

**Extraction of diazinon, haloxyfop-R-methyl, hexaconazole, diniconazole, and triticonazole in cheese samples using a ferrofluid based liquid phase extraction method prior to gas chromatography**

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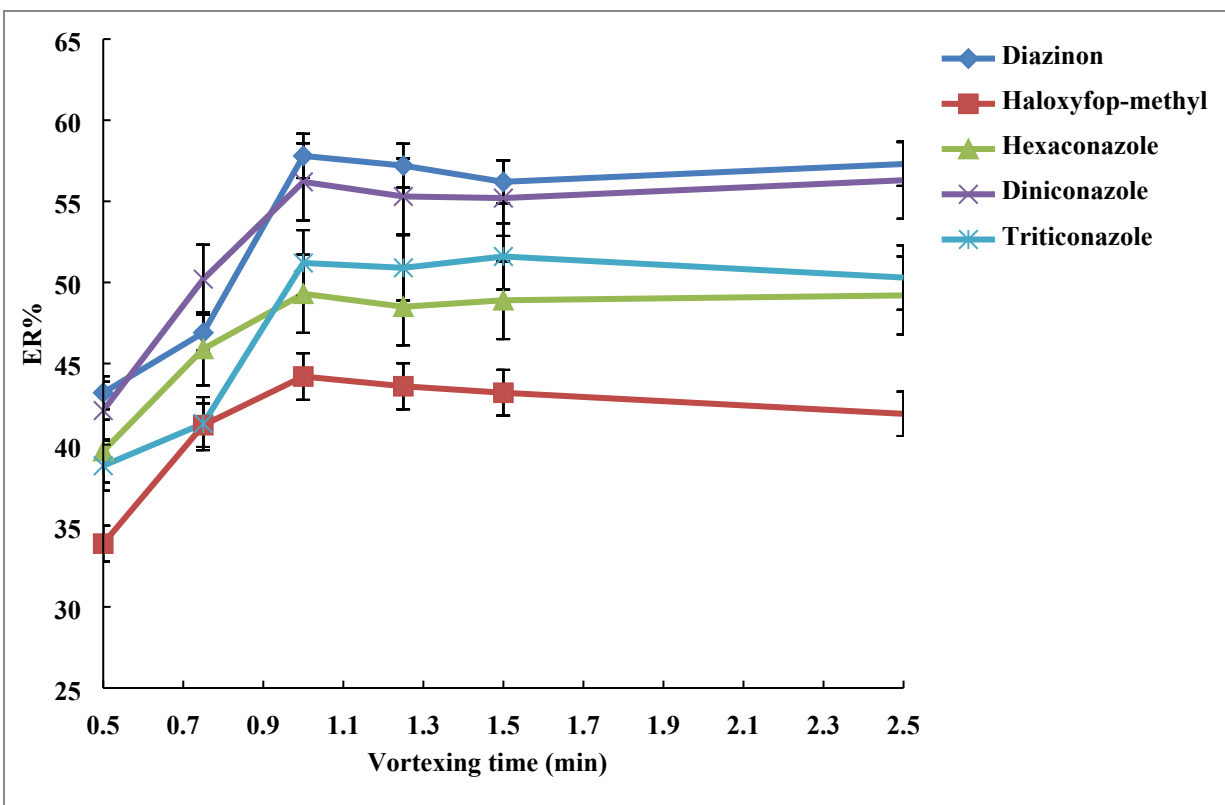


Fig. S1. Optimization of vortexing time.

Extraction conditions: Sample, 1 g blank cheese spiked with 100 ng g<sup>-1</sup> of each analyte; extraction solvent type (volume), ACN (1.5 mL); TCA solution concentration (volume), 10% w/v (1 mL); NaCl concentration, 20 % w/v; Vortexing time, 2.5 min; centrifugation time (speed), 5 min (5000 rpm); ferrofluid volume, 100 μL; back-extraction solvent (volume), *n*-hexane (75 μL); and vortex time, 2 min. The error bars indicate the standard deviations of three repeated determinations.

