**Supplementary Dataset S5.** *Epichloë festucae* genes known to be important for a normal symbiotic association with the host grass were not significantly differentially expressed in the choke stroma tissue relative to the asymptomatic inflorescence tissue.

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene** | **Gene model** | **Mean RPKMa** | **Reference** |
| acy*A* | EfM3.048730 | 5 | Voisey et al. 2016b |
| *bemA* | EfM3.080850 | 46 | Takemoto et al. 2011c |
| *cclA* | EfM3.021140 | 8 | Lukito et al. 2019d |
| *cdc*42 | EfM3.070900 | 46 | Kayano et al. 2018e |
| *clrD* | EfM3.062280 | 49 | Chujo and Scott 2014f |
| *cnaA*1 | EfM3.035130 | 76 | Mitic et al. 2018g |
| *cnaA*2 | EfM3.051970 | 25 | Mitic et al. 2018 |
| *ezhB* | EfM3.069800 | 26 | Chujo and Scott 2014 |
| *hepA* | EfM3.043690 | 110 | Chujo et al. 2019h |
| *kdmB* | EfM3.035320 | 18 | Lukito et al. 2019 |
| *laeA* | EfM3.069170 | 32 | Rahnama et al. 2019i |
| *mkkA* | EfM3.016595 | 64 | Becker et al. 2015j |
| *mobC* | EfM3.028150 | 27 | Green et al. 2016k |
| *mpkA* | EfM3.074990 | 208 | Becker et al. 2015 |
| *noxA* | EfM3.065460 | 58 | Tanaka et al. 2006l |
| *noxR* | EfM3.013400 | 81 | Takemoto et al. 2006m |
| *pacC* | EfM3.009480 | 36 | Lukito et al. 2015n |
| *plsA* | EfM3.019170 | 294 | Green et al. 2019o |
| *proA* | EfM3.060970 | 149 | Tanaka et al. 2013p |
| *racA* | EfM3.048590 | 162 | Tanaka et al. 2008q |
| *rhgA* | EfM3.030930 | 1521 | Bassett et al. 2016r |
| *sakA* | EfM3.073930 | 128 | Eaton et al. 2010s |
| *sidN* | EfM3.029790 | 6 | Johnson et al. 2013t |
| *so* (soft) | EfM3.015580 | 37 | Charlton et al. 2012u |
| *symB* | EfM3.029010 | 163 | Green et al. 2017v |
| *symC* | EfM3.029020 | 4 | Green et al. 2017 |
| *velA* | EfM3.049680 | 129 | Rahnama et al. 2018w |

a RPKM value (reads per kilobase of exon model per million mapped reads) is the mean of the three choke stroma sequence replicates. The expression of these genes in the asymptomatic inflorescence tissues was not significantly different from those of the choke stroma tissues.

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