

## Supplementary Materials

**Table S1.** Bioactivity of different fungal strains against *Phyllotreta striolata*.

Fungi species	Number	Corrected Mortality (%)		
		7 d	9 d	11 d
<i>Beauveria bassiana</i>	BbGX22A02	6.67 ± 0.09	6.67 ± 0.09	6.67 ± 0.09
	BbGX6502	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	BbGX7303	6.67 ± 0.09	6.67 ± 0.09	40.00 ± 0.28
	BbGX10A01	10.00 ± 0.08	13.33 ± 0.05	26.67 ± 0.09
	BbGX7703	6.67 ± 0.09	20.00 ± 0.28	20.00 ± 0.28
	BbGX77A01	13.33 ± 0.09	13.33 ± 0.09	40.00 ± 0.16
<i>B. brongniartii</i>	BbGX70A02	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
<i>Cordyceps fumosorosea</i>	IfGX20A02	0.00 ± 0.00	6.67 ± 0.09	6.67 ± 0.09
	IfGX21G01	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	IfGX2802	0.00 ± 0.00	6.67 ± 0.09	6.67 ± 0.09
	IfGX21L01	13.33 ± 0.09	13.33 ± 0.09	13.33 ± 0.09
	IfGX33H05	0.00 ± 0.00	26.67 ± 0.25	26.67 ± 0.25
	IfGX30S01	6.67 ± 0.09	6.67 ± 0.09	20.00 ± 0.16
	IfGX30A01	0.00 ± 0.00	13.33 ± 0.19	20.00 ± 0.16
	IfGX70A01	13.33 ± 0.09	13.33 ± 0.09	13.33 ± 0.09
	IfGX7704	6.67 ± 0.05	13.33 ± 0.05	16.67 ± 0.05
	IfGZ4304	6.67 ± 0.09	6.67 ± 0.09	13.33 ± 0.09
<i>C. farinosa</i>	IfGX2303	13.33 ± 0.19	13.33 ± 0.19	13.33 ± 0.19
	IfGX6701	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	IcGX32S01	0.00 ± 0.00	26.67 ± 0.09	26.67 ± 0.09
	MaYN8304	20.00 ± 0.04	30.00 ± 0.08	38.33 ± 0.13
<i>Metarhizium anisopliae</i>	MaGX33H02	6.67 ± 0.09	6.67 ± 0.09	6.67 ± 0.09
	MaGX7002	0.00 ± 0.00	6.67 ± 0.09	6.67 ± 0.09
	MaGX23A01	0.00 ± 0.00	0.00 ± 0.00	6.67 ± 0.09

	MaGX19S02	46.67 ± 0.09	46.67 ± 0.09	53.33 ± 0.09
	MaGX13S01	0.00 ± 0.00	0.00 ± 0.00	6.67 ± 0.09
	MaGX19J01	0.00 ± 0.00	6.67 ± 0.09	6.67 ± 0.09
	MaGX0601	0.00 ± 0.00	20.00 ± 0.28	20.00 ± 0.28
	MaGX7201	13.33 ± 0.09	20.00 ± 0.16	20.00 ± 0.16
	MaGX02A02	0.00 ± 0.00	0.00 ± 0.00	3.33 ± 0.05
	MaGX09A02	3.33 ± 0.05	10.00 ± 0.08	20.00 ± 0.16
	MaYN8304	20.00 ± 0.09	30.00 ± 0.09	38.33 ± 0.09
	MaGX7702	6.67 ± 0.09	20.00 ± 0.00	20.00 ± 0.00
<i>M. guizhouense</i>	MgGX1103	0.00 ± 0.00	13.33 ± 0.09	23.33 ± 0.17
<i>M. flavoviride</i>	MfGX6501	6.67 ± 0.09	6.67 ± 0.09	13.33 ± 0.09
	MfGX33Y01	0.00 ± 0.00	0.00 ± 0.00	6.67 ± 0.09
<i>Pochonia</i>	P.GX0801	6.67 ± 0.09	16.67 ± 0.13	26.67 ± 0.21
<i>P.chlamydosporia</i>	PcGX13Z02	0.00 ± 0.00	6.67 ± 0.09	6.67 ± 0.09
	PcGX2301	13.33 ± 0.09	13.33 ± 0.09	13.33 ± 0.09
	PcGX33Y03	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PcGX08A01	10.00 ± 0.00	13.33 ± 0.05	20.00 ± 0.08
<i>P. bulbillosa</i>	PbGX13S04	0.00 ± 0.00	13.33 ± 0.12	13.33 ± 0.12
	PbGX32S02	0.00 ± 0.00	6.67 ± 0.09	6.67 ± 0.09
	PbGX16S04	0.00 ± 0.00	13.33 ± 0.19	13.33 ± 0.19
<i>Purpureocillium lilacinum</i>	PIYN6601	0.00 ± 0.00	6.67 ± 0.09	6.67 ± 0.09
	PIGX7402	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PIGX7706	6.67 ± 0.09	13.33 ± 0.09	13.33 ± 0.09
	PIGX1001	6.67 ± 0.09	6.67 ± 0.09	6.67 ± 0.09
	PIGX77A04	6.67 ± 0.09	6.67 ± 0.09	6.67 ± 0.09
	PIGX0802	3.33 ± 0.05	6.67 ± 0.05	13.33 ± 0.09
	PIGX06A01	6.67 ± 0.05	10.00 ± 0.05	13.33 ± 0.05
	PIGX7202	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00

