

Table S2: *De novo* assembly statistics by different assemblers at different k-mer length using total high-quality reads**(A) Velvet**

	K_35	K_39	K_43	K_51	K_55	K_57	K_59	K_61	K_65	K_69	K_75	K_89	K_93	K_95
Number of contigs	483493	471545	442626	445123	374482	344569	317569	290418	237720	197921	146582	57353	39010	30453
Total size (Mb)	92.69	93.19	91.59	93.53	88.00	84.91	81.97	78.87	72.26	66.29	57.08	34.02	25.38	18.99
Minimum length (bp)	100	100	100	101	109	113	117	121	129	137	149	177	185	189
Maximum length (bp)	2890	3060	3064	5366	6542	8657	8358	11923	11924	9511	11337	13745	10893	7142
Average length (bp)	191.71	197.64	206.93	210.14	235.00	246.44	258.12	271.58	304.0	334.95	389.46	593.20	650.73	623.82
N50 length (bp)	185	193	205	238	272	287	303	321	362	403	472	799	848	745

(B) Oases

	K_31	K_35	K_39	K_43	K_51	K_55	K_57	K_59	K_61	K_65
Number of contigs	296098	269768	241269	213235	163979	146525	138587	133289	128716	118132
Total size (Mb)	178.22	177.30	179.99	151.09	176.93	179.19	175.48	170.68	165.01	151.25
Minimum length (bp)	100	100	100	100	100	100	100	100	100	100
Maximum length (bp)	35537	22926	18370	23799	19103	17112	17881	17112	17071	17034
Average length (bp)	601.92	657.25	746.03	849.29	1079.03	1222.99	839.00	866.00	1281.99	1280.41
N50 length (bp)	1238	1347	1537	1706	1867	2133	2194	2190	2161	2099

(C) ABySS

	K_63	K_65	K_77	K_83	K_85	K_87	K_89	K_93
Number of contigs	349522	330402	216379	166405	148636	133650	115571	83324
Total size (Mb)	136.59	134.29	107.42	88.58	80.79	72.78	63.95	45.17
Minimum length (bp)	100	100	100	100	100	100	100	100
Maximum length (bp)	15324	15324	14839	15578	15524	15524	15389	15611
Average length (bp)	390.79	406.47	496.49	532.35	543.60	544.56	553.42	542.19
N50 length (bp)	750	766	925	1024	1061	1087	1127	1155