Table S1: Chemical and isotopic compositions of gas samples in literature.

Locality	Sample No.	Reference	GPS		T	N_2	O_2	Ar	CO_2	CH_4	He	$^4He/^{20}Ne$	$^3He/^4He$	R_M/R_A	R_C/R_A	$\delta^{13}C$	$CO_2/^3He$	$\delta^{15}N$
			N	E	(C°)	(%)	(%)	(%)	(%)	(%)	(ppm)					(‰)	($\times 10^9$)	(‰)
Mapumyom	SH1901	Sun et al., 2020	30.7748	81.6191	85	42.8	0.3	0.27	50.9	4.4	11729	4410	2.1E-08	0.02	0.01	-7.8	2.1	
Mapumyom	SH1902	Sun et al., 2020	30.5854	81.5818	79	18.4	3.2	0.22	77.2	0.6	1773	875	1.9E-08	0.01	0.01	-6.1	22.4	
Mapumyom	SH1903	Sun et al., 2020	30.5848	81.5810	82	4.3	0.4	0.07	94.4	0.5	703	566	2.5E-08	0.02	0.02	-7.0	55.9	
Gongzhu co	GZ1906	Sun et al., 2020	30.7053	82.1055	77	4.8	1.1	0.06	93.7	0	0.15	0.7	9.6E-07	0.69	0.51	-7.8	8280.0	
Xumai	XM1501	Zhang et al., 2017a	29.4604	90.2564	26.6	91.4	0.1	0.83	0.7	6.04	9813	193.0	5.6E-08	0.04	0.04	-14.8	0.012	
Xumai	XM1502	Zhang et al., 2017a	29.4604	90.2564	26.2	89.9	0.1	0.82	0.8	7.19	9821	1146.0	1.4E-07	0.10	0.10	-14.6	0.006	
Yangying	YY1501	Zhang et al., 2017a	29.7401	90.3696	82.1	15.0	3.3	0.34	81.1	0.11	135	26.5	1.3E-07	0.09	0.08	-5.0	48.0	
Laduogang	LDG1501	Zhang et al., 2017a	30.1998	90.6001	22.7	1.8	0.8	0.05	97.1	0.3	0.38	0.8	7.2E-07	0.52	0.29	-7.1	3535.2	
Laduogang	LDG1502	Zhang et al., 2017a	30.1998	90.6001	53.3	2.0	0.9	0.05	96.8	0.23	1.79	3.7	4.6E-07	0.33	0.28	-6.9	1178.9	
Ningzhong	NZ1501	Zhang et al., 2017a	30.4123	90.9429	60.7	12.2	1.2	0.12	86.4	0.07	690	325.0	4.2E-07	0.30	0.30	-3.6	3.0	
Ningzhong	NZ1502	Zhang et al., 2017a	30.4124	90.9431	59.7	1.9	1.0	0.05	97.1		1.73	3.1	6.3E-07	0.45	0.40	-6.4	897.3	
Yuela	YL1501	Zhang et al., 2017a	30.6208	91.2338	66.2	2.6	1.2	0.07	96.1	0.01	0.75	1.3	6.8E-07	0.49	0.35	-3.0	1881.3	
Sanglai	SL1501	Zhang et al., 2017a	30.6670	91.5902	82.9	3.5	1.5	0.07	94.9		3	5.9	2.8E-07	0.20	0.16	-2.2	1137.9	
Sanglai	SL1502	Zhang et al., 2017a	30.6666	91.5906	80.8	3.6	1.6	0.08	94.7		2.63	4.2	2.5E-07	0.18	0.12	-4.3	1439.2	
Jiaqiong	JQ1501	Zhang et al., 2017a	30.6482	91.5956	41.5	1.9	0.9	0.05	97.2		3.11	6.1	1.4E-06	1.02	1.02	-3.9	220.4	
Tuoma	TM1501	Zhang et al., 2017a	31.1603	91.8495	47.7	2.3	1.3	0.06	96.4		4.08	8.2	9.5E-07	0.68	0.67	-2.9	250.0	
Tuoma	TM1502	Zhang et al., 2017a	31.1604	91.8491	50.9	1.7	0.8	0.05	97.4	0.05	4.92	1.5	3.5E-07	0.25	0.09	-4.1	569.7	
Luoma	LM1501	Zhang et al., 2017a	31.2996	91.8732	25.7	4.4	0.7	0.12	94.8	0.01	41.6	68.3	2.4E-07	0.17	0.17	-5.2	96.4	
Yuzhai	YZ1501	Zhang et al., 2017a	31.7439	92.0995	50.9	4.5	2.0	0.1	93.4	0.01	7.72	10.0	3.1E-07	0.22	0.20	-0.1	395.6	
Yuzhai	YZ1502	Zhang et al., 2017a	31.7442	92.1001	49.6	4.8	1.7	0.09	93.4	0.01	7.21	12.7	2.4E-07	0.17	0.15	-0.5	548.2	
