

Predictive_dose-response_per_farm.R

nuiuce

Sun Jan 22 19:47:36 2017

```
#Analysis were based on three different concentrations per acaricide  
#i.e. alpha-cypermethrin at 0.002%, 0.02%, and 0.5%; amitraz at 0.002%, 0.1%, and 0.25% and ivermectin  
#at 0.01%, 0.1%, and 0.5% for the minimum, medium or discriminatory and maximum doses, respectively.  
#All farms except farm 8 showed resistance levels (more than 10%) according to use frequency of each  
#acaricide
```

```
library(drc)
```

```
## Loading required package: MASS  
##  
## 'drc' has been loaded.  
##  
## Please cite R and 'drc' if used for a publication,  
## for references type 'citation()' and 'citation('drc')'.  
##  
##  
## Attaching package: 'drc'  
##  
## The following objects are masked from 'package:stats':  
##  
##     gaussian, getInitial
```

```
Predic<-read.csv("resist.csv",header = T,sep = ";", dec = ",")  
Predic
```

```
##           Localidad finca           droga bioensayo conc  
## 1           Los Bancos Fin 1           amitraz           LPT 0.002  
## 2           Los Bancos Fin 1           amitraz           LPT 0.002  
## 3           Los Bancos Fin 1           amitraz           LIT 0.002  
## 4           Los Bancos Fin 1           amitraz           LIT 0.002  
## 5           Los Bancos Fin 1           amitraz           LPT 0.100  
## 6           Los Bancos Fin 1           amitraz           LPT 0.100  
## 7           Los Bancos Fin 1           amitraz           LIT 0.100  
## 8           Los Bancos Fin 1           amitraz           LIT 0.100  
## 9           Los Bancos Fin 1           amitraz           LPT 0.250  
## 10          Los Bancos Fin 1           amitraz           LPT 0.250  
## 11          Los Bancos Fin 1           amitraz           LIT 0.250  
## 12          Los Bancos Fin 1           amitraz           LIT 0.250  
## 13          Los Bancos Fin 1 alpha-cypermethrin           LPT 0.002  
## 14          Los Bancos Fin 1 alpha-cypermethrin           LPT 0.002  
## 15          Los Bancos Fin 1 alpha-cypermethrin           LIT 0.002  
## 16          Los Bancos Fin 1 alpha-cypermethrin           LIT 0.002  
## 17          Los Bancos Fin 1 alpha-cypermethrin           LPT 0.020  
## 18          Los Bancos Fin 1 alpha-cypermethrin           LPT 0.020  
## 19          Los Bancos Fin 1 alpha-cypermethrin           LIT 0.020  
## 20          Los Bancos Fin 1 alpha-cypermethrin           LIT 0.020
```

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|-------|------------|-------|--------------------|-----------|
| ## 21 | Los Bancos | Fin 1 | alpha-cypermethrin | LPT 0.500 |
| ## 22 | Los Bancos | Fin 1 | alpha-cypermethrin | LPT 0.500 |
| ## 23 | Los Bancos | Fin 1 | alpha-cypermethrin | LIT 0.500 |
| ## 24 | Los Bancos | Fin 1 | alpha-cypermethrin | LIT 0.500 |
| ## 25 | Los Bancos | Fin 1 | ivermectin | LPT 0.010 |
| ## 26 | Los Bancos | Fin 1 | ivermectin | LPT 0.010 |
| ## 27 | Los Bancos | Fin 1 | ivermectin | LIT 0.010 |
| ## 28 | Los Bancos | Fin 1 | ivermectin | LIT 0.010 |
| ## 29 | Los Bancos | Fin 1 | ivermectin | LPT 0.100 |
| ## 30 | Los Bancos | Fin 1 | ivermectin | LPT 0.100 |
| ## 31 | Los Bancos | Fin 1 | ivermectin | LIT 0.100 |
| ## 32 | Los Bancos | Fin 1 | ivermectin | LIT 0.100 |
| ## 33 | Los Bancos | Fin 1 | ivermectin | LPT 0.500 |
| ## 34 | Los Bancos | Fin 1 | ivermectin | LPT 0.500 |
| ## 35 | Los Bancos | Fin 1 | ivermectin | LIT 0.500 |
| ## 36 | Los Bancos | Fin 1 | ivermectin | LIT 0.500 |
| ## 37 | Los Bancos | Fin 2 | amitraz | LPT 0.002 |
| ## 38 | Los Bancos | Fin 2 | amitraz | LPT 0.002 |
| ## 39 | Los Bancos | Fin 2 | amitraz | LIT 0.002 |
| ## 40 | Los Bancos | Fin 2 | amitraz | LIT 0.002 |
| ## 41 | Los Bancos | Fin 2 | amitraz | LPT 0.100 |
| ## 42 | Los Bancos | Fin 2 | amitraz | LPT 0.100 |
| ## 43 | Los Bancos | Fin 2 | amitraz | LIT 0.100 |
| ## 44 | Los Bancos | Fin 2 | amitraz | LIT 0.100 |
| ## 45 | Los Bancos | Fin 2 | amitraz | LPT 0.250 |
| ## 46 | Los Bancos | Fin 2 | amitraz | LPT 0.250 |
| ## 47 | Los Bancos | Fin 2 | amitraz | LIT 0.250 |
| ## 48 | Los Bancos | Fin 2 | amitraz | LIT 0.250 |
| ## 49 | Los Bancos | Fin 2 | alpha-cypermethrin | LPT 0.002 |
| ## 50 | Los Bancos | Fin 2 | alpha-cypermethrin | LPT 0.002 |
| ## 51 | Los Bancos | Fin 2 | alpha-cypermethrin | LIT 0.002 |
| ## 52 | Los Bancos | Fin 2 | alpha-cypermethrin | LIT 0.002 |
| ## 53 | Los Bancos | Fin 2 | alpha-cypermethrin | LPT 0.020 |
| ## 54 | Los Bancos | Fin 2 | alpha-cypermethrin | LPT 0.020 |
| ## 55 | Los Bancos | Fin 2 | alpha-cypermethrin | LIT 0.020 |
| ## 56 | Los Bancos | Fin 2 | alpha-cypermethrin | LIT 0.020 |
| ## 57 | Los Bancos | Fin 2 | alpha-cypermethrin | LPT 0.500 |
| ## 58 | Los Bancos | Fin 2 | alpha-cypermethrin | LPT 0.500 |
| ## 59 | Los Bancos | Fin 2 | alpha-cypermethrin | LIT 0.500 |
| ## 60 | Los Bancos | Fin 2 | alpha-cypermethrin | LIT 0.500 |
| ## 61 | Los Bancos | Fin 2 | ivermectin | LPT 0.010 |
| ## 62 | Los Bancos | Fin 2 | ivermectin | LPT 0.010 |
| ## 63 | Los Bancos | Fin 2 | ivermectin | LIT 0.010 |
| ## 64 | Los Bancos | Fin 2 | ivermectin | LIT 0.010 |
| ## 65 | Los Bancos | Fin 2 | ivermectin | LPT 0.100 |
| ## 66 | Los Bancos | Fin 2 | ivermectin | LPT 0.100 |
| ## 67 | Los Bancos | Fin 2 | ivermectin | LIT 0.100 |
| ## 68 | Los Bancos | Fin 2 | ivermectin | LIT 0.100 |
| ## 69 | Los Bancos | Fin 2 | ivermectin | LPT 0.500 |
| ## 70 | Los Bancos | Fin 2 | ivermectin | LPT 0.500 |
| ## 71 | Los Bancos | Fin 2 | ivermectin | LIT 0.500 |
| ## 72 | Los Bancos | Fin 2 | ivermectin | LIT 0.500 |
| ## 73 | Los Bancos | Fin 3 | amitraz | LPT 0.002 |
| ## 74 | Los Bancos | Fin 3 | amitraz | LPT 0.002 |

