

Supplementary Material

Use of Simulated Sunlight Radiation and Hydrogen Peroxide to Remove Xenobiotics from Aqueous Solutions

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Table S1. Sampling times when performing photolysis

<i>t</i> , min	0	5	10	15	20	30	60	90	120	180	240	300
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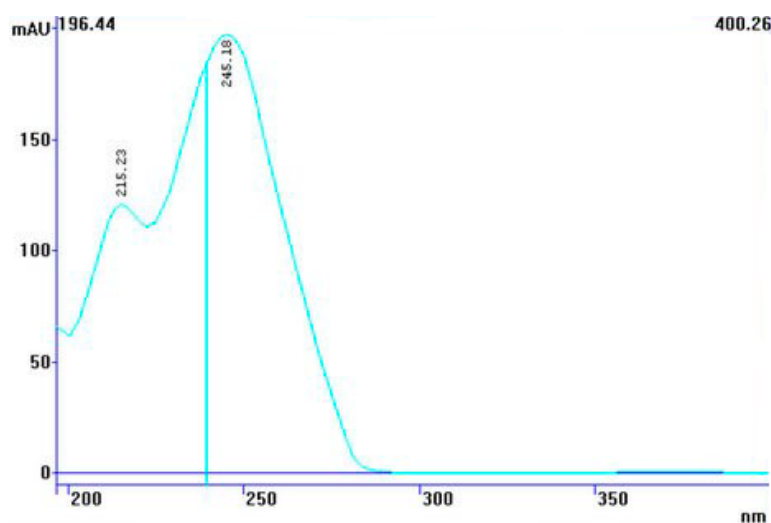


