

## Supplementary Files

Evaluation of the nutritional quality of Chinese kale (*Brassica alboglabra* Bailey) using UHPLC-Quadrupole-Orbitrap MS/MS-based metabolomics

**Figure S1.** Images and descriptions of the seven Chinese kale cultivars.



| Description                            | W1                       | W2                                                       | W3                           | W4                                    | W5                                    | Y1                           | Y2                      |
|----------------------------------------|--------------------------|----------------------------------------------------------|------------------------------|---------------------------------------|---------------------------------------|------------------------------|-------------------------|
| <b>Flower color</b>                    | White                    | White                                                    | White                        | White                                 | White                                 | Yellow                       | Yellow                  |
| <b>Stem color</b>                      | Purple                   | Green                                                    | Green                        | Green                                 | Green                                 | Green                        | Green                   |
| <b>Leaf</b>                            | Bubble wrinkled surface  | Smooth surface                                           | Smooth surface, long petiole | Bubble wrinkled surface, long petiole | Bubble wrinkled surface, long petiole | Smooth surface, long petiole | Bubble wrinkled surface |
| <b>Origin</b>                          | Beijing, China           | Tokyo, Japan                                             | Shantou, China               | Shantou, China                        | Shantou, China                        | Guangzhou, China             | Shantou, China          |
| <b>Source cultivar of selfing line</b> | Wangtiantaixuan-zhonghua | Jinpincuilv                                              | Jiaxinchneghai               | Kunjichenghaicuiyu                    | Hongjixianggu                         | Lianjikuaidatian             | Shenghetiancui          |
| <b>Note</b>                            | Inbred line              | Doubled-haploid derived from isolated microspore culture | Inbred line                  | Inbred line                           | Inbred line                           | Inbred line                  | Inbred line             |

**Table S1.** Glucosinolate content ( $\mu\text{mol/g}$  fresh weight) in Chinese kale whole edible part. Values (mean  $\pm$  SD,  $n=3$ ) of the same compound followed by different lowercase letters indicate significant difference ( $p<0.05$ ).

|                         | W1                   | W2                   | W3                  | W4                  | W5                  | Y1                  | Y2                   |
|-------------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| Gluconapin              | 2.466 $\pm$ 0.088 e  | 1.667 $\pm$ 0.029 c  | 1.921 $\pm$ 0.136 d | 0.190 $\pm$ 0.028 a | 0.239 $\pm$ 0.004 a | 2.432 $\pm$ 0.032 e | 1.279 $\pm$ 0.022 b  |
| Glucoraphanin           | 2.910 $\pm$ 0.065 d  | 0.227 $\pm$ 0.004 a  | 0.251 $\pm$ 0.012 a | 0.574 $\pm$ 0.076 b | 1.017 $\pm$ 0.101 c | 3.796 $\pm$ 0.140 e | 1.024 $\pm$ 0.009 c  |
| Glucoerucin             | 0.041 $\pm$ 0.003 c  | 0.026 $\pm$ 0.003 a  | nd                  | 0.028 $\pm$ 0.003 a | 0.025 $\pm$ 0.002 a | 0.089 $\pm$ 0.006 d | 0.035 $\pm$ 0.002 b  |
| Progoitrin              | 0.272 $\pm$ 0.009 d  | 0.244 $\pm$ 0.006 c  | 0.437 $\pm$ 0.033 f | 0.023 $\pm$ 0.003 a | 0.009 $\pm$ 0.002 a | 0.379 $\pm$ 0.003 e | 0.075 $\pm$ 0.001 b  |
| Sinigrin                | nd                   | nd                   | nd                  | 0.266 $\pm$ 0.042 a | 0.036 $\pm$ 0.001 b | nd                  | nd                   |
| Glucobrassicin          | 0.249 $\pm$ 0.019 e  | 0.240 $\pm$ 0.013 e  | 0.123 $\pm$ 0.012 c | 0.173 $\pm$ 0.022 d | 0.054 $\pm$ 0.007 a | 0.252 $\pm$ 0.024 e | 0.092 $\pm$ 0.005 b  |
| 4-Hydroxyglucobrassicin | 0.020 $\pm$ 0.002 cd | 0.015 $\pm$ 0.002 bc | 0.049 $\pm$ 0.005 e | 0.024 $\pm$ 0.001 d | 0.003 $\pm$ 0.001 a | 0.070 $\pm$ 0.006 f | 0.013 $\pm$ 0.001 b  |
| 4-Methoxyglucobrassicin | 0.014 $\pm$ 0.000 a  | 0.013 $\pm$ 0.000 a  | 0.022 $\pm$ 0.001 b | 0.030 $\pm$ 0.004 c | 0.015 $\pm$ 0.002 a | 0.034 $\pm$ 0.001 d | 0.022 $\pm$ 0.001 b  |
| Neoglucobrassicin       | 0.047 $\pm$ 0.004 c  | 0.011 $\pm$ 0.002 a  | 0.016 $\pm$ 0.001 a | 0.022 $\pm$ 0.003 b | 0.042 $\pm$ 0.003 c | 0.070 $\pm$ 0.005 d | 0.026 $\pm$ 0.001 b  |
| Total                   | 6.018 $\pm$ 0.184 d  | 2.444 $\pm$ 0.052 b  | 2.819 $\pm$ 0.199 c | 1.329 $\pm$ 0.176 a | 1.439 $\pm$ 0.113 a | 7.123 $\pm$ 0.182 e | 2.566 $\pm$ 0.038 bc |