Jidaguo	JDG1501	Zhang et al., 2017a	29.8455	90.2884	55.8							108.0	1.1E-07	0.08	0.08			
Namuru	NMR1501	Zhang et al., 2017b	31.9229	80.1664	77	95.1	0.0	0.9	2.9	0.22	8623	1688	2.2E-08	0.02	0.02	-12.9	0.1	4.99
Namuru	NMR1502	Zhang et al., 2017b	31.9229	80.1664	75	89.4	0.3	1.08	8.2	0.27	6760	1355	2.8E-08	0.02	0.02	-11.6	0.4	4.94
Baer	BE1501	Zhang et al., 2017b	31.4458	80.4051	69	43.9	11.9	0.56	43.7		1835	11	9.5E-08	0.07	0.05	-6.8	2.5	-0.22
Baer	BE1502	Zhang et al., 2017b	31.4458	80.4051	51	9.7	1.8	0.18	87.5	0.76	767	1182	6.4E-08	0.05	0.05	-6.7	17.8	-0.02

Tirthapuri	MS1501	Zhang et al., 2017b	31.1274	80.7520	47	26.5	6.1	0.36	67.1			0.8	8.0E-07	0.57	0.36	-5.0		-0.23
Tirthapuri	MS1502	Zhang et al., 2017b	31.1274	80.7520	60	11.7	2.1	0.25	96.0			1.5	4.9E-07	0.35	0.21	-5.2		-0.21
Qiwusi	QW1501	Zhang et al., 2017b	30.7671	81.3628	38	34.5	8.3	0.41	56.6	0.14	242	2.9	2.3E-07	0.17	0.09	-5.1	10.0	-0.14
Darong	DR1501	Zhang et al., 2017b	30.4271	83.5646	37	19.5	2.9	0.34	76.1	0.98	2260	1889	3.2E-08	0.02	0.02	-5.9	10.5	0.85
Darong	DR1502	Zhang et al., 2017b	30.4271	83.5646	60	48.6	5.8	0.66	42.2	1.78	9445	1478	2.2E-08	0.02	0.02	-6.0	2.0	1.5
Dagejia	DGJ1501	Zhang et al., 2017b	29.6053	85.7458	48	62.1	6.2	0.62	29.1	0.5	13,956	1076	2.1E-08	0.02	0.01	-5.1	1.0	2.02
Dagejia	DGJ1503	Zhang et al., 2017b	29.6053	85.7458	82	56.3	4.9	0.71	35.7	0.71	16,859	1793	1.9E-08	0.01	0.01	-6.3	1.1	0.78
Liudaoban	LDB1502	Zhang et al., 2017b	29.3238	87.0965	46	75.1	0.5	0.95	0.1	23.2	1365	204	2.8E-08	0.02	0.02	-11.3	0.029	0.55
Xiqin	XQ1502	Zhang et al., 2017b	29.0715	87.7413	53	93.9	0.1	1.41	4.5	0.16	110	11	7.9E-08	0.06	0.03	-12.3	5.1	0.76
Mianjiu	MJ1501	Zhang et al., 2017b	29.3390	90.0006	59	18.5	2.6	0.33	77.3	1.14	1199	1304	5.0E-08	0.04	0.04	-7.7	12.9	1.18
Mianjiu	MJ1502	Zhang et al., 2017b	29.3390	90.0006	65	15.1	1.6	0.31	81.4	1.2	1117	1477	6.3E-08	0.05	0.04	-7.8	11.7	1.05
Karakoram Fault	Mengshi	Klemperer et al., 2013	31.1314	80.7191	54.5									2.23				
Namuru	Namuru	Zhao et al., 2002	31.9200	80.1700	82	88.5	2.8	1.00	6.6	0.50	12700.0							
Langjiu	ZK9	Zhao et al., 2002	32.3600	80.3600	105	15.8	0.8	0.15	80.8	0.20	570.0			0.19		-1.3		
Langjiu	ZK12	Zhao et al., 2002	32.3600	80.3600	102	20.3	0.6	0.20	76.4	0.26	855.0					-1.5		
Langjiu	ZK8	Zhao et al., 2002	32.3600	80.3600	105	15.4	0.6	0.14	83.0	0.18	638.0							
Baer	Baer	Zhao et al., 2002	31.4500	80.4100	79.5	2.6	1.2	0.07	96.8	0.08	132.0					-3.3		
Menshi	Menshi	Zhao et al., 2002	31.1300	80.7500	54.5	1.1	0.5	0.02	97.7		2.29			2.24		-0.7		
Qiwusi	Qiwusi	Zhao et al., 2002	30.7700	81.3600	74.9	1.1	0.6	0.02	98.5		0.0					-1.7		
