

Figure S1 An example of stair-step “weak” synergism after 24 incubation (isolate MDR-8; clove EO)

Description: the light blue dashed lines mark the area where the interaction between enrofloxacin and essential oil occur (a total of six wells). Blue wells indicate 99.9% reduction of *E. coli*. Faint pink border wells indicate incomplete interaction (some percentage of *E. coli* survived the 18 h incubation). Intense pink wells indicate an ineffective antimicrobial agent (presence of live cells). ➡ individual MIC for clove essential oil (0.125 % v/v) ➡ individual MIC for enrofloxacin (4 µg/mL) (-) negative control + positive control  
 SYN - “weak” synergy (FICI=0.5) with an equal reduction of the effective dose  
 ADD#1 - additive effect (FICI = 0.625) to the maximal reduction of enrofloxacin concentrations  
 ADD#2 - additive effect (FICI = 0.625) to the maximal reduction of clove EO content

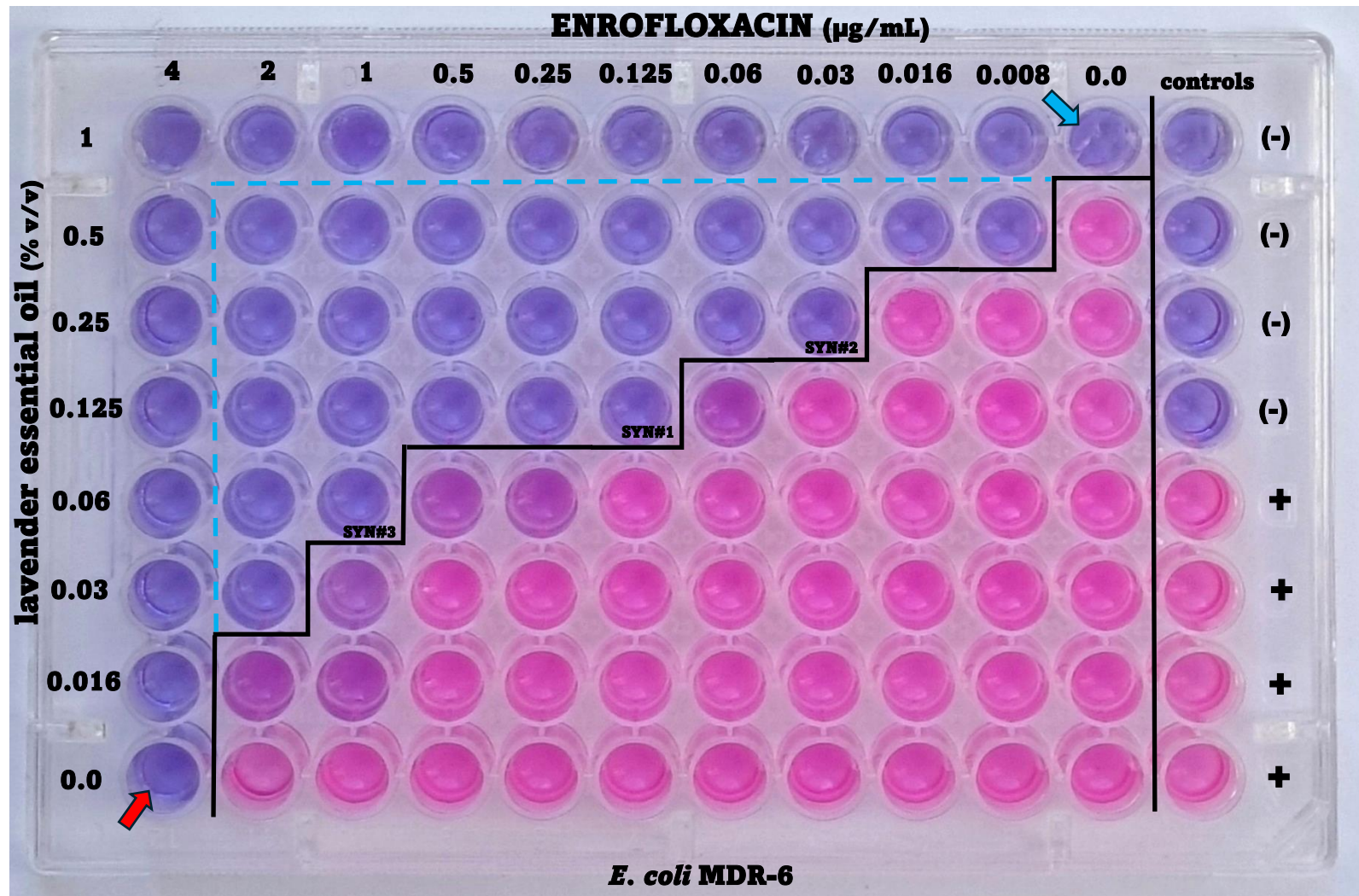


Figure S2 An example of “strong” synergism after 24 incubation (isolate MDR-6; lavender EO)

Description: the light blue dashed lines mark the area where the interaction between enrofloxacin and essential oil occur (a total of twenty-four wells). Blue wells indicate 99.9% reduction of *E. coli*. Faint pink border wells indicate incomplete interaction (some percentage of *E. coli* survived the 18 h incubation). Intense pink wells indicate an ineffective antimicrobial agent (presence of live cells). ➡ individual MIC for lavender essential oil (1 % v/v) ➡ individual MIC for enrofloxacin (4  $\mu\text{g/mL}$ ) (-) negative control + positive control

SYN#1 - “strong” synergy ( $\text{FIC}_i = 0.155$ ) with a reduction in lavender EO content to the level of the best results for clove EO and the isolate is becoming susceptible to enrofloxacin

SYN#2 - “medium” synergy ( $\text{FIC}_i = 0.258$ ) to the maximal reduction of enrofloxacin concentrations with a reduction in lavender EO content to the level of the best results for cinnamon EO

SYN#3 - “medium” synergy ( $\text{FIC}_i = 0.31$ ) to the maximal reduction of lavender EO concentration; however, the isolate becomes only weak intermediate to enrofloxacin