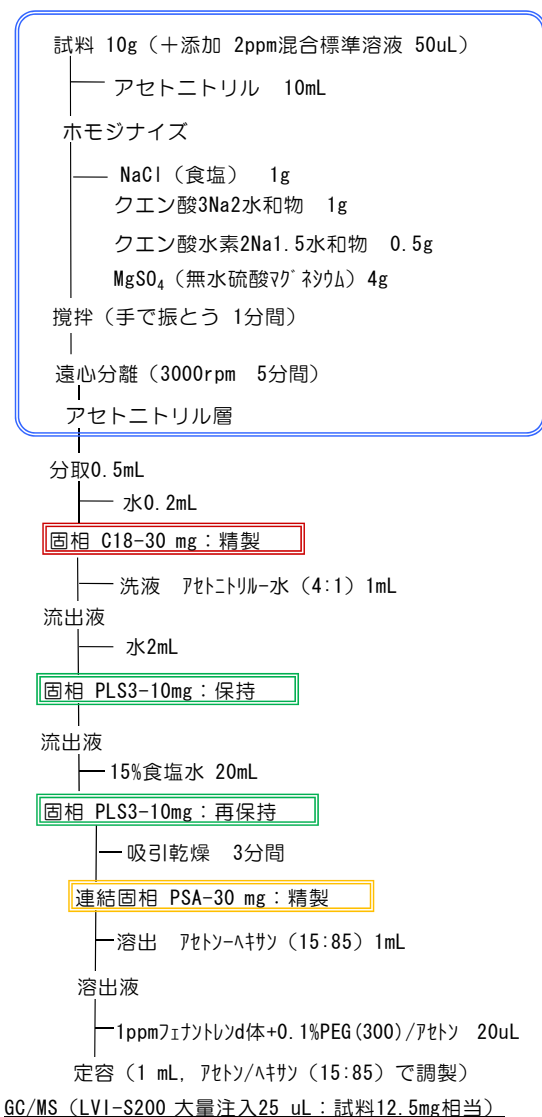


キャベツ MA-GCB1

前処理フロー

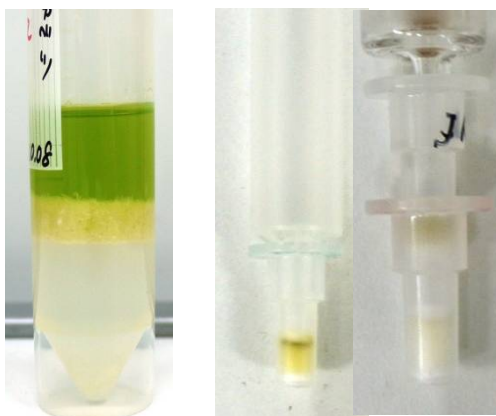


目的/実験方法

手作業による添加回収試験(GC-B1法)

- 添加濃度(試料中) : 10ppb
- 最終バイアル中濃度 : 5ppb
- 農薬 : 関東MIX-22, 31, 34, 48, 51
- 検量線 :
 - ・PEG共注入標準溶液、絶対、直線検量線
 - ・1点 : 5ppb
 - ・20ppbフェナントレンド体+20ppmPEG + 農薬混合標準溶液(アセトン-ヘキサン)
 - * フェナントレンド体は装置の感度評価の目安として使用。
- 測定 : 1 Injection によるSCAN測定
- 測定条件 : 参考資料に従う。

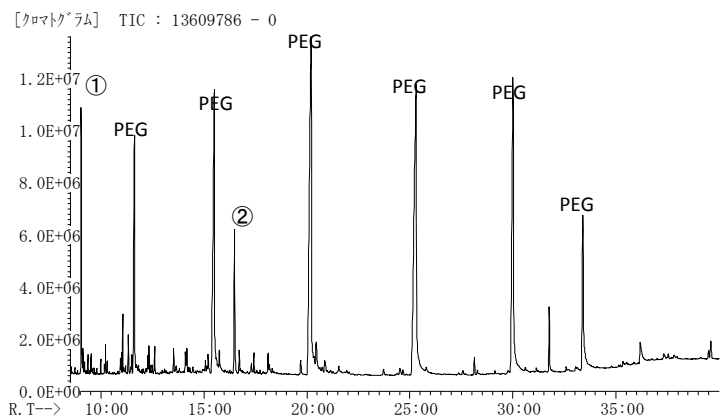
①遠心分離後 ②固相 (C18-30, PLS+PSA)



