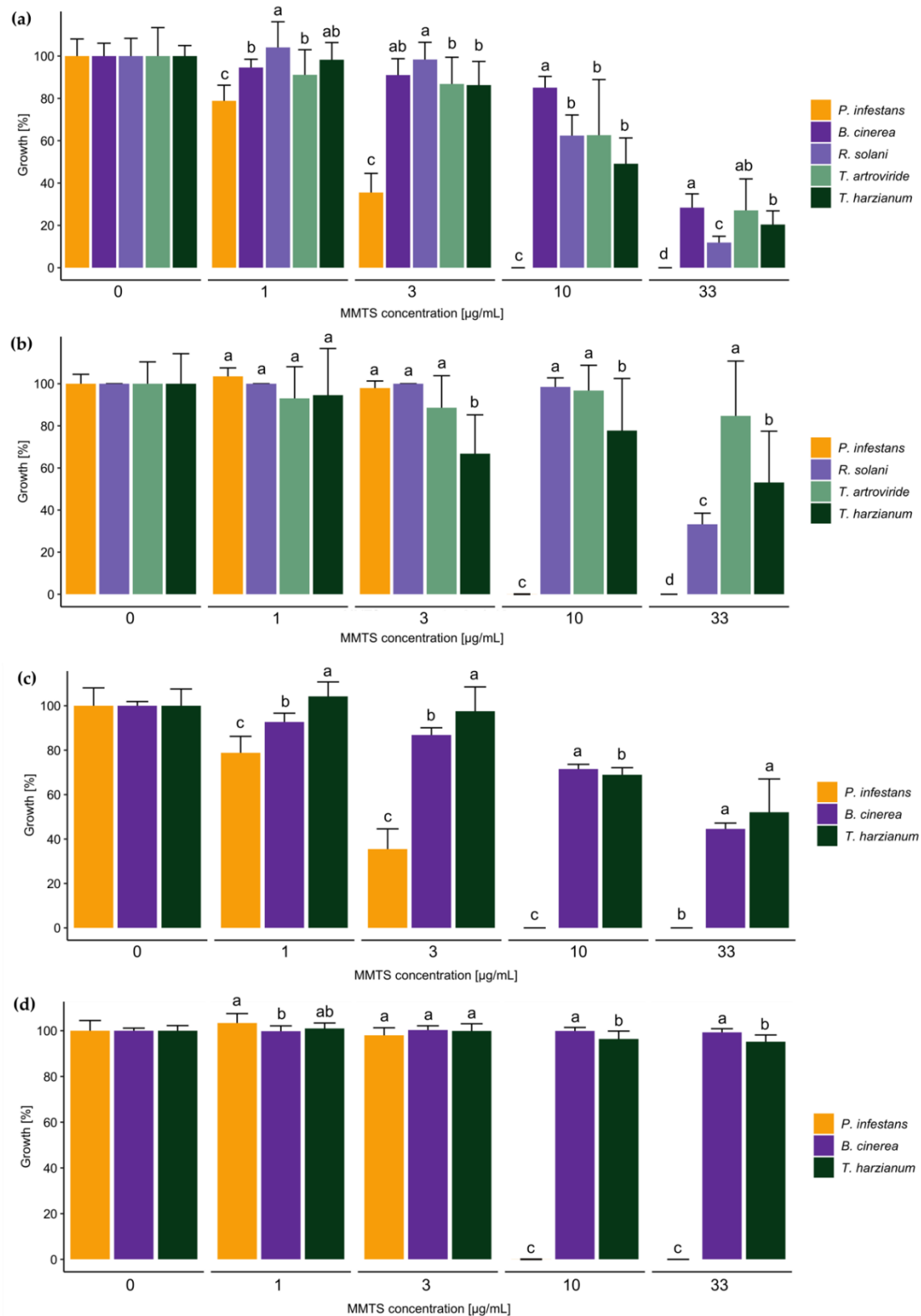


**Table S1.** Growth parameters obtained for Bakers' yeast grown at different MMTS concentrations.

MMTS Treatment	Carrying Capacity k [OD 600]	Growth Rate Constant r	Time at Inflection Point [h]
DMSO Control	0.927	0.459	7.855
1.95 µg/mL	0.919	0.528	7.685
3.9 µg/mL	0.901	0.591	9.069
7.8 µg/mL	0.881	0.465	11.988
15.6 µg/mL	0.005	0.241	3.463

