

Table S1. Correlation coefficient between Phyllody (HF vs I1) and Little Leaf (H1 vs LL) affected sesame.

Context	Correlation coefficient	
	HF vs I1	H1 vs LL
CG	0.76	0.71
CHG	0.83	0.79
CHH	0.87	0.86

Table S2. Absolute and relative methylation percentage in HF-Healthy Flowering, I1-Phyllody, H1-Healthy vegetative and LL-Little Leaf sesame samples.

Sample	Absolute Methylation percentage (%)	Relative Methylation percentage (%)
HF	46.20	66.32
I1	41.39	35.11
H1	41.06	64.09
LL	40.52	52.55

Table S3. Methylation level (%) of cytosines in different (CG, CHG and CHH) sequence contexts in HF-Healthy Flowering, I1-Phyllody, H1-Healthy vegetative and LL-Little Leaf sesame samples.

Methylation level (%)	Percentage (%) of methylated cytosines											
	CG				CHG				CHH			
	H1	LL	HF	I1	H1	LL	HF	I1	H1	LL	HF	I1
0-20	0.4	0.4	0.3	0.3	0.6	0.5	0.4	0.5	9.3	9.1	10.1	10.2
20-40	0.5	0.5	0.5	0.4	1.3	1.3	1.3	1.1	19.9	20.3	21.2	21.5
40-60	0.9	0.8	1.0	0.8	3.5	3.6	3.6	3.7	24.9	25.6	25.3	27.2
60-80	3.6	3.4	3.3	3.0	9.9	10	9.8	10.4	23.7	23.8	23.4	22.9
80-100	94.4	95	94.8	95.4	84.7	84.7	85.1	84.3	21.9	21.3	20.0	18.2

Table S4. Hyper and hypomethylated DMCs with methylation deference of more than 25% in different sequence contexts in Phyllody (HF vs I1) and Little Leaf (H1 vs LL) affected sesame.

Context	Filtered DMCs	Hyper methylated DMCs		Hypo methylated DMCs	
		Number of DMCs	Percentage	Number of DMCs	Percentage
HF vs I1_CG	251	66	26.29	185	73.71
HF vs I1_CHG	348	86	24.71	262	75.29
HF vs I1_CHH	905	166	18.34	739	81.66
TOTAL	1504	318	21.14	1186	78.86
H1 vs LL_CG	1827	870	47.62	957	52.38
H1 vs LL_CHG	1649	744	45.12	905	54.88
H1 vs LL_CHH	2268	1059	46.69	1209	53.31
TOTAL	5744	2673	46.54	3071	53.46