Figure S1. Absorption spectrum of acetamiprid

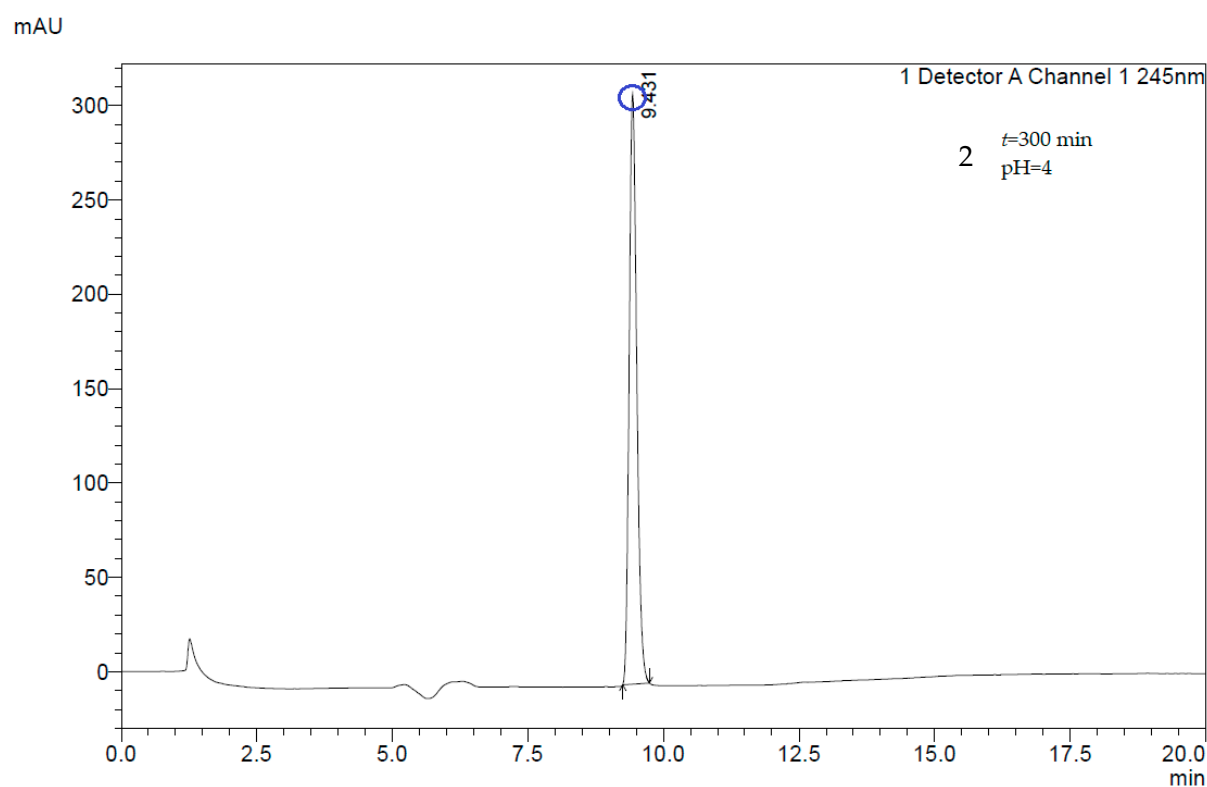
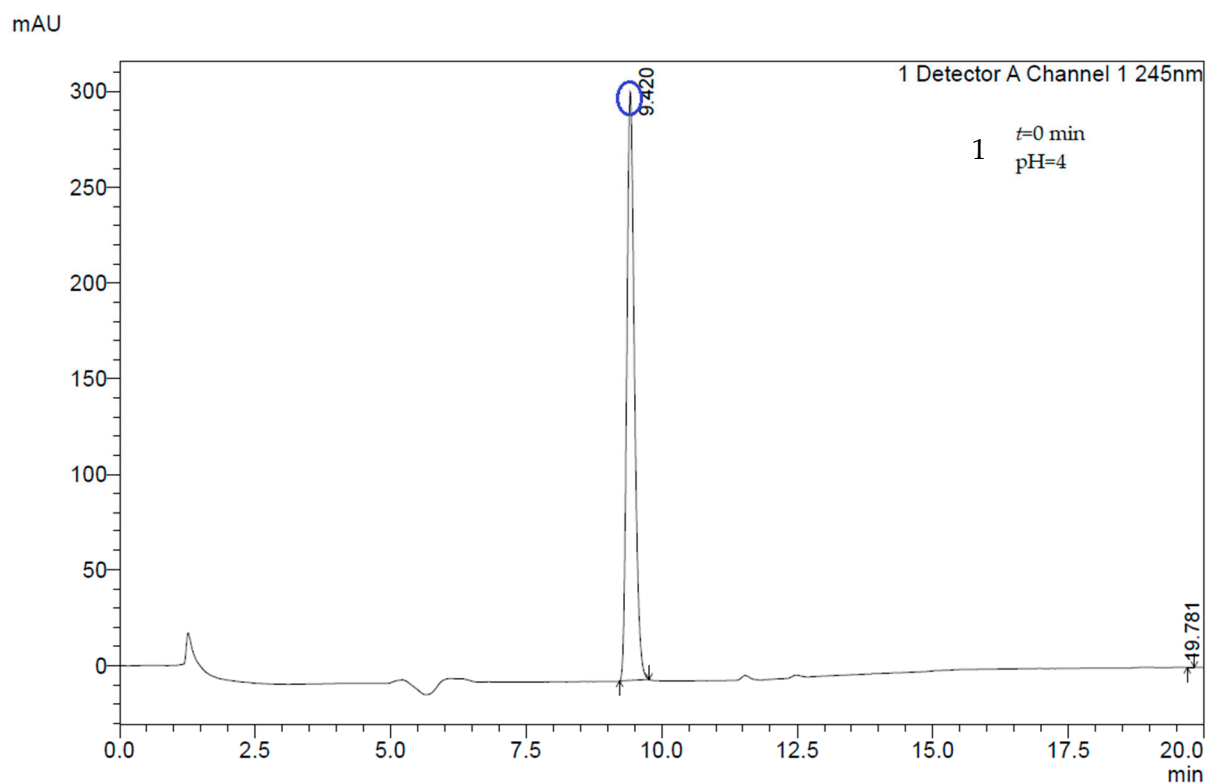


Figure S2. Chromatogram of [acetamiprid](#) at pH=4 at time $t=0$ min (1) and $t=300$ min (2)