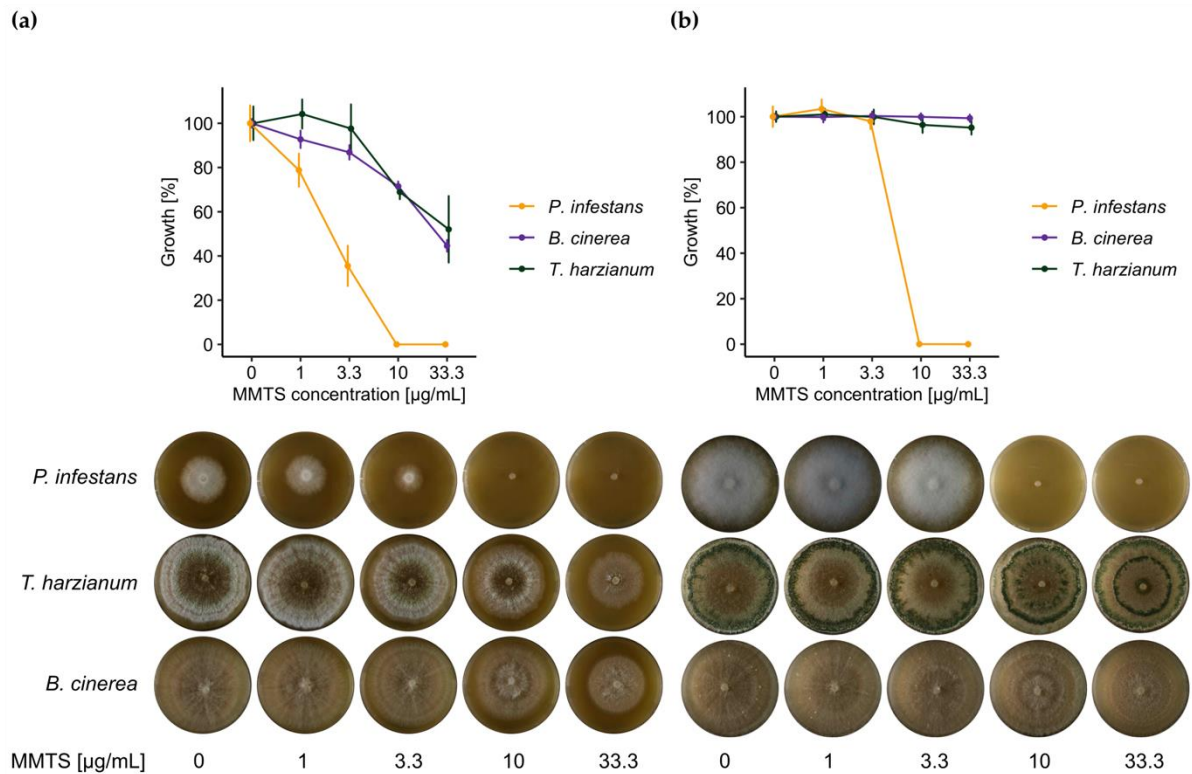
**Table S2.** Minimal inhibiting concentrations (MICs) of MMTS for wildtype bacterial species and clinical bacterial species carrying different antibiotic marker genes. MICs were determined in cation-adjusted Muller-Hinton broth (CA-MHB). A mother-solution of MMTS of 256 µg/mL was prepared by dissolving MMTS in water and serial dilutions were obtained by mixing with CA-MHB in 96 well plates. A range of concentrations of 0.125 µg/mL–128 µg/ml was tested against fresh bacterial colonies adjusted to final densities of roughly 10<sup>6</sup> CFU/mL in CA-MHB. The experiment was carried out in quadruplicates for each bacterial strain. Plates were sealed with parafilm and incubated at 37 °C for 16 h. Growth +/- was visually assessed after incubation.

Species	Resistance Phenotype and Determinant	MIC MMTS (µg/mL)
<i>E. coli</i>	WT	16
<i>E. coli</i>	Plasmid-mediated Colistin Resistance MCR-1	32
<i>E. coli</i>	Carbapenemase OXA-48, Extended spectrum β-lactamase CTX-M-9	32
<i>K. pneumoniae</i>	Carbapenemase OXA-48	32
<i>K. pneumoniae</i>	Cephalosporinase DHA	32
<i>A. baumannii</i>	Colistin Resistant (chromosomally encoded)	8
<i>A. baumannii</i>	WT	16
<i>P. aeruginosa</i>	Colistin Resistant (chromosomally encoded)	16
<i>C. freundii</i>	Extended spectrum β-lactamase CTX-M-1	32
<i>S. aureus</i>	Methicillin Susceptible	32
<i>S. aureus</i>	Methicillin Resistant MecA (MRSA)	16
<i>S. aureus</i>	Daptomycin Resistant	32
<i>E. faecalis</i>	Vancomycin Susceptible	64
<i>E. faecalis</i>	Linezolid Resistant, Vancomycin Resistant VanA	32 – 64
<i>E. faecalis</i>	Linezolid Resistant, Vancomycin Resistant VanA	32
<i>E. faecium</i>	Linezolid Resistant, Vancomycin Resistant VanA	64
<i>E. faecium</i>	Linezolid Resistant	32 – 64
<i>S. epidermidis</i>	Linezolid Resistant	16

