Supplementary Material

From Resistance Mechanism to Green Application: Discovery of Rutaevin as a Key Phytoalexin in Larch and Cross-Species Resource Optimization

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1 Supplementary Figure

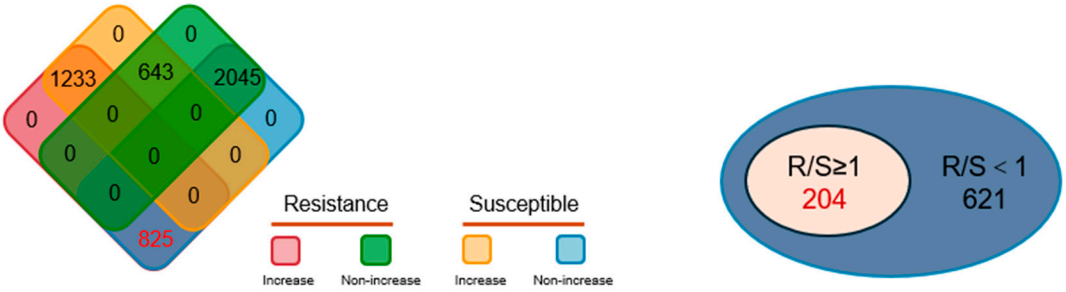


Figure S1 Identification of metabolites with significantly higher abundance in disease-resistant larch compared to susceptible larch.

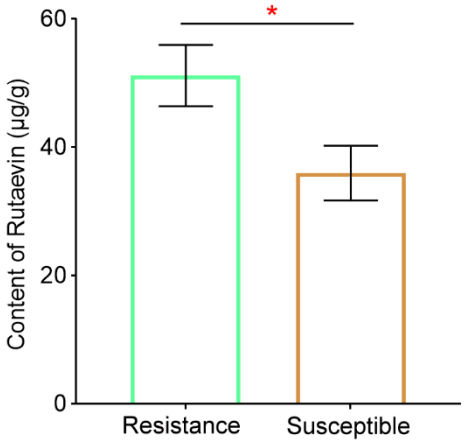


Figure S2 The content of rutaevin in disease-resistant larch and susceptible larch.

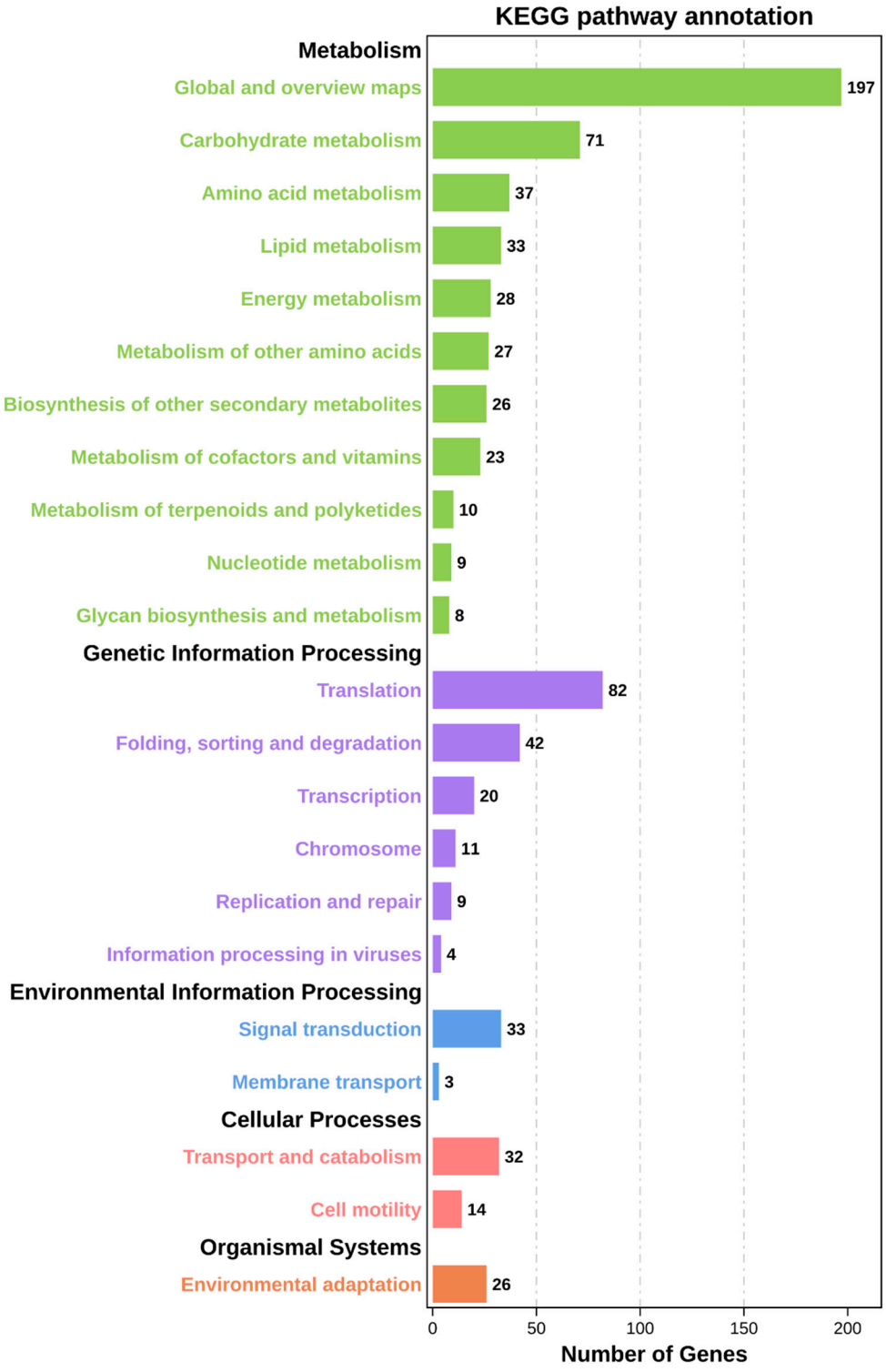


Figure S3 KEGG enrichment analysis of differentially expressed genes.

