

図1. CO₂密度の影響

SFE conditions: extraction temperature, 40 °C ; CO₂ flow rate, 2.0 mL/min ; static extraction, 3.0 min; dynamic extraction, 20.0 min; rice, 2.0 g.

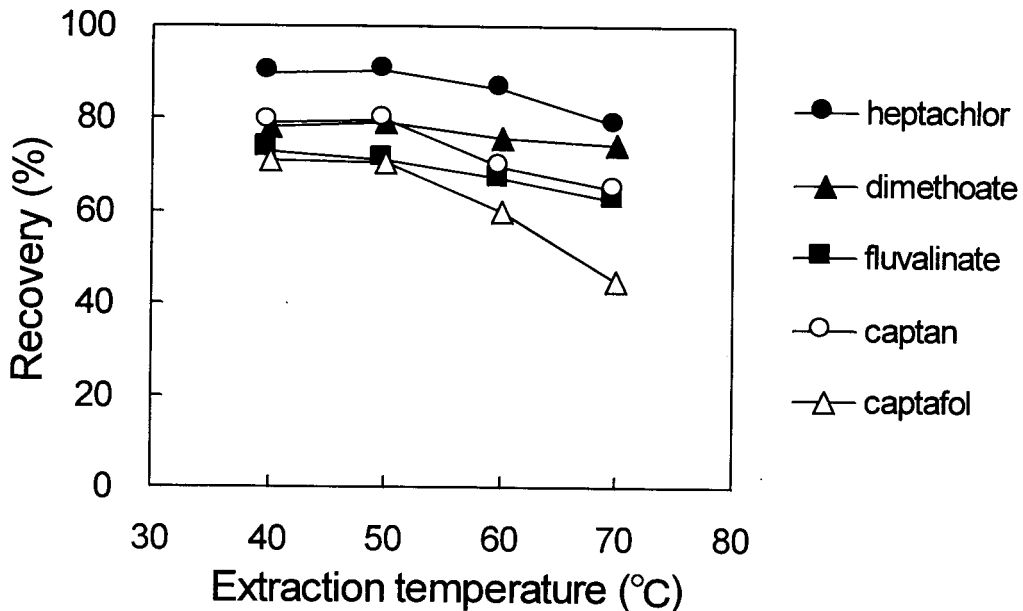


図2. 抽出温度の影響

SFE conditions: CO₂ density, 0.70 g/mL; CO₂ flow rate, 2.0 mL/min ; static extraction, 3.0 min; dynamic extraction, 20.0 min; rice, 2.0 g.