考察

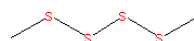
大きな夾雑ピークは無く、やや低いものもあるが概ね良好な回収率を得ることができた。

Scan Chromatogram

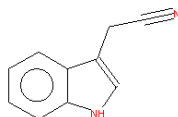


【夾雑成分】

① Dimethyl tetrasulfide



② Indoleacetonitrile



STQ-KIT
For STQ Method

Sample



Information

水分 : 92.7%
脂質 : 0.2%
脂肪酸 : 0.05%

キャベツは、外側変質葉及びしんを除いたものを4等分し、各々から1/2等分を集めたものをフードプロセッサで細切。

AISTI SCIENCE

Product

LVI-S200
Smart-SPE C18-30
Smart-SPE PLS3-10
Smart-SPE PSA-30

株式会社アイスティサイエンス

〒640-8341
和歌山市黒田120-6アソト黒田2F
TEL. 073-475-0033
FAX. 073-497-5011
www.aisti.co.jp

| No. | 農薬名 | 回収率(%) | No. | 農薬名 | 回収率(%) | No. | 農薬名 | 回収率(%) | No. | 農薬名 | 回収率(%) |
|-----|---------------------------|--------|-----|--------------------|--------|-----|---------------------------|--------|-----|----------------------|--------|
| 1 | 1-Naphthylacetamide | ND | 76 | Cypermethrin-3 | 96.3 | 151 | Fluthiacet-methyl | 48.6 | 226 | Profenofos | 79.0 |
| 2 | 3-Hydroxycarbofuran | St- | 77 | Cypermethrin-4 | 103.3 | 152 | Flutolanil | 88.3 | 227 | Prohydrojasmon-1 | 79.9 |
| 3 | 4,4'-Dichlorobenzophenone | 78.4 | 78 | Cyproconazole-1 | 81.2 | 153 | Flutriafol | 53.1 | 228 | Prohydrojasmon-2 | St- |
| 4 | Acephate | ND | 79 | Cyproconazole-2 | 79.4 | 154 | Fluvalinate-1 | 101.9 | 229 | Prometryn | 82.8 |
| 5 | Acetamipride | ND | 80 | DEF(tribufos) | 82.3 | 155 | Fluvalinate-2 | 97.8 | 230 | Propachlor | 78.3 |
| 6 | Acetochlor | 87.6 | 81 | Deltamethrin | 85.8 | 156 | Formothion | 84.8 | 231 | Propanil | 65.6 |
| 7 | Acrinathrin | 86.2 | 82 | Demeton-S-methyl | 55.8 | 157 | Fosthiazate-1 | 69.1 | 232 | Propaphos | 79.5 |
| 8 | Alachlor | 84.1 | 83 | Diallate-1 | 81.7 | 158 | Fosthiazate-2 | 73.8 | 233 | Propargite(BPPS) | 80.7 |
| 9 | Allethrin-1,2 | St- | 84 | Diallate-2 | 81.9 | 159 | Halfenprox | 75.9 | 234 | Propazine | 85.6 |
| 10 | Allethrin-3,4 | 78.9 | 85 | Diazinone | 85.2 | 160 | Hexaconazole | 80.8 | 235 | Propiconazole-1 | 84.4 |
| 11 | Ametryn | 81.0 | 86 | Dichlofenthion | 83.2 | 161 | Hexazinone | 43.0 | 236 | Propiconazole-2 | 72.8 |
| 12 | Anilofos | 68.5 | 87 | Dichlofluanid | ND | 162 | Imazamethabenz methyl | 40.5 | 237 | Propoxur | 70.2 |
| 13 | Aramite-3 | 79.0 | 88 | Dichlorvos | 43.1 | 163 | Imibenconazole | 49.8 | 238 | Propyzamide | 86.5 |