Gongzhucuo	Gongzhucuo	Zhao et al., 2002	30.7100	82.1000	67.3	31.1	1.4	0.32	63.5	1.63	15400.0					0.3		
Gongzhucuo	Gongzhucuo	Zhao et al., 2002	30.7100	82.1000	77.7	1.2	0.7	0.04	95.7		39.0					-4.2		
Qupu	Qupu	Zhao et al., 2002	30.5900	81.5800	83.4	5.2	1.0	0.10	91.2	0.17	540.0					-3.2		
Qupu	Qupu	Zhao et al., 2002	30.5900	81.5800	82.6	2.9	1.0	0.11	93.2	0.08	168.0					-4.6		
Dagejia	Dagejia 1	Zhao et al., 2002	29.6100	85.7500	82	21.9	2.8	0.27	72.5	0.33	3698.0			0.02				
Dagejia	Dagejia 2	Zhao et al., 2002	29.6100	85.7500	82	10.3	0.6	0.10	86.3	0.26	3840.0			0.02				
Dagejia	Dagejia 3	Zhao et al., 2002	29.6000	85.7500	85	19.1	4.1	0.31	74.6	0.24	2646.0			0.02				
Tingri Baiba	Baiba	Zhao et al., 2002	28.7345	87.2197	46	2.6	0.8	0.03	95.6	0.94	414.0			0.04				
Tingri Baiba	Baiba	Zhao et al., 2002	28.7361	87.2102	78	0.9	0.3	0.01	97.1	0.19	60.0			0.04				
Tingri Baiba	Qiaga	Zhao et al., 2002	29.4469	88.2372	60	90.5	0.9	1.06	8.4	0.01	4656.0			0.07				

Yangbajing	ZK355	Zhao et al., 2002	30.0800	90.4700	104	3.1	1.2	0.07	95.0	0.03	121.0		0.13		
Yangbajing	ZK354	Zhao et al., 2002	30.0800	90.4700	118	4.0	1.6	0.07	93.2	0.03	215.0		0.17		
Yangbajing	ZK329	Zhao et al., 2002	30.0800	90.4700	101	6.2	1.2	0.11	92.5	0.03	204.0		0.12		
Yangbajing	ZK324	Zhao et al., 2002	30.0800	90.4700	106	3.5	1.1	0.09	94.7	0.03	94.0		0.14		
Yangbajing	ZK313	Zhao et al., 2002	30.0800	90.4700	86	4.1	1.4	0.08	94.5	0.02	121.0		0.09		
Yangbajing	ZK4001	Zhao et al., 2002	30.0800	90.4700	195	5.9	0.7	0.06	91.3	0.08	601.0		0.26		
Ningzhong	Ningzhong	Zhao et al., 2002	30.4100	90.9400	92	1.6	0.6	0.04	97.5	0.02			0.94		
Ningzhong	Ningzhong	Zhao et al., 2002	30.4100	90.9400	67	2.8	1.3	0.06	97.5		11.0		0.94		
Riduo	Riduo	Zhao et al., 2002	29.6947	92.2378	81.4	4.3	1.4	0.05	92.6	0.02	165.0		0.03		
Shiquanhe	Shiquanhe	Hoke et al., 2000	32.3594	80.3625	87							647.7	0.27	0.27	
Tirthapuri	Tirthapuri	Hoke et al., 2000	31.1858	80.9314	35							3.9	0.43	0.39	
Tirthapuri	Tirthapuri	Hoke et al., 2000	31.1858	80.9314	72							17.5	0.31	0.30	
Pabai Zong	Pabai Zong (s)	Hoke et al., 2000	29.1778	87.0972	46							207.4	0.03	0.03	
Pabai Zong	Pabai Zong (s)	Hoke et al., 2000	29.1778	87.0972	46							197.1	0.03	0.03	
Pabai Zong	Pabai Zong (s)	Hoke et al., 2000	29.1778	87.0972	40							45.1	0.02	0.01	
Xitchin (Laze)	Xitchin (Laze) (s)	Hoke et al., 2000	29.0736	87.7522	52							11.5	0.07	0.05	
Daggyai Co	Daggyai Co (s)	Hoke et al., 2000	29.6089	85.7475	83							1792.0	0.02	0.02	
Daggyai Co	Daggyai Co (s)	Hoke et al., 2000	29.6089	85.7475	83-88							58.6	0.03	0.02	
Daggyai Co	Daggyai Co (g)	Hoke et al., 2000	29.6089	85.7475	89							801.6	0.02	0.02	
