



**Table S1:** Material information in ex situ conservation of DXWR.

No.	Name	Origin or source of population	No.	Name	Origin or source of population	No.	Name	Origin or source of population
1-1	DY1	Dongtangshang	3-26	DY75	Dongtang	6-13	DY148	Dongtangxia
1-2	DY2	Dongtangshang	3-27	DY76	Dongtang	6-14	DY149	Dongtangxia
1-3	DY3	Dongtangshang	3-28	DY77	Dongtang	6-15	DY150	Dongtangxia
1-4	DY4	Dongtangshang	3-29	DY78	Dongtang	6-16	DY151	Dongtangxia
1-5	DY5	Dongtangshang	3-30	DY79	Dongtang	6-17	DY152	Dongtangxia
1-6	DY6	Dongtangshang	4-1	DY80	Shuitaoshu	6-18	DY153	Dongtangxia
1-7	DY7	Dongtangshang	4-2	DY81	Shuitaoshu	6-19	DY154	Dongtangxia
1-8	DY8	Dongtangshang	4-3	DY82	Shuitaoshu	6-20	DY155	Dongtangxia
1-9	DY9	Dongtangshang	4-4	DY83	Shuitaoshu	6-21	DY156	Dongtangxia
1-10	DY10	Dongtangshang	4-5	DY84	Shuitaoshu	6-22	DY157	Dongtangxia
1-11	DY11	Dongtangshang	4-6	DY85	Shuitaoshu	6-23	DY158	Dongtangxia
1-12	DY12	Dongtangshang	4-7	DY86	Shuitaoshu	6-24	DY159	Dongtangxia
1-13	DY13	Dongtangshang	4-8	DY87	Shuitaoshu	6-25	DY160	Dongtangxia
1-14	DY14	Dongtangshang	4-9	DY88	Shuitaoshu	6-26	DY161	Dongtangxia
1-15	DY15	Dongtangshang	4-10	DY89	Shuitaoshu	6-27	DY162	Dongtangxia
1-16	DY16	Dongtangshang	4-11	DY90	Shuitaoshu	7-1	DY163	Dongtangxice
1-17	DY17	Dongtangshang	4-12	DY91	Shuitaoshu	7-2	DY164	Dongtangxice
1-18	DY18	Dongtangshang	4-13	DY92	Shuitaoshu	7-3	DY165	Dongtangxice
1-19	DY19	Dongtangshang	4-14	DY93	Shuitaoshu	7-4	DY166	Dongtangxice
1-20	DY20	Dongtangshang	4-15	DY94	Shuitaoshu	7-5	DY167	Dongtangxice
2-1	DY21	Zhangtang	4-16	DY95	Shuitaoshu	7-6	DY168	Dongtangxice
2-2	DY22	Zhangtang	4-17	DY96	Shuitaoshu	7-7	DY169	Dongtangxice
2-3	DY23	Zhangtang	4-18	DY97	Shuitaoshu	7-8	DY170	Dongtangxice
2-4	DY24	Zhangtang	4-19	DY98	Shuitaoshu	7-9	DY171	Dongtangxice
2-5	DY25	Zhangtang	4-20	DY99	Shuitaoshu	7-10	DY172	Dongtangxice
2-6	DY26	Zhangtang	4-21	DY100	Shuitaoshu	7-11	DY173	Dongtangxice
2-7	DY27	Zhangtang	4-22	DY101	Shuitaoshu	7-12	DY174	Dongtangxice
2-8	DY28	Zhangtang	4-23	DY102	Shuitaoshu	7-13	DY175	Dongtangxice
2-9	DY29	Zhangtang	4-24	DY103	Shuitaoshu	7-14	DY176	Dongtangxice
2-10	DY30	Zhangtang	4-25	DY104	Shuitaoshu	7-15	DY177	Dongtangxice
2-11	DY31	Zhangtang	4-26	DY105	Shuitaoshu	8-1	DY178	Anjiashan
2-12	DY32	Zhangtang	4-27	DY106	Shuitaoshu	8-2	DY179	Anjiashan
2-13	DY33	Zhangtang	4-28	DY107	Shuitaoshu	8-3	DY180	Anjiashan
2-14	DY34	Zhangtang	4-29	DY108	Shuitaoshu	8-4	DY181	Anjiashan
2-15	DY35	Zhangtang	4-30	DY109	Shuitaoshu	8-5	DY182	Anjiashan
2-16	DY36	Zhangtang	4-31	DY110	Shuitaoshu	8-6	DY183	Anjiashan
2-17	DY37	Zhangtang	4-32	DY111	Shuitaoshu	8-7	DY184	Anjiashan
2-18	DY38	Zhangtang	4-33	DY112	Shuitaoshu	8-8	DY185	Anjiashan
2-19	DY39	Zhangtang	5-1	DY113	Linchang	8-9	DY186	Anjiashan
2-20	DY40	Zhangtang	5-2	DY114	Linchang	8-10	DY187	Anjiashan
2-21	DY41	Zhangtang	5-3	DY115	Linchang	8-11	DY188	Anjiashan

2-22	DY42	Zhangtang	5-4	DY116	Linchang	8-12	DY189	Anjiashan
2-23	DY43	Zhangtang	5-5	DY117	Linchang	8-13	DY190	Anjiashan
2-24	DY44	Zhangtang	5-6	DY118	Linchang	8-14	DY191	Anjiashan
2-25	DY45	Zhangtang	5-7	DY119	Linchang	8-15	DY192	Anjiashan
2-26	DY46	Zhangtang	5-8	DY120	Linchang	8-16	DY193	Anjiashan
2-27	DY47	Zhangtang	5-9	DY121	Linchang	8-17	DY194	Anjiashan
2-28	DY48	Zhangtang	5-10	DY122	Linchang	8-18	DY195	Anjiashan
2-29	DY49	Zhangtang	5-11	DY123	Linchang	8-19	DY196	Anjiashan
3-1	DY50	Dongtang	5-12	DY124	Linchang	8-20	DY197	Anjiashan
3-2	DY51	Dongtang	5-13	DY125	Linchang	8-21	DY198	Anjiashan
3-3	DY52	Dongtang	5-14	DY126	Linchang	8-22	DY199	Anjiashan
3-4	DY53	Dongtang	5-15	DY127	Linchang	8-23	DY200	Anjiashan
3-5	DY54	Dongtang	5-16	DY128	Linchang	8-24	DY201	Anjiashan
3-6	DY55	Dongtang	5-17	DY129	Linchang	9-1	DY202	Kanxialong
3-7	DY56	Dongtang	5-18	DY130	Linchang	9-2	DY203	Kanxialong
3-8	DY57	Dongtang	5-19	DY131	Linchang	9-3	DY204	Kanxialong
3-9	DY58	Dongtang	5-20	DY132	Linchang	9-4	DY205	Kanxialong
3-10	DY59	Dongtang	5-21	DY133	Linchang	9-5	DY206	Kanxialong
3-11	DY60	Dongtang	5-22	DY134	Linchang	9-6	DY207	Kanxialong
3-12	DY61	Dongtang	5-23	DY135	Linchang	9-7	DY208	Kanxialong
3-14	DY63	Dongtang	6-1	DY136	Dongtangxia	9-8	DY209	Kanxialong
3-15	DY64	Dongtang	6-2	DY137	Dongtangxia	9-9	DY210	Kanxialong
3-16	DY65	Dongtang	6-3	DY138	Dongtangxia	9-10	DY211	Kanxialong
3-17	DY66	Dongtang	6-4	DY139	Dongtangxia	9-11	DY212	Kanxialong
3-18	DY67	Dongtang	6-5	DY140	Dongtangxia	9-12	DY213	Kanxialong
3-19	DY68	Dongtang	6-6	DY141	Dongtangxia	9-13	DY214	Kanxialong
3-20	DY69	Dongtang	6-7	DY142	Dongtangxia	9-14	DY215	Kanxialong
3-21	DY70	Dongtang	6-8	DY143	Dongtangxia	9-15	DY216	Kanxialong
3-22	DY71	Dongtang	6-9	DY144	Dongtangxia	9-16	DY217	Kanxialong
3-23	DY72	Dongtang	6-10	DY145	Dongtangxia	9-17	DY218	Kanxialong
3-24	DY73	Dongtang	6-11	DY146	Dongtangxia	9-18	DY219	Kanxialong
3-25	DY74	Dongtang	6-12	DY147	Dongtangxia	9-19	DY220	Kanxialong

**Table S2:** The alignment rate for each sample.

ID	Total reads	No. uniquely mapped	% uniquely mapped	No. repeatedly mapped	% repeatedly mapped	No. un-mapped	% un-mapped
1-1	19,918,039	15,310,784	76.87%	3,515,481	17.65%	1,091,774	5.48%
1-2	17,352,739	13,016,738	75.01%	3,368,929	19.41%	967,072	5.57%
1-3	25,748,498	18,997,168	73.78%	5,418,386	21.04%	1,332,944	5.18%
1-4	18,760,209	14,091,472	75.11%	3,653,572	19.48%	1,015,165	5.41%
1-5	19,683,965	14,767,146	75.02%	3,803,875	19.32%	1,112,944	5.65%
1-6	29,738,970	22,933,036	77.11%	5,361,721	18.03%	1,444,213	4.86%
1-7	16,691,695	12,366,360	74.09%	3,418,082	20.48%	907,253	5.44%
1-8	20,191,159	14,789,062	73.25%	4,303,050	21.31%	1,099,047	5.44%
1-9	19,580,411	14,508,387	74.10%	3,980,098	20.33%	1,091,926	5.58%