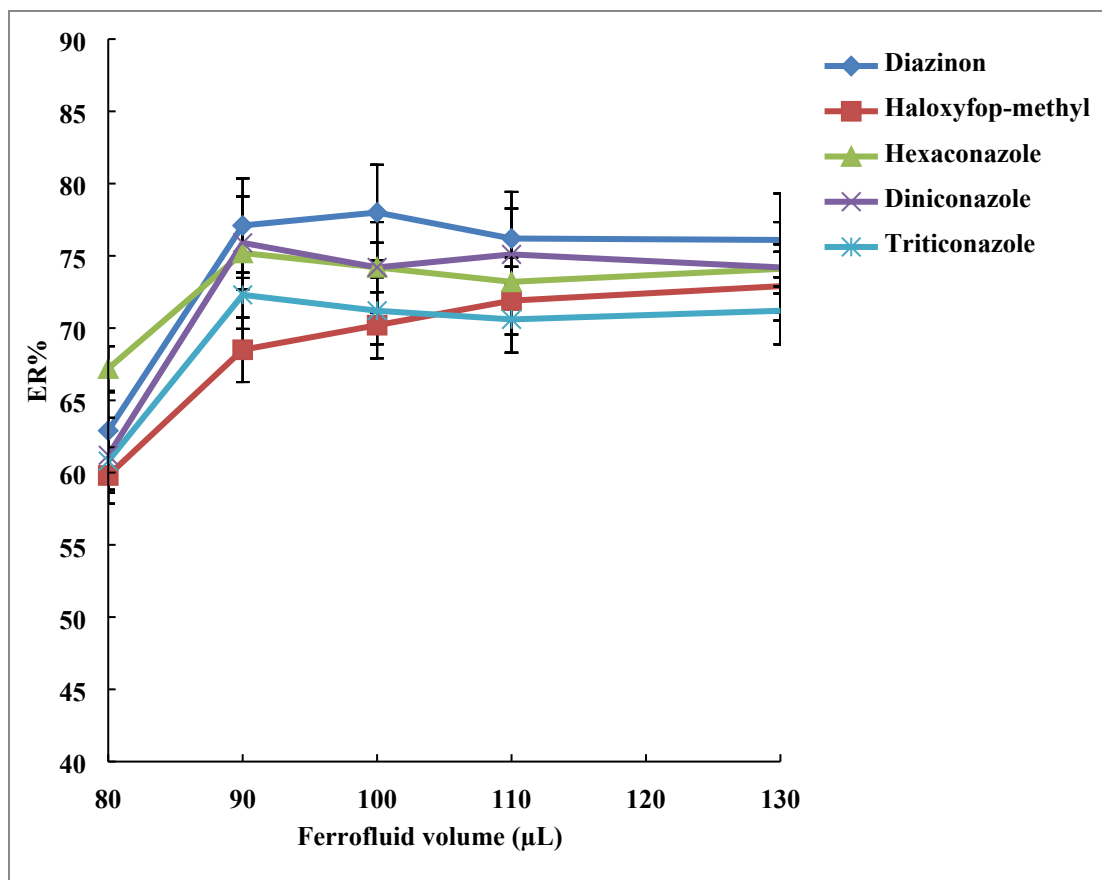


Fig. S2. Optimization of ferrofluid volume.

Extraction conditions: are the same as those used in Fig. S1, except 1 min and 1.5 mL TCA solution (15% w/v) were the vortexing time and precipitation agent.

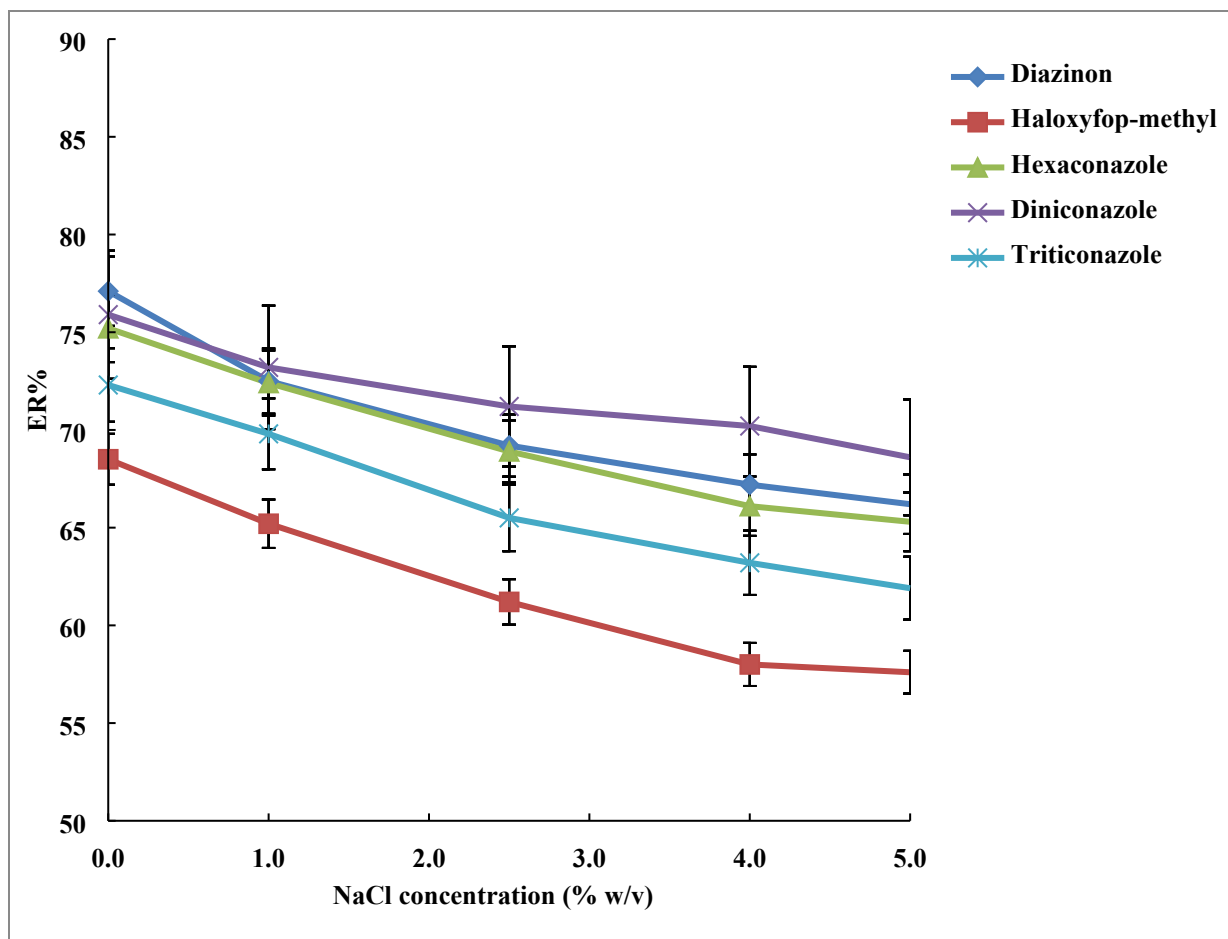


Fig. S3. Salt effect

Extraction conditions: are the same as those used in Fig. S2, except 90  $\mu\text{L}$  of the ferrofluid was chosen as the optimum volume of extraction solvent.