Supplementary Figure 1

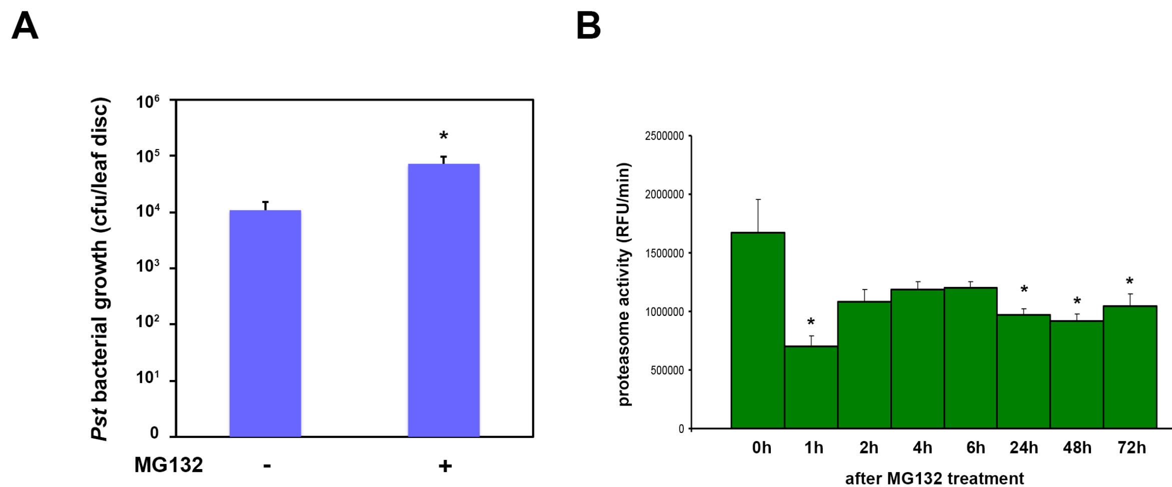

Figure S1: Inhibition of the proteasome by MG132 treatment significantly promotes bacterial growth of *Pseudomonas syringae* pv. *tomato* DC3000 (*Pst*) in *Arabidopsis thaliana*. **(A)** Bacterial density in leaves of *Arabidopsis thaliana* infected with *Pst*. Leaves were syringe infiltrated with a mixture of 100 µM MG132 and 1 x 10^4 cfu/mL of bacteria and bacterial multiplication was determined at 3 dpi. Each bar represents the mean of 3 biological replicates SD. Asterisks indicate a statistical difference according to Student's *t*-test (*, P < 0.05). **(B)** Proteasome activity in *Arabidopsis thaliana* leaves treated with 100 µM MG132 over a time-course of 3 days. Each bar represents the mean of 3 biological replicates SD. Asterisks indicate a statistical difference according to Student's *t*-test (*, P < 0.05).