1-10	24,632,793	18,475,100	75.00%	4,784,133	19.42%	1,373,560	5.58%
1-11	18,023,537	13,334,063	73.98%	3,755,852	20.84%	933,622	5.18%
1-12	20,069,433	14,951,776	74.50%	3,996,665	19.91%	1,120,992	5.59%
1-13	19,781,098	14,872,804	75.19%	3,899,096	19.71%	1,009,198	5.10%
1-14	19,649,095	15,074,307	76.72%	3,397,432	17.29%	1,177,356	5.99%
1-15	16,828,397	12,561,678	74.65%	3,368,241	20.02%	898,478	5.34%
1-16	17,019,781	13,167,087	77.36%	3,021,474	17.75%	831,220	4.88%
1-17	17,788,968	13,473,808	75.74%	3,237,117	18.20%	1,078,043	6.06%
1-18	20,162,956	15,265,122	75.71%	3,742,968	18.56%	1,154,866	5.73%
1-19	41,795,091	32,041,720	76.66%	7,486,748	17.91%	2,266,623	5.42%
1-20	38,828,166	29,740,122	76.59%	6,783,168	17.47%	2,304,876	5.94%
2-1	20,658,114	14,943,913	72.34%	4,580,001	22.17%	1,134,200	5.49%
2-2	20,858,829	15,728,147	75.40%	3,966,821	19.02%	1,163,861	5.58%
2-3	17,867,017	12,609,898	70.58%	4,306,753	24.10%	950,366	5.32%
2-4	38,853,074	29,615,897	76.23%	7,128,932	18.35%	2,108,245	5.43%
2-5	19,490,339	14,236,651	73.04%	4,217,944	21.64%	1,035,744	5.31%
2-6	20,145,591	15,307,853	75.99%	3,746,261	18.60%	1,091,477	5.42%
2-7	17,139,641	12,637,658	73.73%	3,628,492	21.17%	873,491	5.10%
2-8	20,957,692	15,606,415	74.47%	4,130,573	19.71%	1,220,704	5.82%
2-9	26,579,563	20,111,364	75.66%	5,041,486	18.97%	1,426,713	5.37%
2-10	20,329,219	15,616,396	76.82%	3,679,351	18.10%	1,033,472	5.08%
2-11	31,854,805	23,960,817	75.22%	6,277,014	19.71%	1,616,974	5.08%
2-12	20,842,035	15,587,386	74.79%	4,174,840	20.03%	1,079,809	5.18%
2-13	19,615,671	15,164,173	77.31%	3,422,031	17.45%	1,029,467	5.25%
2-14	23,649,978	16,905,249	71.48%	5,480,214	23.17%	1,264,515	5.35%
2-15	22,986,718	17,260,582	75.09%	4,536,029	19.73%	1,190,107	5.18%
2-16	20,685,008	15,501,130	74.94%	4,052,282	19.59%	1,131,596	5.47%
2-17	35,549,815	26,718,204	75.16%	7,064,808	19.87%	1,766,803	4.97%
2-18	20,176,135	15,118,044	74.93%	3,932,311	19.49%	1,125,780	5.58%
2-19	18,912,517	14,257,864	75.39%	3,585,145	18.96%	1,069,508	5.66%
2-20	18,534,338	13,819,293	74.56%	3,733,878	20.15%	981,167	5.29%
2-21	20,290,205	14,820,373	73.04%	4,373,666	21.56%	1,096,166	5.40%
2-22	18,546,597	13,722,168	73.99%	3,736,864	20.15%	1,087,565	5.86%
2-23	30,890,557	22,866,855	74.03%	6,360,011	20.59%	1,663,691	5.39%
2-24	19,574,172	14,531,724	74.24%	3,979,580	20.33%	1,062,868	5.43%
2-25	21,921,263	16,309,976	74.40%	4,424,365	20.18%	1,186,922	5.41%
2-26	19,559,275	14,473,158	74.00%	3,952,074	20.21%	1,134,043	5.80%
2-27	19,193,474	13,958,519	72.73%	4,060,796	21.16%	1,174,159	6.12%
2-28	16,775,444	12,877,017	76.76%	3,045,504	18.15%	852,923	5.08%
2-29	18,131,639	13,877,320	76.54%	3,137,275	17.30%	1,117,044	6.16%
3-1	26,569,653	20,359,799	76.63%	4,795,416	18.05%	1,414,438	5.32%
3-2	27,653,479	20,771,618	75.11%	5,415,980	19.59%	1,465,881	5.30%
3-3	17,777,653	13,624,533	76.64%	3,177,070	17.87%	976,050	5.49%
3-4	23,567,978	17,681,940	75.03%	4,682,639	19.87%	1,203,399	5.11%
3-5	22,225,138	16,739,995	75.32%	4,328,289	19.47%	1,156,854	5.21%
3-6	26,788,563	20,394,460	76.13%	4,915,918	18.35%	1,478,185	5.52%
3-7	30,194,924	22,947,987	76.00%	5,650,505	18.71%	1,596,432	5.29%
3-8	25,581,752	19,342,593	75.61%	4,756,982	18.60%	1,482,177	5.79%

3-9	17,383,683	13,099,325	75.35%	3,327,910	19.14%	956,448	5.50%
3-10	18,661,111	14,229,162	76.25%	3,232,512	17.32%	1,199,437	6.43%
3-11	16,509,489	12,157,653	73.64%	3,489,265	21.13%	862,571	5.22%
3-12	24,363,083	17,808,882	73.10%	5,149,217	21.14%	1,404,984	5.77%
3-13	27,052,418	20,459,479	75.63%	5,057,560	18.70%	1,535,379	5.68%
3-14	21,232,044	15,779,493	74.32%	4,223,972	19.89%	1,228,579	5.79%
3-15	20,508,523	15,550,579	75.82%	3,822,929	18.64%	1,135,015	5.53%
3-16	21,887,888	16,513,635	75.45%	4,161,150	19.01%	1,213,103	5.54%
3-17	21,971,757	16,304,459	74.21%	4,470,901	20.35%	1,196,397	5.45%
3-18	27,460,854	20,444,074	74.45%	5,512,742	20.07%	1,504,038	5.48%
3-19	21,223,465	15,759,362	74.25%	4,336,826	20.43%	1,127,277	5.31%
3-20	18,941,997	13,892,976	73.34%	3,955,988	20.88%	1,093,033	5.77%
3-21	19,320,338	14,646,231	75.81%	3,595,759	18.61%	1,078,348	5.58%
3-22	18,755,373	13,688,772	72.99%	3,976,559	21.20%	1,090,042	5.81%
3-23	16,934,443	12,573,854	74.25%	3,471,110	20.50%	889,479	5.25%
3-24	20,332,314	15,348,615	75.49%	3,919,438	19.28%	1,064,261	5.23%
3-25	16,917,656	12,465,813	73.69%	3,430,386	20.28%	1,021,457	6.04%
3-26	20,366,320	15,130,130	74.29%	4,049,406	19.88%	1,186,784	5.83%
3-27	18,450,803	13,841,870	75.02%	3,476,717	18.84%	1,132,216	6.14%
3-28	25,489,054	19,016,957	74.61%	5,005,675	19.64%	1,466,422	5.75%
3-29	19,075,079	14,411,593	75.55%	3,524,318	18.48%	1,139,168	5.97%
3-30	23,482,798	17,958,793	76.48%	4,209,031	17.92%	1,314,974	5.60%
4-1	19,209,356	14,558,654	75.79%	3,505,865	18.25%	1,144,837	5.96%
4-2	17,449,477	13,335,806	76.43%	3,046,574	17.46%	1,067,097	6.12%
4-3	16,917,670	12,931,471	76.44%	2,936,725	17.36%	1,049,474	6.20%
4-4	18,631,129	13,722,316	73.65%	3,735,657	20.05%	1,173,156	6.30%
4-5	18,661,367	13,983,082	74.93%	3,476,516	18.63%	1,201,769	6.44%
4-6	20,693,949	15,771,998	76.22%	3,738,026	18.06%	1,183,925	5.72%
4-7	28,850,128	21,278,408	73.75%	5,766,100	19.99%	1,805,620	6.26%
4-8	29,279,184	21,613,352	73.82%	5,896,947	20.14%	1,768,885	6.04%
4-9	21,633,852	16,031,618	74.10%	4,472,997	20.68%	1,129,237	5.22%
4-10	22,831,076	17,348,417	75.99%	4,187,834	18.34%	1,294,825	5.67%
4-11	18,059,914	13,568,692	75.13%	3,421,926	18.95%	1,069,296	5.92%
4-12	18,719,603	13,876,736	74.13%	3,824,007	20.43%	1,018,860	5.44%
4-13	20,333,087	15,104,618	74.29%	4,004,474	19.69%	1,223,995	6.02%
4-14	19,349,734	13,817,491	71.41%	4,397,528	22.73%	1,134,715	5.86%
4-15	23,800,925	17,814,496	74.85%	4,645,005	19.52%	1,341,424	5.64%
4-16	17,814,151	13,479,272	75.67%	3,286,644	18.45%	1,048,235	5.88%
4-17	18,568,142	14,257,647	76.79%	3,334,959	17.96%	975,536	5.25%
4-18	18,720,938	13,653,500	72.93%	3,983,801	21.28%	1,083,637	5.79%
4-19	18,185,304	13,084,999	71.95%	4,072,284	22.39%	1,028,021	5.65%
4-20	29,886,891	21,923,265	73.35%	6,110,462	20.45%	1,853,164	6.20%
4-21	22,430,274	16,651,378	74.24%	4,491,468	20.02%	1,287,428	5.74%
4-22	26,013,139	19,773,956	76.02%	4,768,855	18.33%	1,470,328	5.65%
4-23	19,254,244	14,746,816	76.59%	3,407,902	17.70%	1,099,526	5.71%
4-24	18,311,602	13,469,235	73.56%	3,794,861	20.72%	1,047,506	5.72%
4-25	21,037,109	15,296,358	72.71%	4,206,078	19.99%	1,534,673	7.30%
4-26	22,697,094	16,191,634	71.34%	4,939,159	21.76%	1,566,301	6.90%

4-27	22,041,601	16,190,731	73.46%	4,523,266	20.52%	1,327,604	6.02%
4-28	25,318,467	19,393,723	76.60%	4,452,140	17.58%	1,472,604	5.82%
4-29	22,390,397	16,647,011	74.35%	4,203,354	18.77%	1,540,032	6.88%
4-30	17,390,090	12,911,292	74.25%	3,508,971	20.18%	969,827	5.58%
4-31	49,610,804	36,279,271	73.13%	9,903,619	19.96%	3,427,914	6.91%
4-32	21,768,917	2,968,042	13.63%	2,010,658	9.24%	16,790,217	77.13%
4-33	36,848,721	26,837,083	72.83%	7,195,159	19.53%	2,816,479	7.64%
5-1	22,075,389	15,941,289	72.21%	4,494,073	20.36%	1,640,027	7.43%
5-2	21,188,189	14,943,046	70.53%	4,834,889	22.82%	1,410,254	6.66%
5-3	21,197,525	15,500,739	73.13%	4,289,695	20.24%	1,407,091	6.64%
5-4	18,758,919	14,212,860	75.77%	3,497,159	18.64%	1,048,900	5.59%
5-5	23,382,897	16,994,734	72.68%	4,640,126	19.84%	1,748,037	7.48%
5-6	20,741,147	15,200,694	73.29%	4,032,250	19.44%	1,508,203	7.27%
5-7	19,264,315	13,913,309	72.22%	4,080,184	21.18%	1,270,822	6.60%
5-8	23,715,505	17,260,382	72.78%	4,884,130	20.59%	1,570,993	6.62%
5-9	19,181,776	13,778,940	71.83%	4,063,824	21.19%	1,339,012	6.98%
5-10	17,833,383	12,775,533	71.64%	3,841,314	21.54%	1,216,536	6.82%
5-11	19,058,993	13,813,395	72.48%	3,832,772	20.11%	1,412,826	7.41%
5-12	33,351,711	23,984,812	71.91%	6,677,434	20.02%	2,689,465	8.06%
5-13	19,697,581	14,502,457	73.63%	3,769,913	19.14%	1,425,211	7.24%
5-14	20,898,046	14,553,919	69.64%	4,801,252	22.97%	1,542,875	7.38%
5-15	24,081,733	16,790,889	69.72%	5,199,538	21.59%	2,091,306	8.68%
5-16	22,210,598	15,789,346	71.09%	4,611,011	20.76%	1,810,241	8.15%
5-17	17,630,524	12,408,111	70.38%	3,950,205	22.41%	1,272,208	7.22%
5-18	17,492,885	12,544,672	71.71%	3,683,575	21.06%	1,264,638	7.23%
5-19	21,617,545	16,066,286	74.32%	4,114,088	19.03%	1,437,171	6.65%
5-20	20,763,637	15,157,725	73.00%	4,295,567	20.69%	1,310,345	6.31%
5-21	20,241,732	14,968,546	73.95%	4,104,328	20.28%	1,168,858	5.77%
5-22	19,129,928	14,025,189	73.32%	3,790,123	19.81%	1,314,616	6.87%
5-23	18,426,493	13,366,761	72.54%	3,790,942	20.57%	1,268,790	6.89%
6-1	22,095,878	16,797,524	76.02%	3,830,879	17.34%	1,467,475	6.64%
6-2	26,655,681	18,985,701	71.23%	5,820,138	21.83%	1,849,842	6.94%
6-3	17,445,552	12,644,522	72.48%	3,591,730	20.59%	1,209,300	6.93%
6-4	21,627,470	15,279,499	70.65%	4,779,101	22.10%	1,568,870	7.25%
6-5	22,070,266	16,178,888	73.31%	4,377,418	19.83%	1,513,960	6.86%
6-6	21,750,883	15,176,320	69.77%	4,844,650	22.27%	1,729,913	7.95%
6-7	19,685,405	14,392,532	73.11%	3,876,277	19.69%	1,416,596	7.20%
6-8	18,928,584	14,062,879	74.29%	3,776,456	19.95%	1,089,249	5.75%
6-9	31,815,280	23,357,866	73.42%	6,236,743	19.60%	2,220,671	6.98%
6-10	21,591,833	15,348,423	71.08%	4,483,323	20.76%	1,760,087	8.15%
6-11	19,801,404	14,187,866	71.65%	4,071,392	20.56%	1,542,146	7.79%
6-12	20,344,054	14,229,140	69.94%	4,328,834	21.28%	1,786,080	8.78%
6-13	20,523,435	14,660,641	71.43%	4,133,822	20.14%	1,728,972	8.42%
6-14	16,810,602	12,141,380	72.22%	3,447,702	20.51%	1,221,520	7.27%
6-15	16,729,016	12,181,805	72.82%	3,317,210	19.83%	1,230,001	7.35%
6-16	27,328,701	19,625,922	71.81%	5,432,493	19.88%	2,270,286	8.31%
6-17	30,684,850	21,967,874	71.59%	6,212,764	20.25%	2,504,212	8.16%
6-18	19,996,861	14,835,771	74.19%	3,691,687	18.46%	1,469,403	7.35%

