

| Plant | Samples | BBTV reads | BBTA+alpha reads | Total number reads | % of viral reads |
|---|---------|------------|------------------|--------------------|------------------|
| <i>Musa</i> <i>Ipomoea</i> | ALYU-26 | 2,343,872 | 7,190,098 | 10,455,772 | 0.6376 |
| | ALYU-28 | 2,170 | 3,376 | 12,488,618 | 0.0003 |
| <i>Musa</i> <i>Phyllanthus</i> <i>Arachis</i> | ALYU-29 | 1,088,396 | 8,063,084 | 11,642,444 | 0.6926 |
| | ALYU-30 | 6,022 | 7,842 | 13,503,218 | 0.0006 |
| | ALYU-31 | 1,042 | 1,452 | 10,347,832 | 0.0001 |
| <i>Musa</i> <i>Musa</i> | ALYU-46 | 259 | 467 | 18,154,862 | 0.0000 |
| | ALYU-52 | 1,685 | 1,885 | 10,763,616 | 0.0002 |

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|---------------------------------|---------|------------|------------------|--------------------|------------------|
| <i>Musa</i> <i>Commelina</i> | ALYU-26 | 2,343,872 | 7,190,098 | 10,455,772 | 0.6376 |
| | ALYU-27 | 14,932 | 53,512 | 11,731,770 | 0.0043 |
| <i>Musa</i> <i>Bidens</i> | ALYU-37 | 6,742,128 | 9,793,147 | 10,828,680 | 0.9044 |
| | ALYU-38 | 2,435,471 | 2,808,035 | 11,763,264 | 0.2387 |
| <i>Chromolaena</i> | ALYU-41 | 6,999 | 17,142 | 11,534,294 | 0.0015 |
| <i>Musa</i> | ALYU-42 | 1,132,366 | 1,747,470 | 13,002,052 | 0.1344 |
| <i>Musa</i> | ALYU-43 | 1,278,482 | 2,905,982 | 13,238,836 | 0.2195 |

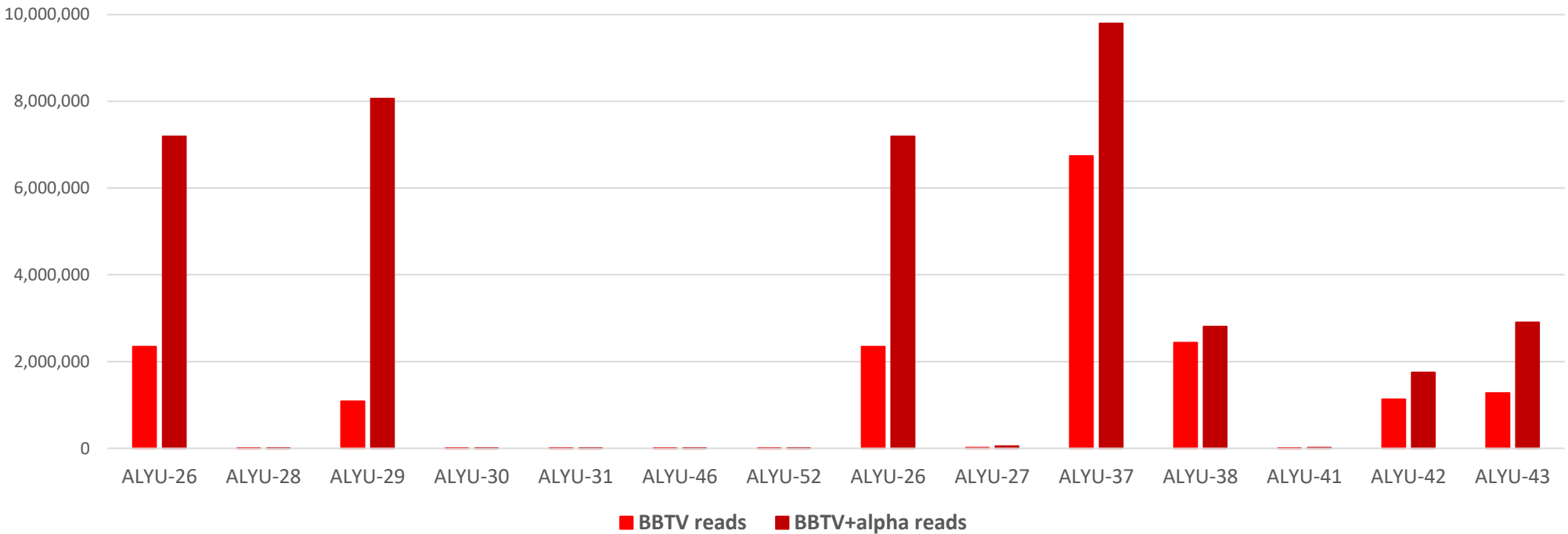


Figure S4. Counts of Illumina reads representing BBTV and alphasatellite DNA from banana and non-banana neighbor plants. Total DNA from banana (ALYU-26, ALYU-29, ALYU-37, ALYU-42-43, ALYU-46, ALYU-52) and non-banana (ALYU-27-28, AYL-30-31, ALYU-38, ALYU-41) plants was treated by RCA, RCA products were Illumina sequenced and the sequencing reads were used for *de novo* reconstruction of BBTV and alphasatellite genomes. The Illumina reads were then mapped onto the reconstructed BBTV and alphasatellite genomes present in each sample (or in the case of *Ipomoea*, *Phyllanthus*, *Arachis* and bananas ALYU-46 and ALYU-52 onto the BBTV and alphasatellite genomes present in infected banana neighbors) and counted. Counts are given in tables and plotted as a bar-graph.