

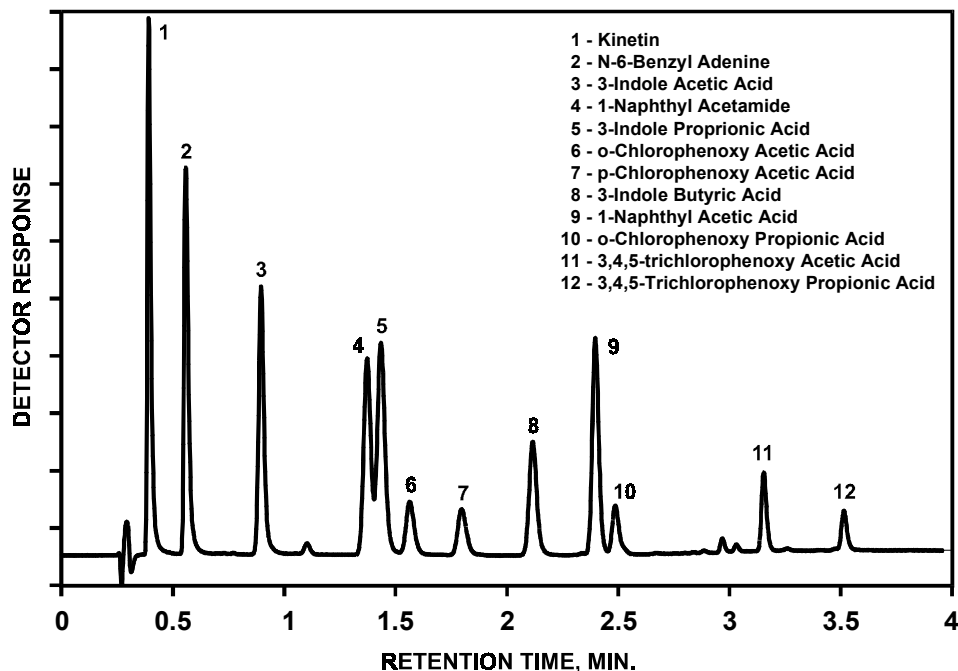
Plant Hormones Rapid Gradient Elution Separation

Application
Agrichemical
Robert D. Ricker

Plant hormones play an essential role in the growth and development of plant species. Rapid analysis of these compounds by HPLC may be used for general research into metabolism and the study of plant disease mechanisms. HPLC may also be used in studies of plant control, whether that is stimulation of growth for the purpose of larger and sturdier plants, or for stopping growth, as in plant pesticides (herbicides). The wide variety and structure of these molecules makes them a candidate for gradient HPLC, to reduce runtime and increase throughput.

Highlights

- *These sterically protected bonded phases provide long column life and good peak shape at low pH (0.1% TFA)*
- *Use of temperature (60°C) with short column length (75mm) permits operation with reasonable back pressure at higher flow rates (e.g. 3.0mL/min).*
- *Agilent ZORBAX 3.5 µm particles can be used in columns to provide an excellent balance in speed of separation and resolution.*



Conditions: LC: Hewlett Packard 1050
Column: ZORBAX SB-C8, 4.6 x 75 mm (Agilent Part No. 866953-906)
Mobile Phase:
A Solvent: Water with 0.1% TFA
B Solvent: Acetonitrile with 0.1% TFA
Gradient: 22% B to 50% B in 1.5 min.
UV: 254 nm; Flow: 3.0 mL / min.; 60°C



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Printed in the USA
April 25, 2002
5988-6285EN



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