Supplemental Information S7 File: RT-PCR screening results of known honey bee pathogens

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| --- | --- | --- | --- | --- | --- |
| **Sample** | **Viruses** | ***Crithidia* spp.** | **Neogregarinorida** | ***Nosema* sp.** | ***Ascosphaera* spp.** |
| *Bombus terrestris* | SBV | - | *Apicystis bombi* | *Nosema thomsoni* | - |
| *Bombus pascuorum* | - | - | - | - | - |
| *Osmia cornuta* | DWV | - | *Apicystis bombi* | *Nosema thomsoni* | *Ascosphaera sp.* |
| *Andrena vaga* | - | - | - | *Nosema thomsoni* | - |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Primer name | Sequence (5'>3') | ref. |
| DWV | DWV-F1425 | CGTCGGCCTATCAAAG | [1] |
|  | DWV-B1806 | CTTTTCTAATTCAACTTCACC |  |
| BQCV | BQCV700-F | TGGTCAGCTCCCACTACCTTAAAC | [2] |
|  | BQCV700-R | GCAACAAGAAGAAACGTAAACCAC |  |
| LSV | LSVdeg-F | GCCWCGRYTGTTGGTYCCCCC | [3] |
|  | LSVdeg-R | GAGTGGCGGCGCSAGATAAAGT |  |
| AmFV | AmFV-BroN-F | CAGAGAATTCGGTTTTTGTGAGTG | [9] |
|  | AmFV-BroN-R | CATGGTGGCCAAGTCTTGCT |  |
| VdMLV | VdMLV-F | ATCCCTTTTCAGTTCGCT | [4] |
|  | VdMLV-R | AGAAGAGACTTCAAGGAC |  |
| SBV | SBV693F | GCACGTTTAATTGGGGATCA | [2] |
|  | SBV693R | CAGGTTGTCCCTTACCTCCA |  |
| *Apicystis* bombi | ApBF1 | CGTACTGCCCTGAATACTCCAG | [5] |
|  | ApBR1 | TGAAAGCGGCGTATACATGA |  |
| *Crithidia* bombi | 500Tr-CytB-F | TGTGGWGTKTGTTTAGC | [6] |
|  | 500Tr-CytB-R | CRTCWGAACTCATAAAATAATG |  |
| *Nosema* spp. | Nos-F | TATGCCGACGATGTGATATG | [7] |
|  | Nos-R | CACAGCATCCATTGAAAACG | [8] |
| *Ascosphaera* | KS25\_513f | TGGACCTTTCCTTCTGGGGA | this study |
|  | KS26\_1194r | CAAACGTCGACCGGGCTATT | this study |

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