

Simultaneous LC–MS/MS determination of diacylhydrazine ecdysone receptor agonist insecticides in tomatoes: field dissipation, household processing effects and dietary risk assessment.

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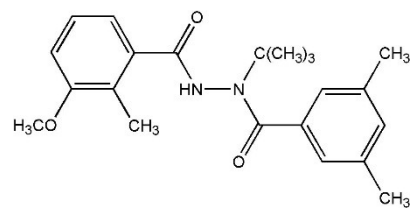
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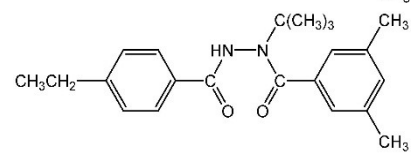
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(a)



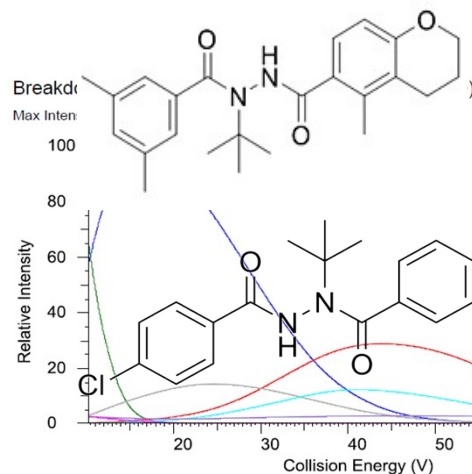
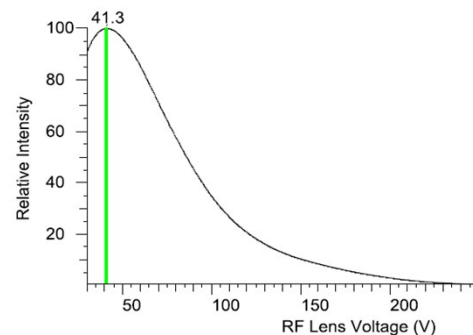
(b)



A

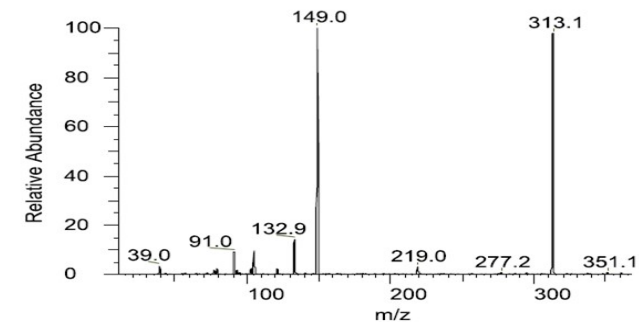
Optimizing RF Lens of Ion 369.000 in Q1MS (+)

Optimal Value: 41 V; Optimal Intensity: 1.95E+006



Product Scan of Ion 369.125 m/z (+)

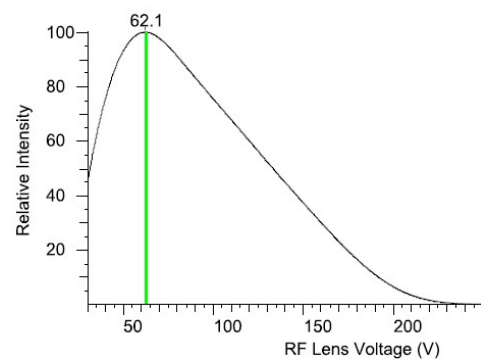
Max Intensity: 4.62E+004



B

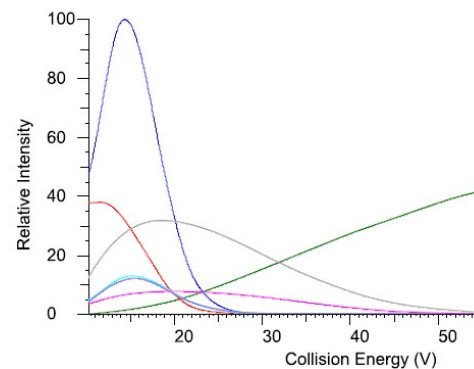
Optimizing RF Lens of Ion 353.000 in Q1MS (+)

