



Agilent Technologies

Agilent Chem Elut

A collection of citations to advance your research

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[Environmental](#)

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Environmental

[Method development for the determination of 52 pesticides in tobacco by liquid chromatography–tandem mass spectrometry](#)

Journal of Chromatography A, **1216**, 8953-8959
(2009)
Bernhard Mayer-Helm

Tags
Chem Elut, Bond Elut PSA, environmental,
pesticides

Abstract

Agilent Chem Elut was used with consecutive elution, first with n-pentane then with dichloromethane. It is a good example of the use of SLE, with good recoveries that showed PSA causing pesticide recovery reduction, mobile phase, and pH. Published by Elsevier B. V.

Food testing and agriculture

[Influence of fructooligosaccharides and garlic on formation of heterocyclic amines in fried ground beef patties](#)

Food Science and Biotechnology, **19**, 1159-1164
(2010)
Kyunghee Jung *et al.*

Tags
Chem Elut, Bond Elut C18, ZORBAX Rx-C18,
1100 Series LC, food testing and agriculture

Abstract

Agilent Chem Elut and Bond Elut C18 sorbents were used to extract HCAs, which were then analyzed on an Agilent 1100 Series LC fitted with an Agilent ZORBAX Rx-C18 column. Published by Springer.

[Suppressive effect of soil application of carbonaceous adsorbents on dieldrin uptake by cucumber fruits](#)

Soil Science and Plant Nutrition, **57**, 157-166
(2011)
Takashi Saito *et al.*

Tags

Chem Elut, food testing and agriculture,
persistent organic pollutants

Abstract

The use of aldrin and dieldrin as pesticides was prohibited in 1975 in Japan. However, some of the soils still remain contaminated with dieldrin, because aldrin is easily oxidized to dieldrin and dieldrin is extremely stable in soil. In recent years, dieldrin at concentrations exceeding the limit set by the Food Sanitation Law of Japan (dieldrin < 0.02 mg kg⁻¹ fresh weight) has been detected in cucumber fruits produced in some areas of Japan. We examined the effect of the soil application of selected adsorbents on reducing dieldrin concentrations in cucumber fruits in three steps of pot experiments. Among the three types of biochar made from wood chip, rice husk, and bamboo, wood chip charcoal was found to be the most effective (pot experiment 1). The effect of wood chip charcoal was enhanced by high-temperature burning and crushing (pot experiment 2). However, the effect of activated carbon was superior to that of optimized (high-temperature-treated and crushed) wood chip charcoal (pot experiment 3). Therefore, activated carbon was selected as the most effective adsorbent. The effect of activated carbon to reduce dieldrin concentrations in cucumber fruits was confirmed in a field experiment, and the effect continued to a certain extent for at least four years after the application. We calculated the cost of activated carbon necessary to maintain a sufficient suppressive effect in the field, and this cost would appear to be acceptable to cucumber farmers. Consequently, application of activated carbon to dieldrin-contaminated soils can be considered a promising practical technique for reducing dieldrin concentrations in cucumber fruits. © 2011 Taylor & Francis.

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