6-19	23,496,491	16,728,384	71.20%	4,730,817	20.13%	2,037,290	8.67%
6-20	20,609,094	15,248,121	73.99%	4,136,719	20.07%	1,224,254	5.94%
6-21	34,000,960	23,797,918	69.99%	6,927,437	20.37%	3,275,605	9.63%
6-22	16,961,576	12,649,845	74.58%	3,188,576	18.80%	1,123,155	6.62%
6-23	16,768,854	12,132,840	72.35%	3,430,051	20.45%	1,205,963	7.19%
6-24	17,680,793	12,872,189	72.80%	3,602,241	20.37%	1,206,363	6.82%
6-25	17,593,859	12,680,791	72.08%	3,629,575	20.63%	1,283,493	7.30%
6-26	25,699,388	18,512,980	72.04%	5,161,402	20.08%	2,025,006	7.88%
6-27	21,630,305	16,182,947	74.82%	3,907,225	18.06%	1,540,133	7.12%
7-1	19,244,283	13,677,271	71.07%	4,171,614	21.68%	1,395,398	7.25%
7-2	20,098,325	14,997,489	74.62%	3,715,639	18.49%	1,385,197	6.89%
7-3	28,054,099	21,005,265	74.87%	5,265,969	18.77%	1,782,865	6.36%
7-4	18,612,909	13,134,336	70.57%	4,094,779	22.00%	1,383,794	7.43%
7-5	18,962,818	14,829,913	78.21%	2,948,994	15.55%	1,183,911	6.24%
7-6	16,971,248	12,274,447	72.32%	3,594,885	21.18%	1,101,916	6.49%
7-7	19,752,858	13,571,473	68.71%	4,509,474	22.83%	1,671,911	8.46%
7-8	20,071,204	14,204,734	70.77%	4,148,803	20.67%	1,717,667	8.56%
7-9	19,442,153	14,251,467	73.30%	3,762,418	19.35%	1,428,268	7.35%
7-10	20,215,024	13,898,572	68.75%	4,571,420	22.61%	1,745,032	8.63%
7-11	14,832,191	10,702,424	72.16%	3,007,649	20.28%	1,122,118	7.57%
7-12	17,318,660	12,747,495	73.61%	3,620,688	20.91%	950,477	5.49%
7-13	19,931,234	15,134,573	75.93%	3,536,192	17.74%	1,260,469	6.32%
7-14	20,066,281	14,561,430	72.57%	4,107,664	20.47%	1,397,187	6.96%
7-15	20,253,388	14,355,412	70.88%	4,315,535	21.31%	1,582,441	7.81%
8-1	18,217,752	13,080,403	71.80%	3,757,532	20.63%	1,379,817	7.57%
8-2	16,860,275	12,201,609	72.37%	3,291,832	19.52%	1,366,834	8.11%
8-3	20,622,751	14,714,107	71.35%	4,193,757	20.34%	1,714,887	8.32%
8-4	17,370,312	12,920,994	74.39%	3,130,608	18.02%	1,318,710	7.59%
8-5	18,455,512	13,159,119	71.30%	3,839,530	20.80%	1,456,863	7.89%
8-6	17,485,669	12,674,448	72.48%	3,571,595	20.43%	1,239,626	7.09%
8-7	17,957,071	13,020,687	72.51%	3,731,582	20.78%	1,204,802	6.71%
8-8	19,429,902	14,102,705	72.58%	3,720,905	19.15%	1,606,292	8.27%
8-9	18,270,163	12,882,559	70.51%	3,914,517	21.43%	1,473,087	8.06%
8-10	19,754,211	14,229,457	72.03%	3,818,231	19.33%	1,706,523	8.64%
8-11	19,098,637	14,209,745	74.40%	3,549,259	18.58%	1,339,633	7.01%
8-12	19,871,730	14,649,165	73.72%	3,672,971	18.48%	1,549,594	7.80%
8-13	16,789,864	12,193,716	72.63%	3,207,294	19.10%	1,388,854	8.27%
8-14	17,909,878	13,469,418	75.21%	3,274,121	18.28%	1,166,339	6.51%
8-15	18,905,360	13,239,207	70.03%	4,167,899	22.05%	1,498,254	7.93%
8-16	18,981,062	14,139,818	74.49%	3,522,731	18.56%	1,318,513	6.95%
8-17	18,523,638	13,360,920	72.13%	3,862,142	20.85%	1,300,576	7.02%
8-18	20,244,350	14,894,834	73.58%	3,813,222	18.84%	1,536,294	7.59%
8-19	18,582,861	13,884,740	74.72%	3,688,454	19.85%	1,009,667	5.43%
8-20	20,901,816	15,247,251	72.95%	4,106,476	19.65%	1,548,089	7.41%
8-21	19,099,673	13,681,885	71.63%	4,060,425	21.26%	1,357,363	7.11%
8-22	23,462,870	17,276,537	73.63%	4,637,027	19.76%	1,549,306	6.60%
8-23	19,915,380	14,731,761	73.97%	3,859,892	19.38%	1,323,727	6.65%
8-24	20,305,028	15,151,914	74.62%	3,725,589	18.35%	1,427,525	7.03%

9-1	18,936,685	14,109,741	74.51%	3,582,555	18.92%	1,244,389	6.57%
9-2	17,299,580	12,813,596	74.07%	3,360,447	19.43%	1,125,537	6.51%
9-3	17,897,609	12,940,422	72.30%	3,707,302	20.71%	1,249,885	6.98%
9-4	18,222,372	13,431,660	73.71%	3,659,999	20.09%	1,130,713	6.21%
9-5	18,277,396	13,667,784	74.78%	3,315,024	18.14%	1,294,588	7.08%
9-6	18,796,613	13,706,299	72.92%	3,737,759	19.89%	1,352,555	7.20%
9-7	18,668,951	13,633,793	73.03%	3,706,475	19.85%	1,328,683	7.12%
9-8	18,422,774	13,552,097	73.56%	3,572,113	19.39%	1,298,564	7.05%
9-9	23,386,090	16,872,175	72.15%	4,804,178	20.54%	1,709,737	7.31%
9-10	20,023,061	14,959,170	74.71%	3,593,634	17.95%	1,470,257	7.34%
9-11	36,969,892	27,111,460	73.33%	7,240,775	19.59%	2,617,657	7.08%
9-12	84,261,886	61,488,287	72.97%	16,540,105	19.63%	6,233,494	7.40%
9-13	19,038,112	13,627,225	71.58%	4,002,566	21.02%	1,408,321	7.40%
9-14	32,403,094	23,460,415	72.40%	6,629,665	20.46%	2,313,014	7.14%
9-15	33,611,912	24,815,084	73.83%	6,821,469	20.29%	1,975,359	5.88%
9-16	59,602,762	44,562,182	74.77%	11,727,003	19.68%	3,313,577	5.56%
9-17	65,149,516	48,339,945	74.20%	13,211,652	20.28%	3,597,919	5.52%
9-18	32,384,240	23,746,550	73.33%	6,857,816	21.18%	1,779,874	5.50%
9-19	24,699,758	18,891,533	76.48%	4,557,388	18.45%	1,250,837	5.06%

**Table S3:** Information of Sequence Data.

Sample	Raw Reads	Discarded Reads(%)	Clean Reads	Clean Bases	GC(%)	Q20(%)	Q30(%)	Coverage(%)	Mean Depth
1-1	21,053,091	5.39%	19,918,039	5,850,656,098	43.89	98.32	94.98	86.81	13.66
1-2	18,693,667	7.17%	17,352,739	5,075,691,600	43.58	98.00	94.11	86.96	11.59
1-3	27,434,768	6.15%	25,748,498	7,515,339,185	44.00	98.20	94.65	88.84	9.25
1-4	19,892,644	5.69%	18,760,209	5,507,804,466	43.91	98.21	94.64	88.11	12.43
1-5	20,988,010	6.21%	19,683,965	5,775,944,776	43.81	98.18	94.62	87.76	13.05
1-6	31,035,943	4.18%	29,738,970	8,743,467,272	43.37	98.42	95.21	89.50	10.58
1-7	17,630,766	5.33%	16,691,695	4,909,662,490	43.73	98.29	94.87	86.44	11.13
1-8	21,395,909	5.63%	20,191,159	5,936,014,576	43.72	98.23	94.69	87.46	13.14
1-9	20,678,014	5.31%	19,580,411	5,745,190,704	43.81	98.41	95.24	87.49	12.87
1-10	26,225,119	6.07%	24,632,793	7,233,666,740	44.24	98.19	94.59	88.62	8.85
1-11	18,987,955	5.08%	18,023,537	5,209,548,524	44.14	98.47	95.33	86.43	11.79
1-12	21,232,057	5.48%	20,069,433	5,866,891,109	43.85	98.37	95.13	87.53	13.20
1-13	21,232,828	6.84%	19,781,098	5,757,611,127	43.69	98.04	94.22	87.90	13.00
1-14	20,996,328	6.42%	19,649,095	5,767,442,522	43.49	98.14	94.57	87.43	13.39
1-15	17,841,889	5.68%	16,828,397	4,903,820,128	43.63	98.37	95.09	85.47	11.34
1-16	17,843,588	4.62%	17,019,781	4,991,120,151	43.62	98.32	94.93	86.52	11.79
1-17	18,983,085	6.29%	17,788,968	5,224,091,173	43.72	98.18	94.57	87.89	11.91
1-18	21,284,184	5.27%	20,162,956	5,935,678,741	43.62	98.30	94.93	88.50	13.41
1-19	44,222,768	5.49%	41,795,091	12,251,512,872	43.85	98.27	94.80	89.57	15.27
1-20	41,090,021	5.50%	38,828,166	11,418,618,986	44.34	98.17	94.50	89.37	14.25
2-1	21,948,422	5.88%	20,658,114	6,066,169,124	43.60	98.32	94.97	87.15	13.30
2-2	22,030,156	5.32%	20,858,829	6,121,399,098	43.70	98.45	95.36	87.83	7.91
2-3	19,073,846	6.33%	17,867,017	5,209,301,558	43.65	98.24	94.73	87.69	11.08
2-4	41,940,867	7.36%	38,853,074	11,361,187,015	43.78	98.02	94.13	89.88	15.77
2-5	20,772,581	6.17%	19,490,339	5,690,884,576	43.84	98.31	94.91	86.90	12.64