Optimal Value: 62 V; Optimal Intensity: 2.82E+007



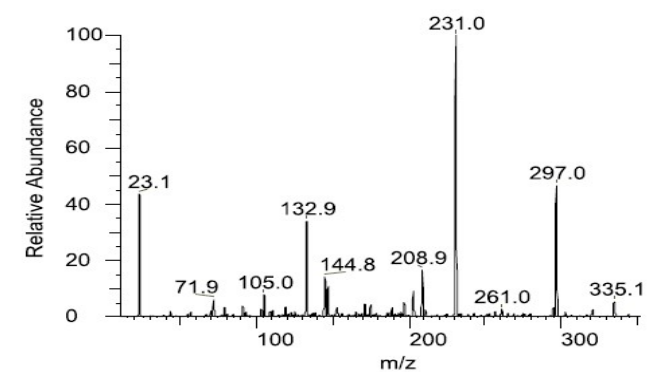
Breakdown Curve of Ion 353.212 m/z at 1.5 mTorr (+)

Max Intensity: 1.08E+004



Product Scan of Ion 353.212 m/z (+)

Max Intensity: 7.52E+003



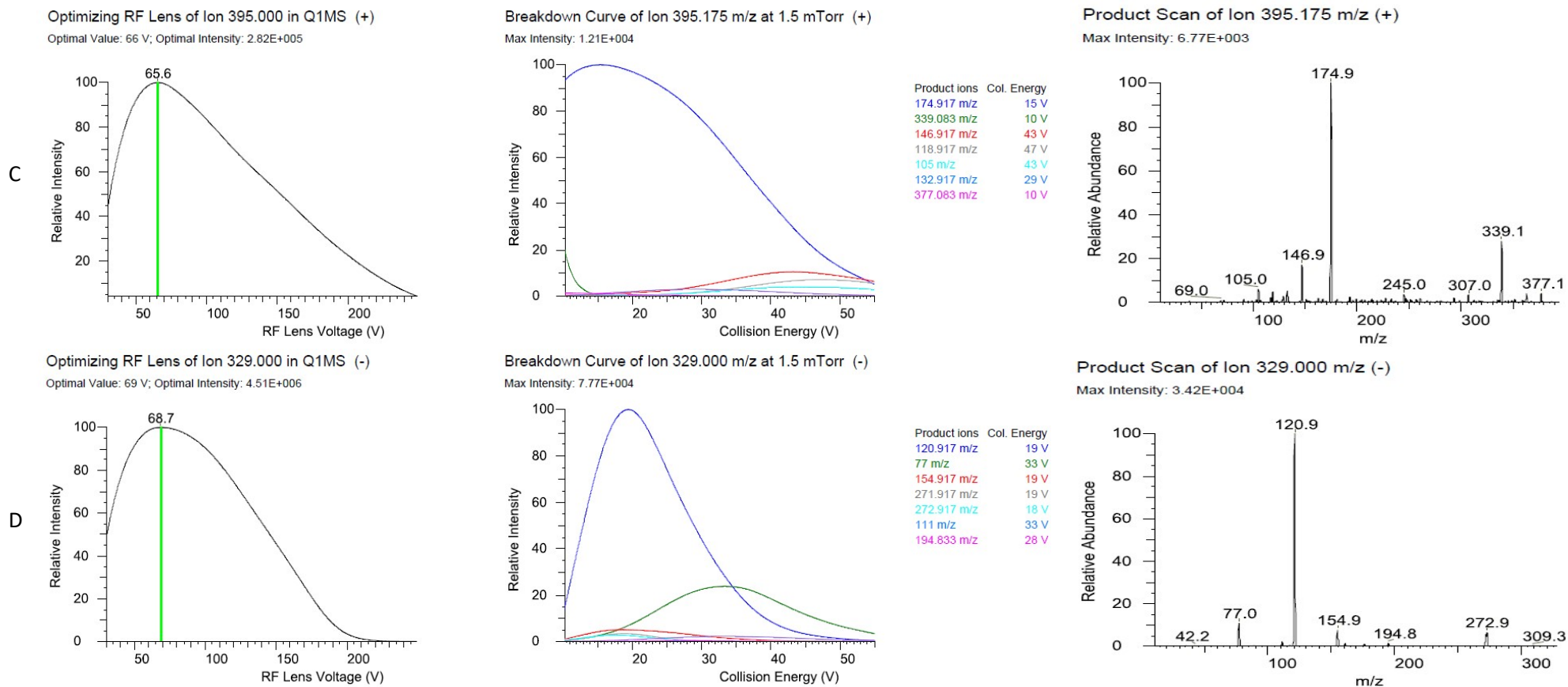


Figure S2. LC–MS/MS optimization and product-ion spectra for (A) methoxyfenozide (ESI⁺, m/z 369.125), (B) tebufenozide (ESI⁺, m/z 353.212), (C) chromafenozide (ESI⁺, m/z 395.175), and (D) halofenozide (ESI⁻, m/z 329.000). Left: RF-lens tuning; center: collision-energy breakdown curves; right: product-ion scans.