	PIGX6802	0.00 ± 0.00	0.00 ± 0.00	6.67 ± 0.09
	PIGX70A03	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PIGX17A01	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PIYN0401	6.67 ± 0.09	13.33 ± 0.09	23.33 ± 0.17
	PIYN0203	15.00 ± 0.15	20.00 ± 0.19	28.33 ± 0.27
	PIGX16S03	6.67 ± 0.09	20.00 ± 0.16	3.33 ± 0.25
	PIGX1702	20.00 ± 0.16	20.00 ± 0.16	20.00 ± 0.16
	PIGX6901	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PIGX7101	13.33 ± 0.09	13.33 ± 0.09	13.33 ± 0.09
	PIGX7003	26.67 ± 0.25	26.67 ± 0.25	26.67 ± 0.25
	PIGX04A01	6.67 ± 0.05	10.00 ± 0.08	16.67 ± 0.09
	PIGX0501	0.00 ± 0.00	3.33 ± 0.05	6.67 ± 0.09
	PIGX0401	6.67 ± 0.05	13.33 ± 0.05	23.33 ± 0.05
	PIGX0201	20.00 ± 0.28	20.00 ± 0.28	26.67 ± 0.25
	PIGX19S01	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PIYN6701	6.67 ± 0.09	33.33 ± 0.09	40.00 ± 0.28
	PIGX7302	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PIYN5901	6.67 ± 0.09	6.67 ± 0.09	13.33 ± 0.09
	PIGZ5801	0.00 ± 0.00	13.33 ± 0.19	26.67 ± 0.25
	PIYN8102	20.00 ± 0.28	33.33 ± 0.34	33.33 ± 0.34
	PIYN8002	6.67 ± 0.09	20.00 ± 0.16	20.00 ± 0.16
	PIYN8202	26.67 ± 0.09	26.67 ± 0.09	33.33 ± 0.09
<i>P. lavendulum</i>	PIGZ4402	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PIGX6801	5.00 ± 0.00	18.33 ± 0.05	30.00 ± 0.07
	PIGX6503	0.00 ± 0.00	0.00 ± 0.00	6.67 ± 0.09
<i>Paecilomyces marquandii</i>	PmGX7701	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PmGX12Y01	0.00 ± 0.00	0.00 ± 0.00	6.67 ± 0.09
	PmGX7001	0.00 ± 0.00	0.00 ± 0.00	6.67 ± 0.09

	PmGX24G02	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
	PmGX33H03	6.67 ± 0.09	20.00 ± 0.16	20.00 ± 0.16
	PmYN8303	6.67 ± 0.09	6.67 ± 0.09	20.00 ± 0.28
	PmGX7301	0.00 ± 0.00	0.00 ± 0.00	6.67 ± 0.09
	PmGX6506	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
<i>Paecilomyces</i>	P.YN0202	5.00 ± 0.00	6.67 ± 0.02	6.67 ± 0.02
	P.GX77A03	6.67 ± 0.09	13.33 ± 0.19	13.33 ± 0.19
	P.GX78A01	0.00 ± 0.00	6.67 ± 0.09	13.33 ± 0.09
<i>P. carneus</i>	PcYN8101	13.33 ± 0.09	13.33 ± 0.09	13.33 ± 0.09
	PcYN7801	6.67 ± 0.09	13.33 ± 0.09	20.00 ± 0.00
	PcYN8001	6.67 ± 0.09	13.33 ± 0.09	13.33 ± 0.09
<i>Paecilomyces</i>	P.GX6505	0.00 ± 0.00	6.67 ± 0.09	6.67 ± 0.09
<i>P. citrinum</i>	PcGX1605	6.67 ± 0.09	20.00 ± 0.16	20.00 ± 0.16
	PcGX21L02	6.67 ± 0.09	13.33 ± 0.09	13.33 ± 0.09
	PcGX78A02	0.00 ± 0.00	6.67 ± 0.09	6.67 ± 0.09
<i>Acremonium</i>	A.YN0403	11.67 ± 0.08	33.33 ± 0.05	46.67 ± 0.06
<i>Doratomyces</i>	D.GX11G02	3.33 ± 0.05	3.33 ± 0.05	3.33 ± 0.05
<i>Lecanicillium</i>	L.GZ5601	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
<i>Mortierella</i>	M.GX13S05	0.00 ± 0.00	13.33 ± 0.09	20.00 ± 0.00
<i>Nectria</i>	N.GX2905	8.33 ± 0.08	16.67 ± 0.10	23.33 ± 0.14
<i>Scopulariopsis brumptii</i>	SbGX7705	10.00 ± 0.00	20.00 ± 0.08	30.00 ± 0.14
<i>Talaromyces</i>	T.GX3101	0.00 ± 0.00	13.33 ± 0.12	13.33 ± 0.12
	T.GX05A01	0.00 ± 0.00	0.00 ± 0.00	6.67 ± 0.05

The fungal strain concentration:  $1 \times 10^7$  spores/mL. The mortality data were mean ± SE. The numbers of insects for test were 10 in each treatment. The experiment was repeated three times.