2-6	21,302,842	5.43%	20,145,591	5,892,696,862	43.83	98.41	95.25	87.87	13.45
2-7	18,339,752	6.54%	17,139,641	5,005,731,472	43.68	98.23	94.70	87.74	11.12
2-8	22,254,955	5.83%	20,957,692	6,104,937,103	44.14	98.38	95.17	87.77	7.86
2-9	28,312,739	6.12%	26,579,563	7,785,284,744	43.74	98.29	94.86	88.39	10.38
2-10	21,660,667	6.15%	20,329,219	5,931,403,118	43.68	98.23	94.70	88.18	13.65
2-11	34,578,674	7.88%	31,854,805	9,238,697,265	43.64	97.83	93.62	89.87	12.71
2-12	22,368,978	6.83%	20,842,035	6,072,935,003	43.82	98.13	94.41	88.56	13.57
2-13	20,630,499	4.92%	19,615,671	5,777,334,191	44.14	98.39	95.15	88.33	13.33
2-14	25,426,788	6.99%	23,649,978	6,877,200,677	43.67	98.15	94.52	88.42	8.77
2-15	24,580,158	6.48%	22,986,718	6,670,475,892	43.75	98.25	94.76	88.45	9.25
2-16	22,165,916	6.68%	20,685,008	5,984,766,174	43.55	98.34	95.08	87.67	13.54
2-17	38,084,045	6.65%	35,549,815	10,357,182,467	43.48	98.13	94.45	90.33	13.95
2-18	21,708,022	7.06%	20,176,135	5,856,054,324	43.59	98.19	94.61	87.86	13.21
2-19	19,956,215	5.23%	18,912,517	5,525,074,663	43.87	98.49	95.48	87.51	12.57
2-20	19,640,371	5.63%	18,534,338	5,407,252,832	44.12	98.37	95.07	86.22	12.37
2-21	21,672,176	6.38%	20,290,205	5,890,491,938	43.68	98.19	94.63	88.16	12.92
2-22	19,680,958	5.76%	18,546,597	5,378,859,089	44.18	98.37	95.17	86.78	12.12
2-23	33,167,825	6.87%	30,890,557	8,981,780,718	44.02	98.07	94.31	90.37	11.91
2-24	20,800,548	5.90%	19,574,172	5,708,146,804	43.77	98.25	94.78	87.36	12.82
2-25	23,350,496	6.12%	21,921,263	6,399,249,003	43.70	98.25	94.81	88.57	8.10
2-26	20,973,831	6.74%	19,559,275	5,690,955,897	43.78	98.21	94.73	86.89	12.83
2-27	20,479,456	6.28%	19,193,474	5,573,147,232	44.25	98.34	95.09	86.64	12.39
2-28	17,764,028	5.57%	16,775,444	4,900,686,756	44.00	98.21	94.65	86.63	11.50
2-29	19,320,621	6.15%	18,131,639	5,302,491,395	43.66	98.27	94.90	87.21	12.33
3-1	28,037,556	5.24%	26,569,653	7,793,387,651	43.69	98.20	94.62	88.70	10.95
3-2	29,149,065	5.13%	27,653,479	8,138,617,962	44.06	98.18	94.55	89.49	10.96
3-3	19,118,664	7.01%	17,777,653	5,200,841,581	43.60	98.04	94.24	86.77	12.17
3-4	24,872,697	5.25%	23,567,978	6,904,413,009	43.04	98.30	94.92	87.44	9.47
3-5	23,634,424	5.96%	22,225,138	6,479,817,982	43.65	98.16	94.53	89.21	8.66
3-6	28,616,093	6.39%	26,788,563	7,828,721,222	43.48	98.15	94.53	88.19	10.51
3-7	32,094,035	5.92%	30,194,924	8,806,402,475	43.68	98.17	94.55	89.03	12.10
3-8	27,188,061	5.91%	25,581,752	7,502,820,060	43.55	98.19	94.62	87.99	10.48
3-9	18,660,983	6.84%	17,383,683	5,043,357,386	44.11	98.02	94.14	86.52	11.62
3-10	20,330,333	8.21%	18,661,111	5,451,554,688	43.43	97.87	93.91	88.18	12.49
3-11	17,576,573	6.07%	16,509,489	4,800,815,351	43.36	98.17	94.59	86.02	10.88
3-12	26,051,662	6.48%	24,363,083	7,109,929,833	43.66	98.18	94.64	88.16	8.92
3-13	28,923,986	6.47%	27,052,418	7,886,909,217	43.87	98.19	94.66	88.84	10.60
3-14	22,685,482	6.41%	21,232,044	6,214,219,655	43.48	98.18	94.62	87.87	8.07
3-15	21,720,236	5.58%	20,508,523	6,020,861,146	43.43	98.27	94.86	87.25	13.84
3-16	23,460,639	6.70%	21,887,888	6,400,309,228	43.24	98.11	94.46	87.28	8.54
3-17	23,524,886	6.60%	21,971,757	6,399,009,228	43.30	98.15	94.55	87.49	8.34
3-18	29,114,283	5.68%	27,460,854	7,987,902,319	43.24	98.31	94.97	87.93	9.86
3-19	22,708,066	6.54%	21,223,465	6,184,855,267	43.37	98.19	94.66	87.49	8.15
3-20	20,169,402	6.09%	18,941,997	5,519,859,564	43.46	98.29	94.95	86.64	12.37
3-21	20,742,156	6.85%	19,320,338	5,646,680,397	43.16	97.99	94.14	87.63	12.94
3-22	20,066,264	6.53%	18,755,373	5,472,911,738	43.36	98.24	94.82	86.97	12.16
3-23	18,072,331	6.30%	16,934,443	4,951,565,112	43.11	98.17	94.60	86.09	11.32
3-24	21,433,453	5.14%	20,332,314	5,924,323,398	43.30	98.43	95.27	87.10	13.60

3-25	18,058,194	6.32%	16,917,656	4,934,167,000	43.80	98.32	95.05	86.14	11.18
3-26	21,999,108	7.42%	20,366,320	5,949,770,482	43.46	97.77	93.52	87.13	13.45
3-27	19,634,238	6.03%	18,450,803	5,399,898,903	43.59	98.33	95.08	86.70	12.35
3-28	27,192,312	6.26%	25,489,054	7,462,980,674	43.46	98.24	94.79	89.09	9.48
3-29	20,297,682	6.02%	19,075,079	5,585,657,039	43.47	98.30	94.94	87.45	12.75
3-30	24,977,059	5.98%	23,482,798	6,876,355,484	43.33	98.18	94.62	87.47	9.21
4-1	20,409,958	5.88%	19,209,356	5,613,340,983	43.94	98.31	94.97	87.33	12.87
4-2	18,820,220	7.28%	17,449,477	5,093,088,556	43.75	98.12	94.51	87.33	11.80
4-3	18,075,035	6.40%	16,917,670	4,945,507,313	44.08	98.28	94.93	87.00	11.49
4-4	19,957,802	6.65%	18,631,129	5,455,433,261	43.72	98.24	94.82	87.92	12.09
4-5	20,610,250	9.46%	18,661,367	5,416,297,982	43.52	97.84	93.71	88.53	12.15
4-6	22,347,008	7.40%	20,693,949	6,023,154,350	43.75	98.03	94.17	89.94	13.49
4-7	31,232,439	7.63%	28,850,128	8,339,708,258	43.69	98.19	94.62	88.55	11.90
4-8	31,741,684	7.76%	29,279,184	8,510,946,707	43.46	98.05	94.23	90.30	11.70
4-9	23,682,398	8.65%	21,633,852	6,322,928,509	44.66	97.87	93.85	87.78	8.44
4-10	24,744,425	7.73%	22,831,076	6,621,961,081	43.68	97.97	94.01	89.89	9.66
4-11	19,588,730	7.80%	18,059,914	5,223,423,667	43.49	98.15	94.52	87.51	11.90
4-12	21,433,359	12.66%	18,719,603	5,417,644,979	43.28	97.47	92.87	86.95	12.25
4-13	22,167,071	8.27%	20,333,087	5,923,966,825	43.59	97.97	94.04	87.77	13.27
4-14	20,937,968	7.59%	19,349,734	5,607,437,645	43.37	98.15	94.53	87.00	12.20
4-15	25,516,143	6.72%	23,800,925	6,950,735,929	43.06	98.14	94.46	88.46	9.88
4-16	19,368,877	8.03%	17,814,151	5,230,509,538	44.57	98.12	94.55	87.59	11.93
4-17	19,647,671	5.49%	18,568,142	5,416,433,733	43.23	98.26	94.81	87.93	12.52
4-18	20,167,671	7.17%	18,720,938	5,470,806,084	43.43	98.18	94.67	87.68	12.04
4-19	19,537,417	6.92%	18,185,304	5,337,170,881	44.36	98.30	95.03	86.39	11.76
4-20	32,548,096	8.18%	29,886,891	8,708,759,488	43.84	98.01	94.14	88.12	12.01
4-21	24,073,136	6.82%	22,430,274	6,494,618,211	43.83	98.22	94.68	87.22	9.35
4-22	27,929,789	6.86%	26,013,139	7,610,577,548	43.43	98.08	94.30	88.21	10.84
4-23	20,519,817	6.17%	19,254,244	5,615,088,620	43.83	98.31	95.00	86.32	13.18
4-24	19,532,401	6.25%	18,311,602	5,329,669,082	43.80	98.26	94.78	86.23	12.04
4-25	22,289,765	5.62%	21,037,109	6,155,690,796	43.93	98.23	94.63	87.43	9.58
4-26	24,094,963	5.80%	22,697,094	6,606,485,237	43.74	98.15	94.42	87.77	10.16
4-27	23,717,573	7.07%	22,041,601	6,395,208,131	44.12	97.68	93.15	88.77	10.72
4-28	26,570,902	4.71%	25,318,467	7,432,512,778	43.52	98.28	94.74	90.16	11.92
4-29	23,583,776	5.06%	22,390,397	6,493,518,841	43.70	98.30	94.72	89.11	10.56
4-30	18,738,150	7.19%	17,390,090	5,107,092,670	44.22	98.15	94.60	86.12	11.64
4-31	51,751,457	4.14%	49,610,804	14,439,725,731	44.07	98.07	93.72	91.16	26.43
4-32	22,653,567	3.91%	21,768,917	6,388,987,695	45.04	98.45	95.11	8.95	2.43
4-33	38,592,343	4.52%	36,848,721	10,690,167,117	44.24	97.88	93.24	89.44	19.97
5-1	23,043,613	4.20%	22,075,389	6,431,758,099	44.50	98.04	93.69	88.68	12.08
5-2	22,602,035	6.26%	21,188,189	6,158,719,473	43.92	98.07	94.25	87.81	9.37
5-3	22,357,867	5.19%	21,197,525	6,188,319,626	43.82	98.28	94.76	87.92	9.65
5-4	20,043,026	6.41%	18,758,919	5,528,027,225	44.14	98.27	94.84	86.08	12.82
5-5	24,366,414	4.04%	23,382,897	6,817,003,150	44.25	98.08	93.77	89.07	12.77
5-6	22,009,225	5.76%	20,741,147	6,020,696,731	43.69	98.25	94.75	88.76	13.16
5-7	20,550,171	6.26%	19,264,315	5,593,774,050	43.41	98.20	94.63	87.48	12.23
5-8	25,458,943	6.85%	23,715,505	6,888,259,266	43.97	96.55	90.02	87.99	13.36
5-9	20,458,766	6.24%	19,181,776	5,607,809,079	43.56	98.24	94.78	87.03	12.25

