S7 Table: Plasmids and fungal strains used in this study.

Plasmids/Strains	Description	Reference
Plasmids		
Ppk2-OSCAR-GFP	Plasmid for construction of gene disruption plasmid	Xu et al., 2014
pA-Bar	Plasmid for construction of gene disruption plasmid	Xu et al., 2014
pPK2-Ptef	For expression of *Pks1* of *M. robertsii* in *M. album*	Guo et al., 2017
pYH-WA-pyrG	*URA3*, *WA flanking*, *AfpyrG*, *Amp*	Yin et al., 2013
pYH-WA-pyrG-gpdA	*URA3*, *WA flanking*, *Afribo*, *Amp*, *gpdA*	This study
pYPZ56.1	*gpdA(p)::Pks1* in pYH-WA-pyrG-gpdA	This study
***Metarhizium* strains**		
Metarhizium robertsii	ARSEF2575, a generalist	He et al., 2014
Metarhizium anisopliae	ARSEF549, a generalist	He et al., 2014
Metarhizium brunneum	ARSEF3297, a generalist	He et al., 2014
Metarhizium guizhouense	ARSEF977, a species with an intermediate host range	He et al., 2014
Metarhizium majus	ARSEF297, a species with an intermediate host range	He et al., 2014
Metarhizium acridum	ARSEF324, a specialist	He et al., 2014
Metarhizium album	ARSEF1941, a specialist	He et al., 2014
Δ*Mero-Hog1*	The deletion mutant of *Hog1-MAPK* in *M. robertsii*	Chen et al., 2016
Δ*Mero-Fus3*	The deletion mutant of *Fus3-MAPK* in *M. robertsii*	Chen et al., 2016
Δ*Mero-Slt2*	The deletion mutant of *Slt2-MAPK* in *M. robertsii*	Chen et al., 2016
Δ*Mr-OPY2*	The deletion mutant of *Mr-OPY2* in *M. robertsii*	Guo et al., 2017
***Aspergillus nidulans* background strains**		
LO8030	*pyroA4, riboB2, pyrG89, nkuA::argB, sterigmatocystin cluster (AN7804-AN7825)Δ, emericellamide cluster (AN2545-AN2549)Δ, asperfuranone cluster (AN1039-AN1029)Δ, monodictyphenone cluster (AN10023-AN10021) Δ, terrequinone cluster (AN8512-8520)Δ, austinol cluster part 1 (AN8379-AN8384)Δ, austinol cluster part 2 (AN9246-9259)Δ, F9775 cluster (AN7906-7915)Δ, asperthecin cluster (AN6000-AN6002)Δ*	(Chiang *et al*., 2016)
TYPZ26.1	*gpdA:: Pks1::AfpyrG* in LO8030	This study