**Table S3.** Primers used in RT-qPCR

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| --- | --- | --- | --- |
| Thrips | Primer name | Primer sequence（5’- 3’） | Sequence length |
| *M. usitatus* | Rhodopsin 1-F | CTTCGTCTACTTTCTGCCTCTT | 108 bp |
| Rhodopsin 1-R | TTCATCTTCTTGGCTTGCTC |
| Rhodopsin 2-F | CGCTCCGTACTCCGTCAAAC | 120 bp |
| Rhodopsin 2-R | CACCCATAACCCACGTCTCG |
| Ultraviolet sensitive opsin 1-F | GCCAAGAAGATGAACGTGGAG | 106 bp |
| Ultraviolet sensitive opsin 1-R | CGAAGAGGAAGCACAGGGAG |
| Actin-F | CTTCGTCTACTTTCTGCCTCTT | 125 bp |
| Actin-R | TTCATCTTCTTGGCTTGCTC |