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| ## 75 | Los Bancos | Fin 3 | amitraz | LIT 0.002 |
| ## 76 | Los Bancos | Fin 3 | amitraz | LIT 0.002 |
| ## 77 | Los Bancos | Fin 3 | amitraz | LPT 0.100 |
| ## 78 | Los Bancos | Fin 3 | amitraz | LPT 0.100 |
| ## 79 | Los Bancos | Fin 3 | amitraz | LIT 0.100 |
| ## 80 | Los Bancos | Fin 3 | amitraz | LIT 0.100 |
| ## 81 | Los Bancos | Fin 3 | amitraz | LPT 0.250 |
| ## 82 | Los Bancos | Fin 3 | amitraz | LPT 0.250 |
| ## 83 | Los Bancos | Fin 3 | amitraz | LIT 0.250 |
| ## 84 | Los Bancos | Fin 3 | amitraz | LIT 0.250 |
| ## 85 | Los Bancos | Fin 3 | alpha-cypermethrin | LPT 0.002 |
| ## 86 | Los Bancos | Fin 3 | alpha-cypermethrin | LPT 0.002 |
| ## 87 | Los Bancos | Fin 3 | alpha-cypermethrin | LIT 0.002 |
| ## 88 | Los Bancos | Fin 3 | alpha-cypermethrin | LIT 0.002 |
| ## 89 | Los Bancos | Fin 3 | alpha-cypermethrin | LPT 0.020 |
| ## 90 | Los Bancos | Fin 3 | alpha-cypermethrin | LPT 0.020 |
| ## 91 | Los Bancos | Fin 3 | alpha-cypermethrin | LIT 0.020 |
| ## 92 | Los Bancos | Fin 3 | alpha-cypermethrin | LIT 0.020 |
| ## 93 | Los Bancos | Fin 3 | alpha-cypermethrin | LPT 0.500 |
| ## 94 | Los Bancos | Fin 3 | alpha-cypermethrin | LPT 0.500 |
| ## 95 | Los Bancos | Fin 3 | alpha-cypermethrin | LIT 0.500 |
| ## 96 | Los Bancos | Fin 3 | alpha-cypermethrin | LIT 0.500 |
| ## 97 | Los Bancos | Fin 3 | ivermectin | LPT 0.010 |
| ## 98 | Los Bancos | Fin 3 | ivermectin | LPT 0.010 |
| ## 99 | Los Bancos | Fin 3 | ivermectin | LIT 0.010 |
| ## 100 | Los Bancos | Fin 3 | ivermectin | LIT 0.010 |
| ## 101 | Los Bancos | Fin 3 | ivermectin | LPT 0.100 |
| ## 102 | Los Bancos | Fin 3 | ivermectin | LPT 0.100 |
| ## 103 | Los Bancos | Fin 3 | ivermectin | LIT 0.100 |
| ## 104 | Los Bancos | Fin 3 | ivermectin | LIT 0.100 |
| ## 105 | Los Bancos | Fin 3 | ivermectin | LPT 0.500 |
| ## 106 | Los Bancos | Fin 3 | ivermectin | LPT 0.500 |
| ## 107 | Los Bancos | Fin 3 | ivermectin | LIT 0.500 |
| ## 108 | Los Bancos | Fin 3 | ivermectin | LIT 0.500 |
| ## 109 | Santo Domingo | Fin 4 | amitraz | LPT 0.002 |
| ## 110 | Santo Domingo | Fin 4 | amitraz | LPT 0.002 |
| ## 111 | Santo Domingo | Fin 4 | amitraz | LIT 0.002 |
| ## 112 | Santo Domingo | Fin 4 | amitraz | LIT 0.002 |
| ## 113 | Santo Domingo | Fin 4 | amitraz | LPT 0.100 |
| ## 114 | Santo Domingo | Fin 4 | amitraz | LPT 0.100 |
| ## 115 | Santo Domingo | Fin 4 | amitraz | LIT 0.100 |
| ## 116 | Santo Domingo | Fin 4 | amitraz | LIT 0.100 |
| ## 117 | Santo Domingo | Fin 4 | amitraz | LPT 0.250 |
| ## 118 | Santo Domingo | Fin 4 | amitraz | LPT 0.250 |
| ## 119 | Santo Domingo | Fin 4 | amitraz | LIT 0.250 |
| ## 120 | Santo Domingo | Fin 4 | amitraz | LIT 0.250 |
| ## 121 | Santo Domingo | Fin 4 | alpha-cypermethrin | LPT 0.002 |
| ## 122 | Santo Domingo | Fin 4 | alpha-cypermethrin | LPT 0.002 |
| ## 123 | Santo Domingo | Fin 4 | alpha-cypermethrin | LIT 0.002 |
| ## 124 | Santo Domingo | Fin 4 | alpha-cypermethrin | LIT 0.002 |
| ## 125 | Santo Domingo | Fin 4 | alpha-cypermethrin | LPT 0.020 |
| ## 126 | Santo Domingo | Fin 4 | alpha-cypermethrin | LPT 0.020 |
| ## 127 | Santo Domingo | Fin 4 | alpha-cypermethrin | LIT 0.020 |
| ## 128 | Santo Domingo | Fin 4 | alpha-cypermethrin | LIT 0.020 |

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|--------|---------------|-------|--------------------|-----------|
| ## 129 | Santo Domingo | Fin 4 | alpha-cypermethrin | LPT 0.500 |
| ## 130 | Santo Domingo | Fin 4 | alpha-cypermethrin | LPT 0.500 |
| ## 131 | Santo Domingo | Fin 4 | alpha-cypermethrin | LIT 0.500 |
| ## 132 | Santo Domingo | Fin 4 | alpha-cypermethrin | LIT 0.500 |
| ## 133 | Santo Domingo | Fin 4 | ivermectin | LPT 0.010 |
| ## 134 | Santo Domingo | Fin 4 | ivermectin | LPT 0.010 |
| ## 135 | Santo Domingo | Fin 4 | ivermectin | LIT 0.010 |
| ## 136 | Santo Domingo | Fin 4 | ivermectin | LIT 0.010 |
| ## 137 | Santo Domingo | Fin 4 | ivermectin | LPT 0.100 |
| ## 138 | Santo Domingo | Fin 4 | ivermectin | LPT 0.100 |
| ## 139 | Santo Domingo | Fin 4 | ivermectin | LIT 0.100 |
| ## 140 | Santo Domingo | Fin 4 | ivermectin | LIT 0.100 |
| ## 141 | Santo Domingo | Fin 4 | ivermectin | LPT 0.500 |
| ## 142 | Santo Domingo | Fin 4 | ivermectin | LPT 0.500 |
| ## 143 | Santo Domingo | Fin 4 | ivermectin | LIT 0.500 |
| ## 144 | Santo Domingo | Fin 4 | ivermectin | LIT 0.500 |
| ## 145 | El Carmen | Fin 5 | amitraz | LPT 0.002 |
| ## 146 | El Carmen | Fin 5 | amitraz | LPT 0.002 |
| ## 147 | El Carmen | Fin 5 | amitraz | LIT 0.002 |
| ## 148 | El Carmen | Fin 5 | amitraz | LIT 0.002 |
| ## 149 | El Carmen | Fin 5 | amitraz | LPT 0.100 |
| ## 150 | El Carmen | Fin 5 | amitraz | LPT 0.100 |
| ## 151 | El Carmen | Fin 5 | amitraz | LIT 0.100 |
| ## 152 | El Carmen | Fin 5 | amitraz | LIT 0.100 |
| ## 153 | El Carmen | Fin 5 | amitraz | LPT 0.250 |
| ## 154 | El Carmen | Fin 5 | amitraz | LPT 0.250 |
| ## 155 | El Carmen | Fin 5 | amitraz | LIT 0.250 |
| ## 156 | El Carmen | Fin 5 | amitraz | LIT 0.250 |
| ## 157 | El Carmen | Fin 5 | alpha-cypermethrin | LPT 0.002 |
| ## 158 | El Carmen | Fin 5 | alpha-cypermethrin | LPT 0.002 |
| ## 159 | El Carmen | Fin 5 | alpha-cypermethrin | LIT 0.002 |
| ## 160 | El Carmen | Fin 5 | alpha-cypermethrin | LIT 0.002 |
| ## 161 | El Carmen | Fin 5 | alpha-cypermethrin | LPT 0.020 |
| ## 162 | El Carmen | Fin 5 | alpha-cypermethrin | LPT 0.020 |
| ## 163 | El Carmen | Fin 5 | alpha-cypermethrin | LIT 0.020 |
| ## 164 | El Carmen | Fin 5 | alpha-cypermethrin | LIT 0.020 |
| ## 165 | El Carmen | Fin 5 | alpha-cypermethrin | LPT 0.500 |
| ## 166 | El Carmen | Fin 5 | alpha-cypermethrin | LPT 0.500 |
| ## 167 | El Carmen | Fin 5 | alpha-cypermethrin | LIT 0.500 |
| ## 168 | El Carmen | Fin 5 | alpha-cypermethrin | LIT 0.500 |
| ## 169 | El Carmen | Fin 5 | ivermectin | LPT 0.010 |
| ## 170 | El Carmen | Fin 5 | ivermectin | LPT 0.010 |
| ## 171 | El Carmen | Fin 5 | ivermectin | LIT 0.010 |
| ## 172 | El Carmen | Fin 5 | ivermectin | LIT 0.010 |
| ## 173 | El Carmen | Fin 5 | ivermectin | LPT 0.100 |
| ## 174 | El Carmen | Fin 5 | ivermectin | LPT 0.100 |
| ## 175 | El Carmen | Fin 5 | ivermectin | LIT 0.100 |
| ## 176 | El Carmen | Fin 5 | ivermectin | LIT 0.100 |
| ## 177 | El Carmen | Fin 5 | ivermectin | LPT 0.500 |
| ## 178 | El Carmen | Fin 5 | ivermectin | LPT 0.500 |
| ## 179 | El Carmen | Fin 5 | ivermectin | LIT 0.500 |
| ## 180 | El Carmen | Fin 5 | ivermectin | LIT 0.500 |
| ## 181 | El Carmen | Fin 6 | amitraz | LPT 0.002 |
| ## 182 | El Carmen | Fin 6 | amitraz | LPT 0.002 |