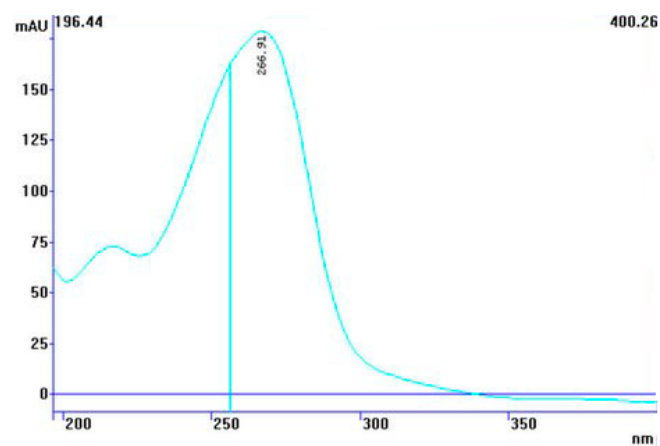


Figure S3. Absorption spectrum of clothianidin

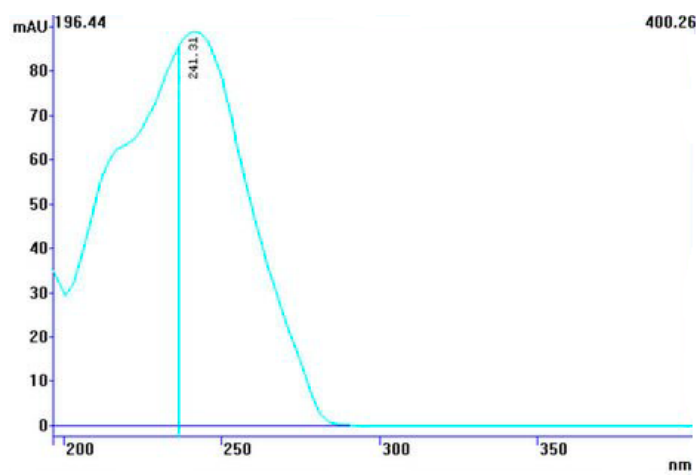


Figure S4. Absorption spectrum of thiacloprid

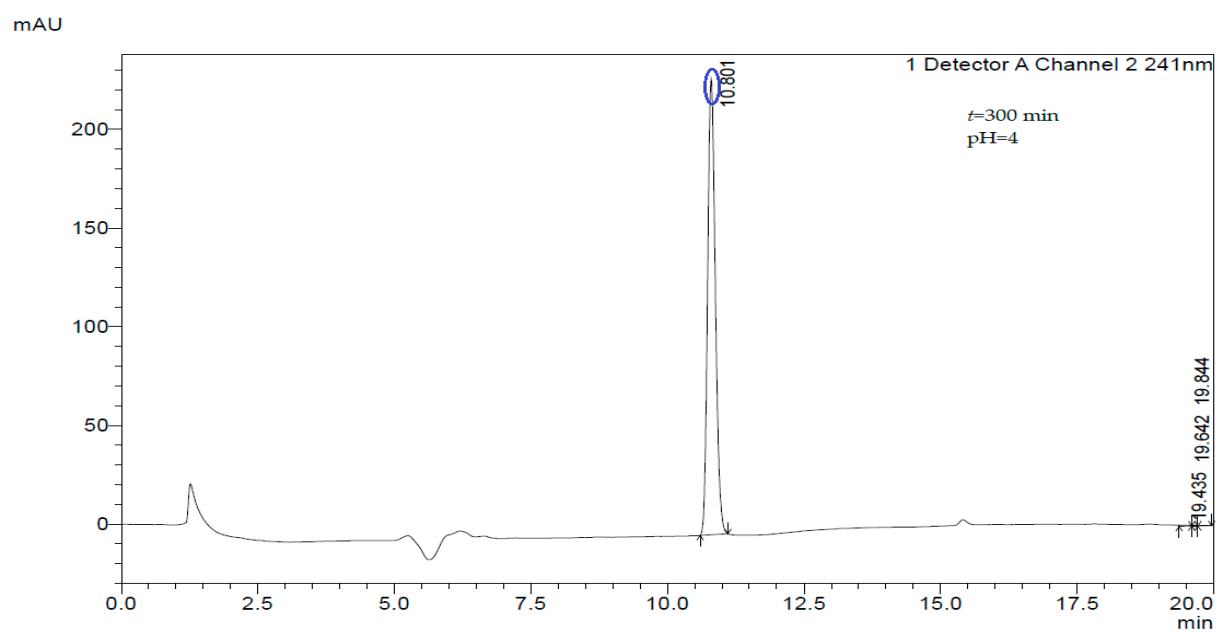
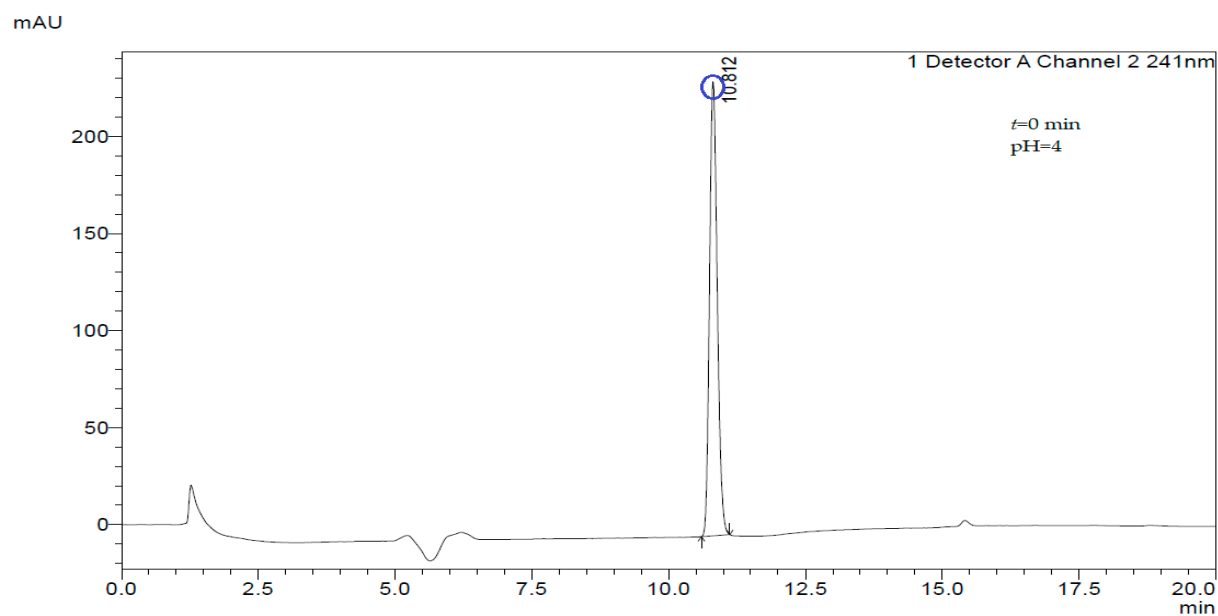


