**Table S1** Percent host contamination from total barcoded, unaligned reads for RNA-seq and GBS.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Species/Host | unique hits | total quality reads | % reads from host |
| RNA-seq | *P. cubensis/*cucumber | 1,022,329 | 54,048,200 | 1.89% |
| RNA-seq | *P. humuli/*hop | 211,296 | 45,951,800 | 0.46% |
| GBS | *P. cubensis/*cucumber | 41,619 | 54,426,051 | 0.08% |
| GBS | *P. humuli/*hop | 5,441 | 26,275,783 | 0.02% |