

Supplementary Table S1. Classification and phenotypes of the 4 rice cultivars used for metabolomics

| Cultivar | Ploidy | Grain Type | Bran Color | Country of Origin | Growing Location |
|----------------------|------------|------------|------------|-------------------|------------------|
| Balilla | Diploid | Short | Brown | Italy | China |
| Tetraploid Balilla | Tetraploid | Short | Brown | China | China |
| Yangdao 6 | Diploid | Long | Brown | China | China |
| Tetraploid Yangdao 6 | Tetraploid | Long | Brown | China | China |

Abbreviations in the text: ① B-2X: Balilla-2X; ② B-4X: Balilla-4X; ③ Y-2X: Yangdao 6-2X; ④ Y-4X: Yangdao 6-4X.