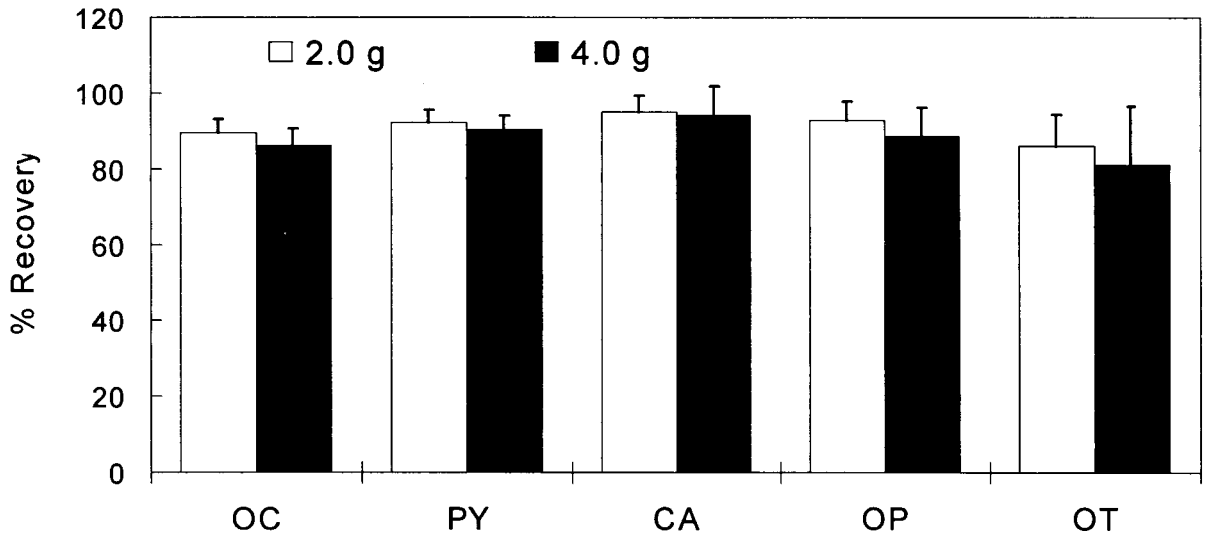


図3. 試料量の影響

SFE conditions: CO₂ density, 0.70 g/mL; extraction temperature, 40 °C ; CO₂ flow rate, 2.0 mL/min; static extraction, 3.0 min; dynamic extraction, 20.0 min; rice, 2.0 g or 4.0 g.

OC = organochlorine; PY = pyrethroid; CA = carbamate; OP = organophosphate; OT = other.

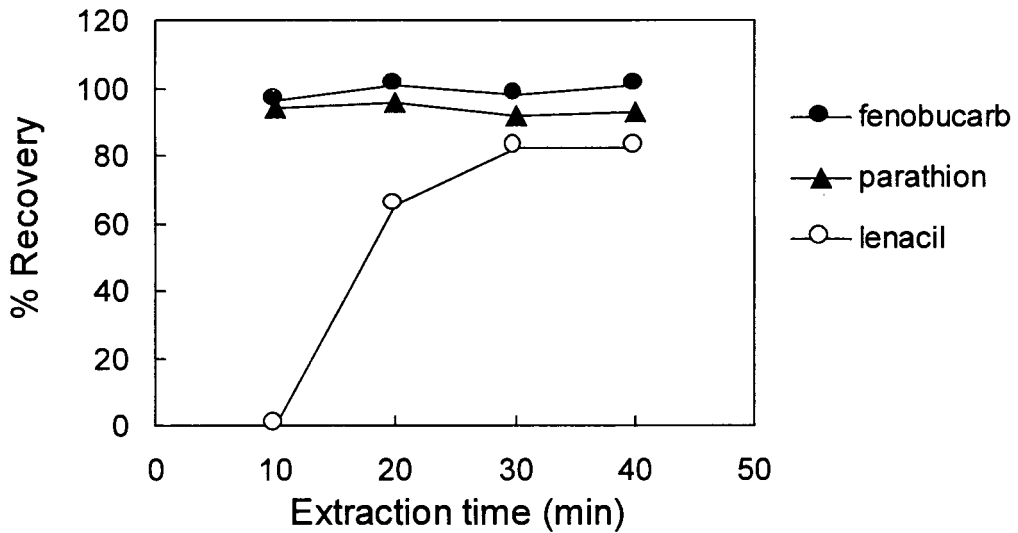
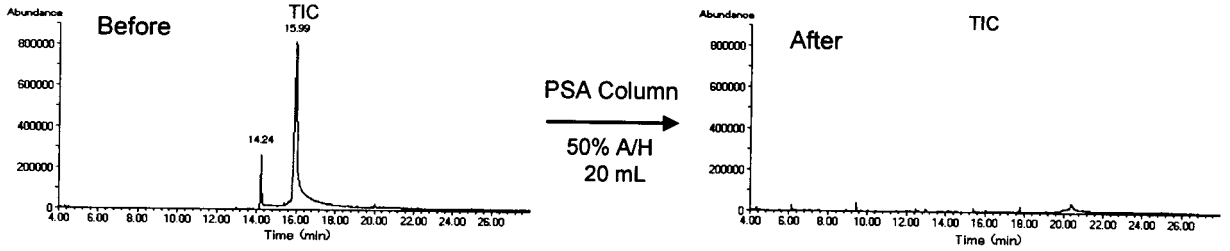


図4. 抽出時間の影響

SFE conditions: CO₂ density, 0.70 g/mL; extraction temperature, 40 °C ;

CO₂ flow rate, 2.0 mL/min; static extraction, 3.0 min; rice, 4.0 g.