Figure S5. Chromatogram of thiocloprid at pH=4 at time $t=0$ min and $t=300$ min

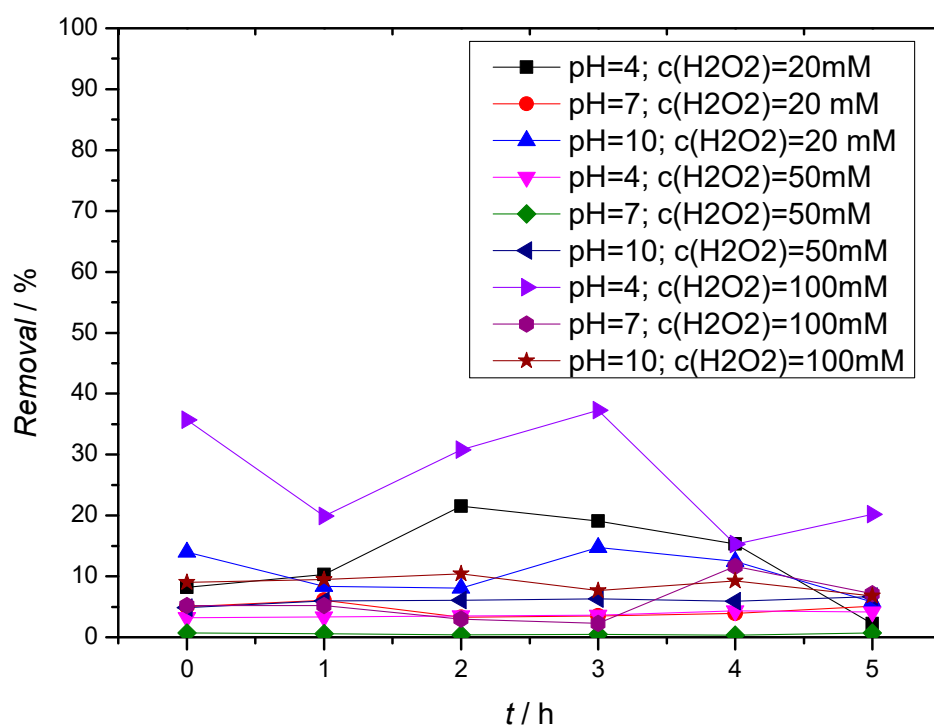


Figure S6. Acetamiprid removal after five hours of mixing with H₂O₂, $c(\text{H}_2\text{O}_2) = 20$ mM, $c(\text{H}_2\text{O}_2) = 50$ mM and $c(\text{H}_2\text{O}_2) = 100$ mM