5-10	18,989,989	6.09%	17,833,383	5,176,888,694	43.77	98.22	94.71	86.96	11.29
5-11	20,539,428	7.21%	19,058,993	5,540,187,276	43.62	98.11	94.46	87.09	12.21
5-12	34,857,058	4.32%	33,351,711	9,682,922,748	43.86	97.95	93.39	90.39	17.43
5-13	20,470,098	3.77%	19,697,581	5,753,466,799	44.11	98.04	93.63	88.40	12.68
5-14	22,241,548	6.04%	20,898,046	6,094,080,473	43.92	98.20	94.59	87.49	12.81
5-15	25,123,153	4.15%	24,081,733	6,997,520,512	44.14	98.09	93.85	88.40	12.78
5-16	23,543,504	5.66%	22,210,598	6,436,354,630	43.92	98.26	94.73	86.72	10.08
5-17	18,582,239	5.12%	17,630,524	5,142,215,791	43.70	97.92	93.37	87.72	10.93
5-18	18,719,785	6.55%	17,492,885	5,075,876,075	43.73	98.16	94.59	86.89	11.08
5-19	22,712,436	4.82%	21,617,545	6,279,174,733	43.66	98.39	95.05	88.06	10.08
5-20	21,781,328	4.67%	20,763,637	6,029,921,548	43.59	98.39	95.08	87.78	13.25
5-21	21,788,574	7.10%	20,241,732	5,875,991,825	44.04	97.07	91.79	87.65	13.03
5-22	20,444,206	6.43%	19,129,928	5,538,182,736	43.88	98.15	94.52	88.33	12.16
5-23	19,626,530	6.11%	18,426,493	5,369,484,292	43.56	98.27	94.85	87.37	11.80
6-1	22,853,301	3.31%	22,095,878	6,455,507,634	44.07	97.45	91.90	89.15	12.62
6-2	27,927,602	4.55%	26,655,681	7,762,913,489	43.89	97.29	91.61	89.37	14.21
6-3	18,246,919	4.39%	17,445,552	5,085,273,208	43.91	97.90	93.28	88.46	11.04
6-4	23,020,870	6.05%	21,627,470	6,294,026,601	43.93	97.83	93.41	87.60	10.57
6-5	23,514,075	6.14%	22,070,266	6,421,800,206	44.01	98.07	94.18	88.27	10.24
6-6	22,795,879	4.58%	21,750,883	6,336,667,199	43.56	98.01	93.58	88.83	11.20
6-7	20,737,311	5.07%	19,685,405	5,706,164,176	43.76	98.08	94.05	88.90	12.42
6-8	20,018,095	5.44%	18,928,584	5,477,209,081	43.95	94.88	85.80	90.07	11.95
6-9	32,674,207	2.63%	31,815,280	9,317,183,513	44.84	98.14	93.76	89.89	17.33
6-10	22,528,190	4.16%	21,591,833	6,251,512,043	43.91	97.91	93.26	88.13	11.68
6-11	20,888,685	5.21%	19,801,404	5,791,750,599	43.67	98.18	94.30	87.54	12.54
6-12	21,814,993	6.74%	20,344,054	5,870,977,097	43.94	97.93	93.74	87.07	12.48
6-13	21,757,617	5.67%	20,523,435	5,938,942,682	43.97	97.91	93.42	88.90	12.63
6-14	17,812,753	5.63%	16,810,602	4,894,769,338	43.68	98.13	94.32	86.29	10.85
6-15	17,800,734	6.02%	16,729,016	4,873,472,909	43.57	98.10	94.25	86.31	10.88
6-16	28,513,650	4.16%	27,328,701	7,985,341,240	44.01	98.12	93.90	89.58	14.46
6-17	32,009,428	4.14%	30,684,850	8,964,513,061	43.88	97.74	92.81	90.26	16.29
6-18	20,995,551	4.76%	19,996,861	5,831,787,400	43.30	98.09	94.06	88.67	12.91
6-19	24,553,565	4.31%	23,496,491	6,804,097,986	43.79	97.68	92.63	89.00	12.55
6-20	22,113,218	6.80%	20,609,094	6,063,225,909	44.44	98.29	94.90	86.74	13.67
6-21	35,945,747	5.41%	34,000,960	9,883,384,013	43.48	97.93	93.50	89.35	17.44
6-22	17,945,615	5.48%	16,961,576	4,948,896,360	43.78	98.25	94.66	88.71	11.01
6-23	18,145,228	7.59%	16,768,854	4,868,649,896	43.53	98.00	94.06	86.95	10.74
6-24	19,153,841	7.69%	17,680,793	5,110,672,117	43.40	98.01	94.04	86.95	11.34
6-25	18,807,586	6.45%	17,593,859	5,123,492,118	43.39	98.00	93.99	87.76	11.14
6-26	26,928,470	4.56%	25,699,388	7,482,921,733	44.16	98.02	93.69	88.51	14.05
6-27	22,348,802	3.21%	21,630,305	6,316,506,503	43.97	98.26	94.16	88.25	12.33
7-1	20,313,965	5.27%	19,244,283	5,621,326,903	43.73	97.82	93.36	88.68	11.93
7-2	21,142,666	4.94%	20,098,325	5,865,254,377	43.89	98.08	93.97	89.12	13.00
7-3	28,885,014	2.88%	28,054,099	8,211,182,640	43.91	98.32	94.29	90.27	15.19
7-4	19,829,566	6.14%	18,612,909	5,409,982,188	43.40	98.16	94.42	88.40	11.45
7-5	19,866,569	4.55%	18,962,818	5,558,116,923	43.58	98.33	94.76	88.95	12.91
7-6	18,062,821	6.04%	16,971,248	4,936,085,287	43.70	97.65	93.01	88.11	10.73
7-7	21,000,165	5.94%	19,752,858	5,629,388,355	43.87	98.07	94.14	88.16	11.61

7-8	21,435,915	6.37%	20,071,204	5,733,106,324	43.88	97.99	93.93	88.53	12.14
7-9	20,649,971	5.85%	19,442,153	5,650,506,512	43.59	98.11	94.22	88.72	12.37
7-10	21,309,204	5.13%	20,215,024	5,727,224,473	43.93	98.13	94.21	88.43	11.78
7-11	15,924,369	6.86%	14,832,191	4,288,683,503	43.58	98.10	94.31	86.99	9.42
7-12	18,507,080	6.42%	17,318,660	5,086,531,946	43.31	98.35	95.03	86.03	11.51
7-13	20,966,036	4.94%	19,931,234	5,800,648,973	43.60	98.02	93.79	89.20	13.08
7-14	21,066,488	4.75%	20,066,281	5,855,765,632	43.52	98.15	94.15	89.12	12.62
7-15	21,328,529	5.04%	20,253,388	5,863,224,864	43.68	98.19	94.35	88.94	12.37
8-1	19,180,651	5.02%	18,217,752	5,294,098,097	44.10	98.01	93.70	89.80	11.22
8-2	17,721,310	4.86%	16,860,275	4,876,182,975	43.86	98.06	93.80	87.50	10.68
8-3	21,572,762	4.40%	20,622,751	5,988,212,620	43.99	98.22	94.27	90.13	12.56
8-4	18,002,916	3.51%	17,370,312	5,059,189,761	43.99	98.09	93.73	88.05	11.32
8-5	19,296,976	4.36%	18,455,512	5,350,817,721	43.92	98.13	94.08	88.74	11.39
8-6	18,349,802	4.71%	17,485,669	5,042,916,699	44.23	97.76	93.00	88.30	10.97
8-7	19,437,932	7.62%	17,957,071	5,187,129,388	44.35	97.85	93.37	88.51	11.27
8-8	20,253,417	4.07%	19,429,902	5,635,977,745	44.10	98.27	94.39	89.24	12.15
8-9	19,330,829	5.49%	18,270,163	5,276,586,520	44.12	98.00	93.73	89.07	11.08
8-10	20,590,921	4.06%	19,754,211	5,689,729,123	44.12	98.31	94.52	88.96	12.20
8-11	19,683,825	2.97%	19,098,637	5,595,805,139	43.67	98.49	94.90	89.47	12.28
8-12	20,604,742	3.56%	19,871,730	5,782,041,691	44.28	98.36	94.60	88.99	12.68
8-13	17,583,303	4.51%	16,789,864	4,874,433,057	44.33	98.17	94.13	88.98	10.53
8-14	18,483,209	3.10%	17,909,878	5,235,972,250	44.55	98.31	94.37	87.87	11.85
8-15	19,836,848	4.70%	18,905,360	5,486,273,129	44.28	98.25	94.44	87.49	11.62
8-16	19,683,827	3.57%	18,981,062	5,561,151,339	44.47	98.07	93.71	88.67	12.33
8-17	19,410,885	4.57%	18,523,638	5,396,686,106	44.14	98.20	94.30	89.50	11.51
8-18	21,151,845	4.29%	20,244,350	5,900,239,260	44.46	98.20	94.20	89.28	12.88
8-19	19,019,457	2.30%	18,582,861	5,479,074,450	43.94	98.60	95.23	88.77	12.15
8-20	21,650,265	3.46%	20,901,816	6,086,125,791	44.11	98.34	94.54	89.99	13.05
8-21	19,720,327	3.15%	19,099,673	5,572,635,883	44.41	98.39	94.63	87.37	12.08
8-22	24,475,374	4.14%	23,462,870	6,879,154,998	44.10	98.16	94.03	90.41	12.82
8-23	21,075,184	5.50%	19,915,380	5,793,010,650	43.67	98.18	94.42	88.17	12.88
8-24	20,995,373	3.29%	20,305,028	5,917,003,045	44.25	98.25	94.23	89.94	13.00
9-1	19,886,393	4.78%	18,936,685	5,475,173,646	44.22	98.15	94.18	89.66	12.06
9-2	18,254,618	5.23%	17,299,580	5,033,883,396	44.04	98.21	94.45	87.96	11.22
9-3	18,665,158	4.11%	17,897,609	5,219,805,357	44.08	98.31	94.57	87.92	11.35
9-4	19,197,119	5.08%	18,222,372	5,300,312,164	44.13	97.38	92.09	88.53	11.68
9-5	19,024,170	3.93%	18,277,396	5,329,820,595	44.19	98.36	94.71	88.61	11.91
9-6	19,840,295	5.26%	18,796,613	5,465,104,983	44.02	98.15	94.20	88.31	11.91
9-7	19,523,704	4.38%	18,668,951	5,442,997,382	43.69	98.25	94.43	89.56	11.76
9-8	19,449,784	5.28%	18,422,774	5,335,178,154	44.10	98.15	94.24	89.77	11.60
9-9	24,456,153	4.38%	23,386,090	6,799,578,148	44.07	98.17	94.14	89.82	12.52
9-10	20,919,734	4.29%	20,023,061	5,833,078,783	44.08	98.20	94.20	89.67	12.87
9-11	38,768,239	4.64%	36,969,892	10,773,275,823	44.24	98.05	93.85	91.45	19.70
9-12	87,691,291	3.91%	84,261,886	24,521,631,173	44.39	98.13	93.98	91.29	44.77
9-13	19,777,916	3.74%	19,038,112	5,563,772,022	44.06	98.43	94.88	89.49	11.77
9-14	33,637,733	3.67%	32,403,094	9,404,948,246	44.22	98.28	94.35	90.46	17.34
9-15	37,536,440	10.46%	33,611,912	9,643,070,350	43.86	97.82	93.76	90.87	17.18
9-16	65,355,444	8.80%	59,602,762	17,163,096,030	43.82	97.91	93.95	91.56	30.11