Supplementary Figure 2

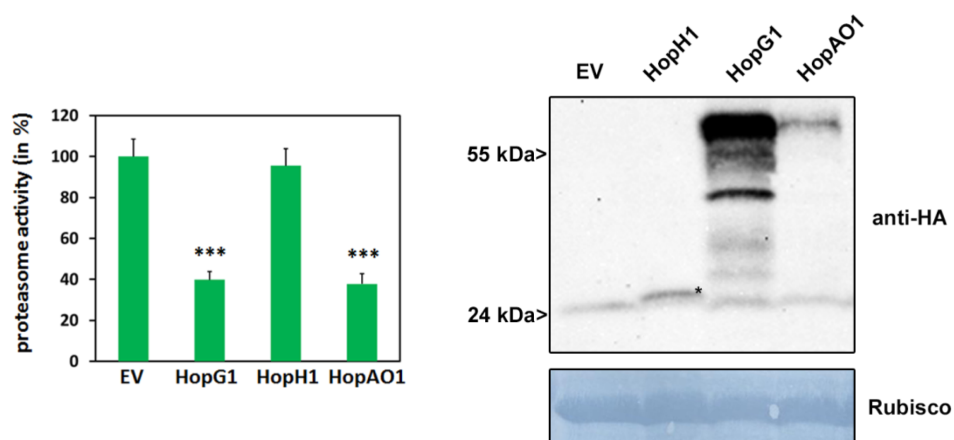

Figure S2: Proteasome activity in *N. benthamiana* leaves following transient expression of T3Es HopG1, HopH1, HopAO1 or empty vector control (EV). Relative proteasome activity in total protein extracts was determined by monitoring the breakdown of the fluorogenic peptide suc-LLVY-AMC at 30°C in a fluorescence spectrophotometer. EV was set to 100%. Data represent the mean standard deviation (SD) (n = 3). Asterisks indicate statistical significance (*** P < 0.001) determined by Student´s *t*-test (compared with EV control). Protein extracts from *N. benthamiana* leaves transiently

expressing T3Es tagged with HA and empty vector (EV) at 48 hpi were prepared. Equal volumes representing approximately equal protein amounts of each extract were immunoblotted and proteins were detected using anti-HA antiserum. Amido black staining served as a loading control.

Supplementary Figure 3

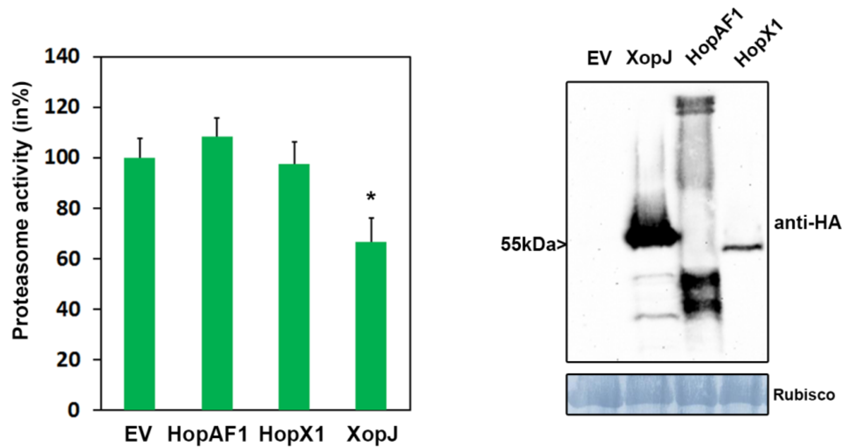

Figure S3: Proteasome activity in *N. benthamiana* leaves following transient expression of T3Es HopAF1, HopX1, XopJ or empty vector control (EV). Relative proteasome activity in total protein extracts was determined by monitoring the breakdown of the fluorogenic peptide suc-LLVY-AMC at 30°C in a fluorescence spectrophotometer. EV was set to 100%. Data represent the mean standard deviation (SD) (n = 3). Asterisks indicate statistical significance (* $P < 0.05$) determined by Student´s *t*-test (compared with EV control). Protein extracts from *N. benthamiana* leaves transiently expressing T3Es tagged with HA and empty vector (EV) at 48 hpi were prepared. Equal volumes representing approximately equal protein amounts of each extract were immunoblotted and proteins were detected using anti-HA antiserum. Amido black staining served as a loading control.

