

Table S3. *De novo* assembly statistics by different assemblers at different k-mer length using NR high-quality reads.

(A) Velvet

	K_31	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	500170	480499	468253	439096	408330	343218	314713	287008	260789	213855	177620	134574	56021	39276	30848
Total size (Mb)	92.45	92.36	92.86	91.30	90.00	84.79	81.77	78.67	75.56	69.49	63.83	55.61	34.00	25.62	19.22
Minimum length (bp)	100	100	100	100	101	109	113	117	121	129	137	149	177	185	189
Maximum length (bp)	2745	2889	3064	3064	5366	5784	8657	6927	11923	11924	9511	11337	15591	10913	7142
Average length (bp)	184.85	192.22	198.33	207.94	220.42	247.05	259.85	274.12	289.76	324.97	359.41	413.27	606.93	652.32	623.32
N50 length (bp)	177	186	194	207	250	286	303	321	340	383	426	494	809	841	738

(B) Oases

	K_31	K_35	K_39	K_43	K_51	K_55	K_57	K_59	K_61	K_65	K_69	K_75
Number of contigs	56982	56084	55560	55493	58313	54064	53017	53110	52993	52499	51197	47859
Total size (Mb)	54.06	53.42	54.09	54.40	55.77	52.77	51.86	51.35	50.90	49.74	48.04	44.62
Minimum length (bp)	100	100	100	100	101	105	107	109	111	115	119	125
Maximum length (bp)	17314	17326	16362	17052	15948	17112	17112	17112	17071	17034	15601	15441
Average length (bp)	948.78	952.67	973.7	980.37	956.41	976.11	978.19	966.9	960.62	947.53	938.45	932.52
N50 length (bp)	2061	1995	1975	1934	1718	1881	1911	1879	1851	1773	1715	1648

(C) AByss

	K_63	K_65	K_77	K_83	K_85	K_87	K_89	K_93
Number of contigs	145910	138938	110435	87062	78269	71190	69034	54820
Total size (Mb)	91.36	89.48	80.12	68.04	62.92	57.62	53.68	37.49
Minimum length (bp)	100	100	100	100	100	100	100	100
Maximum length (bp)	15473	15697	15577	15581	15524	15524	15633	15611
Average length (bp)	626.18	644.08	725.53	781.55	803.97	809.47	777.63	683.94
N50 length (bp)	1202	1218	1279	1350	1387	1400	1379	1298