9-17	70,857,468	8.06%	65,149,516	18,817,455,345	43.65	98.04	94.27	90.77	32.89
9-18	35,956,607	9.94%	32,384,240	9,313,188,081	43.67	97.84	93.81	88.62	16.59
9-19	27,751,503	11.00%	24,699,758	7,052,304,269	43.96	97.52	92.96	90.01	13.48

**Table S4:** Information of 44 common wild rice and 468 cultivated rice.

Original sequence code	Group	Name of landrace/MC cultivar/WDR line	Location
R01	Wild Rice	R01	Huilai
R02	Wild Rice	R02	Huilai
R03	Wild Rice	R03	Huilai
R04	Wild Rice	R04	Wuxuan
R05	Wild Rice	R05	Wuxuan
R06	Wild Rice	R06	Wuxuan
R07	Wild Rice	R07	Daling
R08	Wild Rice	R08	Daling
R09	Wild Rice	R09	Daling
R10	Wild Rice	R10	Nawu
R11	Wild Rice	R11	Nawu
R12	Wild Rice	R12	Nawu
R13	Wild Rice	R13	Xinpo
R14	Wild Rice	R14	Xinpo
R15	Wild Rice	R15	Xinpo
R16	Wild Rice	R16	Yangxi
R17	Wild Rice	R17	Yangxi
R18	Wild Rice	R18	Yangxi
R19	Wild Rice	R19	Tanlu
R20	Wild Rice	R20	Tanlu
R21	Wild Rice	R21	Tanlu
R22	Wild Rice	R22	Zhongshan
R23	Wild Rice	R23	Zhongshan
R24	Wild Rice	R24	Zhongshan
R25	Wild Rice	R25	Pengshan
R26	Wild Rice	R26	Pengshan
R27	Wild Rice	R27	Pengshan
R28	Wild Rice	R28	Chaling
R29	Wild Rice	R29	Chaling
R30	Wild Rice	R30	Chaling
R31	Wild Rice	R31	Jiangfeng
R32	Wild Rice	R32	Jiangfeng
R33	Wild Rice	R33	Jiangfeng
R34	Wild Rice	R34	Hainan
R35	Wild Rice	R35	Hainan
R36	Wild Rice	R36	Hainan
R37	Wild Rice	R37	Kuishan
R38	Wild Rice	R38	Kuishan
R39	Wild Rice	R39	Kuishan
R40	Wild Rice	R40	Fangcheng
R41	Wild Rice	R41	Fangcheng
R42	Wild Rice	R42	Yunnan Province
R44	Wild Rice	R44	Dongxiang

R45	Wild Rice	R45	Dongxiang
W183	Modern Cultivar	Huhan106	NA
W184	Modern Cultivar	17WJD154	NA
W185	Modern Cultivar	17WJD87	NA
W187	Modern Cultivar	17WJD133	NA
W188	Modern Cultivar	17WJD156	NA
W189	Modern Cultivar	17WJD77	NA
W190	Modern Cultivar	17WJD157	NA
W191	Modern Cultivar	17WJD153	NA
W192	Modern Cultivar	17WJD155	NA
W193	Modern Cultivar	17WJD62	NA
W194	Modern Cultivar	17WJD127	NA
W195	Modern Cultivar	17WJD142	NA
W196	Modern Cultivar	17WJD152	NA
W197	Modern Cultivar	17WJD83	NA
W198	Modern Cultivar	17WJD85	NA
W202	Modern Cultivar	Longjing 21	NA
W203	Modern Cultivar	Longjing 31	NA
W204	Modern Cultivar	Longjing 46	NA
W205	Modern Cultivar	Longjing 47	NA
W206	Modern Cultivar	H13	NA
W207	Modern Cultivar	H52	NA
W208	Modern Cultivar	Bijing 42	NA
W209	Modern Cultivar	Bijing 37	NA
W210	Modern Cultivar	Ning 81	NA
W211	Modern Cultivar	Zhejing 27	NA
W212	Modern Cultivar	Zhejing 23	NA
W213	Modern Cultivar	Yunjingyou 14	NA
W214	Modern Cultivar	Ninghu i11	NA
W215	Modern Cultivar	Ningjing 1	NA
W216	Modern Cultivar	Xudao 8	NA
W217	Modern Cultivar	Xuhan 1	NA
W218	Modern Cultivar	Xu33202	NA
W219	Modern Cultivar	Zhongdao 1	NA
W220	Modern Cultivar	Zhongzuodao 2	NA
W221	Modern Cultivar	Si2333	NA
W222	Modern Cultivar	Huajing 8	NA
W223	Modern Cultivar	Suken118	NA
W224	Modern Cultivar	Zhendao 14	NA
W225	Modern Cultivar	Changnongjing 7	NA
W226	Modern Cultivar	Changnongjing 9	NA
W227	Modern Cultivar	Wuyunjing 8	NA
W228	Modern Cultivar	Wuyun3132	NA
W229	Modern Cultivar	Yanjing 10	NA
W230	Modern Cultivar	Nongken58	NA
W231	Modern Cultivar	Yongjing18	NA
W342	Modern Cultivar	17WJD167	NA
W343	Modern Cultivar	17WJD166	NA
W344	Modern Cultivar	17WJD173	NA
W345	Modern Cultivar	17WJD119	NA

W346	Modern Cultivar	17WJD103	NA
W347	Modern Cultivar	17WJD97	NA
W348	Modern Cultivar	17WJD56	NA
W349	Modern Cultivar	17WJD95	NA
W350	Modern Cultivar	17WJD65	NA
W351	Modern Cultivar	17WJD121	NA
W352	Modern Cultivar	17WJD159	NA
W353	Modern Cultivar	17WJD161	NA
W354	Modern Cultivar	17WJD177	NA
W355	Modern Cultivar	WJD175	NA
W356	Modern Cultivar	WJD171	NA
W358	Modern Cultivar	Huhan190	NA
W360	Modern Cultivar	Huhan 9	NA
W361	Modern Cultivar	Najing46	NA
W362	Modern Cultivar	Najing9108	NA
W363	Modern Cultivar	Qingxiangruanjing	NA
W364	Modern Cultivar	Changlixiangjing	NA
W365	Modern Cultivar	Xiushui 134	NA
W366	Modern Cultivar	WDR35	NA
W367	Modern Cultivar	Zaoyuxiangjing 2	NA
W369	Modern Cultivar	Zaoyuxiangjing	NA
W370	Modern Cultivar	WDR61	NA
W372	Modern Cultivar	Zhonghan 3	NA
W375ai	Modern Cultivar	WDR48	NA
W376	Modern Cultivar	Huhan 3	NA
W379	Modern Cultivar	Xiushui 123	NA
A001	Landrace	Dahandao	Donghai County
A013	Landrace	Fengrunsanbaili	Fengrun County
A019	Landrace	Changlixiaohongmang	Changli County
A026	Landrace	Fengningjingzi	Fengning County
A028	Landrace	Huaianxiaodaozi (Bendidao)	Huaian County
A084	Landrace	Baixiangnuo	Jinping County
A088	Landrace	Ruanlengshuigu	Jiangcheng County
A089	Landrace	Xiganmagu	Jiangcheng County
A090	Landrace	Luesuo	Luchun County
A091	Landrace	Hongxinnuogu	Jiangcheng County
A103	Landrace	Cunsanli	Natong County
A105	Landrace	Hannuodao	Huaiyin County
A110	Landrace	Youmanghandao	Changshu County
A111	Landrace	Youmangbaikehandao	Changshu County
A124	Landrace	Funingxiaobairen(Funinghandao)	Funing County
A165	Landrace	NA(T02)	Baise County
A169	Landrace	NA(T08)	Baise County
A171	Landrace	NA(T10)	Baise County
A173	Landrace	NA(T15)	Baise County
A182	Landrace	Wutoumi	Shangcheng County
A184	Landrace	Huangkehandao	Runa County
A189	Landrace	Mengdongnuo	Chengbu County
A194	Landrace	Shunnuo	Xupu County
A199	Landrace	Handaoxuan	Hunan province

A201	Landrace	Hanhe	Hunan province
A202	Landrace	Nuoganhe	Hunan province
A209	Landrace	Gannuohe	Hunan province
A213	Landrace	Hongjiugu	Yunnan Province
IR004	Landrace	SENSHO IBARZI	Republic of Korea
IR005	Landrace	AE DAE	Republic of Korea
IR006	Landrace	AE GUK	Republic of Korea
IR009	Landrace	GIN BOZU	Japan
IR010	Landrace	BENKEI 1	Japan
IR011	Landrace	SOMEWAKE	Japan
IR012	Landrace	TAKAO MOCHI	Japan
IR013	Landrace	FUSAKU SHIRASU SAI 1	Japan
IR014	Landrace	HIKOTARO MOCHI	Japan
IR015	Landrace	MITSURYU INE	Japan
IR016	Landrace	MURASAKI INE	Japan
IR017	Landrace	OURA	Japan
IR018	Landrace	SOMEWAKE	Japan
IR019	Landrace	MUBO AIKOKU	Japan
IR020	Landrace	CATETO BRANCO	Brazil
IR021	Landrace	CANAIO	Brazil
IR023	Landrace	POACEAE 388	Japan
IR024	Landrace	POACEAE 391	Japan
IR025	Landrace	IYO BENKEI 2	Japan
IR026	Landrace	KOMYO NICHIKI 1	Japan
IR027	Landrace	KOKURYO NIYAKO 1	Japan
IR028	Landrace	HAYA SHINRIKI	Japan
IR029	Landrace	BUPHOPA TY 26	Myanmar
IR030	Landrace	BUTHE TY 18	Myanmar
IR031	Landrace	KYWE BU THE	Myanmar
IR032	Landrace	PATHEINWA TY 13	Myanmar
IR033	Landrace	BEROD	Indonesia
IR034	Landrace	CI 7214	Indonesia
IR035	Landrace	CI 7217	Indonesia
IR036	Landrace	CI 7224	Indonesia
IR037	Landrace	BANKU	India
IR038	Landrace	BASMATI	India
IR039	Landrace	MAGSANA YA	Philippines
IR040	Landrace	KINARABAO	Philippines
IR041	Landrace	KINASTANO	Philippines
IR042	Landrace	INITLOG DALAG	Philippines
IR043	Landrace	PILENG BAYBAY	Philippines
IR045	Landrace	KINANDANG PULA	Philippines
IR046	Landrace	BUABO	Philippines
IR047	Landrace	DUANG OJOY	Philippines
IR048	Landrace	DUANG OJOY	Philippines
IR049	Landrace	PINILING BAYBAY	Philippines
IR050	Landrace	KINASTANO	Philippines
IR051	Landrace	PINILI	Philippines
IR052	Landrace	ALABANG 528	Philippines
IR053	Landrace	PARAGA	Philippines