Supplementary Figure 4

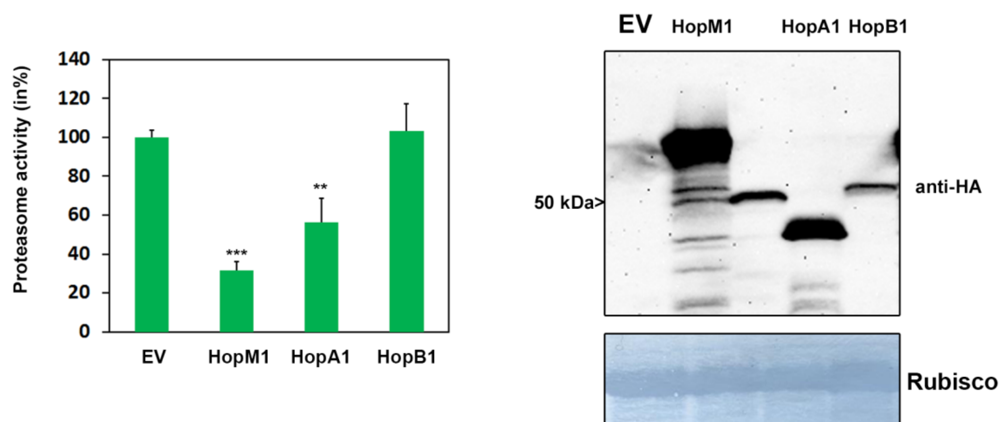

Figure S4: Proteasome activity in *N. benthamiana* leaves following transient expression of T3Es HopM1, HopA1, HopB1 or empty vector control (EV). Relative proteasome activity in total protein extracts was determined by monitoring the breakdown of the fluorogenic peptide suc-LLVY-AMC at 30°C in a fluorescence spectrophotometer. EV was set to 100%. Data represent the mean standard deviation (SD) (n = 3). Asterisks indicate statistical significance (** $P < 0.01$; *** $P < 0.001$) determined by Student´s *t*-test (compared with EV control). Protein extracts from *N. benthamiana* leaves

transiently expressing T3Es tagged with HA and empty vector (EV) at 48 hpi were prepared. Equal volumes representing approximately equal protein amounts of each extract were immunoblotted and proteins were detected using anti-HA antiserum. Amido black staining served as a loading control.

Supplementary Figure 5

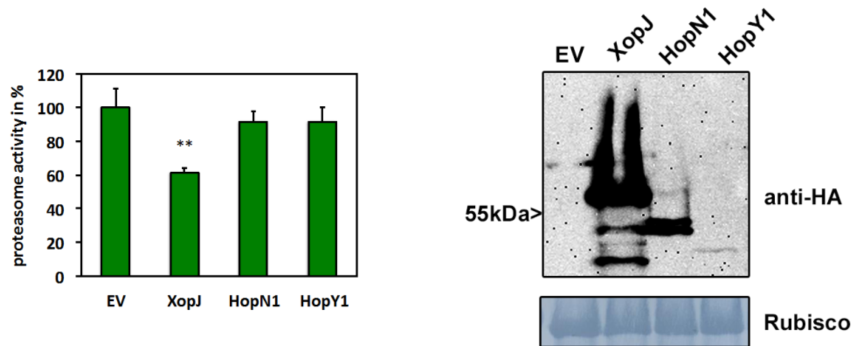

Figure S5: Proteasome activity in *N. benthamiana* leaves following transient expression of T3Es HopN1, HopY1, XopJ or empty vector control (EV). Relative proteasome activity in total protein extracts was determined by monitoring the breakdown of the fluorogenic peptide suc-LLVY-AMC at 30°C in a fluorescence spectrophotometer. EV was set to 100%. Data represent the mean standard deviation (SD) (n = 3). Asterisks indicate statistical significance (** $P < 0.01$) determined by Student´s *t*-test (compared with EV control). Protein extracts from *N. benthamiana* leaves transiently expressing T3Es tagged with HA and empty vector (EV) at 48 hpi were prepared. Equal volumes representing approximately equal protein amounts of each extract were immunoblotted and proteins were detected using anti-HA antiserum. Amido black staining served as a loading control.

