

## Supplementary information

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3 **Dimethyl disulfide exerts antifungal activity against *Sclerotinia minor* by damaging its**  
4 **membrane and induces systemic resistance in host plants**

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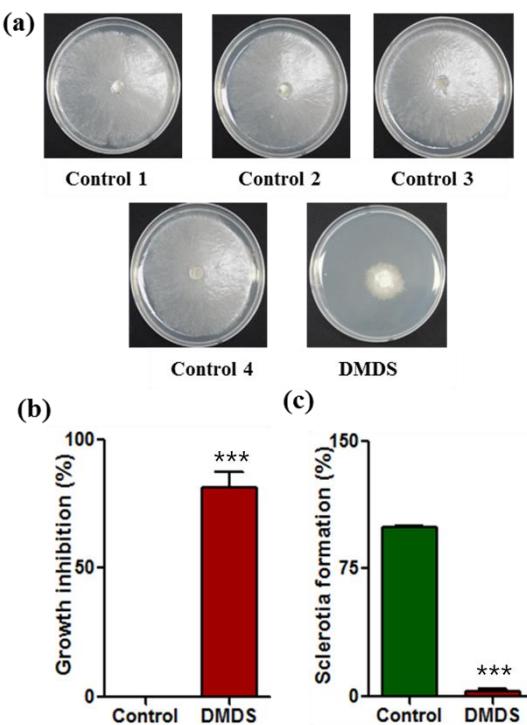
14 \*Corresponding authors

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16 **Supplementary Table 1.** List of primers used in this study

Name	Primer sequence (5' → 3')	Target gene	Gene ID
ACT2-F	CCAGGCACACAGGTGTTATG	Actin	101267214
Act2-R	GCCTCAGTCAGGAGAACAGG		
EXP2-F	CGAACCCGTCTCTACCTAACAA	Expansin	543582
EXP2-R	GGACGATAACCGGCTTGTATT		
EXPA5-F	ACTTGAGCCTAAGCTTGTAGTC	Expansin	543558
EXPA5-R	CCGTATCCCGTGTGTATAAAT		
ARF5-F	AGCTCCAATAGGCCAGGATT	Auxin response factor	100736448
ARF5-R	ACTGTGCTCCGCTGTTACT		
ACS2-F	ATGTCGAGTTCCGGTTAGTATCT	1-amino-cyclopropane-1-carboxylate synthase	606304
ACS2-R	CTAACCTCATCGCGCTTCT		
RAP2-7-F	GTCACTCCAGTGCCAGTATT	Ethylene-responsive transcription factor	101252772
RAP2-7-R	TAGTTGGTTGCTGGTAG,		
APX2-F	CAGGCTGTGACCAC TTGAGA	Ascorbate peroxidase	778224
APX2-R	TCAAAACCAGAACGCTCC		
PA2-F	AGAAGAGCAAATCAAGGAGGAG	Peroxidase	101254854
PA2-R	AGTAATGGTGAGGCCAACAG		
PR1-F	AAAATGGTGGCAAATTCAA	Pathogenesis-related protein	101267538
PR1-R	TTTTCTCATCAGCCCAGC		
PR5-F	GAGTCCTGGATTGCAAAGGA	Pathogenesis-related protein	101264959
PR5-R	AAGTGAACCAGGGCATT		

17 **Supplementary Figure 1.** Effect of DMDS on fungal growth. (a) Dual plate assay showing the effect  
18 of DMDS on fungal growth, (b) fungal growth inhibition, (c) sclerotia formation. Asterisks indicate  
19 significant change in the values calculated by Student's *t*-test (\*\*\*,  $p < 0.001$ ).



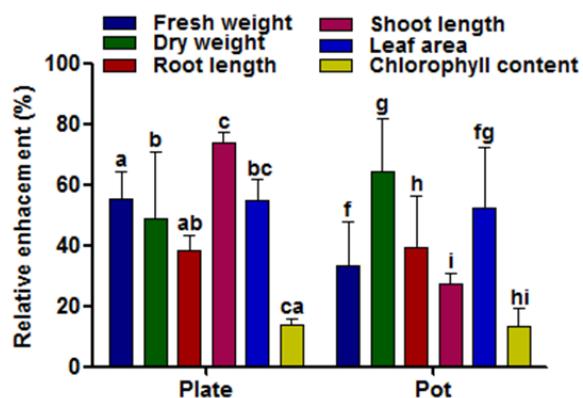
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23 **Supplementary Figure 2.** Relative enhancement of different plant growth parameters in plate and pot  
24 assays. Small letters above the error bars represent significant differences according to the  
25 Bonferroni's multiple comparison test ( $p$  value = 0.05).

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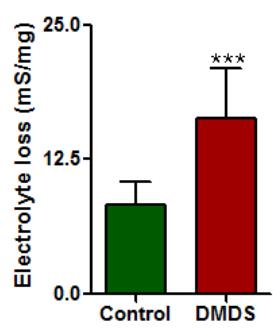
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29 **Supplementary Figure 3.** Electrolyte leakage. Asterisk indicates a significant change in the values  
30 calculated by Student's *t*-test (\*\*\*,  $p<0.001$ ).

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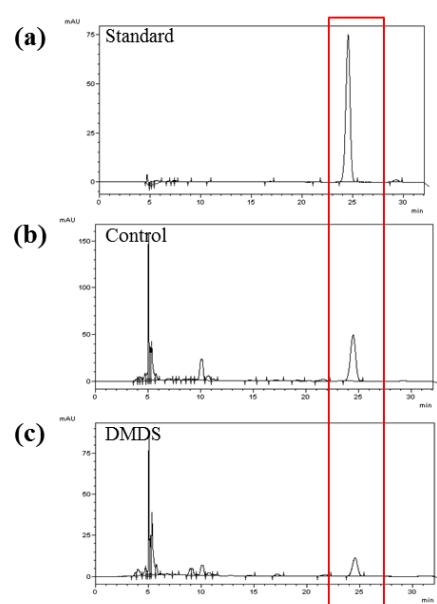


34 **Supplementary Figure 4.** Chromatogram showing ergosterol (a) Standard (b) Control (c) DMDS.

35 Ergosterol was determined by HPLC Spectra-Physics equipment with UV 100 detector and a  
36 Supelcosil C18 column at room temperature. The mobile phase was HPLC grade methanol:  
37 acetonitrile (80:20 v/v). The retention time in these conditions was about  $24.5 \pm 0.2$  min at a flow rate  
38 of 0.6 mL/min.

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