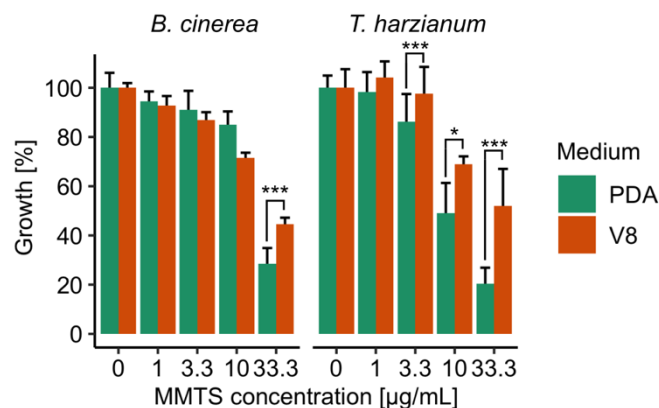


**Figure S1.** Significant differences in growth area inhibition of mycelial growth of *P. infestans* on V8 medium and, *T. harzianum*, *T. artroviride*, *R. solani*, *B. cinerea* grown on PDA medium (a), (b) as well as *R. solani* and *B. cinerea* grown on V8 instead of PDA compared to *P. infestans* (c), (d) at MMTS concentrations of 1–33 µg/mL. Growth area quantifications in percentage to the solvent control are shown at an early timepoint; (a), (c) and a later timepoint; (b), (d). Average growth compared to the solvent control (100%) depicted in the upper graphs corresponds to the mean of 8 replicates pooled from two independent experiments with four replicates each. Error bars represent standard deviation ( $n = 8$ ). Letters indicate significant differences in growth area percentages between fungi and

oomycete at a given MMTS concentration according to ANOVA and LSD (Least Significant Difference) for post hoc analysis ( $p < 0.05$ ).

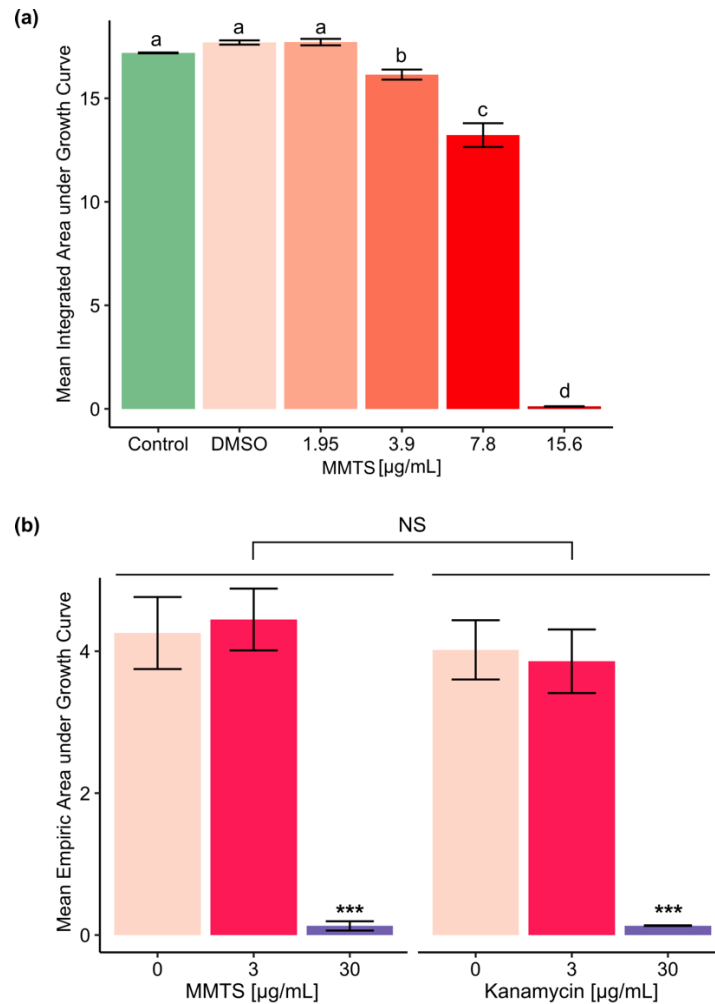


**Figure S2.** Inhibition of mycelial growth of *P. infestans*, *T. harzianum* and *B. cinerea* grown on V8 medium with added MMTS at concentrations of 1–33 µg/mL. Representative pictures and corresponding growth area quantifications in percentage to the solvent control are shown at an early timepoint: (a) and a later timepoint; (b). Timepoint 1 corresponded to 4–7 days after inoculation, Timepoint 2 to 12–14 days after inoculation (depending on mycelial growth speed). Average growth compared to the solvent control (100%) depicted in the upper graphs corresponds to the mean of 8 replicates pooled from two independent experiments with four replicates each. Error bars represent standard deviation ( $n = 8$ ). Significant differences in growth percentages at a given MMTS concentration between fungal species and *P. infestans* are shown in Figure S1cd.