Supplementary Figure 6

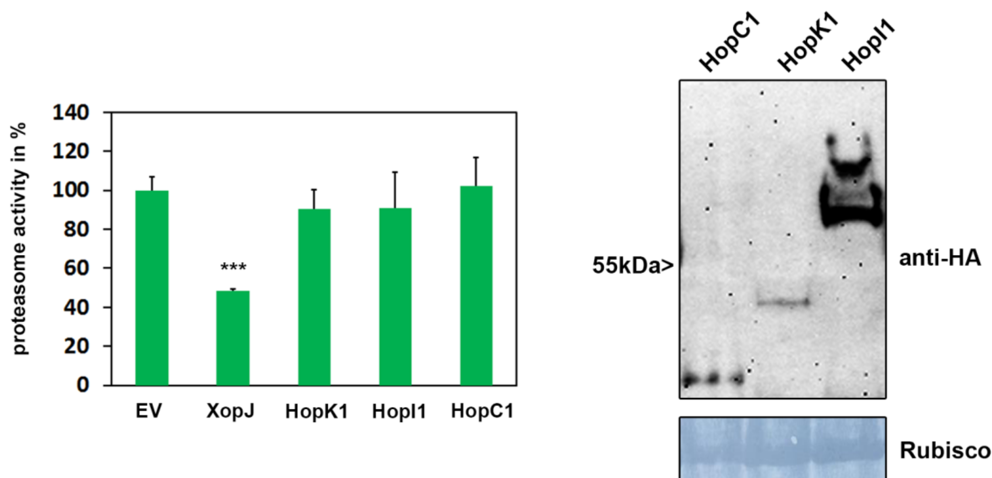

Figure S6: Proteasome activity in *N. benthamiana* leaves following transient expression of T3Es HopK1, HopI1, HopC1, XopJ or empty vector control (EV). Relative proteasome activity in total protein extracts was determined by monitoring the breakdown of the fluorogenic peptide suc-LLVY-AMC at 30°C in a fluorescence spectrophotometer. EV was set to 100%. Data represent the mean standard deviation (SD) (n = 3). Asterisks indicate statistical significance (*** $P < 0.001$) determined by Student´s *t*-test (compared with EV control). Protein extracts from *N. benthamiana* leaves transiently expressing T3Es tagged with HA and empty vector (EV) at 48 hpi were prepared. Equal volumes

representing approximately equal protein amounts of each extract were immunoblotted and proteins were detected using anti-HA antiserum. Amido black staining served as a loading control.

Supplementary Figure 7

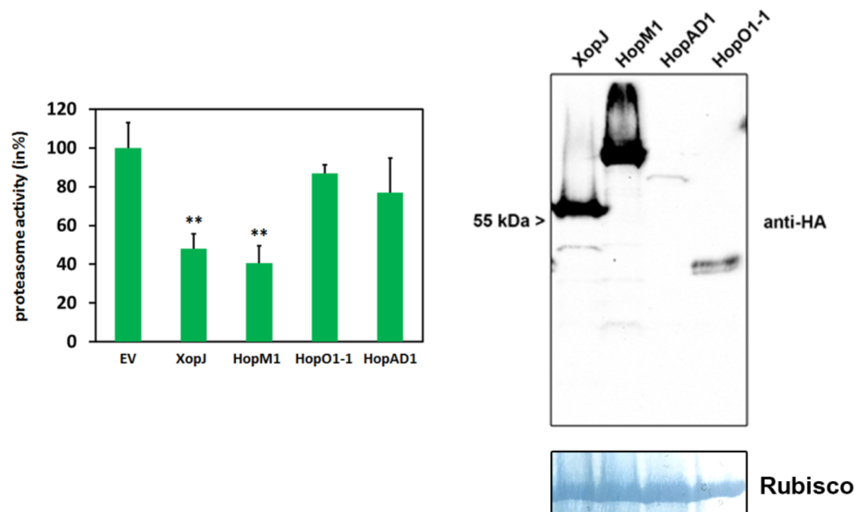

Figure S7: Proteasome activity in *N. benthamiana* leaves following transient expression of T3Es HopM1, HopO1-1, HopAD1, XopJ or empty vector control (EV). Relative proteasome activity in total protein extracts was determined by monitoring the breakdown of the fluorogenic peptide suc-LLVY-AMC at 30°C in a fluorescence spectrophotometer. EV was set to 100%. Data represent the mean standard deviation (SD) (n = 3). Asterisks indicate statistical significance (** $P < 0.01$) determined by Student´s *t*-test (compared with EV control). Protein extracts from *N. benthamiana* leaves transiently expressing T3Es tagged with HA and empty vector (EV) at 48 hpi were prepared. Equal volumes representing approximately equal protein amounts of each extract were immunoblotted and proteins were detected using anti-HA antiserum. Amido black staining served as a loading control.