Daggyai Co	Daggyai Co (g)	Hoke et al., 2000	29.6089	85.7475	88							1863.4	0.02	0.02	
Nagqu	Naqu (w)	Hoke et al., 2000	31.4861	92.0514	82							135.4	0.22	0.22	
Yanpachen	Yanpachen (w)	Hoke et al., 2000	30.0581	90.4769	78							106.2	0.11	0.11	
Yangbajing	Yangbajing 1	Yokoyama et al., 1999	30.0725	90.4757								57.8	0.14	0.13	
Yangbajing	Yangbajing 2	Yokoyama et al., 1999	30.0725	90.4757					102.0		56.0	670.0	0.12	0.12	-7.4
Yangbajing	Yangbajing 3	Yokoyama et al., 1999	30.0725	90.4757					100.0		40.0	584.0	0.12	0.12	-7.3
Yangbajing	Yangbajing 4	Yokoyama et al., 1999	30.0725	90.4757					93.0		53.0	813.0	0.12	0.12	-7.2
Yangbajing	Yangbajing 5	Yokoyama et al., 1999	30.0725	90.4757					84.0		52.0	127.0	0.13	0.12	-7.5
Yangbajing	Yangbajing 6	Yokoyama et al., 1999	30.0725	90.4757					39.0			5.4	0.16	0.11	-6.3
Yangbajing	Yangbajing 7	Yokoyama et al., 1999	30.0725	90.4757								0.9	0.57	0.38	

Yangbajing	Yangbajing 8	Yokoyama et al., 1999	30.0725	90.4757	97.0		48.1	0.12	0.12	-6.7
Yangbajing	Yangbajing 9	Yokoyama et al., 1999	30.0725	90.4757			0.6	0.65	0.36	
Yangbajing	Yangbajing 10	Yokoyama et al., 1999	30.0725	90.4757	92.0		65.8	0.13	0.12	-7.2
Yangbajing	Yangbajing 11	Yokoyama et al., 1999	30.0725	90.4757	69.0	334.0	138.0	0.13	0.13	-9.1
Yangbajing	Yangbajing 12	Yokoyama et al., 1999	30.0725	90.4757	95.0	30.0	154.0	0.11	0.11	-6.8
Lingzhou	Lingzhou	Yokoyama et al., 1999	30.1942	90.5999			0.7	1.08	1.13	
Yuela	Yuela	Yokoyama et al., 1999	30.6208	91.2338	97.0	67.0	154.0	0.26	0.25	-2.9
Juzila	Juzila	Yokoyama et al., 1999	30.6879	91.5542	95.0	1.7	131.0	0.19	0.19	-4.1
Gulu 1	Gulu 1	Yokoyama et al., 1999	30.8763	91.6113	90.0	127.0	114.0	0.25	0.25	-1.0
Gulu 2	Gulu 2	Yokoyama et al., 1999	30.8763	91.6113	96.0	17.0	104.0	0.25	0.25	-2.0
Sanxun	Sanxun	Yokoyama et al., 1999	31.1056	91.6654			32.2	0.17	0.16	
Luoma	Luoma	Yokoyama et al., 1999	31.2995	91.8732	90.0	35.0	166.0	0.22	0.22	-4.3
Naqu	Nagqu 1	Yokoyama et al., 1999	31.4861	92.0514	99.0		2.4	0.38	0.30	-2.0
Naqu	Nagqu 2	Yokoyama et al., 1999	31.4861	92.0514			30.7	0.24	0.23	
Naqu	Nagqu 3	Yokoyama et al., 1999	31.4861	92.0514	101.0	9.5	201.0	0.24	0.24	-2.4

Note. R_m/R_A is the observed $^3He/^4He$ ratio divided by the $^3He/^4He$ ratio in the air (1.39×10^{-6}), and R_C/R_A is the air-corrected Helium isotope ratio by applying the following formulas: $R_C/R_A = ((R_m/R_A) \times X-1)/(X-1)$, $X = (^4He/^{20}Ne)_M/(^4He/^{20}Ne)_{Air} \times (\beta_{Ne}/\beta_{He})$, where β represents the Bunsen coefficients, $(^4He/^{20}Ne)_M$ and $(^4He/^{20}Ne)_{Air}$ are the measured ratio of samples and the ratio of air, respectively.