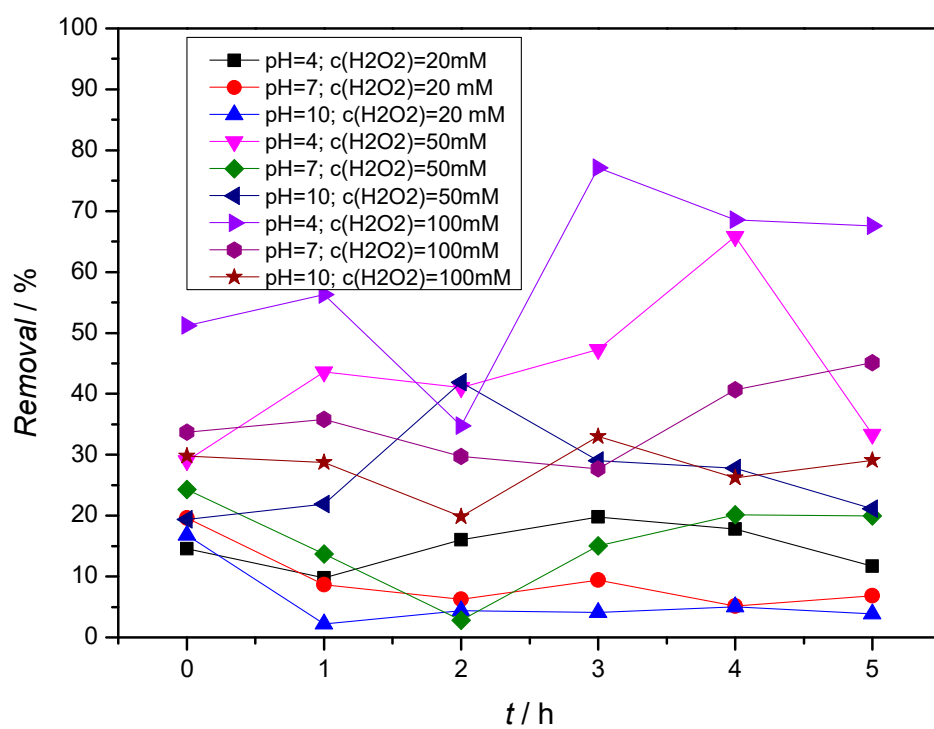


Figure S7. Clothianidin removal after five hours of mixing with H_2O_2 , $c(\text{H}_2\text{O}_2) = 20$ mM, $c(\text{H}_2\text{O}_2)=50\text{ mM}$ and $c(\text{H}_2\text{O}_2)=100\text{ mM}$