Supplementary Figure 8

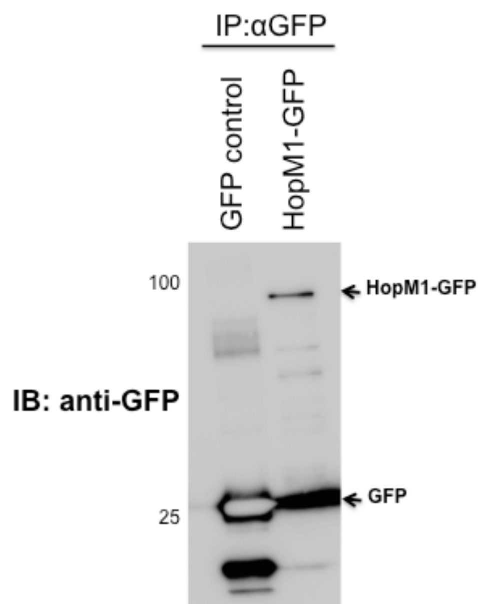

Figure S8: HopM1 interacts with proteasome-associated proteins. Immunoprecipitation of HopM1 using GFP trap agarose beads. Western blot using anti-GFP antibody showing the GFP control and C-terminal GFP tagged HopM1 pulled down proteins expressed in *Nicotiana benthamiana*. The arrowheads indicate the position of the proteins. The gel lanes were excised and Mass Spec analysis was performed.

Supplementary Figure 9

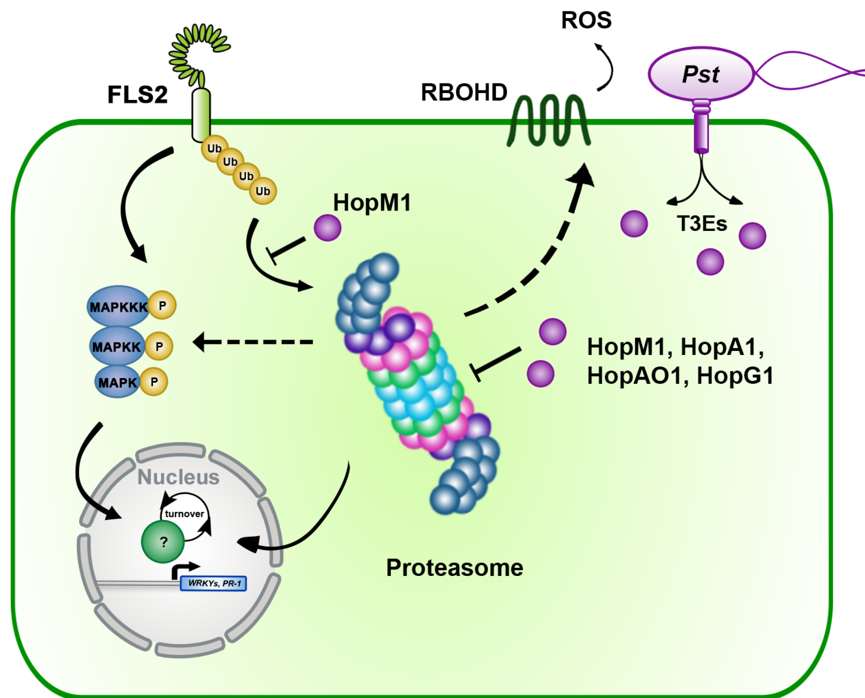

Figure S9: The role of the proteasome during plant immunity. The proteasome is involved in different events during plant immunity such as degradation of PAMP receptor FLS2, MAP Kinase signaling, ROS production or defense gene expression in the nucleus. *Pseudomonas syringae* pv. *tomato* DC3000 (*Pst*) inhibits the activity of the proteasome by its T3Es HopM1, HopG1, HopA1 and HopAO1. The proteasome inhibitor HopM1 is thereby able to block FLS2 degradation probably contributing to defense signaling suppression.