

Table S1. Genomic resources and genome completeness of *F. oxysporum* strains used in this study. A) Lists the strains analyzed along with their data sources.

Strain Name	Strain's Abbreviation	GenBank Assembly Number	PacBio Reads
<i>Fusarium oxysporum</i> Fo47	Fo47	GCA_013085055.1	SRR11526760
<i>Fusarium oxysporum</i> f. sp. <i>conglutinans</i> Fo5176	Fo5176	GCA_030345115.1	SRR22746921
<i>Fusarium oxysporum</i> f. sp. <i>Cubense</i> II5	II5	GCA_031834405.1	From Li Jun Ma (UMass Amherst)
<i>Fusarium oxysporum</i> f. sp. <i>Lycopersici</i> race3	Race3	GCA_003977725.1	SRR7892102
<i>Fusarium oxysporum</i> f. sp. <i>fragariae</i> BRIP62122a	BRIP62122	GCA_016166325.2	From Peter Henry (USDA)
<i>Fusarium oxysporum</i> f. sp. <i>fragariae</i> MAFF727510	MAFF727510	GCA_016164145.2	From Peter Henry (USDA)
<i>Fusarium oxysporum</i> f. sp. <i>fragariae</i> GL1080	GL1080	GCA_016170085.2	SRR10386447
<i>Fusarium oxysporum</i> f. sp. <i>fragariae</i> GL1315	GL1315	GCA_016166095.2	From Peter Henry (USDA)
<i>Fusarium oxysporum</i> f. sp. <i>fragariae</i> GL1381	GL1381	GCA_016170095.2	SRR10313629

B) Results of BUSCO genome completeness analysis based on 1,706 conserved fungal genes from the fungi_odb10 dataset.

Isolate	Complete BUSCO (%)	Complete and single-copy BUSCOs (%)	Complete and duplicated BUSCOs (%)	Fragmented BUSCOs (%)	Missing BUSCOs (%)
Fo47	98.0	97.1	0.9	0.1	1.9
Fo5176	98.2	94.3	3.9	0.1	1.7
II5	98.2	97.7	0.5	0.2	1.6
Race3	97.7	97.3	0.4	0.4	1.9
BRIP62122	98.3	97.7	0.6	0.2	1.5
MAFF727510	95.0	94.4	0.6	0.2	4.8
GL1080	98.1	97.2	0.9	0.2	1.7
GL1315	98.0	97.2	0.8	0.2	1.8
GL1381	97.9	97.1	0.8	0.3	1.8