

Figure S1. Statistical comparison for results of total polyphenolic content (TPC) for optimized young shoots extracts of *Ribes nigrum* (RNYS), *Vaccinium myrtillus* (VMYS), and *Vaccinium vitis-idaea* (VVIYS). All values are expressed as mean \pm SD (n = 3). Statistical analysis was performed using a one-way ANOVA test, with Tukey's multiple comparisons post-test (**** $p < 0.0001$).

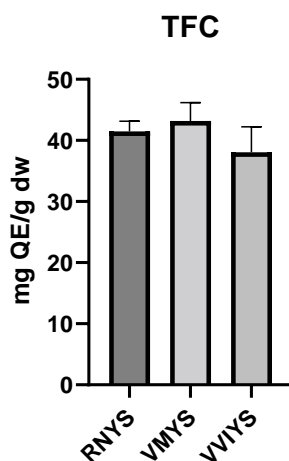


Figure S2. Statistical comparison for results of total flavonoid content (TFC) for optimized young shoots extracts of *Ribes nigrum* (RNYS), *Vaccinium myrtillus* (VMYS), and *Vaccinium vitis-idaea* (VVIYS). All values are expressed as mean \pm SD (n = 3). Statistical analysis was performed using a one-way ANOVA test, with Tukey's multiple comparisons post-test. Statistical significance was considered for $p < 0.05$.

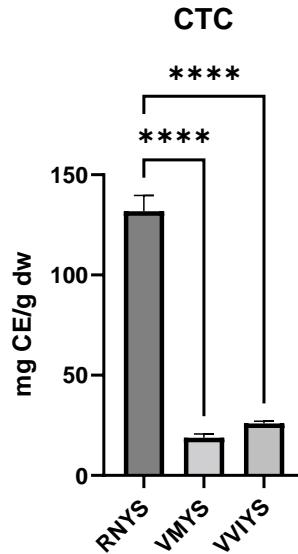


Figure S3. Statistical comparison for results of condensed tannin content (CTC) for optimized young shoots extracts of *Ribes nigrum* (RNYS), *Vaccinium myrtillus* (VMYS), and *Vaccinium vitis-idaea* (VVIYS). All values are expressed as mean \pm SD ($n = 3$). Statistical analysis was performed using a one-way ANOVA test, with Tukey's multiple comparisons post-test (**** $p < 0.0001$).

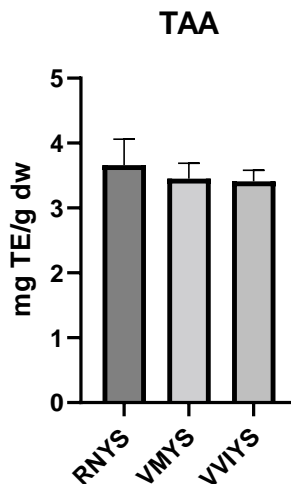


Figure S4. Statistical comparison for results of total antioxidant activity evaluated by DPPH assay (TAA) for optimized young shoots extracts of *Ribes nigrum* (RNYS), *Vaccinium myrtillus* (VMYS), and *Vaccinium vitis-idaea* (VVIYS). All values are expressed as mean \pm SD ($n = 3$). Statistical analysis was performed using a one-way ANOVA test, with Tukey's multiple comparisons post-test. Statistical significance was considered for $p < 0.05$.