Table S2: Calculated results of Helium and Carbon provenance based on three-endmember mixing model.

Reference	Sample No.	R_m/R_A	$^4He/^{20}Ne$	$\delta^{13}C$ (‰)	$CO_2/^3He$	Helium contribution ($^3He/^4He$-$^4He/^{20}Ne$)			Carbon contribution ($\delta^{13}C$-$CO_2/^3He$; $\delta^{13}C_{OMS}$ = -18.5‰)			Carbon contribution ($\delta^{13}C$-$CO_2/^3He$; $\delta^{13}C_{OMS}$ = -30‰)		
						DM	ASW	CRUST	DM	CAR	OMS	DM	CAR	OMS
This study	20ZBQK01	0.015	692	-5.7	1.7E+10	0.00	0.00	1.00	0.09	0.63	0.28	0.09	0.74	0.17
This study	20DSC01	0.016	1100	-7.4	6.8E+09	0.00	0.00	1.00	0.22	0.47	0.30	0.22	0.58	0.20
This study	20ZBQK01-R	0.019	666											
This study	20CZ01	0.020	1027	-4.3	1.1E+10	0.00	0.00	1.00	0.13	0.68	0.18	0.13	0.75	0.11
This study	20CW01-R	0.023	1867			0.00	0.00	1.00						
This study	20CW01	0.024	1132	-7.1	2.7E+09	0.00	0.00	1.00	0.55	0.26	0.19	0.55	0.32	0.13
This study	20BD01	0.025	41	-6.6	1.9E+12				0.00	0.64	0.36	0.00	0.78	0.22
This study	20QD01	0.054	43	-4.9	5.0E+11	0.00	0.01	0.99	0.00	0.73	0.27	0.00	0.83	0.16
This study	20PD01	0.065	17	-2.5	2.6E+11	0.00	0.01	0.98	0.01	0.86	0.13	0.01	0.91	0.08
This study	20CN01	0.085	150	-4.0	6.7E+10	0.01	0.00	0.99	0.02	0.77	0.21	0.02	0.85	0.13
This study	20CDQZ01	0.094	823	-1.8	1.0E+10	0.01	0.00	0.99	0.15	0.81	0.04	0.15	0.82	0.03
This study	20CN01-R	0.099	94			0.01	0.00	0.99						
This study	20LZ01	0.155	532	-3.1	3.6E+09	0.02	0.00	0.98	0.42	0.56	0.02	0.42	0.57	0.01
This study	20LZ02	0.191	8	-3.8	4.1E+11	0.02	0.03	0.95	0.00	0.79	0.20	0.00	0.87	0.13
This study	20MSL01	0.243	7	-2.6	4.7E+11	0.02	0.03	0.94	0.00	0.86	0.14	0.00	0.91	0.08
This study	20MD01	0.265	14	-3.7	9.2E+10	0.03	0.02	0.95	0.02	0.79	0.19	0.02	0.86	0.12
This study	20BL01-R	0.576	51			0.07	0.00	0.93						
This study	20BL01	0.687	53	-3.3	8.5E+09	0.08	0.00	0.91	0.18	0.71	0.12	0.18	0.75	0.07
This study	20WB01	0.899	6	-2.6	2.0E+11	0.11	0.04	0.85	0.01	0.86	0.14	0.01	0.91	0.08
Sun et al., 2020	SH1902	0.014	875	-6.1	2.2E+10				0.07	0.63	0.31	0.07	0.74	0.19
Zhang et al., 2017c	DGJ1503	0.014	1793	-6.3	1.1E+09									
Sun et al., 2020	SH1901	0.015	4410	-7.8	2.1E+09				0.70	0.13	0.17	0.70	0.19	0.11
Zhang et al., 2017c	DGJ1501	0.015	1076	-5.1	1.0E+09									
Zhang et al., 2017c	NMR1501	0.016	1688	-12.9	1.5E+08									

Zhang et al., 2017c	DR1502	0.016	1478	-6.0	2.0E+09				0.75	0.19	0.06	0.75	0.21	0.04
Hoke et al., 2000	Daggyai Co (s)	0.017	1792											
