**Table S1.** Evaluation of genome annotation quality using BUSCO.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Protein dataset | NCBI BioProject | Number of proteins | BUSCO Report(Ascomycota lineage dataset) | BUSCO Report(Saccharomycetales lineage dataset) |
| CBS573 (this study) | PRJNA434433 | 5140 | C:91.7%[S:91.2%,D:0.5%],F:4.3%,M:4.0%,n:1315 | C:80.0%[S:79.4%,D:0.6%],F:9.4%,M:10.6%,n:1711 |
| 81-B-5 (Cuomo *et al.*) | PRJNA381554 | 4949 | C:86.3%[S:85.6%,D:0.7%],F:7.1%,M:6.6%,n:1315 | C:74.7%[S:74.1%,D:0.6%],F:11.9%,M:13.4%,n:1711 |
| SD108 (Xiao *et al.*) | PRJNA257499 | 7107 | C:82.4%[S:79.3%,D:3.1%],F:9.8%,M:7.8%,n:1315 | C:71.0%[S:67.7%,D:3.3%],F:12.8%,M:16.2%,n:1711 |
| 129 (van Rijswijck *et al.*) | PRJNA381597 | 5385 | C:79.6%[S:76.9%,D:2.7%],F:11.3%,M:9.1%,n:1315 | C:66.6%[S:64.0%,D:2.6%],F:14.2%,M:19.2%,n:1711 |