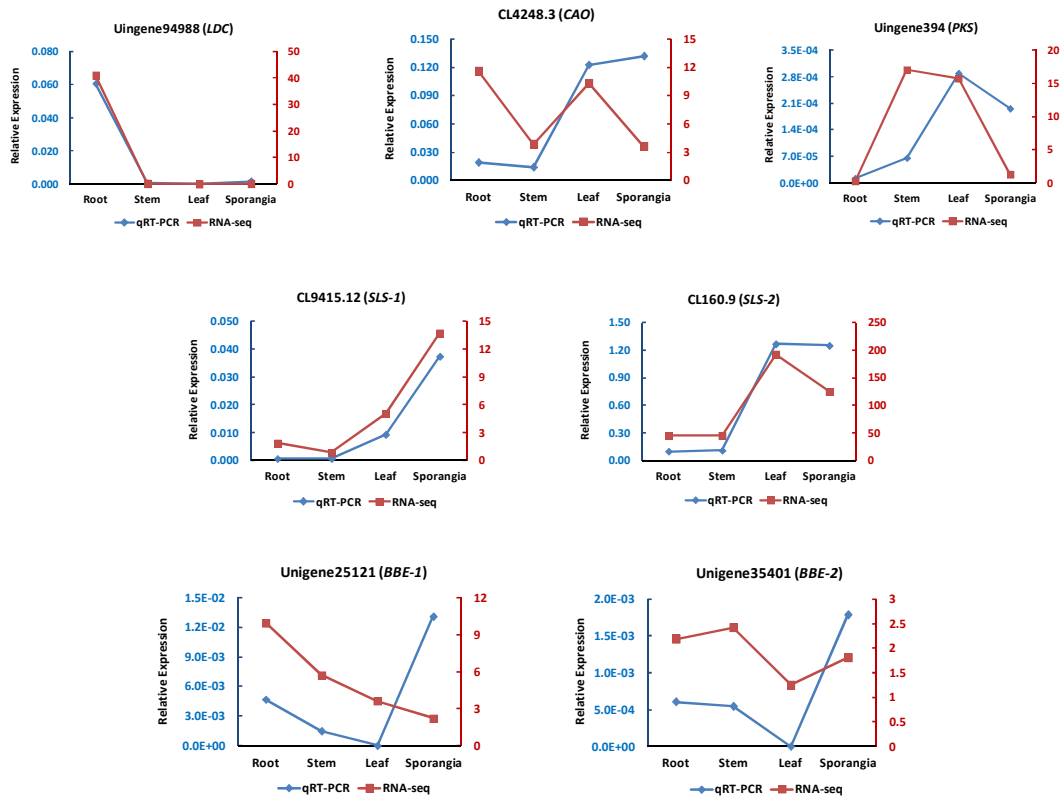




Real-Time PCR expression analyses of *HsLDC*, *HsCAO*, *HsPKS*, and *CYP450s* (SLS and BBE classes)

qRT-PCR was used to validate several of the differentially expressed genes identified by RNA-Seq in the four tissues of *H. serrata*. Using the internal control, tubulin (Unigene50132), seven selected genes involved in HupA biosynthesis, including *HsLDC*, *HsCAO*, *HsPKS* and *CYP450s* (SLS and BBE classes), were evaluated.

Primers for qRT-PCR

Gene name	Gene ID	Forward primer (5' - 3')	Reverse primer (5' - 3')
LDC	Unigene94988	CACGGATGGAGATCATGACAAGT	CGCCGAGGTCTAGAACGAAG
CAO	CL4248.3	CTCTGGGTTTTGTATCCTTCTGC	TGCTTGTCTTTTGGCACCCT
PKS	Unigene394	CATTACTTATAATAAGAAAAGTATGGGACA	GCAGTATTTACGTATATGTTACAATAACT
CYP450 (SLS-1)	CL160.9	CCTGTGGGTGGTGAAGATTGTAA	GTTTATAGTGAGGAAGCACGTGAG
CYP450 (SLS-2)	CL9415.12	TATGGATCATTCATGCGTGCC	AGATTCTTCGCTGCTGATGCC
CYP450 (BBE-1)	Unigene25121	CACACGAAAGCACATAGTTTAAATCC	CGAATCCCAGATATGAAATACCTCC
CYP450 (BBE-2)	Unigene35401	ATTTAGATCCGTTTCATCGCTCG	GAAGTGAATAAGCATCCGACG
Tubulin	Unigene50132	AGTCTAGCGTCTGCGATATTG	CCATCTCATCCATACCTTCTCC