IR054	Landrace	DUMALI	Philippines
IR055	Landrace	MOROPOTOL	Philippines
IR056	Landrace	MOROPOTOL SELECTION	Philippines
IR057	Landrace	ALABANG 388	Philippines
IR058	Landrace	MANUMBALAY	Philippines
IR059	Landrace	KINABUGAN	Philippines
IR060	Landrace	KIRAO SELECTION	Philippines
IR061	Landrace	CADACAY	Philippines
IR062	Landrace	MAL WIT	Philippines
IR063	Landrace	MAL WIT	Philippines
IR064	Landrace	SINAMPABLO	Philippines
IR065	Landrace	KINATUDAY	Philippines
IR066	Landrace	LAMPADAN	Philippines
IR067	Landrace	ER TER 1-SHIH HSING	Philippines
IR068	Landrace	GUNGEN LANG SHUI PE	Philippines
IR069	Landrace	GUINATA	Philippines
IR070	Landrace	BOENAR	Indonesia
IR071	Landrace	CHONG KUE TAE PYANG	Republic of Korea
IR072	Landrace	3879	Thailand
IR073	Landrace	BINATANGAN	Philippines
IR074	Landrace	PINAULA	Philippines
IR075	Landrace	R 21 S 5	Senegal
IR076	Landrace	KINTUMAN	Philippines
IR077	Landrace	JAOH	Liberia
IR078	Landrace	ELLIOTT	Liberia
IR079	Landrace	C 5561	Thailand
IR080	Landrace	C 5566	Thailand
IR081	Landrace	C 5568	Thailand
IR083	Landrace	KITAMOCHI	Japan
IR084	Landrace	YUKIMOCHI	Japan
IR085	Landrace	MI MASARI	Japan
IR086	Landrace	CHIKAMA	Japan
IR087	Landrace	FUKUMINORI	Japan
IR088	Landrace	NAKASENGOKU	Japan
IR089	Landrace	ISAOMOCHI	Japan
IR091	Landrace	PARAY LUPAW	Philippines
IR092	Landrace	IFUGAO RICE	Philippines
IR093	Landrace	IFUGAO RICE	Philippines
IR094	Landrace	IFUGAO RICE	Philippines
IR095	Landrace	FUKU SUKE	Japan
IR096	Landrace	GO HYAKU MAN GOKU	Japan
IR097	Landrace	CHUSEI SHIN SEMBON	Japan
IR098	Landrace	UKON NISHIKI	Japan
IR099	Landrace	WAKA BA	Japan
IR100	Landrace	SUECA	Brazil
IR101	Landrace	SECANO	Brazil
IR102	Landrace	MAGKASAR	Philippines
IR103	Landrace	MIGA	Brazil
IR104	Landrace	SHANER 255-15 UPPER	India
IR105	Landrace	KUMARICHIKARI 243-33-66	India

IR106	Landrace	ABOR RED B	India
IR107	Landrace	AC 2533	India
IR108	Landrace	GIMBO 2	India
IR109	Landrace	KUMARICHIKARI 243-33-66	India
IR110	Landrace	MUBO AIKOKU 22	Japan
IR111	Landrace	ISHYIRO	Japan
IR112	Landrace	PI 6468	Japan
IR113	Landrace	PRECOZ VERDE	Madagascar
IR114	Landrace	BALILLA	Madagascar
IR115	Landrace	MEQIGE-T	Philippines
IR118	Landrace	WARABEHATOMOCHI	Japan
IR119	Landrace	CHIYOMINORI	Japan
IR120	Landrace	GOGO DJOTO	Indonesia
IR121	Landrace	A GA BYEO	Republic of Korea
IR122	Landrace	A GU DO	Republic of Korea
IR123	Landrace	AKUK DO	Republic of Korea
IR124	Landrace	ALONG BYEO	Republic of Korea
IR125	Landrace	AN NA	Republic of Korea
IR126	Landrace	AN NAM ZO	Republic of Korea
IR127	Landrace	AN ZUN BAENG-I	Republic of Korea
IR129	Landrace	JA BOO AE	Thailand
IR131	Landrace	LAI DAWK DOO	Thailand
IR132	Landrace	SIMANUK	Indonesia
IR135	Landrace	MIMASARANG	Bangladesh
IR137	Landrace	AE GUK (AI KOKU)	Brazil
IR138	Landrace	AGULHAO PRECOCE	Brazil
IR139	Landrace	AHBAW C 408 (OS 4)	Brazil
IR140	Landrace	AIMASARI 111	Brazil
IR141	Landrace	AI YEH LU	Brazil
IR142	Landrace	AI YEH LU HWANG MIAO CHAN	Brazil
IR143	Landrace	AKEBONE 119	Brazil
IR144	Landrace	ARDITO	Brazil
IR145	Landrace	ARK FORTUNA 155 SEL 54 P	Brazil
IR147	Landrace	CANA ROXA	Brazil
IR148	Landrace	CATETO 4631-1-5	Brazil
IR149	Landrace	CESARIOT 60	Brazil
IR150	Landrace	CHACAREIRO	Brazil
IR151	Landrace	CHAGAS 4	Brazil
IR152	Landrace	CHANG CHOW	Brazil
IR153	Landrace	CHIANG TSENF TAO	Brazil
IR154	Landrace	CHIBA-A-HO MOCHI	Brazil
IR155	Landrace	CHING SHWEY PAI	Brazil
IR156	Landrace	CHIN NA SU	Brazil
IR157	Landrace	CHOKEY WASE	Brazil
IR158	Landrace	CI 176-370	Brazil
IR159	Landrace	CI 8633	Brazil
IR160	Landrace	CI 187091	Brazil
IR161	Landrace	CSOR NUY	Brazil
IR162	Landrace	CUME MON	Brazil
IR163	Landrace	DALILA	Brazil

IR165	Landrace	EARLY ROSE	Brazil
IR166	Landrace	EGIPTIAN 2709	Brazil
IR167	Landrace	676205	Brazil
IR168	Landrace	ERO SHIMA	Brazil
IR171	Landrace	FITOTECNIA 3 (DNA FRANCISCA)	Brazil
IR172	Landrace	FURU WASE	Brazil
IR173	Landrace	GAE SEON	Brazil
IR174	Landrace	GIGANTE VERCELLI	Brazil
IR176	Landrace	GIMBOZU	Brazil
IR177	Landrace	GUNEKI	Brazil
IR178	Landrace	HAN PU CHIN	Brazil
IR180	Landrace	HTSU MISHIKI 120	Brazil
IR181	Landrace	HUCOCU MOCHI	Brazil
IR182	Landrace	HUNG CHAO LU YU	Brazil
IR183	Landrace	IAS 22-8 PALMAR	Brazil
IR184	Landrace	INDO YIALA LONICA	Brazil
IR185	Landrace	IRGA 407	Brazil
IR186	Landrace	ISE ZINZA	Brazil
IR187	Landrace	KANOU	Brazil
IR188	Landrace	KOKKO	Brazil
IR190	Landrace	LACROSS	Brazil
IR192	Landrace	MIAOMICHIKI	Brazil
IR193	Landrace	MING CHANG WAN TAO KU	Brazil
IR194	Landrace	MISUHO	Brazil
IR195	Landrace	MIYAGI AIKU	Brazil
IR196	Landrace	NAO TRADUZIDO 2	Brazil
IR197	Landrace	NO ORDEM LISTA 2 (IC)	Brazil
IR198	Landrace	NO ORDEM LISTA 91 (IC)	Brazil
IR199	Landrace	ORKIKOM SHIROQUE	Brazil
IR200	Landrace	PORTUGUESE	Brazil
IR201	Landrace	PROLIFIC	Brazil
IR202	Landrace	SEL WALDEMAR TERRES	Brazil
IR203	Landrace	SEUCIRRE	Brazil
IR204	Landrace	STIRPE (NOVA)	Brazil
IR205	Landrace	TAICHUNG 65-186	Brazil
IR206	Landrace	VZ ROSZ 2831	Brazil
IR207	Landrace	WONG SON ZO 11	Brazil
IR208	Landrace	439	Brazil
IR210	Landrace	NGELEGOHUN	Sierra Leone
IR212	Landrace	AHGABYEO	Republic of Korea
IR216	Landrace	KARABKAB (MALIKET)	Philippines
IR217	Landrace	TOMOYUTAKA	Japan
IR218	Landrace	DOUKOUIN	Côte D'Ivoire
IR221	Landrace	LUPAO	Philippines
IR222	Landrace	IC 25705	India
IR223	Landrace	MONCA MANGGA	Indonesia
IR224	Landrace	MUTI NOEL	Indonesia
IR225	Landrace	NDALE EKO MUJA	Indonesia
IR229	Landrace	ANJEUNBAENGI	Republic of Korea
IR230	Landrace	BUE LAW PAE	Thailand

IR232	Landrace	HOKU SETSU	Madagascar
IR233	Landrace	MADIRAT 237	Madagascar
IR234	Landrace	MADIRAT 240	Madagascar
IR235	Landrace	SUZUHARA MOCHI	Japan
IR236	Landrace	CHUGOKU 65	Japan
IR237	Landrace	FUKEI 111	Japan
IR238	Landrace	MANSAENG	Republic of Korea
IR240	Landrace	WAENGCHALBYEO	Republic of Korea
IR241	Landrace	KUNI ICHI	Japan
IR242	Landrace	OOKUWA NISHIKI	Japan
IR243	Landrace	KUROKA	Japan
IR244	Landrace	KUROKA MOCHI	Japan
IR247	Landrace	MOGAMI MOCHI 1	Japan
IR248	Landrace	MOGAMI URUCHI 1	Japan
IR249	Landrace	MUTSUKI	Japan
IR251	Landrace	EAN LICI	Brazil
IR255	Landrace	MON HANG	Lao PDR
IR257	Landrace	Mak kheua deng	Lao PDR
IR258	Landrace	BAY	Lao PDR
SAGC039	Landrace	Xingtaishijiangmi	Xingtaishi
SAGC041	Landrace	Yefenghuang	Wujiang County
SAGC131	Landrace	Xiaobainuo2	Jinping County
SAGC133	Landrace	Lengshuiweigu	Jinping County
SAGC165	Landrace	Sanlicun	Yangzhou
SAGC237	Landrace	Milai	Baise County
SAGC326	Landrace	NA(T11)	Baise County
SAGC377	Landrace	Youxianzhan	Chaling
SAGCLZ-002	Landrace	Yuanhuanguo	Guizhou Province
SAGCLZ-003	Landrace	Danhuanguo	Guizhou Province
SAGCLZ-004	Landrace	Taohuanuo	Guizhou Province
SAGCLZ-005	Landrace	Xiaomike	Guizhou Province
SAGCLZ-006	Landrace	Yutianxiaohongmang	Yutian County
SAGCLZ-007	Landrace	Qiananshuinuozi	Qianan County
SAGCLZ-008	Landrace	Lulongdabaimang	Lulong County
SAGCLZ-009	Landrace	Funingdahongmang	Funing County
SAGCLZ-010	Landrace	Qinhuangdaodahongmang	Qinhuangdaoshi
SAGCLZ-011	Landrace	Luanxianxiaohongmang(Bendidaozi)	Luan County
SAGCLZ-012	Landrace	Weinahongmangdao	Fengna County
SAGCLZ-013	Landrace	Luannahongmangjingzi	Luanna County
SAGCLZ-014	Landrace	Pingquanxiaolibai	Pingquan County
SAGCLZ-015	Landrace	Longhuadahongpao	Longhua County
SAGCLZ-016	Landrace	Weixiandaheimang	Wei County
SAGCLZ-017	Landrace	Tangxiandalaoguan	Tang County
SAGCLZ-019	Landrace	Wanjinxian	Wu County
SAGCLZ-020	Landrace	Changzixian	Wu County
SAGCLZ-021	Landrace	Zaoshiri	Wu County
SAGCLZ-022	Landrace	Hongdao	Wu County
SAGCLZ-023	Landrace	Fenghuangdao	Wu County
SAGCLZ-024	Landrace	Dadaotou	Wu County
SAGCLZ-025	Landrace	Manyedao	Kunshan County