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| ## 183 | El Carmen | Fin 6 | amitraz | LIT 0.002 |
| ## 184 | El Carmen | Fin 6 | amitraz | LIT 0.002 |
| ## 185 | El Carmen | Fin 6 | amitraz | LPT 0.100 |
| ## 186 | El Carmen | Fin 6 | amitraz | LPT 0.100 |
| ## 187 | El Carmen | Fin 6 | amitraz | LIT 0.100 |
| ## 188 | El Carmen | Fin 6 | amitraz | LIT 0.100 |
| ## 189 | El Carmen | Fin 6 | amitraz | LPT 0.250 |
| ## 190 | El Carmen | Fin 6 | amitraz | LPT 0.250 |
| ## 191 | El Carmen | Fin 6 | amitraz | LIT 0.250 |
| ## 192 | El Carmen | Fin 6 | amitraz | LIT 0.250 |
| ## 193 | El Carmen | Fin 6 | alpha-cypermethrin | LPT 0.002 |
| ## 194 | El Carmen | Fin 6 | alpha-cypermethrin | LPT 0.002 |
| ## 195 | El Carmen | Fin 6 | alpha-cypermethrin | LIT 0.002 |
| ## 196 | El Carmen | Fin 6 | alpha-cypermethrin | LIT 0.002 |
| ## 197 | El Carmen | Fin 6 | alpha-cypermethrin | LPT 0.020 |
| ## 198 | El Carmen | Fin 6 | alpha-cypermethrin | LPT 0.020 |
| ## 199 | El Carmen | Fin 6 | alpha-cypermethrin | LIT 0.020 |
| ## 200 | El Carmen | Fin 6 | alpha-cypermethrin | LIT 0.020 |
| ## 201 | El Carmen | Fin 6 | alpha-cypermethrin | LPT 0.500 |
| ## 202 | El Carmen | Fin 6 | alpha-cypermethrin | LPT 0.500 |
| ## 203 | El Carmen | Fin 6 | alpha-cypermethrin | LIT 0.500 |
| ## 204 | El Carmen | Fin 6 | alpha-cypermethrin | LIT 0.500 |
| ## 205 | El Carmen | Fin 6 | ivermectin | LPT 0.010 |
| ## 206 | El Carmen | Fin 6 | ivermectin | LPT 0.010 |
| ## 207 | El Carmen | Fin 6 | ivermectin | LIT 0.010 |
| ## 208 | El Carmen | Fin 6 | ivermectin | LIT 0.010 |
| ## 209 | El Carmen | Fin 6 | ivermectin | LPT 0.100 |
| ## 210 | El Carmen | Fin 6 | ivermectin | LPT 0.100 |
| ## 211 | El Carmen | Fin 6 | ivermectin | LIT 0.100 |
| ## 212 | El Carmen | Fin 6 | ivermectin | LIT 0.100 |
| ## 213 | El Carmen | Fin 6 | ivermectin | LPT 0.500 |
| ## 214 | El Carmen | Fin 6 | ivermectin | LPT 0.500 |
| ## 215 | El Carmen | Fin 6 | ivermectin | LIT 0.500 |
| ## 216 | El Carmen | Fin 6 | ivermectin | LIT 0.500 |
| ## 217 | El Carmen | Fin 7 | amitraz | LPT 0.002 |
| ## 218 | El Carmen | Fin 7 | amitraz | LPT 0.002 |
| ## 219 | El Carmen | Fin 7 | amitraz | LIT 0.002 |
| ## 220 | El Carmen | Fin 7 | amitraz | LIT 0.002 |
| ## 221 | El Carmen | Fin 7 | amitraz | LPT 0.100 |
| ## 222 | El Carmen | Fin 7 | amitraz | LPT 0.100 |
| ## 223 | El Carmen | Fin 7 | amitraz | LIT 0.100 |
| ## 224 | El Carmen | Fin 7 | amitraz | LIT 0.100 |
| ## 225 | El Carmen | Fin 7 | amitraz | LPT 0.250 |
| ## 226 | El Carmen | Fin 7 | amitraz | LPT 0.250 |
| ## 227 | El Carmen | Fin 7 | amitraz | LIT 0.250 |
| ## 228 | El Carmen | Fin 7 | amitraz | LIT 0.250 |
| ## 229 | El Carmen | Fin 7 | alpha-cypermethrin | LPT 0.002 |
| ## 230 | El Carmen | Fin 7 | alpha-cypermethrin | LPT 0.002 |
| ## 231 | El Carmen | Fin 7 | alpha-cypermethrin | LIT 0.002 |
| ## 232 | El Carmen | Fin 7 | alpha-cypermethrin | LIT 0.002 |
| ## 233 | El Carmen | Fin 7 | alpha-cypermethrin | LPT 0.020 |
| ## 234 | El Carmen | Fin 7 | alpha-cypermethrin | LPT 0.020 |
| ## 235 | El Carmen | Fin 7 | alpha-cypermethrin | LIT 0.020 |
| ## 236 | El Carmen | Fin 7 | alpha-cypermethrin | LIT 0.020 |

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|--------|---------------|-------|--------------------|-----------|
| ## 237 | El Carmen | Fin 7 | alpha-cypermethrin | LPT 0.500 |
| ## 238 | El Carmen | Fin 7 | alpha-cypermethrin | LPT 0.500 |
| ## 239 | El Carmen | Fin 7 | alpha-cypermethrin | LIT 0.500 |
| ## 240 | El Carmen | Fin 7 | alpha-cypermethrin | LIT 0.500 |
| ## 241 | El Carmen | Fin 7 | ivermectin | LPT 0.010 |
| ## 242 | El Carmen | Fin 7 | ivermectin | LPT 0.010 |
| ## 243 | El Carmen | Fin 7 | ivermectin | LIT 0.010 |
| ## 244 | El Carmen | Fin 7 | ivermectin | LIT 0.010 |
| ## 245 | El Carmen | Fin 7 | ivermectin | LPT 0.100 |
| ## 246 | El Carmen | Fin 7 | ivermectin | LPT 0.100 |
| ## 247 | El Carmen | Fin 7 | ivermectin | LIT 0.100 |
| ## 248 | El Carmen | Fin 7 | ivermectin | LIT 0.100 |
| ## 249 | El Carmen | Fin 7 | ivermectin | LPT 0.500 |
| ## 250 | El Carmen | Fin 7 | ivermectin | LPT 0.500 |
| ## 251 | El Carmen | Fin 7 | ivermectin | LIT 0.500 |
| ## 252 | El Carmen | Fin 7 | ivermectin | LIT 0.500 |
| ## 253 | Santo Domingo | Fin 8 | amitraz | LPT 0.002 |
| ## 254 | Santo Domingo | Fin 8 | amitraz | LPT 0.002 |
| ## 255 | Santo Domingo | Fin 8 | amitraz | LIT 0.002 |
| ## 256 | Santo Domingo | Fin 8 | amitraz | LIT 0.002 |
| ## 257 | Santo Domingo | Fin 8 | amitraz | LPT 0.100 |
| ## 258 | Santo Domingo | Fin 8 | amitraz | LPT 0.100 |
| ## 259 | Santo Domingo | Fin 8 | amitraz | LIT 0.100 |
| ## 260 | Santo Domingo | Fin 8 | amitraz | LIT 0.100 |
| ## 261 | Santo Domingo | Fin 8 | amitraz | LPT 0.250 |
| ## 262 | Santo Domingo | Fin 8 | amitraz | LPT 0.250 |
| ## 263 | Santo Domingo | Fin 8 | amitraz | LIT 0.250 |
| ## 264 | Santo Domingo | Fin 8 | amitraz | LIT 0.250 |
| ## 265 | Santo Domingo | Fin 8 | alpha-cypermethrin | LPT 0.002 |
| ## 266 | Santo Domingo | Fin 8 | alpha-cypermethrin | LPT 0.002 |
| ## 267 | Santo Domingo | Fin 8 | alpha-cypermethrin | LIT 0.002 |
| ## 268 | Santo Domingo | Fin 8 | alpha-cypermethrin | LIT 0.002 |
| ## 269 | Santo Domingo | Fin 8 | alpha-cypermethrin | LPT 0.020 |
| ## 270 | Santo Domingo | Fin 8 | alpha-cypermethrin | LPT 0.020 |
| ## 271 | Santo Domingo | Fin 8 | alpha-cypermethrin | LIT 0.020 |
| ## 272 | Santo Domingo | Fin 8 | alpha-cypermethrin | LIT 0.020 |
| ## 273 | Santo Domingo | Fin 8 | alpha-cypermethrin | LPT 0.500 |
| ## 274 | Santo Domingo | Fin 8 | alpha-cypermethrin | LPT 0.500 |
| ## 275 | Santo Domingo | Fin 8 | alpha-cypermethrin | LIT 0.500 |
| ## 276 | Santo Domingo | Fin 8 | alpha-cypermethrin | LIT 0.500 |
| ## 277 | Santo Domingo | Fin 8 | ivermectin | LPT 0.010 |
| ## 278 | Santo Domingo | Fin 8 | ivermectin | LPT 0.010 |
| ## 279 | Santo Domingo | Fin 8 | ivermectin | LIT 0.010 |
| ## 280 | Santo Domingo | Fin 8 | ivermectin | LIT 0.010 |
| ## 281 | Santo Domingo | Fin 8 | ivermectin | LPT 0.100 |
| ## 282 | Santo Domingo | Fin 8 | ivermectin | LPT 0.100 |
| ## 283 | Santo Domingo | Fin 8 | ivermectin | LIT 0.100 |
| ## 284 | Santo Domingo | Fin 8 | ivermectin | LIT 0.100 |
| ## 285 | Santo Domingo | Fin 8 | ivermectin | LPT 0.500 |
| ## 286 | Santo Domingo | Fin 8 | ivermectin | LPT 0.500 |
| ## 287 | Santo Domingo | Fin 8 | ivermectin | LIT 0.500 |
| ## 288 | Santo Domingo | Fin 8 | ivermectin | LIT 0.500 |
| ## 289 | Santo Domingo | Fin 9 | amitraz | LPT 0.002 |
| ## 290 | Santo Domingo | Fin 9 | amitraz | LPT 0.002 |