| 14 | Aramite-4 | 57.7 | 89 | Diclocymet-1 | 83.5 | 164 | Imibenconazole-des-benzyl | 34.7 | 239 | Prothiophos | 82.5 |
| 15 | Atrazine | 74.5 | 90 | Diclocymet-2 | 88.1 | 165 | Iprobenfos | 87.8 | 240 | Pyraclofos | 80.1 |
| 16 | Azaconazole | 81.0 | 91 | Diclofop-methyl | 83.5 | 166 | Iprodione | 111.4 | 241 | Pyraflufen-ethyl | 81.2 |
| 17 | Azinphos-Methyl | 34.2 | 92 | Dicloran | 98.7 | 167 | Isazophos | 90.9 | 242 | Pyrazophos | 82.2 |
| 18 | Benalaxyl | 89.4 | 93 | Dicrotofos | ND | 168 | Isofenphos | 91.0 | 243 | Pyributicarb | 84.0 |
| 19 | Bendiocarb | 87.2 | 94 | Diethofencarb | 84.4 | 169 | Isofenphos P=O | 88.2 | 244 | Pyridaben | 78.1 |
| 20 | Benfluranin | 91.9 | 95 | Difenoconazole-1 | 77.7 | 170 | Isoprocarbe | 76.7 | 245 | Pyridafenthion | 84.3 |
| 21 | Benfuresate | 88.3 | 96 | Difenoconazole-2 | 77.5 | 171 | Isoprothiolane | 91.5 | 246 | PyrifenoX-1 | 70.0 |
| 22 | Benoxacor | 81.6 | 97 | Diflufenican | 79.3 | 172 | Isoxathion | 80.4 | 247 | PyrifenoX-2 | 71.6 |
| 23 | BHC-alpha | 77.4 | 98 | Dimepiperate | 77.9 | 173 | Isoxathion-ox | 78.7 | 248 | Pyrimethanil | 79.7 |
| 24 | BHC-beta | 80.1 | 99 | Dimethametryn | 85.3 | 174 | Kresoxim-methyl | 85.8 | 249 | Pyrimidifen | 77.6 |
| 25 | BHC-gamma | 90.4 | 100 | Dimethenamid | 84.9 | 175 | Lenacil | 57.7 | 250 | Pyriminobac-methyl-1 | 88.1 |
| 26 | BHC-delta | 97.2 | 101 | Dimethipin | 75.5 | 176 | Malathion | 89.7 | 251 | Pyriminobac-methyl-2 | 87.8 |
| 27 | Bifenox | 97.9 | 102 | Dimethoate | ND | 177 | Mecarbam | St- | 252 | Pyriproxyfen | 83.2 |
| 28 | Bifenthrin | 81.6 | 103 | Dimethylvinphos-z | 81.4 | 178 | Mefenacet | 81.8 | 253 | Pyroquilon | 44.1 |
| 29 | Bitertanol-1 | 65.4 | 104 | Dioxathion | 35.1 | 179 | Mefenpyr-diethyl | 83.6 | 254 | Quinoclamine | 63.9 |
| 30 | Bitertanol-2 | 57.2 | 105 | Diphenamide | 86.0 | 180 | Mepronil | 90.5 | 255 | Quinolphos | 85.3 |
| 31 | Bromacil | 31.7 | 106 | Disulfoton | 65.4 | 181 | Metalaxyl | 83.7 | 256 | Quinomethionate | 84.3 |
| 32 | Bromobutide | 85.4 | 107 | Disulfoton sulfone | 102.4 | 182 | Methamidophos | ND | 257 | Quinoxyfen | 77.6 |
| 33 | Bromofos methyl | 73.2 | 108 | Edifenphos | 86.8 | 183 | Methidathion | 83.9 | 258 | Quintozen | 75.5 |
| 34 | Bromophos-ethyl | 76.1 | 109 | Endosulfan | 85.4 | 184 | Methiocarb | 112.9 | 259 | Resmethrin-1 | St- |
