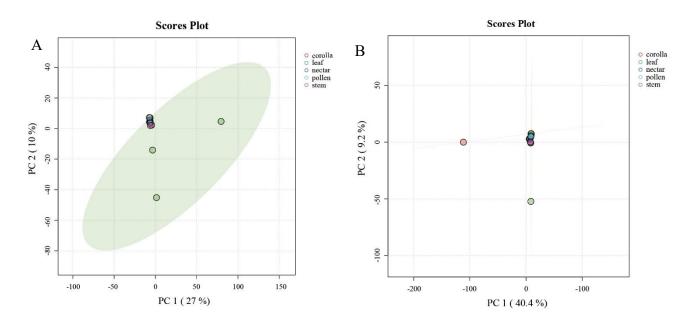
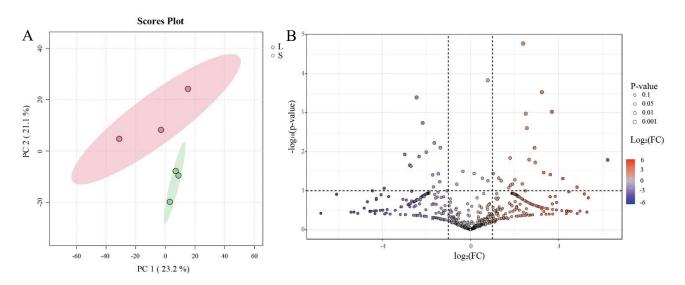


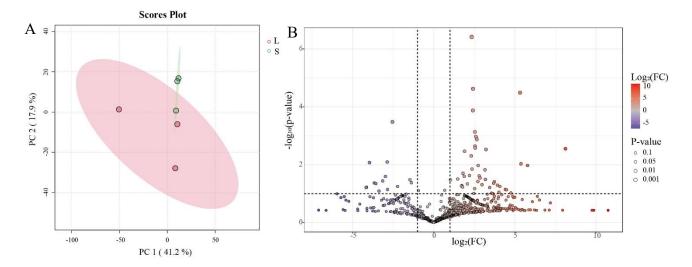
## Supplementary Figures



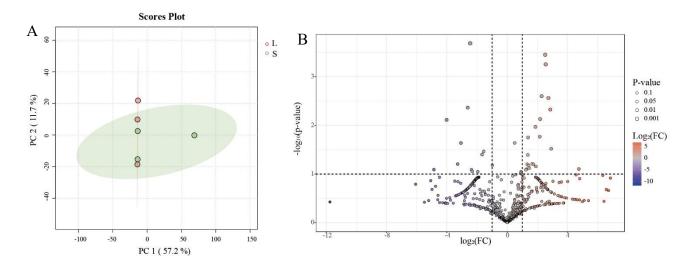
**Supplementary Figure 1** Differential analysis of secondary metabolites in different tissues of *O. alatiflora*. (A) PCA analysis of secondary metabolites in different tissues of L-morph plants. (B) PCA analysis of secondary metabolites in different tissues of S-morph plants.



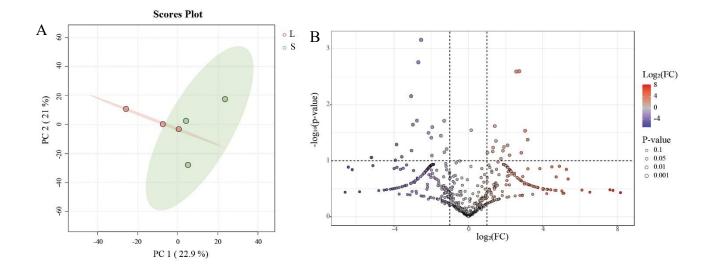
**Supplementary Figure 2** Differential analysis of secondary metabolites in stems of different morphs of *O. alatiflora*. (A) PCA analysis of secondary metabolites in stems of different morphs; (B) Volcanic plots of secondary metabolites in stems of different morphs, with purple representing downregulation and red representing upregulation.



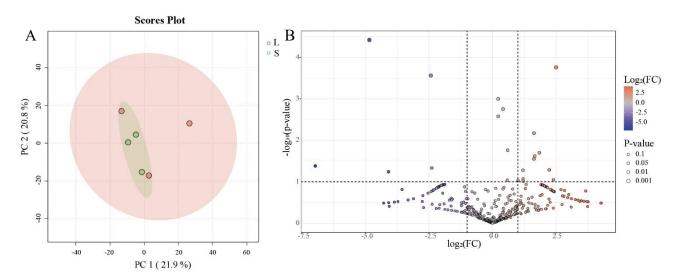
**Supplementary Figure 3** Differential analysis of secondary metabolites in leaves of different morphs of *O. alatiflora*. (A) PCA analysis of secondary metabolites in leaves of different morphs; (B) Volcanic plots of secondary metabolites in leaves of different morphs, with purple representing downregulation and red representing upregulation.



**Supplementary Figure 4** Differential analysis of secondary metabolites in the corolla of different morphs of *O. alatiflora*. (A) PCA analysis of secondary metabolites in the corolla of different morphs; (B) Volcanic plots of secondary metabolites in the corolla of different morphs, with purple representing downregulation and red representing upregulation.



**Supplementary Figure 5** Differential analysis of secondary metabolites in pollen of different morphs of *O. alatiflora*. (A) PCA analysis of secondary metabolites in pollen of different morphs; (B) Volcanic plots of secondary metabolites in pollen of different morphs, with purple representing downregulation and red representing upregulation.



**Supplementary Figure 6** Differential analysis of secondary metabolites in the nectar of different morphs of *O. alatiflora*. (A) PCA analysis of secondary metabolites in the nectar of different morphs; (B) Volcanic plots of secondary metabolites in the nectar of different morphs, with purple representing downregulation and red representing upregulation.