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| ## 291 | Santo Domingo | Fin 9 | amitraz | LIT 0.002 |
| ## 292 | Santo Domingo | Fin 9 | amitraz | LIT 0.002 |
| ## 293 | Santo Domingo | Fin 9 | amitraz | LPT 0.100 |
| ## 294 | Santo Domingo | Fin 9 | amitraz | LPT 0.100 |
| ## 295 | Santo Domingo | Fin 9 | amitraz | LIT 0.100 |
| ## 296 | Santo Domingo | Fin 9 | amitraz | LIT 0.100 |
| ## 297 | Santo Domingo | Fin 9 | amitraz | LPT 0.250 |
| ## 298 | Santo Domingo | Fin 9 | amitraz | LPT 0.250 |
| ## 299 | Santo Domingo | Fin 9 | amitraz | LIT 0.250 |
| ## 300 | Santo Domingo | Fin 9 | amitraz | LIT 0.250 |
| ## 301 | Santo Domingo | Fin 9 | alpha-cypermethrin | LPT 0.002 |
| ## 302 | Santo Domingo | Fin 9 | alpha-cypermethrin | LPT 0.002 |
| ## 303 | Santo Domingo | Fin 9 | alpha-cypermethrin | LIT 0.002 |
| ## 304 | Santo Domingo | Fin 9 | alpha-cypermethrin | LIT 0.002 |
| ## 305 | Santo Domingo | Fin 9 | alpha-cypermethrin | LPT 0.020 |
| ## 306 | Santo Domingo | Fin 9 | alpha-cypermethrin | LPT 0.020 |
| ## 307 | Santo Domingo | Fin 9 | alpha-cypermethrin | LIT 0.020 |
| ## 308 | Santo Domingo | Fin 9 | alpha-cypermethrin | LIT 0.020 |
| ## 309 | Santo Domingo | Fin 9 | alpha-cypermethrin | LPT 0.500 |
| ## 310 | Santo Domingo | Fin 9 | alpha-cypermethrin | LPT 0.500 |
| ## 311 | Santo Domingo | Fin 9 | alpha-cypermethrin | LIT 0.500 |
| ## 312 | Santo Domingo | Fin 9 | alpha-cypermethrin | LIT 0.500 |
| ## 313 | Santo Domingo | Fin 9 | ivermectin | LPT 0.010 |
| ## 314 | Santo Domingo | Fin 9 | ivermectin | LPT 0.010 |
| ## 315 | Santo Domingo | Fin 9 | ivermectin | LIT 0.010 |
| ## 316 | Santo Domingo | Fin 9 | ivermectin | LIT 0.010 |
| ## 317 | Santo Domingo | Fin 9 | ivermectin | LPT 0.100 |
| ## 318 | Santo Domingo | Fin 9 | ivermectin | LPT 0.100 |
| ## 319 | Santo Domingo | Fin 9 | ivermectin | LIT 0.100 |
| ## 320 | Santo Domingo | Fin 9 | ivermectin | LIT 0.100 |
| ## 321 | Santo Domingo | Fin 9 | ivermectin | LPT 0.500 |
| ## 322 | Santo Domingo | Fin 9 | ivermectin | LPT 0.500 |
| ## 323 | Santo Domingo | Fin 9 | ivermectin | LIT 0.500 |
| ## 324 | Santo Domingo | Fin 9 | ivermectin | LIT 0.500 |
| ## 325 | Pedro Vicente Maldonado | Fin 10 | amitraz | LPT 0.002 |
| ## 326 | Pedro Vicente Maldonado | Fin 10 | amitraz | LPT 0.002 |
| ## 327 | Pedro Vicente Maldonado | Fin 10 | amitraz | LIT 0.002 |
| ## 328 | Pedro Vicente Maldonado | Fin 10 | amitraz | LIT 0.002 |
| ## 329 | Pedro Vicente Maldonado | Fin 10 | amitraz | LPT 0.100 |
| ## 330 | Pedro Vicente Maldonado | Fin 10 | amitraz | LPT 0.100 |
| ## 331 | Pedro Vicente Maldonado | Fin 10 | amitraz | LIT 0.100 |
| ## 332 | Pedro Vicente Maldonado | Fin 10 | amitraz | LIT 0.100 |
| ## 333 | Pedro Vicente Maldonado | Fin 10 | amitraz | LPT 0.250 |
| ## 334 | Pedro Vicente Maldonado | Fin 10 | amitraz | LPT 0.250 |
| ## 335 | Pedro Vicente Maldonado | Fin 10 | amitraz | LIT 0.250 |
| ## 336 | Pedro Vicente Maldonado | Fin 10 | amitraz | LIT 0.250 |
| ## 337 | Pedro Vicente Maldonado | Fin 10 | alpha-cypermethrin | LPT 0.002 |
| ## 338 | Pedro Vicente Maldonado | Fin 10 | alpha-cypermethrin | LPT 0.002 |
| ## 339 | Pedro Vicente Maldonado | Fin 10 | alpha-cypermethrin | LIT 0.002 |
| ## 340 | Pedro Vicente Maldonado | Fin 10 | alpha-cypermethrin | LIT 0.002 |
| ## 341 | Pedro Vicente Maldonado | Fin 10 | alpha-cypermethrin | LPT 0.020 |
| ## 342 | Pedro Vicente Maldonado | Fin 10 | alpha-cypermethrin | LPT 0.020 |
| ## 343 | Pedro Vicente Maldonado | Fin 10 | alpha-cypermethrin | LIT 0.020 |
| ## 344 | Pedro Vicente Maldonado | Fin 10 | alpha-cypermethrin | LIT 0.020 |

| | | | | | | | |
|--------|-------|---------|-----------|--------|--------------------|-----|-------|
| ## 345 | Pedro | Vicente | Maldonado | Fin 10 | alpha-cypermethrin | LPT | 0.500 |
| ## 346 | Pedro | Vicente | Maldonado | Fin 10 | alpha-cypermethrin | LPT | 0.500 |
| ## 347 | Pedro | Vicente | Maldonado | Fin 10 | alpha-cypermethrin | LIT | 0.500 |
| ## 348 | Pedro | Vicente | Maldonado | Fin 10 | alpha-cypermethrin | LIT | 0.500 |
| ## 349 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LPT | 0.010 |
| ## 350 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LPT | 0.010 |
| ## 351 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LIT | 0.010 |
| ## 352 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LIT | 0.010 |
| ## 353 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LPT | 0.100 |
| ## 354 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LPT | 0.100 |
| ## 355 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LIT | 0.100 |
| ## 356 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LIT | 0.100 |
| ## 357 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LPT | 0.500 |
| ## 358 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LPT | 0.500 |
| ## 359 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LIT | 0.500 |
| ## 360 | Pedro | Vicente | Maldonado | Fin 10 | ivermectin | LIT | 0.500 |
| ## 361 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LPT | 0.002 |
| ## 362 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LPT | 0.002 |
| ## 363 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LIT | 0.002 |
| ## 364 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LIT | 0.002 |
| ## 365 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LPT | 0.100 |
| ## 366 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LPT | 0.100 |
| ## 367 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LIT | 0.100 |
| ## 368 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LIT | 0.100 |
| ## 369 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LPT | 0.250 |
| ## 370 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LPT | 0.250 |
| ## 371 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LIT | 0.250 |
| ## 372 | Pedro | Vicente | Maldonado | Fin 11 | amitraz | LIT | 0.250 |
| ## 373 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LPT | 0.002 |
| ## 374 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LPT | 0.002 |
| ## 375 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LIT | 0.002 |
| ## 376 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LIT | 0.002 |
| ## 377 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LPT | 0.020 |
| ## 378 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LPT | 0.020 |
| ## 379 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LIT | 0.020 |
| ## 380 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LIT | 0.020 |
| ## 381 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LPT | 0.500 |
| ## 382 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LPT | 0.500 |
| ## 383 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LIT | 0.500 |
| ## 384 | Pedro | Vicente | Maldonado | Fin 11 | alpha-cypermethrin | LIT | 0.500 |
| ## 385 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LPT | 0.010 |
| ## 386 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LPT | 0.010 |
| ## 387 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LIT | 0.010 |
| ## 388 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LIT | 0.010 |
| ## 389 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LPT | 0.100 |
| ## 390 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LPT | 0.100 |
| ## 391 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LIT | 0.100 |
| ## 392 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LIT | 0.100 |
| ## 393 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LPT | 0.500 |
| ## 394 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LPT | 0.500 |
| ## 395 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LIT | 0.500 |
| ## 396 | Pedro | Vicente | Maldonado | Fin 11 | ivermectin | LIT | 0.500 |
| ## 397 | Pedro | Vicente | Maldonado | Fin 12 | amitraz | LPT | 0.002 |
| ## 398 | Pedro | Vicente | Maldonado | Fin 12 | amitraz | LPT | 0.002 |

