**TABLE S1.** Molar mass, quantitative ion, qualifier ions and retention time's ions selected for the analysis of OCPs using GC-MS analysis

| Analytes | MW (g/mol) | RT (min) | quantitative (precursor ion)(m/z) | qualitative ions (product ions) (m/z) |
|---|---|---|---|---|
| α-BHC | 290.83 | 7.87 | 219 | 189, 109 |
| β-BHC | 290.83 | 9.52 | 219 | 189, 109 |
| δ-BHC | 290.83 | 10.08 | 219 | 189, 109 |
| Aldrin | 364.9 | 11.78 | 263 | 66, 293 |
| HCE | 389.3 | 13.88 | 263 | 81, 353 |
| ɣ-chlordane | 409.8 | 15.19 | 272 | 65, 373 |
| 4,4-DDE | 318.02 | 17.38 | 246 | 176, 318 |
| Endrin | 380.90 | 18.74 | 281 | 263, 345 |
| P,p-DDT | 354.49 | 19.25 | 212 | 165, 235 |
| ESS | 422.9 | 21.87 | 272 | 229, 387 |
| Dieldrin | 380.91 | 23.28 | 280 | 249, 379 |
| MC | 345.65 | 24.88 | 240 | 227, 274 |
| DBC | 499 | 25.25 | 237 | 99, 388 |

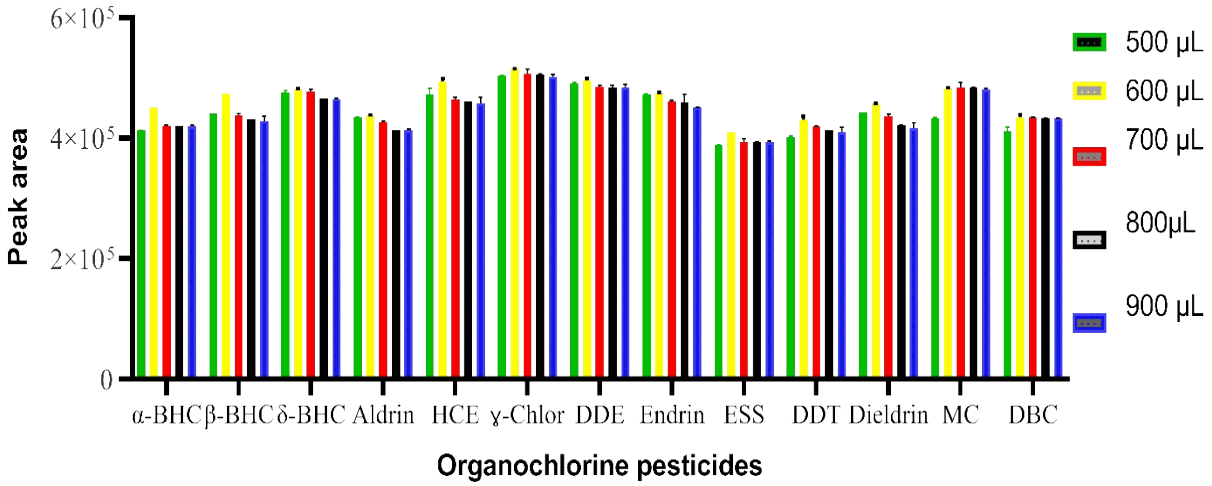



**Figure S1.** Selection of total volume of extraction solvent. Extraction conditions; Sample volume 5mL, mixed standard 5 ng/mL, extraction solvent volume ratio 2:1, the mass of NaCl: 1.5 g, centrifugation at 4000 rpm for 2 min

