

**Supplementary file 1**

Table S1. Comparison of imidacloprid insecticide residue in untreated grape samples in different vineyards (mg/kg)

Confidence interval 95%					
	Minimum	Maximum	Mean ± SD (mg/kg)	Lower limit	Upper limit
Vineyard 1	4.06	6.34	4.86 ± 0.88	3.93	5.79
Vineyard 2	3.90	5.27	4.72 ± 0.55	4.13	5.31
Vineyard 3	3.06	6.05	4.61 ± 1.11	3.44	5.77
Vineyard 4	4.97	6.28	5.78 ± 0.53	5.22	6.33
Vineyard 5	5.04	6.05	5.55 ± 0.40	5.12	5.97

Table S2. Descriptive statistics of imidacloprid insecticide residues in untreated and treated grape samples with different solutions in different vineyards Comparison of imidacloprid insecticide residue in untreated grape samples in different vineyards (mg/kg)

Confidence interval 95%					
Treatments	Minimum	Maximum	Mean ± SD (mg/kg)	Lower limit	Upper limit
Acetic Acid	1.58	4.89	3.46 ± 0.79	3.16	3.76
Sodium Bicarbonate	0.84	3.49	2.45 ± 0.58	2.23	2.67
Sodium Chloride	2.79	5.89	4.49 ± 0.77	4.20	4.78
Detergent	3.03	5.86	4.48 ± 0.67	4.23	4.73
Water	3.00	6.04	4.77 ± 0.78	4.48	5.07
Untreated	3.06	6.23	4.94 ± 0.84	4.63	5.26

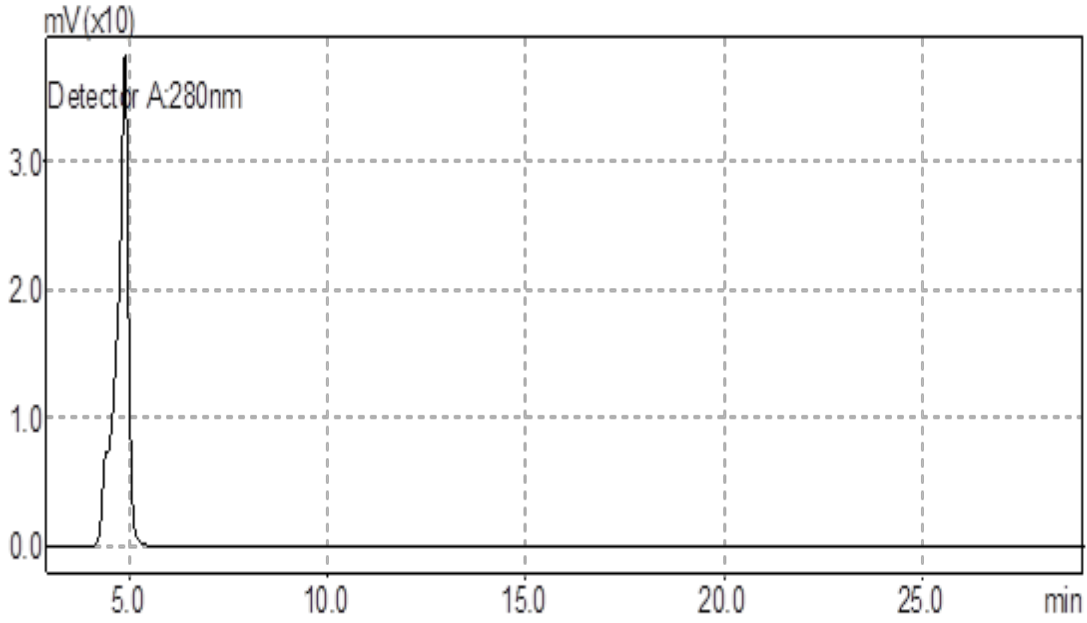


Fig. S1. Standard chromatogram of imidacloprid by HPLC

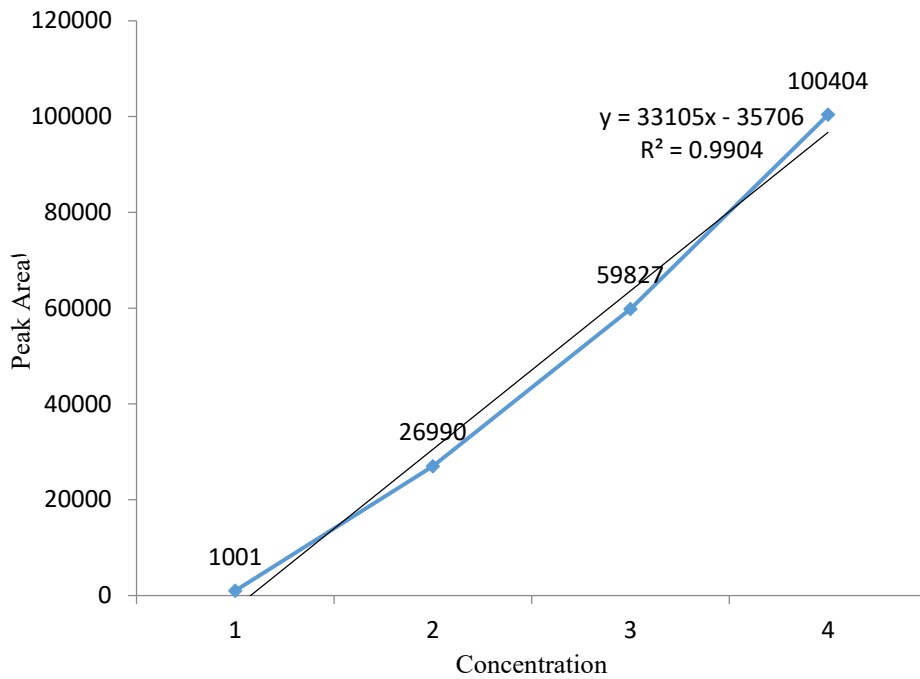


Fig. S2. Calibration curve for various standard solutions of imidacloprid