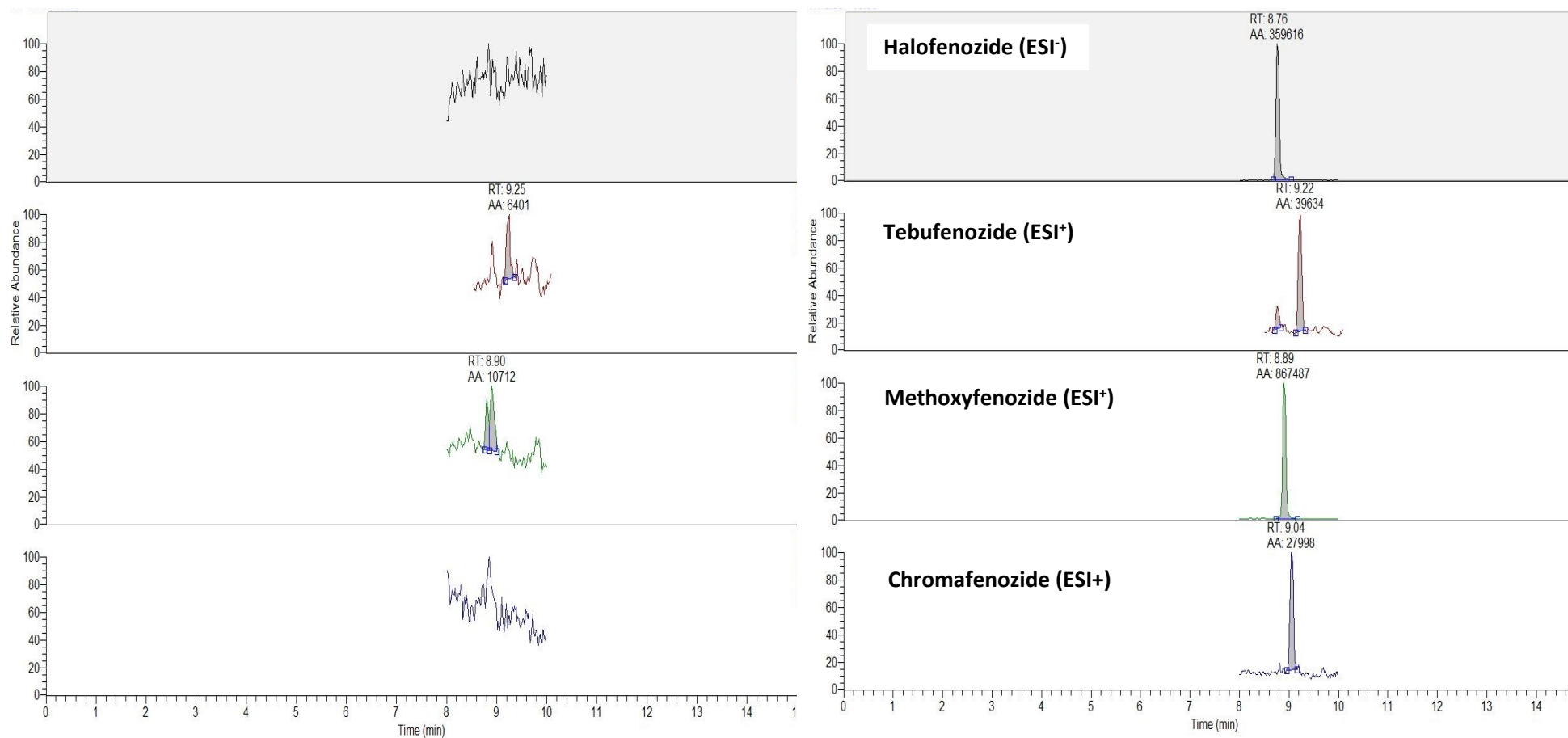


Figure S3. Representative LC–MS/MS chromatograms of blank matrix (left) and matrix spiked at 0.01 mg kg⁻¹ (right) for halofenozide (ESI⁻), tebufenozide (ESI⁺), methoxyfenozide (ESI⁺), and chromafenozide (ESI⁺).