Sun et al., 2020	SH1903	0.018	566	-7.0	5.6E+10				0.03	0.60	0.37	0.03	0.75	0.23
Hoke et al., 2000	Daggyai Co (g)	0.018	802											
Hoke et al., 2000	Daggyai Co (g)	0.018	1863											
Zhang et al., 2017c	LDB1502	0.020	204	-11.3	2.9E+07									
Zhang et al., 2017c	NMR1502	0.020	1355	-11.6	4.4E+08									
Hoke et al., 2000	Pabai Zong (s)	0.020	45											
Zhang et al., 2017c	DR1501	0.023	1889	-5.9	1.1E+10	0.00	0.00	1.00	0.14	0.59	0.27	0.14	0.69	0.16
Hoke et al., 2000	Pabai Zong (s)	0.027	197			0.00	0.00	1.00						
Hoke et al., 2000	Daggyai Co (s)	0.027	59			0.00	0.00	1.00						
Hoke et al., 2000	Pabai Zong (s)	0.028	207			0.00	0.00	1.00						
Zhang et al., 2017c	MJ1501	0.036	1304	-7.7	1.3E+10	0.00	0.00	1.00	0.12	0.51	0.38	0.12	0.65	0.23
Zhang et al., 2017c	XM1501	0.040	193	-14.8	1.2E+07	0.00	0.00	1.00						
Zhang et al., 2017c	MJ1502	0.045	1477	-7.8	1.2E+10	0.00	0.00	1.00	0.13	0.50	0.37	0.13	0.64	0.23
Zhang et al., 2017c	BE1502	0.046	1182	-6.7	1.8E+10				0.08	0.58	0.33	0.08	0.71	0.21
Zhang et al., 2017c	XQ1502	0.057	11	-12.3	5.1E+09	0.00	0.02	0.98	0.29	0.15	0.56	0.29	0.36	0.35
Zhang et al., 2017c	BE1501	0.068	11	-6.8	2.5E+09				0.60	0.25	0.16	0.60	0.31	0.10
Hoke et al., 2000	Xitchin (Laze) (s)	0.072	12			0.00	0.02	0.98						
Zhang et al., 2017a	JDG1501	0.080	108			0.01	0.00	0.99						
Zhang et al., 2017c	YY1501	0.090	27	-5.0	4.8E+10	0.01	0.01	0.98	0.03	0.71	0.26	0.03	0.81	0.16
Zhang et al., 2017c	XM1502	0.100	1146	-14.6	6.1E+06	0.01	0.00	0.99						
Yokoyama et al., 1999	Yangbajing 12	0.107	154	-6.8		0.01	0.00	0.99						
Hoke et al., 2000	Yanpachen (w)	0.110	106			0.01	0.00	0.99						

Yokoyama et al., 1999	Yangbajing 2	0.119	670	-7.4		0.01	0.00	0.99						
Yokoyama et al., 1999	Yangbajing 8	0.120	48	-6.7		0.01	0.00	0.98						
Yokoyama et al., 1999	Yangbajing 4	0.121	813	-7.2		0.01	0.00	0.99						
Yokoyama et al., 1999	Yangbajing 3	0.122	584	-7.3		0.01	0.00	0.99						
Yokoyama et al., 1999	Yangbajing 5	0.125	127	-7.5		0.01	0.00	0.99						
Yokoyama et al., 1999	Yangbajing 10	0.126	66	-7.2		0.01	0.00	0.98						
Yokoyama et al., 1999	Yangbajing 11	0.131	138	-9.1		0.01	0.00	0.98						
Yokoyama et al., 1999	Yangbajing 1	0.135	58			0.01	0.00	0.98						
Yokoyama et al., 1999	Yangbajing 6	0.157	5	-6.3		0.01	0.04	0.94						
Zhang et al., 2017c	QW1501	0.169	3	-5.1	1.0E+10				0.15	0.62	0.22	0.15	0.71	0.14
Zhang et al., 2017a	LM1501	0.170	68	-5.2	9.6E+10	0.02	0.00	0.98	0.02	0.71	0.27	0.02	0.82	0.17
