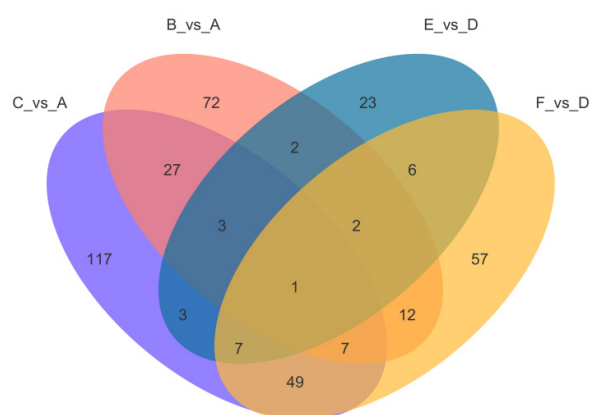


Supplemental information

Impact of cold stress on leaf structure, photosynthesis, and metabolites in *Camellia weiningensis* and *C. oleifera* seedlings

a



b

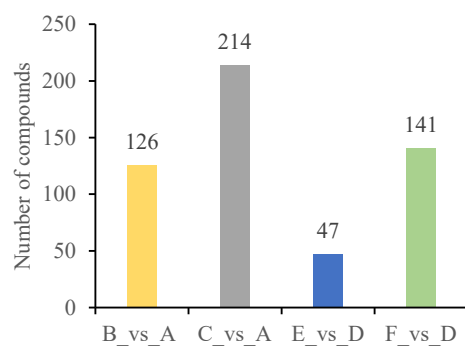


Figure S1. (a) Venn diagram showing all SCMs numbers among different comparison groups. (b) Number of SCMs in the B vs. A , C vs. A , E vs. D , F vs. D groups

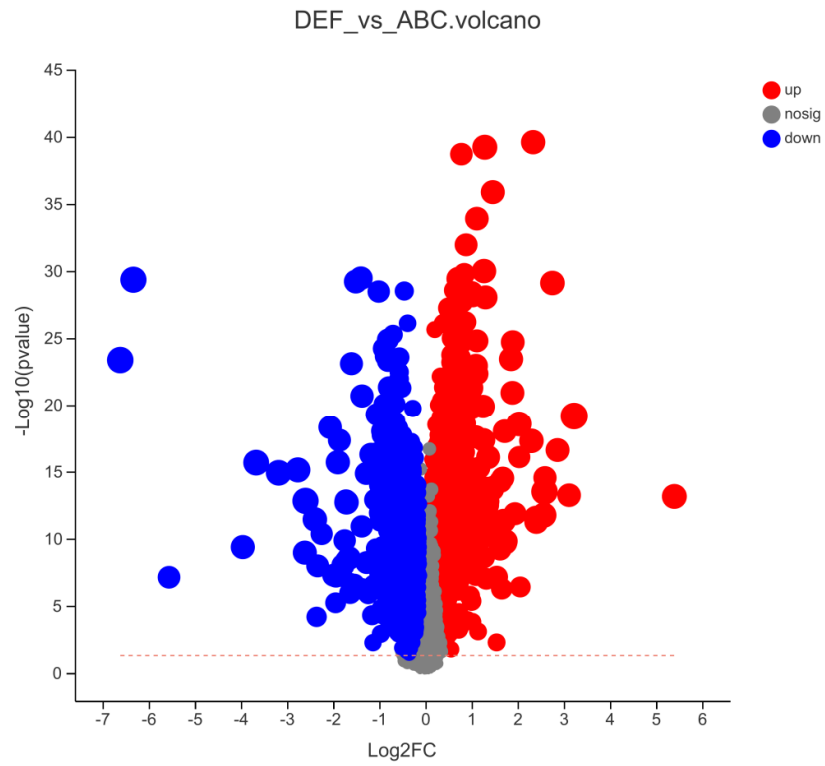


Figure S2. Volcano plot of SCMs between two *Camellia* species seedlings. The X-axis is expressed as \log_2 (fold change). The Y-axis is expressed as $-\log_{10}$ (P value). Gray indicates no significant difference in expression, red represents up-regulated SCMs, green represents down-regulated SCMs

Table S1 Two-way ANOVA analysis the effect of temperature and and species on leaf anatomical structure

Variation	Leaf thickness (μm)	Thickness of upper epidermis (μm)	Thickness of lower epidermis (μm)	Thickness of palisade tissue (μm)	Thickness of spongy tissue (μm)	Palisade tissue-spongy tissue ratio	Tissue structure tightness (%)	Tissue structure looseness(%)
Temperature	<0.001	0.08	0.037	<0.001	0.004	<0.001	<0.001	<0.001
Species	<0.001	0.004	<0.001	0.002	<0.001	<0.001	<0.001	<0.001
Temperature*Species	0.034	<0.001	<0.001	0.003	0.095	0.821	0.678	0.414

P-values show that was not significant for $P>0.05$ and significant $P<0.05$

Table S2 Two-way ANOVA analysis the effect of temperature and and species on photosynthesis

Variation	Fv/Fm	Photosynthetic rate ($\mu\text{mol}\cdot\text{CO}_2\cdot\text{m}^{-2}\cdot\text{s}^{-1}$)	Stomatal conductance ($\text{mmol}\cdot\text{H}_2\text{O}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$)	Transpiration rate ($\text{mmol}\cdot\text{H}_2\text{O}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$)	WUE ($\mu\text{mol}\cdot\text{mmol}$)	Chlorophyll ($\text{mg}\cdot\text{g}^{-1}$)
Temperature	0.03	<0.001	<0.001	<0.001	<0.001	<0.001
Species	0.293	0.011	0.051	0.761	0.006	0.146
Temperature*Species	0.349	<0.001	0.087	0.532	<0.001	0.001

P-values show that was not significant for $P>0.05$ and significant $P<0.05$

Table S3 Two-way ANOVA analysis the effect of temperature and species on endogenous hormone contents

Variation	GA ($\text{ng}\cdot\text{g}^{-1}$)	ABA ($\text{ng}\cdot\text{g}^{-1}$)	JA ($\text{ng}\cdot\text{g}^{-1}$)	IAA ($\text{ng}\cdot\text{g}^{-1}$)
Temperature	<0.001	<0.001	<0.001	0.038
Species	0.008	0.712	<0.001	<0.001
Temperature*Species	<0.001	<0.001	<0.001	<0.001

P-values show that was not significant for $P>0.05$ and significant $P<0.05$