| | | | | | |
|--------|-------------------------|--------|--------------------|---------|-------|
| ## 399 | Pedro Vicente Maldonado | Fin 12 | amitraz | LIT | 0.002 |
| ## 400 | Pedro Vicente Maldonado | Fin 12 | amitraz | LIT | 0.002 |
| ## 401 | Pedro Vicente Maldonado | Fin 12 | amitraz | LPT | 0.100 |
| ## 402 | Pedro Vicente Maldonado | Fin 12 | amitraz | LPT | 0.100 |
| ## 403 | Pedro Vicente Maldonado | Fin 12 | amitraz | LIT | 0.100 |
| ## 404 | Pedro Vicente Maldonado | Fin 12 | amitraz | LIT | 0.100 |
| ## 405 | Pedro Vicente Maldonado | Fin 12 | amitraz | LPT | 0.250 |
| ## 406 | Pedro Vicente Maldonado | Fin 12 | amitraz | LPT | 0.250 |
| ## 407 | Pedro Vicente Maldonado | Fin 12 | amitraz | LIT | 0.250 |
| ## 408 | Pedro Vicente Maldonado | Fin 12 | amitraz | LIT | 0.250 |
| ## 409 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LPT | 0.002 |
| ## 410 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LPT | 0.002 |
| ## 411 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LIT | 0.002 |
| ## 412 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LIT | 0.002 |
| ## 413 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LPT | 0.020 |
| ## 414 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LPT | 0.020 |
| ## 415 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LIT | 0.020 |
| ## 416 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LIT | 0.020 |
| ## 417 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LPT | 0.500 |
| ## 418 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LPT | 0.500 |
| ## 419 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LIT | 0.500 |
| ## 420 | Pedro Vicente Maldonado | Fin 12 | alpha-cypermethrin | LIT | 0.500 |
| ## 421 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LPT | 0.010 |
| ## 422 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LPT | 0.010 |
| ## 423 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LIT | 0.010 |
| ## 424 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LIT | 0.010 |
| ## 425 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LPT | 0.100 |
| ## 426 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LPT | 0.100 |
| ## 427 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LIT | 0.100 |
| ## 428 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LIT | 0.100 |
| ## 429 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LPT | 0.500 |
| ## 430 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LPT | 0.500 |
| ## 431 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LIT | 0.500 |
| ## 432 | Pedro Vicente Maldonado | Fin 12 | ivermectin | LIT | 0.500 |
| ## | resist | mort | total | muertos | vivos |
| ## 1 | 57 | 43 | 101 | 45 | 56 |
| ## 2 | 51 | 49 | 100 | 50 | 50 |
| ## 3 | 60 | 40 | 99 | 40 | 59 |
| ## 4 | 58 | 42 | 102 | 44 | 58 |
| ## 5 | 45 | 55 | 98 | 55 | 43 |
| ## 6 | 44 | 56 | 100 | 57 | 43 |
| ## 7 | 45 | 55 | 99 | 54 | 45 |
| ## 8 | 50 | 50 | 98 | 50 | 48 |
| ## 9 | 30 | 70 | 99 | 70 | 29 |
| ## 10 | 28 | 72 | 100 | 73 | 27 |
| ## 11 | 27 | 73 | 103 | 75 | 28 |
| ## 12 | 28 | 72 | 99 | 72 | 27 |
| ## 13 | 13 | 87 | 105 | 92 | 13 |
| ## 14 | 9 | 91 | 100 | 91 | 9 |
| ## 15 | 10 | 90 | 101 | 91 | 10 |
| ## 16 | 5 | 95 | 99 | 94 | 5 |
| ## 17 | 14 | 86 | 103 | 89 | 14 |
| ## 18 | 10 | 90 | 100 | 90 | 10 |
| ## 19 | 5 | 95 | 98 | 93 | 5 |

| | | | | | |
|-------|----|-----|-----|-----|----|
| ## 20 | 12 | 88 | 101 | 89 | 12 |
| ## 21 | 1 | 100 | 120 | 120 | 0 |
| ## 22 | 1 | 100 | 110 | 110 | 0 |
| ## 23 | 4 | 96 | 103 | 99 | 4 |
| ## 24 | 2 | 98 | 97 | 95 | 2 |
| ## 25 | 44 | 56 | 99 | 56 | 43 |
| ## 26 | 44 | 56 | 106 | 60 | 46 |
| ## 27 | 49 | 51 | 101 | 52 | 49 |
| ## 28 | 31 | 69 | 98 | 68 | 30 |
| ## 29 | 39 | 61 | 100 | 62 | 38 |
| ## 30 | 35 | 65 | 55 | 36 | 19 |
| ## 31 | 37 | 63 | 102 | 64 | 38 |
| ## 32 | 31 | 69 | 96 | 67 | 29 |
| ## 33 | 31 | 69 | 101 | 70 | 31 |
| ## 34 | 32 | 68 | 57 | 39 | 18 |
| ## 35 | 32 | 68 | 99 | 67 | 32 |
| ## 36 | 30 | 70 | 101 | 71 | 30 |
| ## 37 | 4 | 96 | 101 | 97 | 4 |
| ## 38 | 1 | 100 | 60 | 60 | 0 |
| ## 39 | 3 | 97 | 98 | 95 | 3 |
| ## 40 | 3 | 97 | 99 | 96 | 3 |
| ## 41 | 6 | 94 | 103 | 97 | 6 |
| ## 42 | 6 | 94 | 101 | 95 | 6 |
| ## 43 | 4 | 96 | 101 | 97 | 4 |
| ## 44 | 6 | 94 | 101 | 95 | 6 |
| ## 45 | 6 | 94 | 101 | 95 | 6 |
| ## 46 | 1 | 100 | 102 | 102 | 0 |
| ## 47 | 2 | 98 | 99 | 97 | 2 |
| ## 48 | 3 | 97 | 102 | 99 | 3 |
| ## 49 | 34 | 66 | 98 | 65 | 33 |
| ## 50 | 33 | 67 | 150 | 102 | 48 |
| ## 51 | 38 | 62 | 98 | 62 | 36 |
| ## 52 | 39 | 61 | 96 | 59 | 37 |
| ## 53 | 28 | 72 | 117 | 85 | 32 |
| ## 54 | 17 | 83 | 105 | 87 | 18 |
| ## 55 | 19 | 81 | 102 | 83 | 19 |
| ## 56 | 15 | 85 | 96 | 82 | 14 |
| ## 57 | 28 | 72 | 124 | 90 | 34 |
| ## 58 | 17 | 83 | 116 | 97 | 19 |
| ## 59 | 4 | 96 | 96 | 92 | 4 |
| ## 60 | 7 | 93 | 89 | 83 | 6 |
| ## 61 | 46 | 54 | 99 | 54 | 45 |
| ## 62 | 50 | 50 | 121 | 62 | 59 |
| ## 63 | 50 | 50 | 95 | 49 | 46 |
| ## 64 | 41 | 59 | 85 | 51 | 34 |
| ## 65 | 36 | 64 | 101 | 65 | 36 |
| ## 66 | 47 | 53 | 120 | 64 | 56 |
| ## 67 | 50 | 50 | 94 | 48 | 46 |
| ## 68 | 39 | 61 | 92 | 57 | 35 |
| ## 69 | 35 | 65 | 95 | 62 | 33 |
| ## 70 | 33 | 67 | 40 | 27 | 13 |
| ## 71 | 28 | 72 | 89 | 65 | 24 |
| ## 72 | 37 | 63 | 98 | 62 | 36 |
| ## 73 | 81 | 19 | 100 | 20 | 80 |

| | | | | | |
|--------|----|----|-----|-----|-----|
| ## 74 | 88 | 12 | 122 | 16 | 106 |
| ## 75 | 85 | 15 | 106 | 16 | 90 |
| ## 76 | 94 | 6 | 115 | 8 | 107 |
| ## 77 | 74 | 26 | 120 | 32 | 88 |
| ## 78 | 90 | 10 | 142 | 16 | 126 |
| ## 79 | 85 | 15 | 96 | 14 | 82 |
| ## 80 | 88 | 12 | 120 | 16 | 104 |
| ## 81 | 73 | 27 | 115 | 32 | 83 |
| ## 82 | 81 | 19 | 126 | 25 | 101 |
| ## 83 | 76 | 24 | 104 | 25 | 79 |
| ## 84 | 84 | 16 | 135 | 23 | 112 |
| ## 85 | 6 | 94 | 105 | 99 | 6 |
| ## 86 | 7 | 93 | 102 | 95 | 7 |
| ## 87 | 7 | 93 | 110 | 102 | 8 |
| ## 88 | 3 | 97 | 120 | 116 | 4 |
| ## 89 | 2 | 98 | 105 | 103 | 2 |
| ## 90 | 2 | 98 | 120 | 118 | 2 |
| ## 91 | 4 | 96 | 120 | 115 | 5 |
| ## 92 | 7 | 93 | 150 | 139 | 11 |
| ## 93 | 3 | 97 | 120 | 116 | 4 |
| ## 94 | 2 | 98 | 130 | 127 | 3 |
| ## 95 | 6 | 94 | 49 | 46 | 3 |
| ## 96 | 6 | 94 | 110 | 104 | 6 |
| ## 97 | 94 | 6 | 105 | 7 | 98 |
| ## 98 | 78 | 22 | 99 | 23 | 76 |
| ## 99 | 95 | 5 | 98 | 5 | 93 |
| ## 100 | 93 | 7 | 95 | 8 | 87 |
| ## 101 | 81 | 19 | 100 | 20 | 80 |
| ## 102 | 76 | 24 | 100 | 25 | 75 |
| ## 103 | 86 | 14 | 115 | 16 | 99 |
| ## 104 | 80 | 20 | 120 | 25 | 95 |
| ## 105 | 75 | 25 | 135 | 35 | 100 |
| ## 106 | 68 | 32 | 102 | 33 | 69 |
| ## 107 | 75 | 25 | 100 | 25 | 75 |
| ## 108 | 73 | 27 | 120 | 34 | 86 |
| ## 109 | 50 | 50 | 101 | 51 | 50 |
| ## 110 | 51 | 49 | 98 | 49 | 49 |
| ## 111 | 44 | 56 | 85 | 48 | 37 |
| ## 112 | 49 | 51 | 95 | 49 | 46 |
| ## 113 | 50 | 50 | 99 | 50 | 49 |
| ## 114 | 48 | 52 | 97 | 51 | 46 |
| ## 115 | 52 | 48 | 89 | 43 | 46 |
| ## 116 | 51 | 49 | 96 | 48 | 48 |
| ## 117 | 49 | 51 | 109 | 56 | 53 |
| ## 118 | 48 | 52 | 99 | 52 | 47 |
| ## 119 | 58 | 42 | 96 | 41 | 55 |
| ## 120 | 51 | 49 | 85 | 42 | 43 |
| ## 121 | 56 | 44 | 102 | 45 | 57 |
| ## 122 | 51 | 49 | 105 | 52 | 53 |
| ## 123 | 57 | 43 | 84 | 37 | 47 |
| ## 124 | 51 | 49 | 79 | 39 | 40 |
| ## 125 | 54 | 46 | 98 | 46 | 52 |
| ## 126 | 53 | 47 | 85 | 41 | 44 |
| ## 127 | 59 | 41 | 96 | 40 | 56 |

