

**Supplementary Table 4** The average value of the composition, quantity and content of metabolites in the lip of *Cymbidium floribundum* before and after pollination in different periods.

Class I	Number	The relative content				
		NP	P12	P24	P36	P48
Flavonoids	61	1.82E+08	1.57E+08	1.65E+08	2.22E+08	2.22E+08
Alkaloids	42	2.22E+08	2.13E+08	2.46E+08	2.42E+08	2.48E+08
Amino acids and derivatives	37	1.63E+08	2.11E+08	2.05E+08	1.91E+08	2.33E+08
Lipids	34	1.90E+08	1.62E+08	2.18E+08	2.36E+08	2.38E+08
Others	19	4.59E+07	3.95E+07	4.22E+07	4.33E+07	4.26E+07
Nucleotides and derivatives	16	2.39E+07	2.78E+07	3.72E+07	3.86E+07	5.02E+07
Phenolic acids	11	4.55E+06	4.64E+06	4.88E+06	4.36E+06	5.69E+06
Organic acids	7	1.93E+07	2.66E+07	2.11E+07	1.92E+07	1.60E+07
Lignans and Coumarins	2	1.83E+05	1.36E+05	1.90E+05	3.74E+05	2.42E+05
Phenanthrenes	1	5.53E+04	3.11E+04	2.84E+05	1.85E+05	1.55E+05