| 35 | Bromopropylate | 83.7 | 110 | Endosulfan II | 72.0 | 185 | Methoprene-1 | St- | 260 | Resmethrin-2 | ND |
| 36 | Bupimate | 81.4 | 111 | Endosulfan sulfate | 81.0 | 186 | Methoprene-2 | 74.4 | 261 | Silafluofen | 70.1 |
| 37 | Buprofezin | 83.9 | 112 | EPN | 65.2 | 187 | Methoxychlor | 73.4 | 262 | Simazin | 60.6 |
| 38 | Butachlor | 83.0 | 113 | Epoxiconazole | 83.7 | 188 | Metolachlor | 86.2 | 263 | Simetryn | 70.0 |
| 39 | Butamifos | 97.8 | 114 | EPTC | 66.7 | 189 | Metominostrobin-e | 87.6 | 264 | Spirodiclofen | 57.5 |
| 40 | Butylate | 80.1 | 115 | Esprocarb | 83.8 | 190 | Metominostrobin-z | 86.9 | 265 | Spiroxamine-1 | 75.0 |
| 41 | Cadusafos | 83.2 | 116 | Ethalfuralin | 82.4 | 191 | Mevinphos | ND | 266 | Spiroxamine-2 | 84.1 |
| 42 | Cafenstrole | 93.0 | 117 | Ethiofencarb | 72.3 | 192 | Monocrotophos | ND | 267 | TCMTB | St- |
| 43 | Captafol | St- | 118 | Ethion | 82.4 | 193 | Myclobutanil | 87.7 | 268 | Tebuconazole | 82.5 |
| 44 | Captan | St- | 119 | Ethofumesate | 88.2 | 194 | Napropamide | 90.9 | 269 | Tebufenpyrad | 76.5 |
| 45 | Carbaril | 132.6 | 120 | Ethoprophos | 85.6 | 195 | Nitrothal-isopropyl | 88.6 | 270 | Tecnazene | 89.4 |
| 46 | Carbofuran | 78.8 | 121 | Etofenprox | 83.0 | 196 | Norflurazon | 67.9 | 271 | Tefluthrine | 79.3 |
| 47 | Carboxin | 48.8 | 122 | Etoxazole | 83.4 | 197 | Oryzalin | St- | 272 | Terbacil | 61.7 |
| 48 | Carfentrazone ethyl | 79.2 | 123 | Etrinfos | 89.9 | 198 | Oxadiazone | 85.6 | 273 | Terbufos | 66.7 |
| 49 | Chlorbenside | 82.9 | 124 | Fenamidone | 82.4 | 199 | Oxadixyl | 51.9 | 274 | Terbutryn | 90.3 |
| 50 | Chlorbufam | ND | 125 | Fenamiphos | 84.6 | 200 | Oxyfluorfen | 92.5 | 275 | Tetrachlorvinphos | 78.8 |
| 51 | Chlorethoxyphos | 76.9 | 126 | Fenarimol | 76.8 | 201 | p,p'-DDD | 80.9 | 276 | Tetraconazole | 86.4 |
| 52 | Chlorfenapyr | 84.1 | 127 | Fenbuconazole | 74.6 | 202 | p,p'-DDE | 76.2 | 277 | Tetradifon | 73.8 |
| 53 | Chlorfenson | 91.8 | 128 | Fenchlorphos | 77.3 | 203 | Pacllobutrazol | 84.6 | 278 | Thenylchlor | 64.6 |
| 54 | Chlorfenvinphos-1 | 87.2 | 129 | Fenitrothion | 89.5 | 204 | Parathion | 101.3 | 279 | Thiobencarb | 86.3 |