| | | | | | |
|--------|----|-----|-----|-----|----|
| ## 128 | 52 | 48 | 96 | 47 | 49 |
| ## 129 | 5 | 95 | 100 | 95 | 5 |
| ## 130 | 1 | 99 | 80 | 79 | 1 |
| ## 131 | 3 | 97 | 89 | 86 | 3 |
| ## 132 | 4 | 96 | 92 | 88 | 4 |
| ## 133 | 2 | 98 | 102 | 100 | 2 |
| ## 134 | 4 | 96 | 109 | 105 | 4 |
| ## 135 | 2 | 98 | 96 | 94 | 2 |
| ## 136 | 1 | 99 | 83 | 82 | 1 |
| ## 137 | 2 | 98 | 103 | 101 | 2 |
| ## 138 | 3 | 97 | 105 | 102 | 3 |
| ## 139 | 5 | 95 | 101 | 96 | 5 |
| ## 140 | 2 | 98 | 86 | 84 | 2 |
| ## 141 | 1 | 100 | 110 | 110 | 0 |
| ## 142 | 3 | 97 | 78 | 76 | 2 |
| ## 143 | 2 | 98 | 96 | 94 | 2 |
| ## 144 | 3 | 97 | 89 | 86 | 3 |
| ## 145 | 45 | 55 | 98 | 55 | 43 |
| ## 146 | 25 | 75 | 95 | 72 | 23 |
| ## 147 | 30 | 70 | 98 | 69 | 29 |
| ## 148 | 35 | 65 | 92 | 60 | 32 |
| ## 149 | 26 | 74 | 101 | 75 | 26 |
| ## 150 | 26 | 74 | 96 | 71 | 25 |
| ## 151 | 25 | 75 | 96 | 72 | 24 |
| ## 152 | 20 | 80 | 87 | 70 | 17 |
| ## 153 | 9 | 91 | 95 | 87 | 8 |
| ## 154 | 23 | 77 | 84 | 65 | 19 |
| ## 155 | 23 | 77 | 101 | 78 | 23 |
| ## 156 | 24 | 76 | 98 | 75 | 23 |
| ## 157 | 21 | 79 | 88 | 70 | 18 |
| ## 158 | 20 | 80 | 104 | 84 | 20 |
| ## 159 | 16 | 84 | 85 | 72 | 13 |
| ## 160 | 16 | 84 | 101 | 85 | 16 |
| ## 161 | 7 | 93 | 116 | 108 | 8 |
| ## 162 | 20 | 80 | 103 | 82 | 21 |
| ## 163 | 16 | 84 | 89 | 75 | 14 |
| ## 164 | 6 | 94 | 96 | 90 | 6 |
| ## 165 | 6 | 94 | 101 | 95 | 6 |
| ## 166 | 9 | 91 | 90 | 82 | 8 |
| ## 167 | 13 | 87 | 87 | 76 | 11 |
| ## 168 | 5 | 95 | 97 | 92 | 5 |
| ## 169 | 14 | 86 | 104 | 90 | 14 |
| ## 170 | 13 | 87 | 108 | 94 | 14 |
| ## 171 | 8 | 92 | 92 | 85 | 7 |
| ## 172 | 9 | 91 | 86 | 78 | 8 |
| ## 173 | 12 | 88 | 98 | 86 | 12 |
| ## 174 | 9 | 91 | 112 | 102 | 10 |
| ## 175 | 8 | 92 | 86 | 79 | 7 |
| ## 176 | 7 | 93 | 85 | 79 | 6 |
| ## 177 | 5 | 95 | 102 | 97 | 5 |
| ## 178 | 8 | 92 | 98 | 90 | 8 |
| ## 179 | 4 | 96 | 95 | 91 | 4 |
| ## 180 | 8 | 92 | 98 | 90 | 8 |
| ## 181 | 56 | 44 | 101 | 45 | 56 |

| | | | | | |
|--------|----|-----|-----|-----|----|
| ## 182 | 60 | 40 | 120 | 50 | 70 |
| ## 183 | 53 | 47 | 98 | 47 | 51 |
| ## 184 | 52 | 48 | 105 | 51 | 54 |
| ## 185 | 53 | 47 | 110 | 52 | 58 |
| ## 186 | 59 | 41 | 142 | 60 | 82 |
| ## 187 | 49 | 51 | 101 | 52 | 49 |
| ## 188 | 48 | 52 | 120 | 63 | 57 |
| ## 189 | 51 | 49 | 115 | 57 | 58 |
| ## 190 | 42 | 58 | 106 | 62 | 44 |
| ## 191 | 51 | 49 | 116 | 58 | 58 |
| ## 192 | 38 | 62 | 95 | 59 | 36 |
| ## 193 | 29 | 71 | 122 | 87 | 35 |
| ## 194 | 29 | 71 | 105 | 75 | 30 |
| ## 195 | 22 | 78 | 105 | 82 | 23 |
| ## 196 | 19 | 81 | 125 | 101 | 24 |
| ## 197 | 27 | 73 | 102 | 75 | 27 |
| ## 198 | 21 | 79 | 126 | 100 | 26 |
| ## 199 | 21 | 79 | 120 | 95 | 25 |
| ## 200 | 15 | 85 | 115 | 98 | 17 |
| ## 201 | 8 | 92 | 98 | 90 | 8 |
| ## 202 | 11 | 89 | 112 | 100 | 12 |
| ## 203 | 4 | 96 | 99 | 95 | 4 |
| ## 204 | 9 | 91 | 118 | 108 | 10 |
| ## 205 | 6 | 94 | 104 | 98 | 6 |
| ## 206 | 3 | 97 | 98 | 95 | 3 |
| ## 207 | 4 | 96 | 86 | 83 | 3 |
| ## 208 | 2 | 98 | 98 | 96 | 2 |
| ## 209 | 3 | 97 | 120 | 117 | 3 |
| ## 210 | 6 | 94 | 114 | 107 | 7 |
| ## 211 | 2 | 98 | 96 | 94 | 2 |
| ## 212 | 1 | 100 | 75 | 75 | 0 |
| ## 213 | 3 | 97 | 102 | 99 | 3 |
| ## 214 | 1 | 99 | 99 | 98 | 1 |
| ## 215 | 1 | 99 | 89 | 88 | 1 |
| ## 216 | 1 | 99 | 89 | 88 | 1 |
| ## 217 | 39 | 61 | 95 | 78 | 17 |
| ## 218 | 16 | 84 | 106 | 89 | 17 |
| ## 219 | 16 | 84 | 89 | 75 | 14 |
| ## 220 | 17 | 83 | 95 | 79 | 16 |
| ## 221 | 22 | 78 | 86 | 73 | 13 |
| ## 222 | 11 | 89 | 129 | 108 | 21 |
| ## 223 | 16 | 84 | 98 | 82 | 16 |
| ## 224 | 16 | 84 | 83 | 70 | 13 |
| ## 225 | 11 | 89 | 80 | 71 | 9 |
| ## 226 | 18 | 82 | 110 | 96 | 14 |
| ## 227 | 10 | 90 | 94 | 85 | 9 |
| ## 228 | 17 | 83 | 86 | 76 | 10 |
| ## 229 | 21 | 79 | 99 | 78 | 21 |
| ## 230 | 27 | 73 | 137 | 100 | 37 |
| ## 231 | 24 | 76 | 102 | 78 | 24 |
| ## 232 | 26 | 74 | 149 | 112 | 37 |
| ## 233 | 6 | 94 | 101 | 95 | 6 |
| ## 234 | 2 | 98 | 93 | 91 | 2 |
| ## 235 | 4 | 96 | 89 | 85 | 4 |