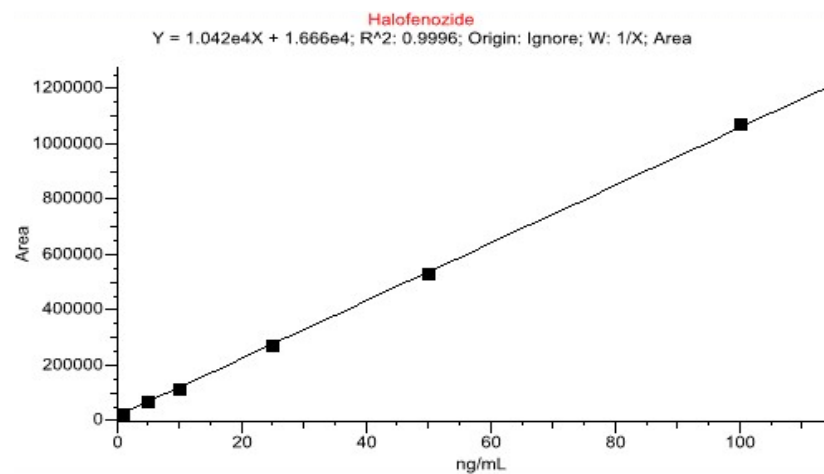
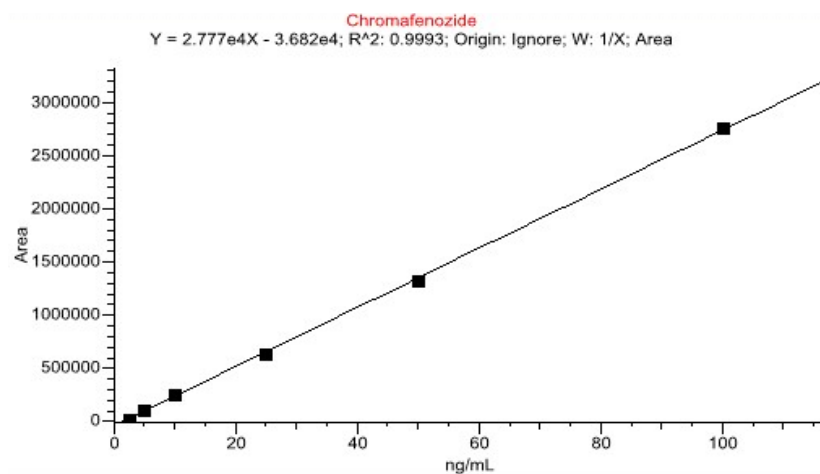
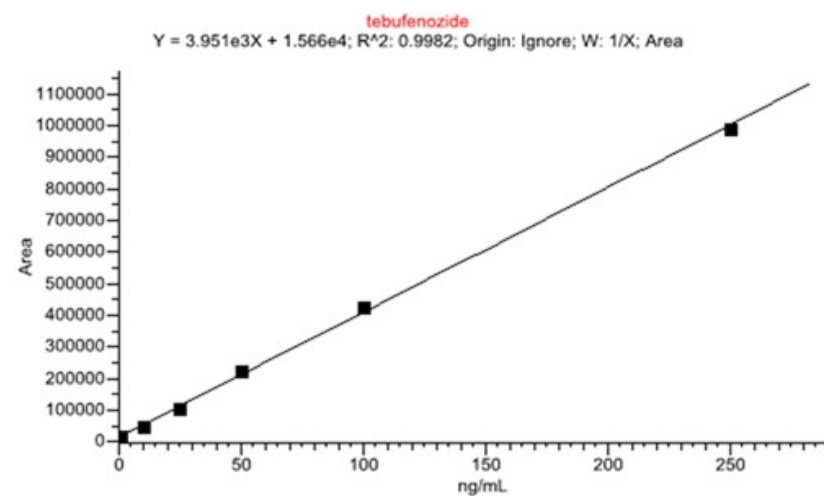
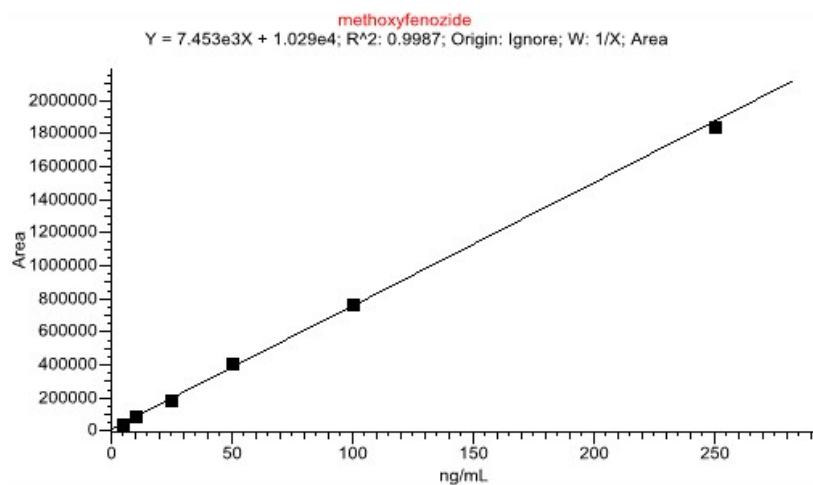


Figure S4. Matrix-matched calibration curves (peak area vs concentration) for methoxyfenozide, tebufenozide, chromafenozide, and halofenozide in blank tomato extract.