SAGCLZ-026	Landrace	Jinguhuang	Kunshan County
SAGCLZ-027	Landrace	Daluohanhuang	Changshu County
SAGCLZ-028	Landrace	Yangzhonggang	Yixing County
SAGCLZ-029	Landrace	Baikeyuan	Yixing County
SAGCLZ-030	Landrace	Youmangtieke	Wujin County
SAGCLZ-031	Landrace	Baikeairihong	Wujin County
SAGCLZ-032	Landrace	Cuganlizhihong	Wu County
SAGCLZ-033	Landrace	Shangu	Baise County
SAGCLZ-034	Landrace	Haoyongyi	Ceheng County
SAGCLZ-035	Landrace	Haoxianling	Ceheng County
SAGCLZ-036	Landrace	Baizhinuo	Wangmo County
SAGCLZ-037	Landrace	Changmangzhan	Ceheng County
SAGCLZ-038	Landrace	Changmanghuanghanzhan	Ceheng County
SAGCLZ-039	Landrace	Mangshang	Ceheng County
SAGCLZ-040	Landrace	Maogu	Ceheng County
SAGCLZ-042	Landrace	Changmangchihexiannuo	Ceheng County
SAGCLZ-043	Landrace	Huaxianggu	Ceheng County
SAGCLZ-044	Landrace	Hongmijing	Ceheng County
SAGCLZ-045	Landrace	Chihehongmangjing	Ceheng County
SAGCLZ-046	Landrace	Honghenuo	Wangmo County
SAGCLZ-047	Landrace	Caopigu	Jiangcheng County
SAGCLZ-048	Landrace	Mowanggu	Jiangcheng County
SAGCLZ-049	Landrace	Huangkenuo	Luchun County
SAGCLZ-052	Landrace	Jizinuo	Jiangcheng County
SAGCLZ-053	Landrace	Jiegunuo	Jiangcheng County
SAGCLZ-054	Landrace	Ludagu	Jiangcheng County
SAGCLZ-055	Landrace	Gaoshandigu	Jinping County
SAGCLZ-056	Landrace	Jiudinuo	Jiangcheng County
SAGCLZ-057	Landrace	Zaobaiyi	Yangzhou
SAGCLZ-058	Landrace	Niujaonuo	Yangzhou
SAGCLZ-059	Landrace	Heikehannuo	Yangzhou
SAGCLZ-060	Landrace	Youmangbaihandao	Yangzhounongkesuo
SAGCLZ-061	Landrace	Zaochadao	Yangzhounongkesuo
SAGCLZ-062	Landrace	Wanbaiyi	Haimen County
SAGCLZ-063	Landrace	Erlibi	Wu County
SAGCLZ-064	Landrace	Zaofeilafeng	Taicang County
SAGCLZ-065	Landrace	Handao	Yangzhong County
SAGCLZ-066	Landrace	Hongpishannuogu	Baise County
SAGCLZ-067	Landrace	Baimangnuo	Baise County
SAGCLZ-068	Landrace	Houxiasuинуogu	Baise County
SAGCLZ-069	Landrace	Huapishannuo	Baise County
SAGCLZ-070	Landrace	Daoliu	Tianyang County
SAGCLZ-071	Landrace	Baxiandabaimang	Ba County
SAGCLZ-072	Landrace	Wenaxiaohongmang I	Wenan County
SAGCLZ-073	Landrace	Dingxiandaqingmang	Ding County
SAGCLZ-074	Landrace	Quyangdadao	Quyang County
SAGCLZ-075	Landrace	Kounong	Baise County
SAGCLZ-076	Landrace	Heimangjing	Baise County
SAGCLZ-077	Landrace	Wanmaojinggu	Baise County
SAGCLZ-078	Landrace	Hanzhangu	Baise County

SAGCLZ-079	Landrace	Houxian	Baise County
SAGCLZ-080	Landrace	Shanzhebaimaojinggu	Baise County
SAGCLZ-081	Landrace	Baikeainuo	Zhenfeng County
SAGCLZ-082	Landrace	Hanmaodao	Anlong County
SAGCLZ-083	Landrace	Hetaonuo	Anlong County
SAGCLZ-084	Landrace	Maogu	Wangmo County
SAGCLZ-085	Landrace	Banbianuo	Wangmo County
SAGCLZ-086	Landrace	Cungunuo	Ceheng County
SAGCLZ-087	Landrace	Danuo	Ceheng County
SAGCLZ-088	Landrace	Haoguangxun	Ceheng County
SAGCLZ-089	Landrace	Zimangfeienuo	Wangmo County
SAGCLZ-090	Landrace	Zihuake	Wangmo County
SAGCLZ-091	Landrace	NA(T01)	Baise County
SAGCLZ-092	Landrace	NA(T05)	Baise County
SAGCLZ-093	Landrace	NA(T06)	Baise County
SAGCLZ-094	Landrace	NA(T07)	Baise County
SAGCLZ-095	Landrace	NA(T14)	Baise County
SAGCLZ-096	Landrace	Hongzhangu	Guizhou Province
SAGCLZ-097	Landrace	Cunnuo	Guizhou Province
SAGCLZ-098	Landrace	Fennuo	Guizhou Province
SAGCLZ-099	Landrace	Xiaonuogu	Guizhou Province
SAGCLZ-100	Landrace	Hongyangwuhao	Yunnan Province
SAGCLZ-101	Landrace	Yehezi	Guidong County
SAGCLZ-102	Landrace	Ganhenuo	Hunan
SAGCLZ-103	Landrace	Tonghenuo	Wugang County
SAGCLZ-104	Landrace	Dubei	Tongdao County
SAGCLZ-105	Landrace	Danuo	Qianyang County
SAGCLZ-106	Landrace	Tuannuogu	Sangzhi County
SAGCLZ-107	Landrace	Hongmangjiuyuenuo	Huayuan County
SAGCLZ-108	Landrace	Zaohandao	Hunan province
SAGCLZ-109	Landrace	Zaohe	Hunan province
SAGCLZ-110	Landrace	Hanhe	Hunan province
SAGCLZ-111	Landrace	Hangu	Hunan province
SAGCLZ-112	Landrace	Hanhe	Hunan province
SAGCLZ-113	Landrace	Hongkenuo	Hunan province
SAGCLZ-114	Landrace	Bendihandao	Hunan province
SAGCLZ-115	Landrace	Beizinuo	Yunnan Province
SAGCLZ-116	Landrace	Huagu	Yunnan Province
W378	Landrace	NA	NA
X007-6	Landrace	Ximazhan	Guizhou Province
X009-6	Landrace	Huangkemi	Guizhou Province
X010-6	Landrace	Qianxixiaohongmang	Qianxi County
X011-6	Landrace	Yutianxiaobaimang	Yutian County
X029-6	Landrace	Gaoyangdiandaodahongmang	Gaoyang County
X041-6	Landrace	Xiangzhinuo	Wu County
X042-6	Landrace	Toudengyishixing	Jiangsu Province
X061-6	Landrace	Baihanzhan	Ceheng County
X064-6	Landrace	Haoyongli	Ceheng County
X070-6	Landrace	Ziheichangmangjing	Ceheng County
X071-6	Landrace	Dankenuo	Ceheng County

X077-6	Landrace	Heikenuo	Wujin County
X079-6	Landrace	Heikenuo	Wujin County
X106-6	Landrace	Luhuadao	Pi County
X117-6	Landrace	Wuyanuo	Baise County
X120-6	Landrace	Baxianputaohong	Ba County
X123-6	Landrace	Fengrunhandaozi	Fengrun County
X125-6	Landrace	Funingxiaohongmang	Funing County
X126-6	Landrace	Qinhuangdaodangdihandao(Xiaobairen)	Qinhuangdaoshi
X127-6	Landrace	Qinglonghandao	Qinglong County
X128-6	Landrace	Xinglongwenzizui	Xinglong County
X131-6	Landrace	Rongchenghandaoxiaohongmang	Rongcheng County
X132-6	Landrace	Rongchenghandaozhongmangzi	Rongcheng County
X133-6	Landrace	Laiyuandadaozi	Laiyuan County
X142-6	Landrace	Hongkenuo	Qinglong County
X149-6	Landrace	Yangchennuo	Anlong County
X153-6	Landrace	Huakenuo (1)	Wangmo County
X156-6	Landrace	Cungunuo	Ceheng County
X174-6	Landrace	NA(T16)	Baise County
X175-6	Landrace	Yanzinuo	Yixing County

Note: raw data of these plant materials are on the NCBI Sequence Read Archive (SRA) under the accession number PRJNA260762.

**Table S5:** The value of Max Fst selected genes number and the distribution on chromosome of selected region in DXWR.

Chr	Start	End	Length	No of Selective genes	Max Fst
Chr2	1400001	1500000	100000	21	0.577
	2370001	2860000	490000	80	0.584
	4070001	4170000	100000	19	0.567
	35920001	36030000	110000	3	0.558
	15710001	15900000	190000	30	0.571
Chr3	16490001	16590000	100000	14	0.556
	24200001	24400000	200000	22	0.61
	33290001	33410000	120000	21	0.591
	34180001	34290000	110000	17	0.607
Chr4	21360001	21470000	110000	18	0.567
Chr5	1	290000	290000	57	0.583
	9120001	9460000	340000	53	0.569
	3040001	3810000	770000	134	0.591
Chr6	19520001	19720000	200000	35	0.58
	20700001	20900000	200000	30	0.579
	28440001	28570000	130000	29	0.587
	2180001	2830000	650000	88	0.62
	2940001	3350000	410000	54	0.562
Chr8	3570001	4480000	910000	147	0.58
	9020001	9290000	270000	46	0.574
	9680001	9810000	130000	19	0.571
	10350001	10700000	350000	54	0.558
	11690001	11960000	270000	40	0.575

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	12250001	12430000	180000	19	0.563
	13450001	13590000	140000	22	0.557
	14270001	14640000	370000	67	0.565
	15060001	15160000	100000	11	0.559
	190001	320000	130000	20	0.573
Chr9	2880001	3080000	200000	34	0.563
	13000001	13100000	100000	13	0.556
Chr12	23910001	24010000	100000	16	0.556
Total		31 regions		1233	

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