

Figure S1. Morphologic changes of ginger aboveground (A) Control, treatment with distilled water; (B) Infection with *F. solani* for 30 days; and rhizome (C) Control, treatment with distilled water; (D) Infection with *F. solani* for 7 days.

Table S2. Morbidity of ginger plants and rhizomes inoculated by *F. solani* for 30 days and 7 days, respectively.

Treatments	disease index (%)
Inoculate at the stem base	70.12
Inoculate at the rhizome	0

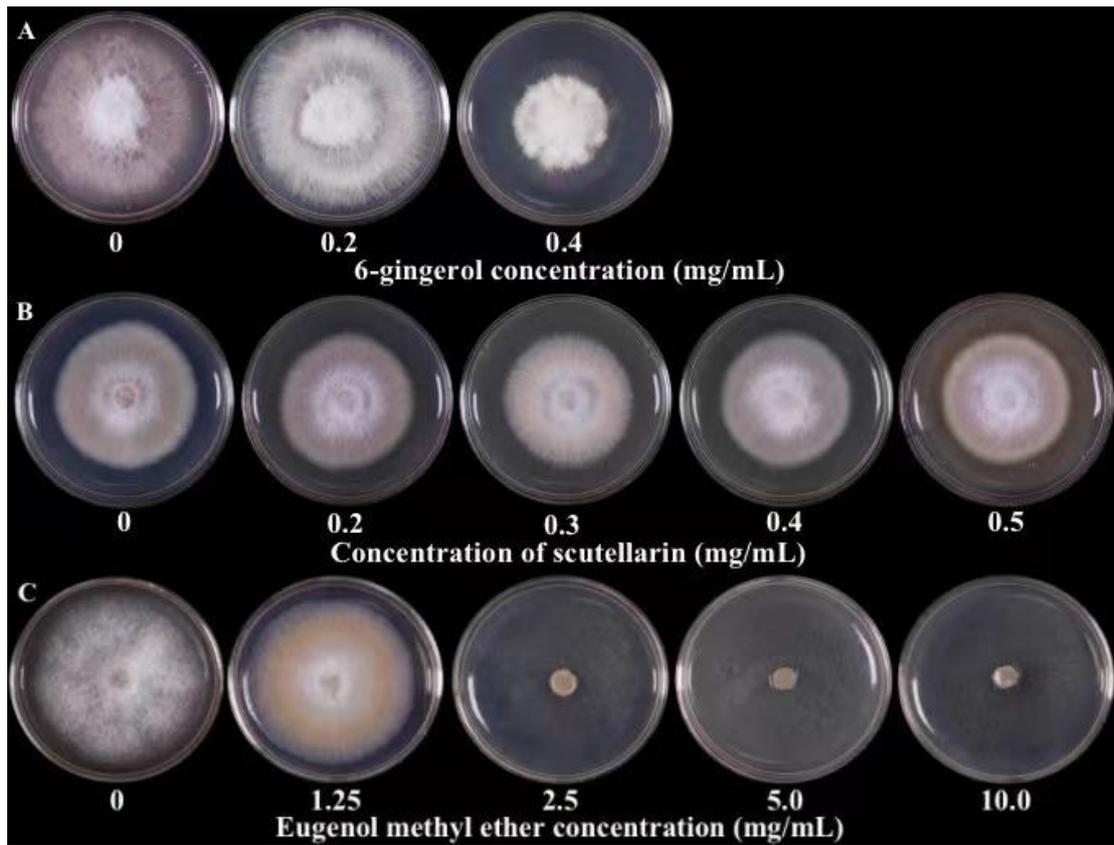


Figure S2. Effects of different concentrations of 6-gingerol on *F. solani* growth(A). Effects of different concentrations of scutellarin on *F. solani* growth(B). Effects of different concentrations of Eugenol methyl ether on *F. solani* growth(C).

Table S3. The concentrations of 4-hydroxybenzaldehyde, quercetin, [6]-Gingerol, Scutellarein (5,6,7,4'-Tetrahydroxyflavone) and Methyleugenol in the rhizome and aboveground.

Compounds	Formula	Class	Underground-Content	Aboveground-Content
4-Hydroxybenzaldehyde	C ₇ H ₆ O ₂	Phenolic acids	4.1889%	0.7593%
Quercetin	C ₁₅ H ₁₀ O ₇	Flavonols	0.0863%	0.000001029%
[6]-Gingerol	C ₁₇ H ₂₆ O ₄	Phenolic acids	1.0513%	0.0425%
Scutellarein (5,6,7,4'-Tetrahydroxyflavone)	C ₁₅ H ₁₀ O ₆	Flavonoid	0.6354%	0.0497%
Methyleugenol	C ₁₁ H ₁₄ O ₂	Phenolic acids	0.0133%	0.0018%