(1) SFE extract from blank wheat



(2) SFE extract from blank corn

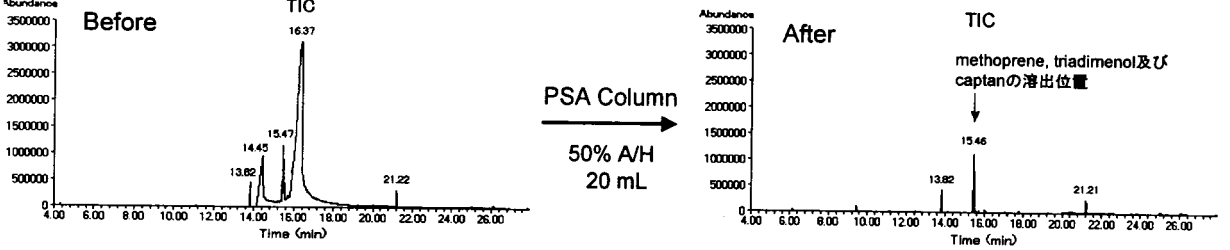


図5. SFE抽出液のPSAカラムクリーンアップ効果
A: acetone, H: n-hexane

Methoprene

Monitor ion: m/z 73.1

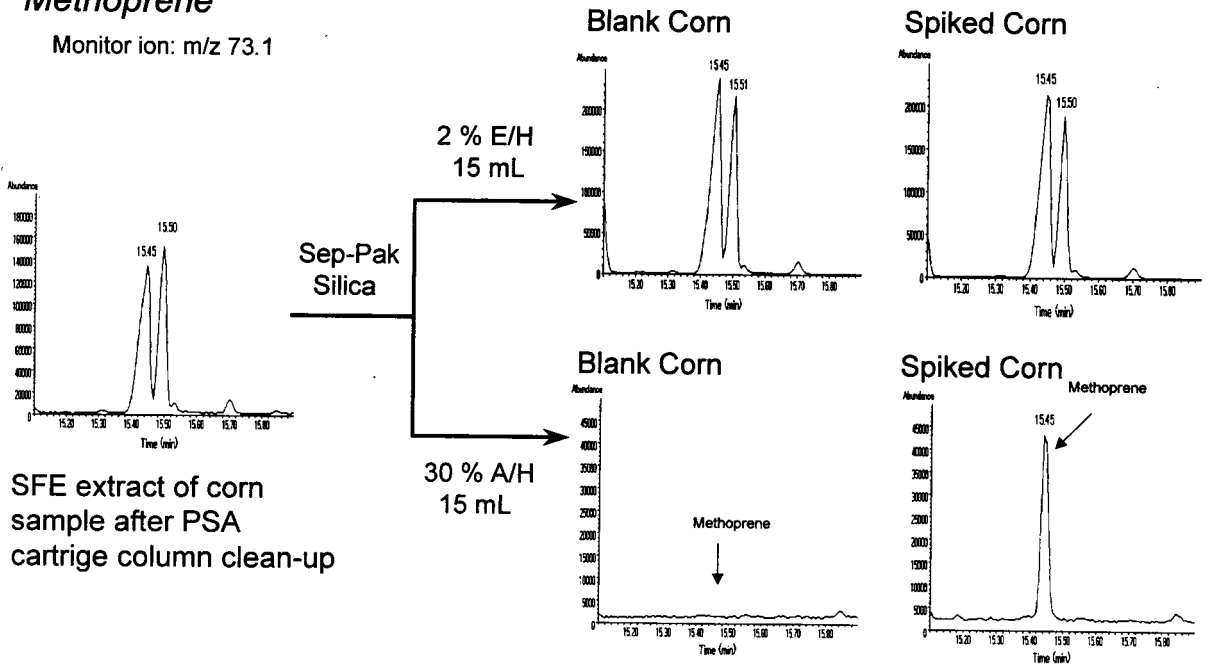


図6. メトプレン測定に対するシリカゲルカラムクリーンアップ効果
E: diethyl ether, A: acetone, H: n-hexane

