Worksheet 2017: California vs Local bee study:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| A | 40 | 34 | 44 | 45 | 3 | 3 | 3 | 5 | 5 | 5 | 43 | 43 |
| B | 40 | 34 | 44 | 45 | 43 | 48 | 48 | 48 | 49 | 49 | 49 | 53 |
| C | 40 | 34 | 44 | 45 | 53 | 53 | 56 | 56 | 56 | 63 | 63 | 63 |
| D | 40 | 34 | 44 | 45 | 59 | 59 | 59 | 57 | 57 | 57 | 77 | 77 |
| E | 40 | 34 | 44 | 45 | 77 | NTC | Gblock | NTC | Gblcok | NTC | Gblock |  |
| F | 40 | 34 | 44 | 45 | 3 | 5 | 43 | 48 | 49 | 53 | 56 | 63 |
| G | 40 | 34 | 44 | 45 | 3 | 5 | 43 | 48 | 49 | 53 | 56 | 63 |
| H | 40 | 34 | 44 | 45 | 59 | 59 | 57 | 57 | 77 | 77 | NTC | Gblock |

California vs Local bee study qPCR for virus Assays: clean up plate (reruns for samples that came up as being positive for only one replicate. Rerunning in triplicates to find best out of 3)

DWV, BQCV

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Stock** | **Final konc** | **20 µl** | **10 µl** |  | **13** | **\* 80%** |
| **H2O** |  |  |  | 1.475 |  | **19.175** |  |
| **iTaq Universal SYBR Green mix** | 2x | 1x |  | 5 |  | **65** |  |
| **Primer 1** | 10 μM | 0.2 μM |  | 0.2 |  | **2.6** |  |
| **Primer 2** | 10 μM | 0.2 μM |  | 0.2 |  | **2.6** |  |
| **iScript reverse transcriptase** |  | 1x |  | 0.125 |  | 1.625 | **1.3** |
| **Template RNA** |  |  |  | 3 |  | **3** |  |
|  |  |  |  |  |  |  |  |

IAPV

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Stock** | **Final konc** | **20 µl** | **10 µl** |  | **50** | **\* 80%** |
| **H2O** |  |  |  | 1.475 |  | **73.75** |  |
| **iTaq Universal SYBR Green mix** | 2x | 1x |  | 5 |  | **250** |  |
| **Primer 1** | 10 μM | 0.2 μM |  | 0.2 |  | **10** |  |
| **Primer 2** | 10 μM | 0.2 μM |  | 0.2 |  | **10** |  |
| **iScript reverse transcriptase** |  | 1x |  | 0.125 |  | 6.25 | **5** |
| **Template RNA** |  |  |  | 3 |  | **3** |  |
|  |  |  |  |  |  |  |  |

ACTIN

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Stock** | **Final konc** | **20 µl** | **10 µl** |  | **37** | **\* 80%** |
| **H2O** |  |  |  | 1.475 |  | **54.575** |  |
| **iTaq Universal SYBR Green mix** | 2x | 1x |  | 5 |  | **185** |  |
| **Primer 1** | 10 μM | 0.2 μM |  | 0.2 |  | **7.4** |  |
| **Primer 2** | 10 μM | 0.2 μM |  | 0.2 |  | **7.4** |  |
| **iScript reverse transcriptase** |  | 1x |  | 0.125 |  | 4.625 | **3.7** |
| **Template RNA** |  |  |  | 3 |  | **3** |  |
|  |  |  |  |  |  |  |  |