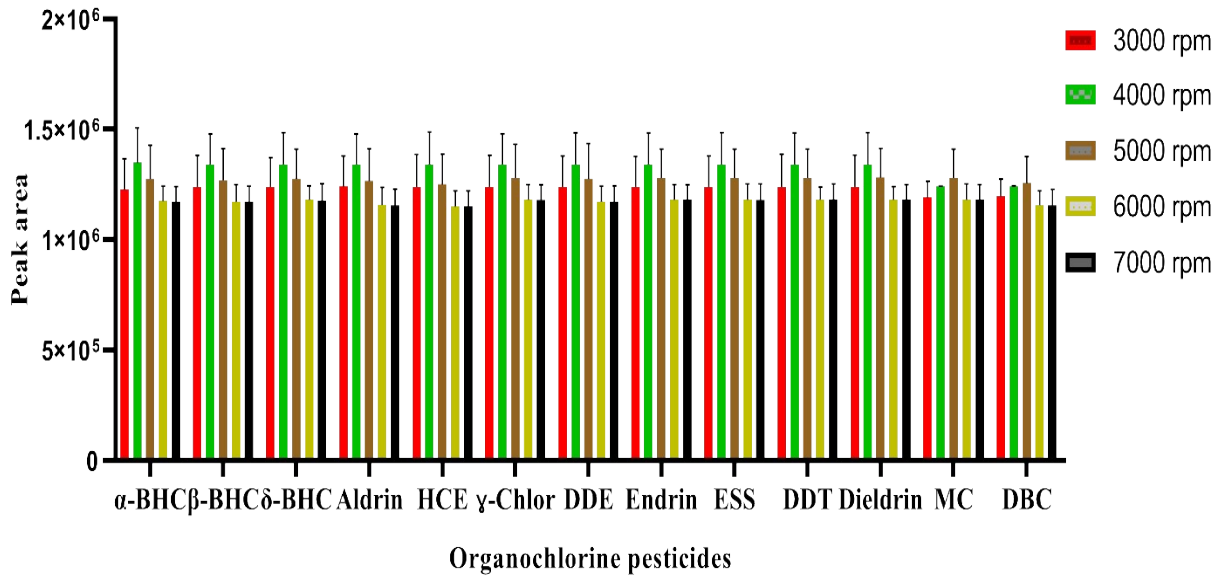
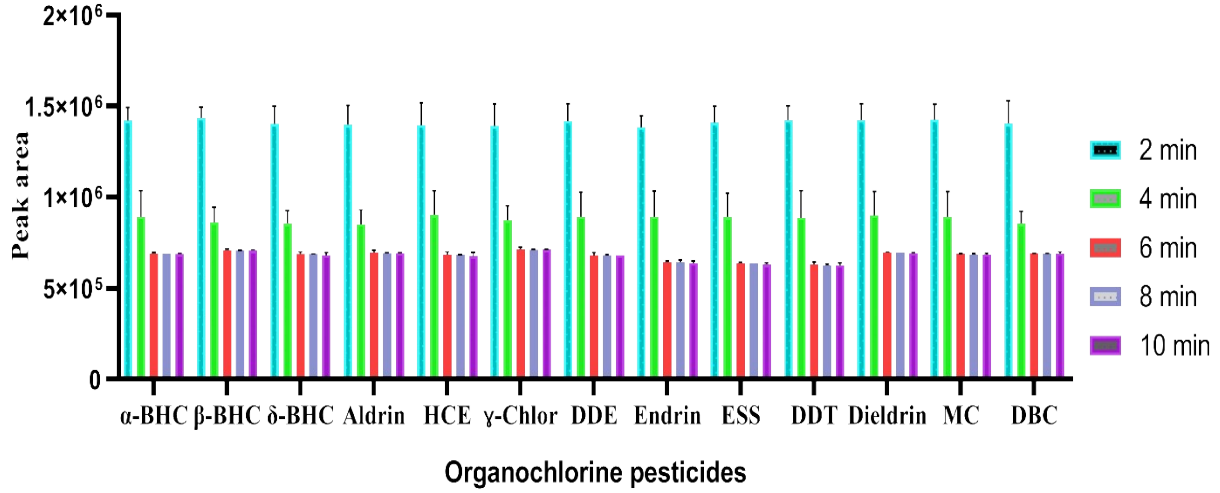



**Figure S2.** Effect of centrifugation rate on the extraction efficiency of the proposed method. Extraction conditions; Sample volume 5 mL, mixed standard 5 ng/mL, extraction solvent (volume) ACN:EA (600 µL), extraction solvent volume ratio 3:1, mass of NaCl 1.5 g, centrifugation time 2




min

**Figure S3.** Effect of centrifugation time on the extraction efficiency of the proposed method. Extraction conditions; Sample volume 5 mL, mixed standard 5 ng/mL, extraction solvent (volume)

ACN: EA (600µL), extraction solvent volume ratio 3:1, mass of NaCl 1.5 g, centrifugation rate 4000 rpm


**Figure S4.** AGREE prep assessment result of this study

Note that numbers 1-12 indicated the 12 principles of GAC as mentioned below

**Principle 1.** Direct analytical techniques should be applied to avoid sample treatment.

**Principle 2.** Minimal sample size and minimal number of samples are goal

**Principle 3.** In situ measurements should be performed

**Principle 4.** Integration of analytical processes and operations saves energy and reduces the use of reagents.

**Principle 5.** Automated and miniaturized methods should be selected.

**Principle 6.** Derivatization should be avoided.

**Principle 7.** Generation of a large volume of analytical waste should be avoided and proper management of analytical waste should be provided

**Principle 8.** Multi-analyte or multi-parameter methods are preferred versus methods using one analyte at a time.

**Principle 9.** The use of energy should be minimized

**Principle 10.** Reagents obtained from renewable source should be preferred

**Principle 11.** Toxic reagents should be eliminated or replaced.

**Principle 12**. The safety of the operator should be increased