| | | | | | |
|--------|----|-----|-----|-----|----|
| ## 236 | 2 | 98 | 87 | 85 | 2 |
| ## 237 | 1 | 100 | 99 | 99 | 0 |
| ## 238 | 1 | 99 | 90 | 89 | 1 |
| ## 239 | 6 | 94 | 78 | 73 | 5 |
| ## 240 | 10 | 90 | 105 | 95 | 10 |
| ## 241 | 7 | 93 | 90 | 84 | 6 |
| ## 242 | 1 | 99 | 90 | 89 | 1 |
| ## 243 | 12 | 88 | 68 | 60 | 8 |
| ## 244 | 6 | 94 | 85 | 80 | 5 |
| ## 245 | 1 | 99 | 100 | 96 | 4 |
| ## 246 | 9 | 91 | 108 | 98 | 10 |
| ## 247 | 7 | 93 | 98 | 91 | 7 |
| ## 248 | 7 | 93 | 95 | 89 | 6 |
| ## 249 | 1 | 100 | 100 | 100 | 0 |
| ## 250 | 1 | 100 | 98 | 98 | 0 |
| ## 251 | 3 | 97 | 86 | 83 | 3 |
| ## 252 | 2 | 98 | 96 | 94 | 2 |
| ## 253 | 19 | 81 | 105 | 95 | 15 |
| ## 254 | 4 | 96 | 96 | 90 | 6 |
| ## 255 | 16 | 84 | 102 | 90 | 12 |
| ## 256 | 9 | 91 | 106 | 96 | 10 |
| ## 257 | 7 | 93 | 96 | 89 | 7 |
| ## 258 | 7 | 93 | 110 | 102 | 8 |
| ## 259 | 13 | 87 | 124 | 108 | 16 |
| ## 260 | 6 | 94 | 128 | 120 | 8 |
| ## 261 | 2 | 98 | 102 | 100 | 2 |
| ## 262 | 2 | 98 | 125 | 122 | 3 |
| ## 263 | 6 | 94 | 106 | 100 | 6 |
| ## 264 | 1 | 99 | 98 | 97 | 1 |
| ## 265 | 4 | 96 | 125 | 120 | 5 |
| ## 266 | 2 | 98 | 96 | 94 | 2 |
| ## 267 | 1 | 99 | 96 | 95 | 1 |
| ## 268 | 2 | 98 | 108 | 106 | 2 |
| ## 269 | 2 | 98 | 115 | 113 | 2 |
| ## 270 | 6 | 94 | 116 | 109 | 7 |
| ## 271 | 5 | 95 | 125 | 119 | 6 |
| ## 272 | 3 | 97 | 124 | 120 | 4 |
| ## 273 | 1 | 99 | 105 | 104 | 1 |
| ## 274 | 1 | 100 | 103 | 103 | 0 |
| ## 275 | 3 | 97 | 103 | 100 | 3 |
| ## 276 | 5 | 95 | 116 | 110 | 6 |
| ## 277 | 1 | 99 | 120 | 119 | 1 |
| ## 278 | 3 | 97 | 98 | 95 | 3 |
| ## 279 | 2 | 98 | 114 | 112 | 2 |
| ## 280 | 1 | 99 | 119 | 118 | 1 |
| ## 281 | 1 | 99 | 115 | 114 | 1 |
| ## 282 | 1 | 100 | 125 | 125 | 0 |
| ## 283 | 1 | 99 | 130 | 129 | 1 |
| ## 284 | 2 | 98 | 105 | 103 | 2 |
| ## 285 | 1 | 99 | 105 | 104 | 1 |
| ## 286 | 1 | 100 | 96 | 96 | 0 |
| ## 287 | 1 | 100 | 102 | 102 | 0 |
| ## 288 | 1 | 99 | 124 | 123 | 1 |
| ## 289 | 51 | 49 | 105 | 52 | 53 |

| | | | | | |
|--------|----|-----|-----|-----|----|
| ## 290 | 63 | 37 | 120 | 45 | 75 |
| ## 291 | 56 | 44 | 120 | 55 | 65 |
| ## 292 | 61 | 39 | 125 | 49 | 76 |
| ## 293 | 45 | 55 | 112 | 62 | 50 |
| ## 294 | 54 | 46 | 106 | 49 | 57 |
| ## 295 | 48 | 52 | 105 | 56 | 49 |
| ## 296 | 53 | 47 | 104 | 49 | 55 |
| ## 297 | 39 | 61 | 106 | 65 | 41 |
| ## 298 | 44 | 56 | 99 | 56 | 43 |
| ## 299 | 48 | 52 | 132 | 71 | 61 |
| ## 300 | 51 | 49 | 106 | 52 | 54 |
| ## 301 | 7 | 93 | 150 | 140 | 10 |
| ## 302 | 3 | 97 | 96 | 93 | 3 |
| ## 303 | 2 | 98 | 125 | 123 | 2 |
| ## 304 | 1 | 99 | 135 | 133 | 2 |
| ## 305 | 5 | 95 | 100 | 95 | 5 |
| ## 306 | 1 | 99 | 120 | 119 | 1 |
| ## 307 | 1 | 99 | 105 | 104 | 1 |
| ## 308 | 1 | 100 | 105 | 105 | 0 |
| ## 309 | 4 | 96 | 100 | 96 | 4 |
| ## 310 | 1 | 100 | 132 | 132 | 0 |
| ## 311 | 1 | 100 | 99 | 99 | 0 |
| ## 312 | 1 | 99 | 142 | 140 | 2 |
| ## 313 | 51 | 49 | 120 | 60 | 60 |
| ## 314 | 53 | 47 | 115 | 55 | 60 |
| ## 315 | 49 | 51 | 132 | 69 | 63 |
| ## 316 | 50 | 50 | 102 | 52 | 50 |
| ## 317 | 47 | 53 | 130 | 70 | 60 |
| ## 318 | 44 | 56 | 96 | 54 | 42 |
| ## 319 | 40 | 60 | 106 | 65 | 41 |
| ## 320 | 49 | 51 | 135 | 69 | 66 |
| ## 321 | 32 | 68 | 110 | 75 | 35 |
| ## 322 | 29 | 71 | 105 | 75 | 30 |
| ## 323 | 39 | 61 | 119 | 74 | 45 |
| ## 324 | 37 | 63 | 124 | 78 | 46 |
| ## 325 | 3 | 97 | 102 | 99 | 3 |
| ## 326 | 4 | 96 | 103 | 99 | 4 |
| ## 327 | 2 | 98 | 102 | 100 | 2 |
| ## 328 | 2 | 98 | 102 | 100 | 2 |
| ## 329 | 4 | 96 | 102 | 98 | 4 |
| ## 330 | 1 | 100 | 102 | 102 | 0 |
| ## 331 | 2 | 98 | 106 | 104 | 2 |
| ## 332 | 4 | 96 | 120 | 115 | 5 |
| ## 333 | 1 | 99 | 101 | 100 | 1 |
| ## 334 | 3 | 97 | 105 | 102 | 3 |
| ## 335 | 3 | 97 | 123 | 119 | 4 |
| ## 336 | 1 | 100 | 140 | 140 | 0 |
| ## 337 | 64 | 36 | 105 | 39 | 66 |
| ## 338 | 44 | 56 | 105 | 60 | 45 |
| ## 339 | 55 | 45 | 110 | 49 | 61 |
| ## 340 | 47 | 53 | 115 | 62 | 53 |
| ## 341 | 7 | 93 | 96 | 89 | 7 |
| ## 342 | 10 | 90 | 100 | 90 | 10 |
| ## 343 | 15 | 85 | 120 | 102 | 18 |

| | | | | | |
|--------|----|-----|-----|-----|----|
| ## 344 | 23 | 77 | 132 | 102 | 30 |
| ## 345 | 1 | 100 | 120 | 120 | 0 |
| ## 346 | 2 | 98 | 108 | 106 | 2 |
| ## 347 | 6 | 94 | 96 | 90 | 6 |
| ## 348 | 4 | 96 | 99 | 95 | 4 |
| ## 349 | 1 | 99 | 98 | 97 | 1 |
| ## 350 | 1 | 100 | 89 | 89 | 0 |
| ## 351 | 1 | 99 | 152 | 150 | 2 |
| ## 352 | 2 | 98 | 142 | 139 | 3 |
| ## 353 | 1 | 100 | 101 | 101 | 0 |
| ## 354 | 2 | 98 | 102 | 100 | 2 |
| ## 355 | 1 | 99 | 132 | 131 | 1 |
| ## 356 | 2 | 98 | 102 | 100 | 2 |
| ## 357 | 1 | 100 | 96 | 96 | 0 |
| ## 358 | 1 | 100 | 89 | 89 | 0 |
| ## 359 | 1 | 100 | 116 | 116 | 0 |
| ## 360 | 2 | 98 | 125 | 123 | 2 |
| ## 361 | 38 | 62 | 105 | 66 | 39 |
| ## 362 | 43 | 57 | 85 | 49 | 36 |
| ## 363 | 35 | 65 | 115 | 75 | 40 |
| ## 364 | 42 | 58 | 139 | 80 | 59 |
| ## 365 | 29 | 71 | 100 | 72 | 28 |
| ## 366 | 35 | 65 | 69 | 45 | 24 |
| ## 367 | 38 | 62 | 124 | 78 | 46 |
| ## 368 | 33 | 67 | 132 | 89 | 43 |
| ## 369 | 18 | 82 | 100 | 82 | 18 |
| ## 370 | 28 | 72 | 95 | 69 | 26 |
| ## 371 | 27 | 73 | 135 | 99 | 36 |
| ## 372 | 23 | 77 | 112 | 86 | 26 |
| ## 373 | 3 | 97 | 30 | 29 | 1 |
| ## 374 | 1 | 100 | 65 | 65 | 0 |
| ## 375 | 2 | 98 | 121 | 119 | 2 |
| ## 376 | 1 | 99 | 96 | 95 | 1 |
| ## 377 | 2 | 98 | 101 | 99 | 2 |
| ## 378 | 2 | 98 | 85 | 83 | 2 |
| ## 379 | 2 | 98 | 135 | 133 | 2 |
| ## 380 | 1 | 100 | 115 | 115 | 0 |
| ## 381 | 2 | 98 | 102 | 100 | 2 |
| ## 382 | 1 | 100 | 78 | 78 | 0 |
| ## 383 | 1 | 99 | 98 | 97 | 1 |
| ## 384 | 1 | 100 | 120 | 120 | 0 |
| ## 385 | 4 | 96 | 103 | 99 | 4 |
| ## 386 | 1 | 99 | 96 | 95 | 1 |
| ## 387 | 3 | 97 | 129 | 125 | 4 |
| ## 388 | 1 | 99 | 125 | 124 | 1 |
| ## 389 | 2 | 98 | 101 | 99 | 2 |
| ## 390 | 1 | 100 | 85 | 85 | 0 |
| ## 391 | 2 | 98 | 98 | 96 | 2 |
| ## 392 | 3 | 97 | 108 | 105 | 3 |
| ## 393 | 1 | 100 | 120 | 120 | 0 |
| ## 394 | 1 | 99 | 88 | 87 | 1 |
| ## 395 | 1 | 99 | 100 | 99 | 1 |
| ## 396 | 2 | 98 | 120 | 117 | 3 |
| ## 397 | 17 | 83 | 96 | 80 | 16 |


```

## 398      8  92  120    100   20
## 399     16  84  125    105   20
## 400     14  86  105     90   15
## 401      7  93  124    115    9
## 402      9  91  112    102   10
## 403     19  81  124    111   13
## 404     18  82  112    102   10
## 405     11  89  116    107    9
## 406      4  96  105     99    6
## 407      7  93  142    132   10
## 408      7  93  135    126    9
## 409      5  95   20     19    1
## 410      2  98  125    123    2
## 411      3  97   95     92    3
## 412      2  98   99     97    2
## 413      3  97  110    107    3
## 414      2  98  132    130    2
## 415      1  99  105    104    1
## 416      1  99  142    140    2
## 417      3  97  120    117    3
## 418      1  99  101    100    1
## 419      1 100   98     98    0
## 420      1  99  109    108    1
## 421     20  80   98     83   15
## 422     18  82   96     83   13
## 423     12  88   89     76   13
## 424     11  89  114    100   14
## 425     13  87  115    100   15
## 426     17  83  158    140   18
## 427      6  94  102     90   12
## 428     14  86  128    110   18
## 429     11  89  102     91   11
## 430     18  82   95     82   13
## 431     15  85  135    115   20
## 432      7  93  106     95   11

