760	383,811	2.15
Brassicaceae	<i>Iberis amara</i>	831.3	13,691,982	13,178,566	1,108,400	702,701	2.95
Brassicaceae	<i>Isatis lusitanica</i>	381.42	23,390,698	17,191,612	508,560	289,084	1.30
Brassicaceae	<i>Isatis tinctoria</i>	616.14	18,892,040	15,557,688	821,520	476,862	1.71
Brassicaceae	<i>Lepidium rudemale</i>	371.64	18,919,410	14,656,664	495,520	192,510	1.36
Brassicaceae	<i>Lepidium sativum</i>	591.69	18,902,354	16,242,402	788,920	436,683	1.02
Brassicaceae	<i>Lobularia maritima</i>	312.96	19,156,394	14,101,930	417,280	202,955	1.18
Brassicaceae	<i>Nasturtium officinale</i>	430.32	16,369,294	13,096,042	573,760	319,579	1.24
Brassicaceae	<i>Olimoarabidopsis pumila</i>	410.76	14,092,992	11,158,530	547,680	254,263	1.92
Brassicaceae	<i>Sisymbrium leucocladum</i>	498.78	21,306,942	17,347,804	665,040	401,436	1.72
Brassicaceae	<i>Rorippa islandica</i>	567.24	14,323,126	12,382,424	756,320	435,593	2.30
Brassicaceae	<i>Sisymbrium brassiciforme</i>	-	18,157,024	15,596,368	495,520	244,732	1.57
Brassicaceae	<i>Streptanthus arizonicus</i>	1090.47	20,032,530	17,795,582	1,453,960	1,007,120	0.93
Brassicaceae	<i>Streptanthus heterophyllus</i>	748.17	20,440,916	18,181,630	997,560	450,432	0.92
Brassicaceae	<i>Teesdalia nudicaulis</i>	557.46	17,158,882	15,882,064	743,280	450,084	1.22
Brassicaceae	<i>Thlaspi arvense</i>	205.38	13,742,780	12,034,208	273,840	165,299	1.56
Brassicaceae	<i>Turritis glabra</i>	919.32	21,721,584	19,358,608	1,225,760	762,939	2.58
Capparaceae	<i>Boscia sp</i>	410.76	21,741,004	19,951,552	547,680	219,942	2.37
Capparaceae	<i>Cadaba natalensis</i>	259.17	18,732,834	15,702,982	345,560	130,056	2.38
Capparaceae	<i>Capparis fascicularis</i>	1139.37	20,757,542	19,626,330	1,519,158	871,161	1.88
Capparaceae	<i>Capparaceae sp</i>	611.25	18,850,070	16,916,978	815,000	395,166	1.70
Cariaceae	<i>Carica papaya</i>	-	26,670,784	22,740,686	496,000	209,518	3.94

Cleomaceae	<i>Cleome africana</i>	484.11	14,535,678	12,523,252	645,480	426,352	3.32
Cleomaceae	<i>Cleome arabica</i>	464.55	15,921,148	12,608,460	619,400	409,695	3.43
Cleomaceae	<i>Polanisia sp</i>	709.05	16,484,740	14,702,180	945,400	720,409	3.70
Cleomaceae	<i>Coalisina paradoxa</i>	484.11	20,093,758	17,333,978	645,480	385,702	3.20
Cleomaceae	<i>Cleomaceae sp</i>	322.74	20,481,152	17,552,776	430,320	245,739	3.27
Cleomaceae	<i>Melidiscus giganteus</i>	420.54	18,036,600	15,768,938	560,720	339,271	4.17
Cleomaceae	<i>Arivela viscosa</i>	268.95	18,197,094	14,690,618	358,600	161,280	3.81
Cleomaceae	<i>Gynandropsis gynandra</i>	1124.7	18,472,870	16,563,780	1,499,600	1,097,311	1.52
Cleomaceae	<i>Polanisia dodecandra</i>	733.5	17,592,446	16,046,308	978,000	753,862	3.43
Cleomaceae	<i>Polanisia graveolens</i>	723.72	20,436,352	18,930,976	964,960	744,700	3.30
Cleomaceae	<i>Polanisia trachysperma</i>	699.27	18,164,388	14,896,462	932,360	714,394	3.46
Cleomaceae	<i>Tarenaya hassleriana</i>	435.21	24,418,660	22,321,972	580,280	333,175	2.78
Moringaceae	<i>Moringa oleifera</i>	386.31	20,478,894	17,095,412	515,080	226,111	1.09
Resadaceae	<i>Ochradenus baccatus</i>	870.42	18,680,706	17,328,066	1,160,560	728,696	0.70
Resadaceae	<i>Reseda odorata</i>	498.78	20,059,938	17,972,876	665,040	417,552	0.75