

## **“Optimizing recoveries of planar pesticides in spinach using Toluene and AOAC QuEChERS Kits with graphitized carbon”**

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Spinach is known for being one of the most heavily pesticide contaminated produce product. The QuEChERS method has been employed for the extraction of the pesticides with Graphitized Carbon Black (GCB) dispersive adsorbent in order to remove the high level of pigment but GCB is also retaining the planar pesticides. In order to compensate the negative effect of the GCB on planar pesticides extraction, the use of toluene with the SampliQ AOAC QuEChERS Kit for highly pigmented fruits and vegetables as been studied.

Modifying the dispersive SPE kit with toluene provides a very useful way to limit the loss of planar pesticides caused by the GCB and shows a dramatic increase in recoveries (91.9% in average) and reduced RSDs (3.3% in average).

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