

Supplementary Information

Tab. S1 Working concentration of 10 specific capture antibodies

No.	Pathogen Name	Concentration ($\mu\text{g mL}^{-1}$)	
		Capture antibodies	Detection antibodies
1	<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> (Cmm)	279.0	18.1
2	Cucumber mosaic virus (CMV)	398.6	94.9
3	Pepino mosaic virus (PepMV)	114.8	47.7
4	Tomato aspermy virus (TAV)	46.9	5.2
5	Tomato black ring virus (TBRV)	30.6	15.5
6	Tomato mosaic virus (ToMV)	44.9	43.9
7	Tomato ring spot virus (ToRSV)	2.0	6.2
8	Tobacco ring spot virus (TRSV)	51.6	82.2
9	Tobacco rattle virus (TRV)	29.2	6.2
10	Tomato spotted wild virus (TSWV)	455.6	94.5

Figure S1

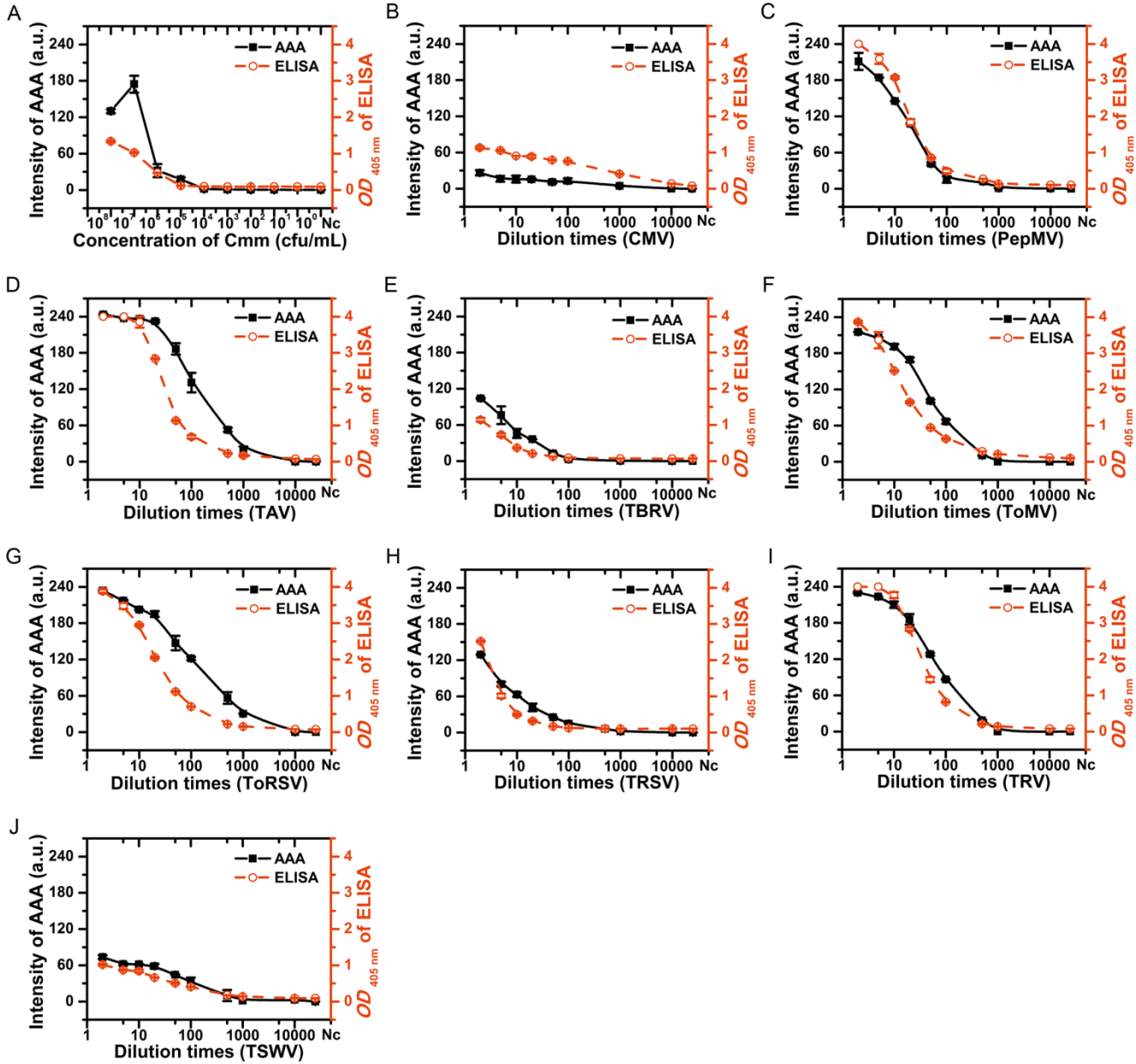


Fig. S1 Sensitivity comparison to single pathogen of antibody array assay (AAA) and ELISA. The serial dilutions of 10 pathogens were detected by both antibody array and ELISA. Results showed a good consistency with the two assay methods. In semi-quantitative analysis, we compared the single indexed detection performance of the two methods. Sensitivity of antibody array assay was higher than ELISA in 3 cases (ToRSV, TRSV and TSWV), lower in 2 cases (PepMV and ToMV). The remaining 5 cases (Cmm, CMV, TAV, TBRV and TRV) were the same.

Figure S2

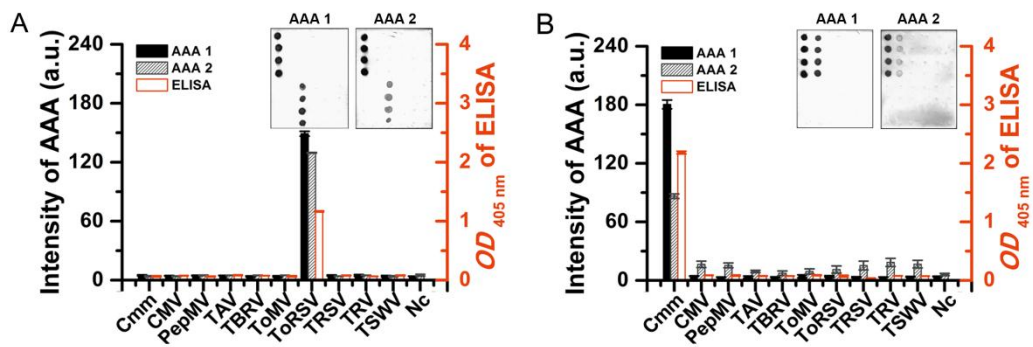


Fig. S2 Stability of antibody array assay system. With the arrays prepared before 3 months and the recently prepared new arrays, 46 seed samples received within one month were detected. With the reference of ELISA method, performance decline of the antibody array assay system stored for 3 months was analysed. Two positive seeds were identified by the new prepared arrays (AAA 1), arrays produced 3 months ago (AAA 2) and ELISA respectively.