

Table S1 Details of insect-associated genes and their primer sequences.

Gene Accession Number	Primer Name	Primer Sequence	Product Length
U20139.1	EF1 α F	5' TGGGCGTCAACAAAATGGA 3'	148
	EF1 α R	5' TCTCCGTGCCAGCCAGAAAT 3'	
MK226188.1	Sf RYR F	5' CACAGGTGGATCTCTCCCAG 3'	142
	Sf RYR R	5' GCGTCCAACGTAGACACCTT 3'	
KC789747.1	Sf CYP6AB12 F	5' GCTATAGCTGCGGTCCTACTG 3'	167
	Sf CYP6AB12 R	5' TACAGCTCGTCTGCTACTTGC 3'	
KJ671575.1	Sf CYP6AE43 F	5' GAGCTTACTTCGGCACGTTG 3'	173
	Sf CYP6AE43 R	5' CAACACTTTCCAGCGGTCG 3'	
KC789748.1	Sf CYP6AN4 F	5' CGCTTGACGCCAACATTTACG 3'	93
	Sf CYP6AN4 R	5' ATCTTCACCCACTGTCTGCAAT 3'	
KJ671577.1	Sf CYP9A58 F	5' TTCATGAACGAGGCAGTGCT 3'	173
	Sf CYP9A58 R	5' GGACTTAGTGTGGAGCGCAT 3'	
KJ671578.1	Sf CYP9A59 F	5' GTACGCGACCCAGAACTGATTA 3'	134
	Sf CYP9A59 R	5' CGCATTTCCCTTCCACTCTTTCAT 3'	
KC789752.1	Sf CYP321A9 F	5' AAGTGCTATCAGGTGACTTTTCACT 3'	121
	Sf CYP321A9 R	5' TTCGATCGCATCAGCTTCCAT 3'	
KJ671576.1	Sf CYP6AE44 F	5' CTTCACTGGCCGTGAAGTCT 3'	96
	Sf CYP6AE44 R	5' TGACGTAGGACCTTCCACCT 3'	
KC789749.1	Sf CYP6B50 F	5' ACAATCTTTTCCACGCCGAC 3'	123
	Sf CYP6B50 R	5' GAAATTGATCCGCTCGGTTGG 3'	
KJ671579.1	Sf CYP9A60 F	5' CTCCAATGGGTTTCGAGTCCT 3'	145
	Sf CYP9A60 R	5' GTCTCCAACCTCCACCATGA 3'	
KC789754.1	Sf CYP321B1 F	5' ACAACGAAAACACTACTGGAGGAA 3'	166
	Sf CYP321B1 R	5' TCGAGTGAGCCCATTTCCAAC 3'	
KC789750.1	Sf CYP321A7 F	5' ACACCTGCGCTCTTTGTCAT 3'	113
	Sf CYP321A7 R	5' TCGCTCAATTGGTCCCCTTC 3'	
KC789751.1	Sf CYP321A8 F	5' GAAGCGTGGCGTAAAGTTCT 3'	162
	Sf CYP321A8 R	5' AAGAGCGCAGGTGTTAGGAC 3'	
KC789753.1	Sf CYP321A10 F	5' TTGCTACCAATTACTTTGGCCCTCA 3'	163
	Sf CYP321A10 R	5' GGAACAGGGGACGTGGTGAT 3'	
KC789755.1	Sf CYP340L1 F	5' TGATCGGGCATGTGCCTAAA 3'	165
	Sf CYP340L1 R	5' TTGCTATCACACTCGCGTCA 3'	

KJ671580.1	Sf CYP337B5 F	5' CAAGCGGTTCTAGCTGGTGA 3'	139
	Sf CYP337B5 R	5' CTGGACTGAGTTTTTGCCTCA 3'	
MN480678.1	Sf CYP314A F	5' ACGTAGAGAGCTTTTGGGTCTG 3'	134
	Sf CYP314A R	5' AGGTCTGACATCTGCCAACG 3'	
MN480675.1	Sf CYP305A1 F	5' GAGAAAGTATCCGCCGGGTC 3'	100
	Sf CYP305A1 R	5' ACAAGCTCTCCATTCCGATCC 3'	
MN480673.1	Sf CYP49A1 F	5' AAGAACCCTTGGAAAACCCG 3'	121
	Sf CYP49A1 R	5' ATGGGAACACTAAGTCGGGG 3'	
MN480669.1	Sf CYP12A2 F	5' TACAGGAGTCAGGAGGCGAA 3'	123
	Sf CYP12A2 R	5' CTTTTCCCCTTGTGCGGTTG 3'	
MN480659.1	Sf CYP4L4 F	5' TCCTCTGCCCTTAGTGGGAA 3'	159
	Sf CYP4L4 R	5' TCCTCAGCCTGCTTTGGATG 3'	
MN480656.1	Sf CYP4C1 F	5' ACTTCCTCAAGGGTTGGCTG 3'	134
	Sf CYP4C1 R	5' CTTCTCCTCGATGACGTGGG 3'	
MN480668.1	Sf CYP9E2 F	5' CAGGAAACCTGTTATATTTGTGGGT 3'	123
	Sf CYP9E2 R	5' TCAAATATCCCGCCAAAGCG 3'	
MN480664.1	Sf CYP6B6 F	5' TGGGAGTTCATGACGGGAGA 3'	125
	Sf CYP6B6 R	5' GGATCCTTCACGTAGAGTCCAG 3'	
MN480658.1	Sf CYP4G75 F	5' CTGGACTGCCACCAACTTGT 3'	108
	Sf CYP4G75 R	5' AGTTTGGCCGCGAGTTCATA 3'	
XM_035580222.1	Sf CYP306A1 F	5' TGTTATCCAAGCAAATTGATCGAG 3'	176
	Sf CYP306A1 R	5' GTCAAATGCGGCTGATGACG 3'	

The above gene primers were designed by using NCBI Primer BLAST. The elongation factor 1 alpha (*EF1 α*) was used as reference gene (Giraud et al., 2014; Shu et al., 2020).