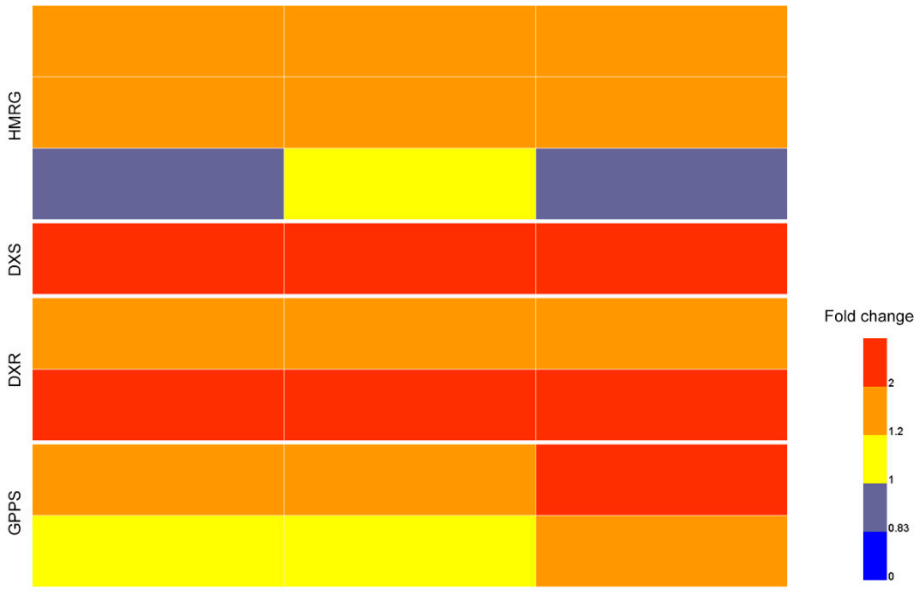


Figure S4 The content changes of key enzymes in disease-resistant larch after inoculation with *N. laricinum*.

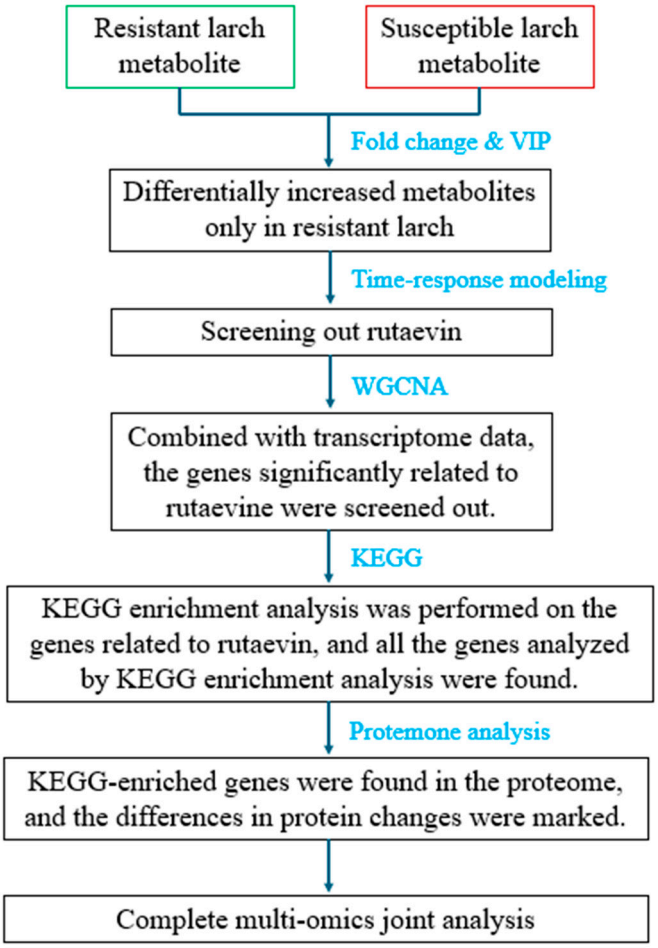


Figure S5 Multi-omics joint analysis flow chart.

Table S1 The diameter of *N. laricinum* moss on PDA containing different concentrations of rutaevin (cm).

	1 mg/mL	0.5 mg/mL	0.25 mg/mL	0.125 mg/mL	0.0625 mg/mL	CK
0 d	0.5 ±0.00	0.5 ±0.00	0.5 ±0.00	0.5 ±0.00	0.5 ±0.00	0.5 ±0.00
1 d	0.5 ±0.00	0.5 ±0.00	0.5 ±0.00	0.5 ±0.00	0.5 ±0.00	0.6 ±0.02
2 d	0.5 ±0.00	0.5 ±0.00	0.5 ±0.00	0.6±0.15	0.8±0.08	0.8±0.10
3 d	0.5 ±0.00	0.5 ±0.00	0.98±0.07	1.1±0.12	1.3±0.21	1.5±0.16
4 d	0.5 ±0.00	0.5 ±0.00	1.5±0.11	1.5±0.15	2.0±0.13	2.1±0.12
5 d	0.5 ±0.00	0.5 ±0.00	1.8±0.06	2.1±0.11	2.4±0.09	2.5±0.18