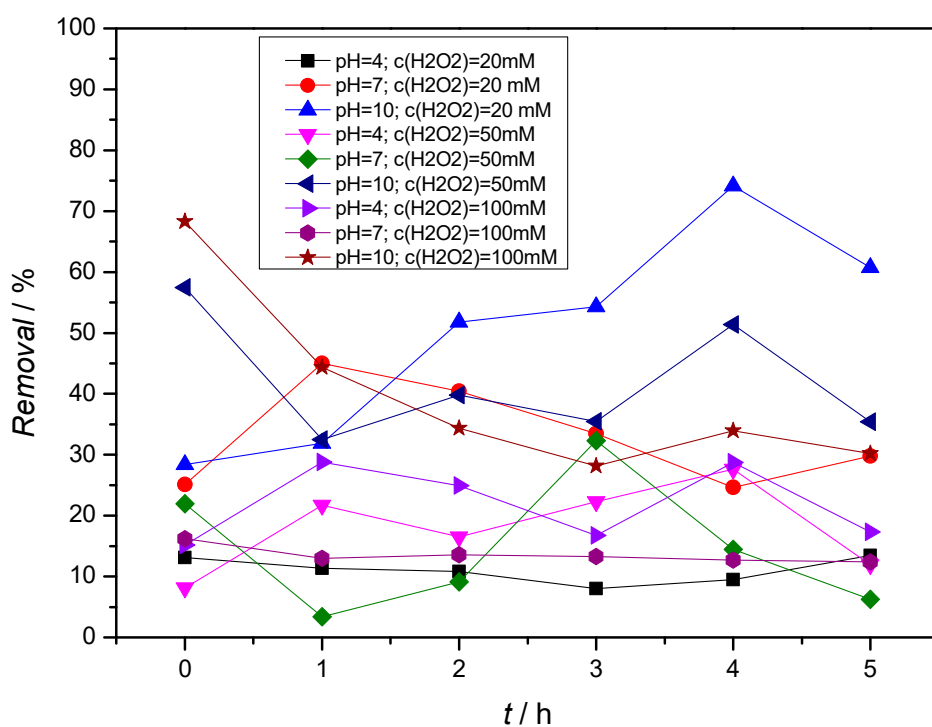


Figure S8. Thiocloprid removal after five hours of mixing with H₂O₂, $c(\text{H}_2\text{O}_2) = 20$ mM, $c(\text{H}_2\text{O}_2)=50$ mM and $c(\text{H}_2\text{O}_2)=100$ mM

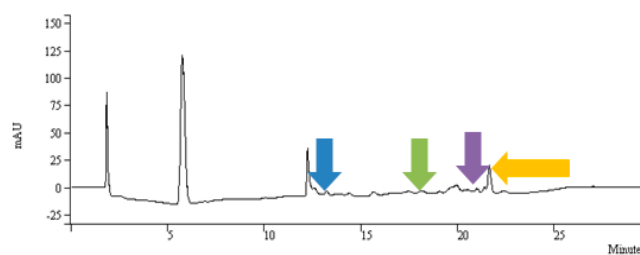


Figure S9. Chromatogram of acetamiprid for pH=4 and $c(\text{H}_2\text{O}_2)=20$ mM, $t=120$ min

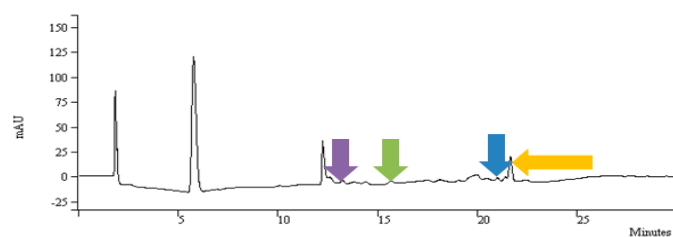


Figure S10. Chromatogram of acetamiprid for pH=10 and $c(\text{H}_2\text{O}_2)=20$ mM, $t=120$ min

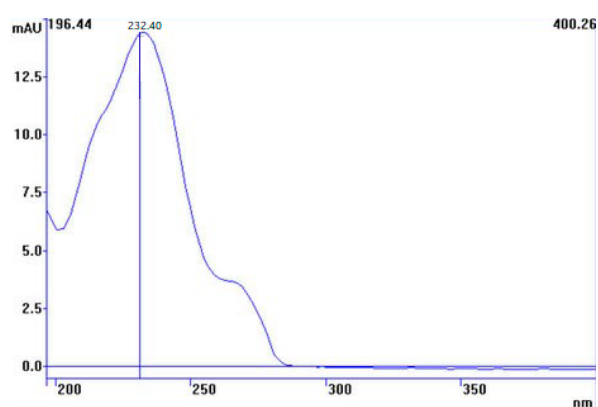


Figure S11. Absorption spectrum of the degradation or transformation product of acetamiprid $t_R=20.963$ min

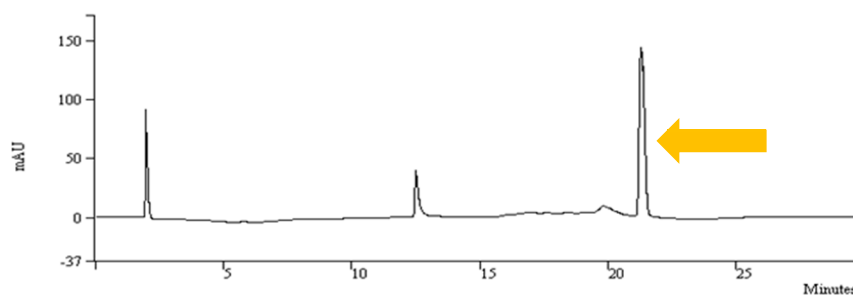


Figure S12. Chromatogram of clothianidin for pH=4 and $c(\text{H}_2\text{O}_2)=20$ mM, $t=0$ min