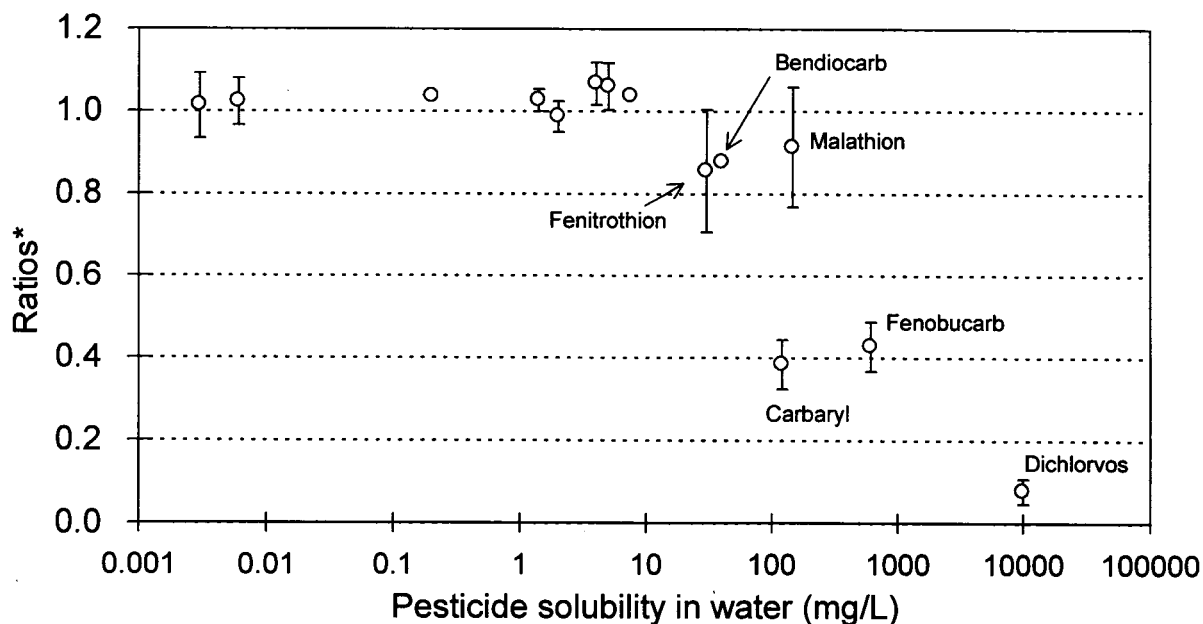


図7. 溶媒抽出法の測定値に対するSFE法の測定値の比に対する農薬の水溶解度の影響

* Ratios = (Results of SFE method)/(Results of solvent extraction method)

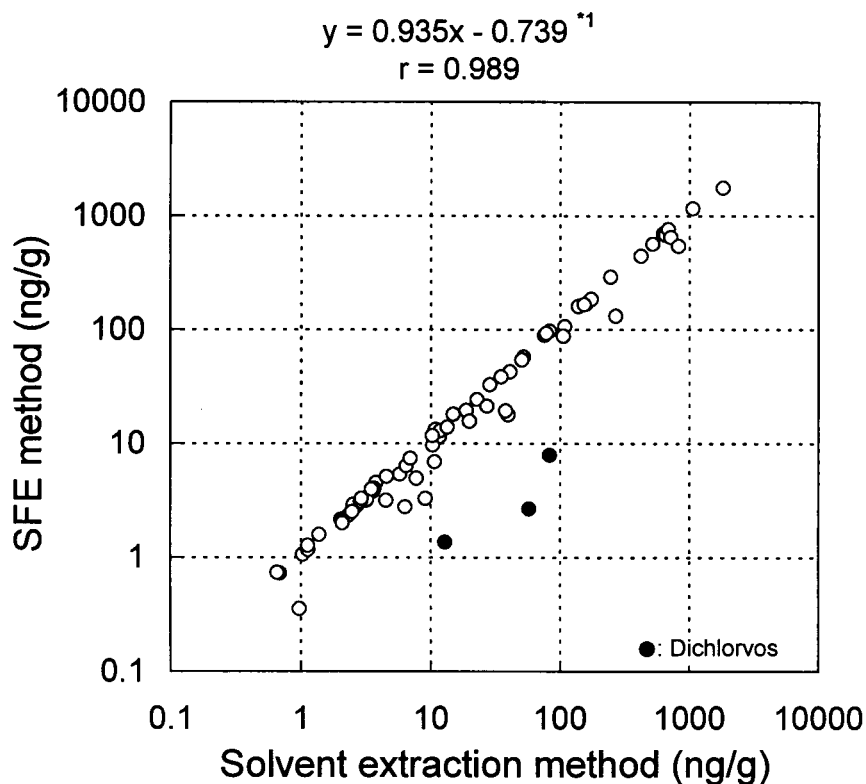


図8. 穀類中の残留農薬分析のSFE法と溶媒抽出法の比較

*¹Dichlorvosを除いた場合: $y = 0.933x + 1.315$, $r = 0.990$