

Metabolite Profiling Facility

Plant Hormone Analysis

Brief Description:

Plant hormones can be detected in extracted plant tissues such as leaf, root, or shoot. The prepared samples are separated on a Waters T3 phase HPLC column and detected using our Agilent 6460 triple quadrupole mass spectrometer in MRM mode. The run time is approximately 26 minutes per sample. Data are collected in positive and negative electrospray ionization modes. Data are typically normalized to wet tissue weight.

Normal Weight: Tissue (200-500 mg)

Minimal Weight: Tissue (100-200 mg)

Special Handling: Samples should remain frozen at -80°C and in darkness prior to analysis if possible

Reference:

Dunming Xu, Hehe Huang, and Yu Zhou "Simultaneous Determination of 21 Plant Growth Regulators in Various Fruits Using QuEChERS Coupled with an HPLC-MS/MS Technique"
 Agilent Technologies application note # 5991-5506E

Table I: Analytes reported. Others on special request:

Compound Name	
6-benzylaminopurine	analyte
trans-zeatin	analyte
kinetin	analyte
jasmonic acid	analyte
6-DAP (2iP)	internal standard
indole-3-butyric acid	analyte
naphthly acetic acid	analyte
d5-indole acetic acid	internal standard
indole acetic acid	analyte
d4-salicylic acid	internal standard
salicylic acid	analyte
gibberellic acid GA3	analyte
abscisic acid	analyte