

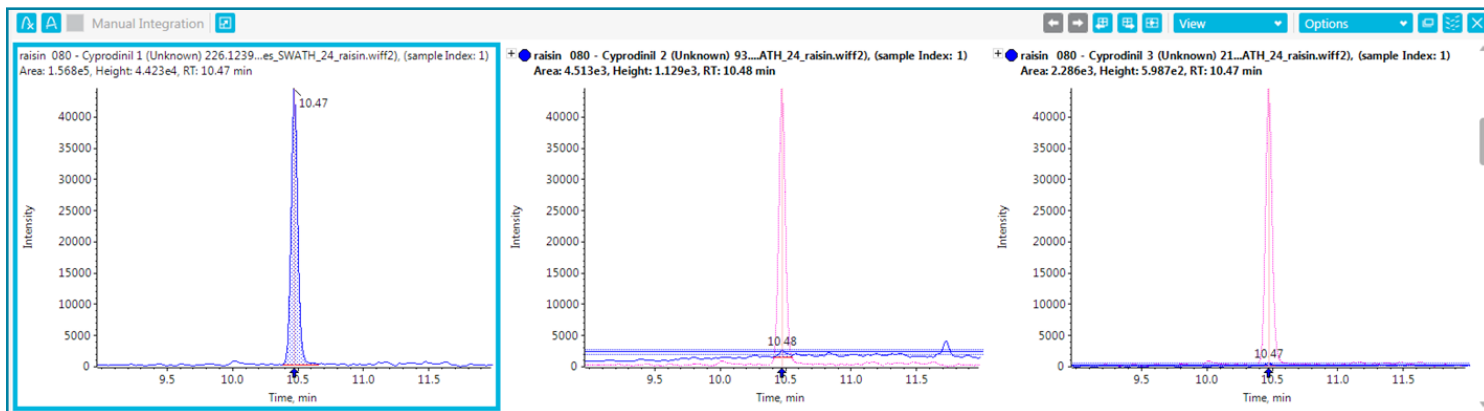
See It All with SWATH® Acquisition

A novel workflow
which helps to ensure nothing is missed

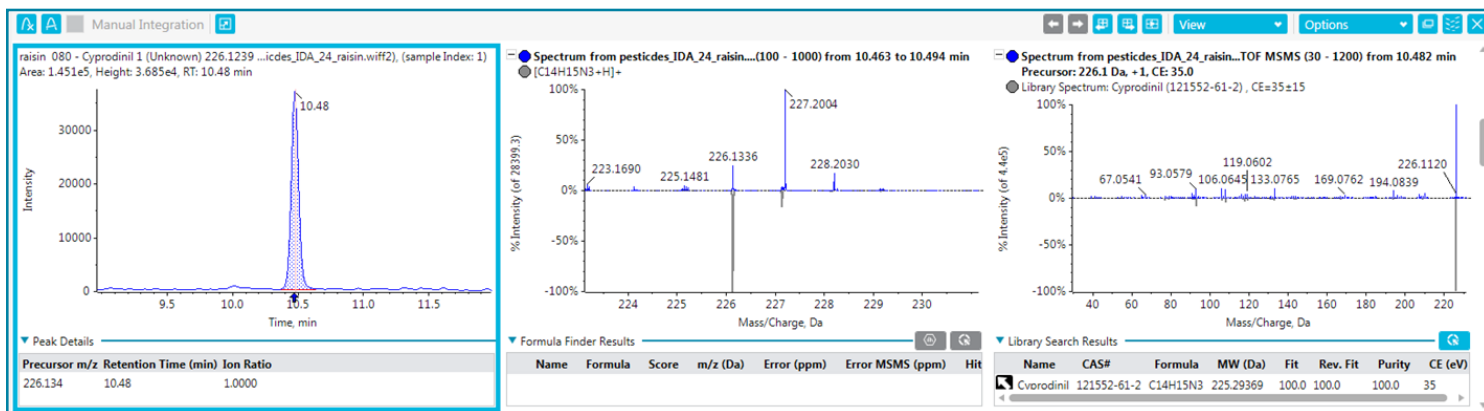
The X500R QTOF system is an accurate mass solution designed like no other with workflows for various levels of user. The high resolution mass spectrometer is robust enough for high sample throughput powerful enough for research and discovery

This new workflow will revolutionize how you screen your samples. Traditionally, it is standard practice to screen samples against a targeted list of transitions on a triple quad mass spectrometer. But what if there is a compound present in your sample that is not in your target analyte list? The answer is SWATH® acquisition

Powered by **SCIEX OS** the X500R QTOF system presents all the data you need and would expect with a targeted workflow but also delivers data on other detectable compounds which you may be unaware of.



Like you would expect using a targeted workflow for quantitation, Ion Ratios are crucial to confirming your positive results. SWATH® delivers this too, therefore you can report results with confidence and meet regulatory requirements



Further confirmation to your results comes in the form of our vast MS/MS libraries, SCIEX OS also has ChemSpider functionality so even the more obscure analytes can be identified.

See It All with SWATH[®] Acquisition

Materials and Method

for a Pesticide Analysis in Fruit and Vegetables

Sample Preparation

- There are no extra steps required when preparing your samples for a SWATH workflow.
- In this instance QuEChERS and 10 to 50x dilution with water was used.

HPLC Conditions

- ExionLC[™] AD
- 5 μ L injection volume
- LC gradient- 15 minutes
- Gradient of water/methanol + 5 mM ammonium formate
- Phenomenex Kinetex Biphenyl 2.6u (50 x 2.1mm) column
- Flow rate 0.5 mL/min

Instrument Parameters

System hardware:

- X500R QTOF mass spectrometer
- Positive polarity
- GS1 50psi, GS2 60psi
- CUR 30
- CAD 8
- TEM 550 $^{\circ}$ C
- Automatic mass calibration using CDS and TwinSprayer probe
- TOF-MS 100 to 1000 Da with DP = 80 V
- MS/MS^{ALL} using SWATH[®] using CE = 35 V and CES = \pm 15 V
- In this project windows of 50 to 200; 195 to 300; 295 to 400; 395 to 500; 495 to 600 and 595 to 1000 were used



Using SWATH[®], a data independent data acquisition technique, avoids the use of thresholds which results in always having a spectrum.