| 55 | Chlorfenvinphos-2 | 93.7 | 130 | Fenobucarb | 82.9 | 205 | Parathion-methyl | 95.7 | 280 | Thiometon | 65.5 |
| 56 | Chlorobenzilate | 85.1 | 131 | Fenothiocarb | 89.3 | 206 | Penconazole | 87.0 | 281 | Tolclofos-methyl | 84.7 |
| 57 | Chloroneb | 79.1 | 132 | Fenoxanil | 87.5 | 207 | Pendimethalin | 87.0 | 282 | Tolfenpyrad | 78.4 |
| 58 | Chlorpropham | 91.2 | 133 | Fenpropathrin | 87.3 | 208 | Permethrin-cis | 80.4 | 283 | Toriadimefon | 89.7 |
| 59 | Chlorpyrifos | 84.1 | 134 | Fenpropemorph | 82.3 | 209 | Permethrin-trans | 79.8 | 284 | Triadimenol-1 | 79.2 |
| 60 | Chlorpyrifos-methyl | 81.1 | 135 | Fensulfotthion | 94.8 | 210 | Perthane | 80.1 | 285 | Triadimenol-2 | 59.5 |
| 61 | Chlorthal-dimethyl | 77.7 | 136 | Fenthion | 77.6 | 211 | Phenothrin-1 | 65.0 | 286 | Triallate | 79.4 |
| 62 | Chlozolate | 90.1 | 137 | Fenvalerate-1 | 92.5 | 212 | Phenothrin-2 | 81.4 | 287 | Triazophos | 84.5 |
| 63 | Cinidon-ethyl | 80.7 | 138 | Fenvalerate-2 | 87.8 | 213 | Phenthoate | 72.8 | 288 | Tricyclazole | ND |
| 64 | Clomazone | 88.3 | 139 | FIPRONIL | 75.8 | 214 | Phorate | 71.5 | 289 | Trifloxystrobin | 84.2 |
| 65 | Cyanazine | 69.6 | 140 | Flamprop-methyl | 95.9 | 215 | Phosalone | 77.2 | 290 | Trifluralin | 87.4 |
| 66 | Cyanophos | 83.0 | 141 | Fluacrypyrim | 84.8 | 216 | Phosmet | 78.1 | 291 | Thiulfamide | 38.9 |
| 67 | Cyfluthrin-1 | ND | 142 | Flucythrinate-1 | 85.9 | 217 | Phosphamidon | 57.5 | 292 | Uniconazole | 72.8 |
| 68 | Cyfluthrin-2 | 92.8 | 143 | Flucythrinate-2 | 86.7 | 218 | Phthalide | 57.8 | 293 | Vinclozoline | 83.0 |
| 69 | Cyfluthrin-3 | 106.3 | 144 | Fludioxonil | 56.8 | 219 | Picolinafen | 81.6 | 294 | XMC | 78.0 |
| 70 | Cyfluthrin-4 | 84.8 | 145 | Flufenpyl-ethyl | 85.3 | 220 | Piperonyl butoxide | 81.1 | 295 | Zoxamide | ND |
| 71 | Cyhalofop-butyl | 90.3 | 146 | Flumiclorac-pentyl | 82.6 | 221 | Piperophos | 86.1 | | | |
| 72 | Cyhalothrin-1 | 85.3 | 147 | Flumioxazin | 74.2 | 222 | Pirimicarb | 43.7 | | | |
| 73 | Cyhalothrin-2 | 88.5 | 148 | Fluquinconazole | 90.8 | 223 | Pirimiphos methyl | 88.5 | | | |
| 74 | Cypermethrin-1 | 82.2 | 149 | Fluridone | 44.4 | 224 | Pretlachlor | 78.1 | | | |
| 75 | Cypermethrin-2 | 112.0 | 150 | Flusilazole | 85.6 | 225 | Procyimidone | 87.3 | | | |

*PEG共注入標準溶液による絶対検量線を使用 回収率30%未満は ND スタンダードNDは St-