Table S1. Statistics of RNA-seq data of wild accessions, landraces, and improved cultivars of *Panicum miliaceum* L. at both seedling and filling stages used in this study. WS, LS, and IS indicate wild types, landraces, and improved cultivars at seedling stage, respectively; WF, LF, and IF present wild types, landraces, and improved cultivars at filling stage, respectively.

Group	Accession	Sample	Variety	Status	Stage	Number of clean reads	Q30 Percentage	Number of total reads	Number of mapped reads
WS	WNX24	WNX24S-1	Yemizi	Wild accession	Seedling	19,595,949	96.25%	39,191,898	34,609,096 (88.31%)
	WNX24	WNX24S-2	Yemizi	Wild accession	Seedling	21,286,665	96.01%	42,573,330	38,214,875 (89.76%)
	WNX24	WNX24S-3	Yemizi	Wild accession	Seedling	20,343,122	96.32%	40,686,244	38,505,719 (94.64%)
	WNM8	WNM8S-1	Dianxingziganyemi	Wild accession	Seedling	24,390,256	95.49%	48,780,512	45,749,291 (93.79%)
	WNM8	WNM8S-2	Dianxingziganyemi	Wild accession	Seedling	22,620,421	95.77%	45,240,842	42,361,119 (93.63%)
	WNM8	WNM8S-3	Dianxingziganyemi	Wild accession	Seedling	22,156,017	95.32%	44,312,034	41,163,089 (92.89%)
WF	WNX24	WNX24F-1	Yemizi	Wild accession	Filling	19,260,673	95.26%	38,521,346	23,854,096 (61.92%)
	WNX24	WNX24F-2	Yemizi	Wild accession	Filling	23,117,158	95.51%	46,234,316	19,857,890 (42.95%)
	WNX24	WNX24F-3	Yemizi	Wild accession	Filling	20,556,054	93.82%	41,112,108	13,423,364 (32.65%)
	WNM8	WNM8F-1	Dianxingziganyemi	Wild accession	Filling	21,897,232	93.67%	43,794,464	18,868,300 (43.08%)
	WNM8	WNM8F-2	Dianxingziganyemi	Wild	Filling	22,249,501	94.49%	44,499,002	32,782,459

				accession					(73.67%)
	WNM8	WNM8F-3	Dianxingziganyemi	Wild accession	Filling	24,526,433	94.23%	49,052,866	28,867,704 (58.85%)
LS	LLN5	LLN5S-1	Dabaimizi	Landrace	Seedling	25,803,592	94.21%	51,607,184	42,582,691 (82.51%)
	LLN5	LLN5S-2	Dabaimizi	Landrace	Seedling	23,471,436	94.14%	46,942,872	41,565,026 (88.54%)
	LLN5	LLN5S-3	Dabaimizi	Landrace	Seedling	23,720,105	94.32%	47,440,210	41,108,455 (86.65%)
	LJL8	LJL8S-1	Yanpibao	landrace	Seedling	19,649,000	94.13%	39,298,000	37,483,707 (95.38%)
	LJL8	LJL8S-2	Yanpibao	landrace	Seedling	22,588,955	94.14%	45,177,910	42,145,692 (93.29%)
	LJL8	LJL8S-3	Yanpibao	landrace	Seedling	23,018,865	93.81%	46,037,730	41,886,553 (90.98%)
LF	LLN5	LLN5F-1	Dabaimizi	Landrace	Filling	24,090,793	93.93%	48,181,586	31,908,698 (66.23%)
	LLN5	LLN5F-2	Dabaimizi	Landrace	Filling	22,337,861	93.62%	44,675,722	38,038,431 (85.14%)
	LLN5	LLN5F-3	Dabaimizi	Landrace	Filling	22,325,545	94.09%	44,651,090	36,122,476 (80.90%)
	LJL8	LJL8F-1	Yanpibao	landrace	Filling	19,166,201	93.55%	38,332,402	17,929,180 (46.77%)
	LJL8	LJL8F-2	Yanpibao	landrace	Filling	24,487,660	94.34%	48,975,320	26,754,789 (54.63%)
	LJL8	LJL8F-3	Yanpibao	landrace	Filling	22,781,127	94.13%	45,562,254	27,846,293

									(61.12%)
IS	ISX63	ISX63S-1	Yanshu 7	Improved cultivars	Seedling	20,590,292	93.67%	41,180,584	37,656,732 (91.44%)
	ISX63	ISX63S-2	Yanshu 7	Improved cultivars	Seedling	19,976,524	93.75%	39,953,048	37,492,759 (93.84%)
	ISX63	ISX63S-3	Yanshu 7	Improved cultivars	Seedling	21,609,111	93.57%	43,218,222	40,261,737 (93.16%)
	IGS169	IGS169S-1	Longmi 5	Improved cultivars	Seedling	22,550,989	94.39%	45,101,978	38,816,862 (86.06%)
	IGS169	IGS169S-2	Longmi 5	Improved cultivars	Seedling	19,902,956	93.49%	39,805,912	34,748,759 (87.30%)
	IGS169	IGS169S-3	Longmi 5	Improved cultivars	Seedling	23,862,685	93.75%	47,725,370	45,664,707 (95.68%)
IF	ISX63	ISX63F-1	Yanshu 7	Improved cultivars	Filling	21,633,010	96.55%	43,266,020	38,648,566 (89.33%)
	ISX63	ISX63F-2	Yanshu 7	Improved cultivars	Filling	20,648,100	96.23%	41,296,200	25,251,900 (61.15%)
	ISX63	ISX63F-3	Yanshu 7	Improved cultivars	Filling	22,057,698	94.15%	44,115,396	33,846,327 (76.72%)
	IGS169	IGS169F-1	Longmi 5	Improved cultivars	Filling	24,320,702	94.39%	48,641,404	29,544,763 (60.74%)
	IGS169	IGS169F-2	Longmi 5	Improved cultivars	Filling	20,694,771	93.40%	41,389,542	14,262,061 (34.46%)
	IGS169	IGS169F-3	Longmi 5	Improved cultivars	Filling	22,582,242	94.30%	45,164,484	28,536,218 (63.18%)