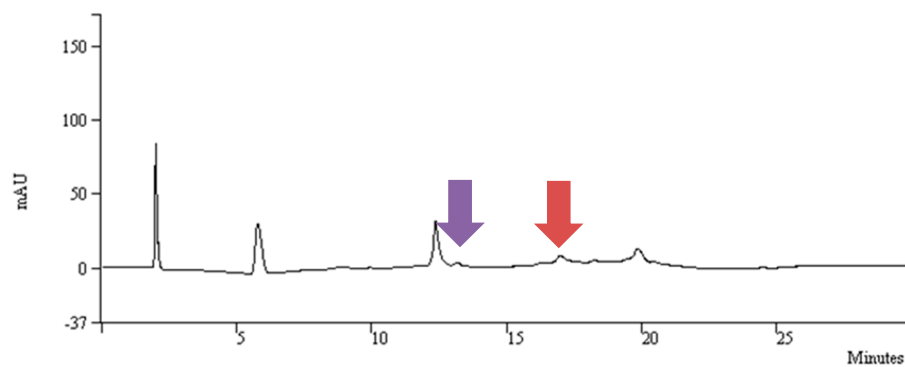


Figure S13. Chromatogram of clothianidin for pH=4 and $c(\text{H}_2\text{O}_2)=20\text{ mM}$, $t=160\text{ min}$

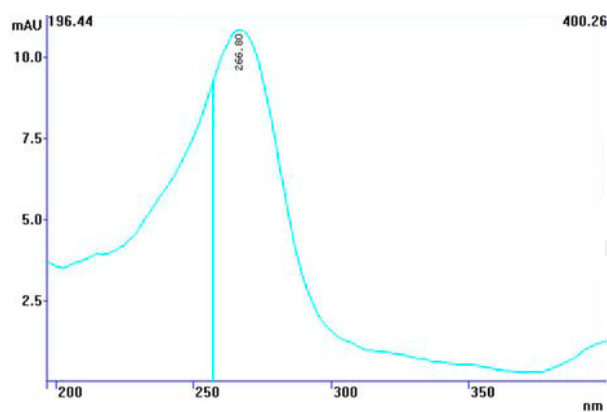


Figure S14. Absorption spectrum of the degradation or transformation product of clothianidin $t_R=16.787\text{ min}$

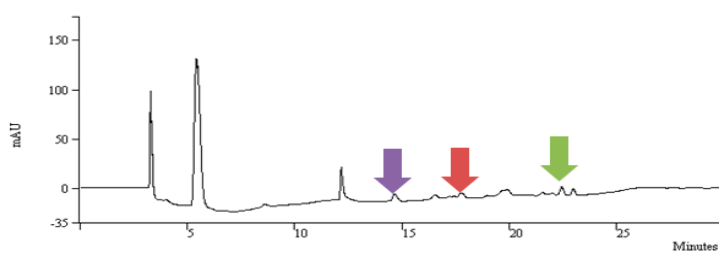


Figure S15. Chromatogram of thiacloprid for pH=4 and $c(\text{H}_2\text{O}_2) = 20\text{ mM}$, $t=120\text{ min}$

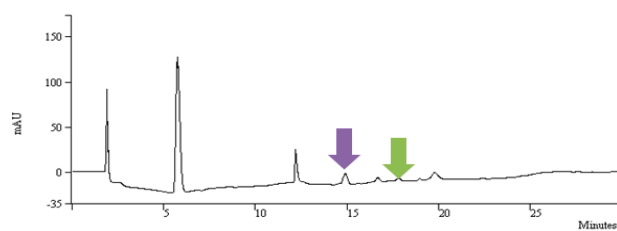


Figure S16. Chromatogram of thiocloprid for pH=4 and $c(\text{H}_2\text{O}_2) = 20 \text{ mM}$, $t=300 \text{ min}$