Supplementary Text S3. Effects of root extracts on the virulence factors

(1) Determination of elastase. The supernatant was diluted 25 times and analyzed using the Thermo Pierce Fluorescent Protease Assay Kit according to the manufacturer.

(2) Determination of pyocyanin. After incubation, 4 mL of the bacterial solution was removed and centrifuged at 12000 rpm for 10 min at 4℃. The supernatant was thoroughly mixed with 4 mL chloroform and then centrifuged for an additional 10 min. 3 mL solution was taken out from the chloroform layer and then mixed with 1.5 mL HCl (0.2 M). After that, 200 μL of the upper layer was transferred to the 96-well plate, and the absorbance was measured at 520 nm.

(3) Determination of rhamnolipid. After incubation, the bacterial solution was removed and centrifuged at 4℃ at 10000 rpm for 10 min. The obtained supernatant was taken out and its pH was adjusted to 2 using HCl (6 M). Then, chloroform and methanol were added to the above solution at a volume ratio of 3:2:1 (supernatant:chloroform:methanol = 3:2:1, v/v/v). After thorough mixing, the solution in the chloroform layer was removed and dried under N_2, then 1 mL of deionized water was added. After that, 4 mL of anthrone-sulfuric acid solution (1 g/L) was added to the above sample, which was then placed in boiling water for 10 min. After the mixture was cooled to room temperature, its absorbance was measured at 620 nm using a spectrophotometer, and the concentration of rhamnolipid was calculated from a glucose standard solution.