Zhang et al., 2017a	YZ1502	0.170	13	-0.5	5.5E+11	0.02	0.02	0.96	0.00	0.97	0.03	0.00	0.98	0.02
Yokoyama et al., 1999	Sanxun	0.170	32			0.02	0.01	0.97						
Zhang et al., 2017a	SL1502	0.180	4	-4.3	1.4E+12	0.01	0.06	0.93	0.00	0.77	0.23	0.00	0.86	0.14
Yokoyama et al., 1999	Juzila	0.194	131	-4.1		0.02	0.00	0.98						
Zhang et al., 2017a	SL1501	0.200	6	-2.2	1.1E+12	0.02	0.04	0.94	0.00	0.88	0.12	0.00	0.93	0.07
Yokoyama et al., 1999	Luoma	0.217	166	-4.3		0.02	0.00	0.97						
Zhang et al., 2017a	YZ1501	0.220	10	-0.1	4.0E+11	0.02	0.02	0.95	0.00	0.99	0.00	0.00	0.99	0.00
Hoke et al., 2000	Naqu (w)	0.220	135			0.02	0.00	0.97						
Yokoyama et al., 1999	Nagqu 2	0.240	31			0.03	0.01	0.97						
Yokoyama et al., 1999	Nagqu 3	0.240	201	-2.4		0.03	0.00	0.97						
Yokoyama et al., 1999	Gulu 1	0.248	114	-1.0		0.03	0.00	0.97						
Zhang et al., 2017a	TM1502	0.250	2	-4.1	5.7E+11	0.01	0.16	0.83	0.00	0.78	0.22	0.00	0.86	0.14
Yokoyama et al., 1999	Gulu 2	0.252	104	-2.0		0.03	0.00	0.97						
Yokoyama et al., 1999	Yuela	0.256	154	-2.9		0.03	0.00	0.97						
Hoke et al., 2000	Shiquanhe	0.270	648			0.03	0.00	0.97						
Zhang et al., 2017a	NZ1501	0.300	325	-3.6	3.0E+09	0.04	0.00	0.96	0.50	0.48	0.02	0.50	0.49	0.01
Hoke et al., 2000	Tirthapuri	0.310	18			0.03	0.01	0.95						
Zhang et al., 2017a	LDG1502	0.330	4	-6.9	1.2E+12	0.03	0.06	0.90	0.00	0.62	0.37	0.00	0.77	0.23

Zhang et al., 2017c	MS1502	0.350	2	-5.2		0.02	0.16	0.82						
Yokoyama et al., 1999	Nagqu 1	0.380	2	-2.0		0.03	0.10	0.87						
Hoke et al., 2000	Tirthapuri	0.430	4			0.04	0.06	0.89						
Zhang et al., 2017a	NZ1502	0.450	3	-6.4	9.0E+11	0.04	0.08	0.88	0.00	0.65	0.34	0.00	0.79	0.21
Zhang et al., 2017a	YL1501	0.490	1	-3.0	1.9E+12	0.04	0.19	0.77	0.00	0.84	0.16	0.00	0.90	0.10
Zhang et al., 2017a	LDG1501	0.520	1	-7.1	3.5E+12	0.03	0.30	0.68	0.00	0.62	0.38	0.00	0.76	0.23
Yokoyama et al., 1999	Yangbajing 7	0.565	1			0.03	0.28	0.69						
Zhang et al., 2017c	MS1501	0.572	1	-5.0		0.03	0.30	0.67						
Yokoyama et al., 1999	Yangbajing 9	0.648	1			0.03	0.41	0.56						
Zhang et al., 2017a	TM1501	0.680	8	-2.9	2.5E+11	0.08	0.03	0.89	0.01	0.84	0.15	0.01	0.90	0.09
Sun et al., 2020	GZ1906	0.691	1	-7.8	8.3E+12	0.04	0.34	0.62	0.00	0.58	0.42	0.00	0.74	0.26
Zhang et al., 2017a	JQ1501	1.020	6	-3.9	2.2E+11	0.12	0.04	0.84	0.01	0.79	0.21	0.01	0.87	0.13
Yokoyama et al., 1999	Lingzhou	1.080	1			0.09	0.34	0.57						

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