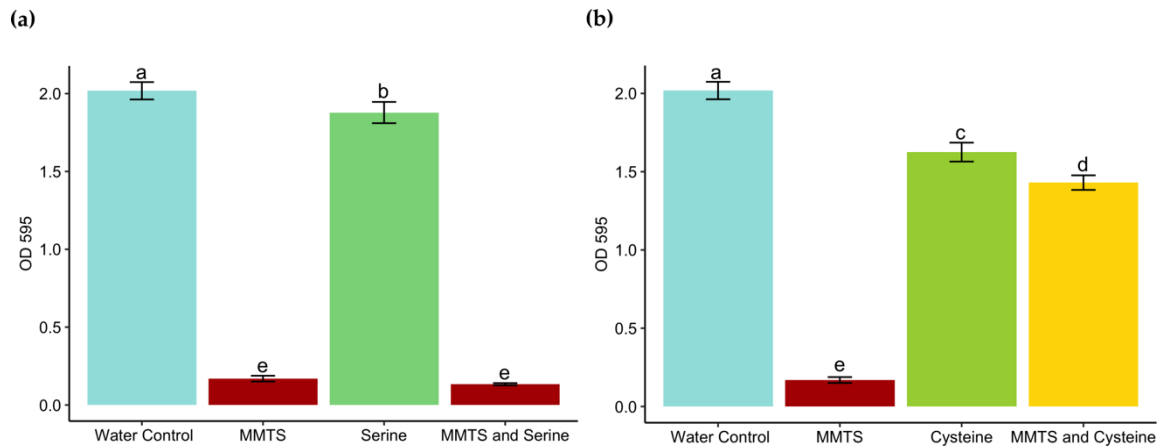


**Figure S3.** Significant differences in inhibition of mycelial growth of *T. harzianum* and *B. cinerea* grown on V8 or PDA medium with added MMTS at concentrations of 1–33 µg/mL. Growth area quantifications in percentage to the average control are shown at an early timepoint. Bars in graphs

correspond to average growth percentage of 2 repetitions with 4 replicates each. Error bars represent standard deviation. Asterisks indicate significant differences in growth area percentages between media for a given MMTS concentration and fungus according to ANOVA and Tukey's HSD for post-hoc analysis (significance levels:  $p$ -values:  $\leq 0.001$  \*\*\*,  $\leq 0.01$  \*\*,  $\leq 0.5$  \*).



**Figure S4.** Significant differences between growth curves of Baker's yeast (a) treated with 1.95–3.9 μg/mL MMTS and *D. solani* (b) treated with 0–30 μg/mL MMTS or kanamycin. (a): The average integrated area under the growth curve, calculated by fitting a log-logistic model to the data, corresponds to the mean of 3 replicates ( $n = 3$ ). Letters indicate significant differences between integrated areas according to ANOVA followed by LSD for post-hoc analysis. (b); The average empiric area under the growth curve, calculated by summing up the trapezoids connecting the Data points under growth curves, corresponds to the mean of 3 replicates ( $n = 3$ ). A two-way ANOVA followed by Tukey's HSD for post-hoc analysis was applied to the data to calculate significant differences between growth curves of *D. solani* exposed to different concentrations of MMTS and kanamycin (significance levels:  $p$ -values:  $\leq 0.001$  \*\*\*,  $\leq 0.01$  \*\*,  $\leq 0.05$  \*).



**Figure S5.** Trapping of MMTS by cysteine in the growth medium. A fresh starter culture of *D. solani* in LB was diluted with LB in test tubes to an OD<sub>595</sub> of 0.05. MMTS, cysteine, serine, MMTS and cysteine or MMTS and Serine were then added to a final concentration of  $8 \times 10^{-7}$  mol/mL of each compound, which corresponds—for MMTS—to approximately 100  $\mu\text{g/mL}$ . This concentration was chosen because 100  $\mu\text{g/mL}$  of MMTS alone completely inhibits bacterial growth. Mother solutions of MMTS, cysteine and serine were realized in water. Bacterial cultures were incubated over night at 28 °C and 180 rpm. OD was measured after incubation. Panels (a) and (b) show the same data but split into two graphs for better visualization, (a) showing the effect on bacterial growth of serine added additionally to MMTS and (b) showing the effect of cysteine added additionally to MMTS. Bars represent the average OD of 2 repetitions with 3 replicates each with error bars corresponding to standard error ( $n = 6$ ). Letters indicate significant differences between treatments according to ANOVA and Tukey's honest significant difference for post hoc analysis (*p*-value < 0.05).