```

```
head(Predic)
```

```

##   Localidad finca  droga bioensayo conc resist mort total muertos vivos
## 1 Los Bancos Fin 1 amitraz      LPT 0.002    57  43  101    45   56
## 2 Los Bancos Fin 1 amitraz      LPT 0.002    51  49  100    50   50
## 3 Los Bancos Fin 1 amitraz      LIT 0.002    60  40   99    40   59
## 4 Los Bancos Fin 1 amitraz      LIT 0.002    58  42  102    44   58
## 5 Los Bancos Fin 1 amitraz      LPT 0.100    45  55   98    55   43
## 6 Los Bancos Fin 1 amitraz      LPT 0.100    44  56  100    57   43

```

```

fin1<-subset(Predic, finca=="Fin 1")
f1a.ll<-drm(vivos/total~conc, droga, data=fin1,fct = LL.4(), weights = total, type=("binomial"))
fin2<-subset(Predic, finca=="Fin 2")
f2a.ll<-drm(vivos/total~conc, droga, data=fin2,fct = LL.4(), weights = total, type=("binomial"))
fin3<-subset(Predic, finca=="Fin 3")
f3a.ll<-drm(vivos/total~conc, droga, data=fin3,fct = LL.4(), weights = total, type=("binomial"))
fin4<-subset(Predic, finca=="Fin 4")

```

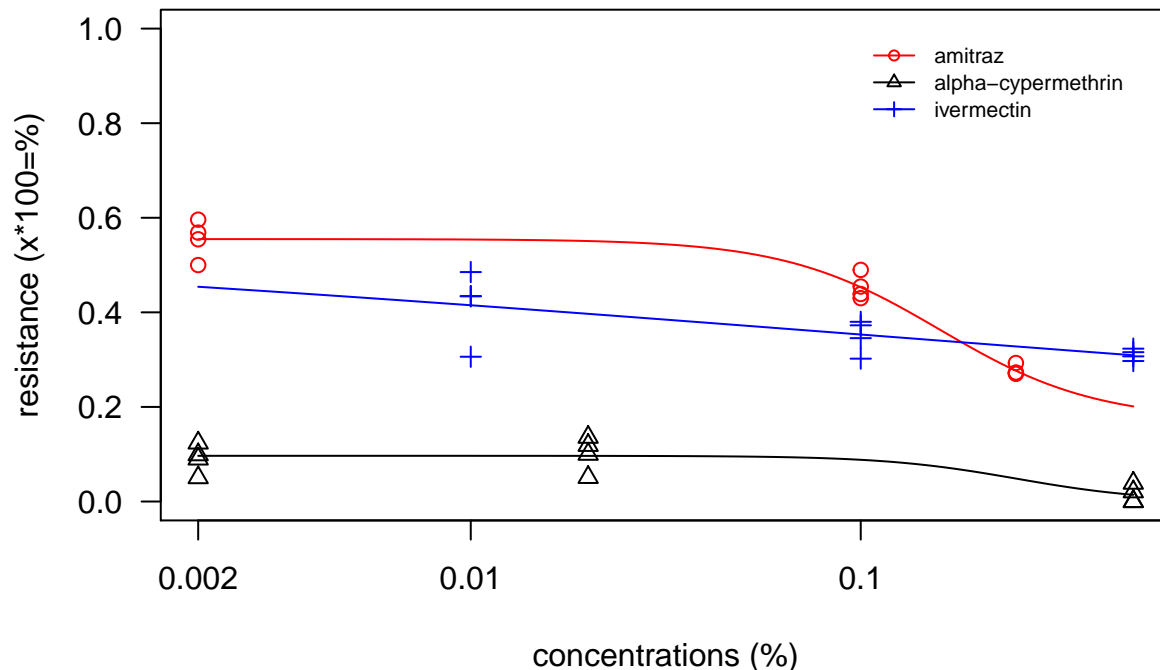
```

f4a.ll<-drm(vivos/total~conc, droga,data=fin4,fct = LL.4(), weights = total, type="binomial")
fin5<-subset(Predic, finca=="Fin 5")
f5a.ll<-drm(vivos/total~conc, droga, data=fin5,fct = LL.4(), weights = total, type="binomial")
fin6<-subset(Predic, finca=="Fin 6")
f6a.ll<-drm(vivos/total~conc, droga, data=fin6,fct = LL.4(), weights = total, type="binomial")
fin7<-subset(Predic, finca=="Fin 7")
f7a.ll<-drm(vivos/total~conc, droga,data=fin7,fct = LL.3(), weights = total, type="binomial")
fin8<-subset(Predic, finca=="Fin 8")
f8a.ll<-drm(vivos/total~conc, droga,data=fin8,fct = LL.4(), weights = total, type="binomial")
fin9<-subset(Predic, finca=="Fin 9")
f9a.ll<-drm(vivos/total~conc,droga, data=fin9,fct = LL.4(), weights = total, type="binomial")
fin10<-subset(Predic, finca=="Fin 10")
f10a.ll<-drm(vivos/total~conc, droga, data=fin10,fct = LL.4(), weights = total, type="binomial")
fin11<-subset(Predic, finca=="Fin 11")
f11a.ll<-drm(vivos/total~conc, droga, data=fin11,fct = LL.4(), weights = total, type="binomial")
fin12<-subset(Predic, finca=="Fin 12")
f12a.ll<-drm(vivos/total~conc, droga, data=fin12,fct = LL.4(), weights = total, type="binomial")

op <- par(mfrow = c(1, 1))
plot(f1a.ll, broken = F, type = "all", main="Farm 1", xlab = "concentrations (%)",
      ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
      cex.legend = 0.7, lty=1, lwd=1, xlim = range(Predic$conc), ylim = c(0,(1)))

```

Farm 1

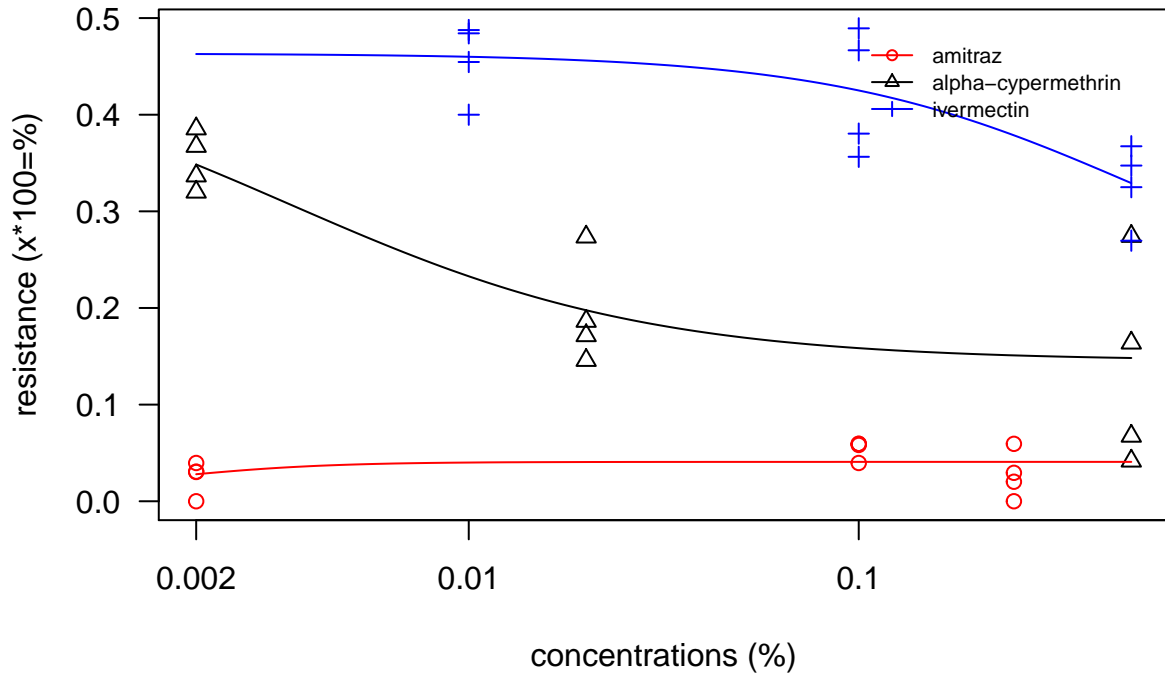


```

plot(f2a.ll,broken = T,type = "all", main="Farm 2", xlab = "concentrations (%)",
      xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
      cex.legend = 0.7, lty=1, lwd=1)

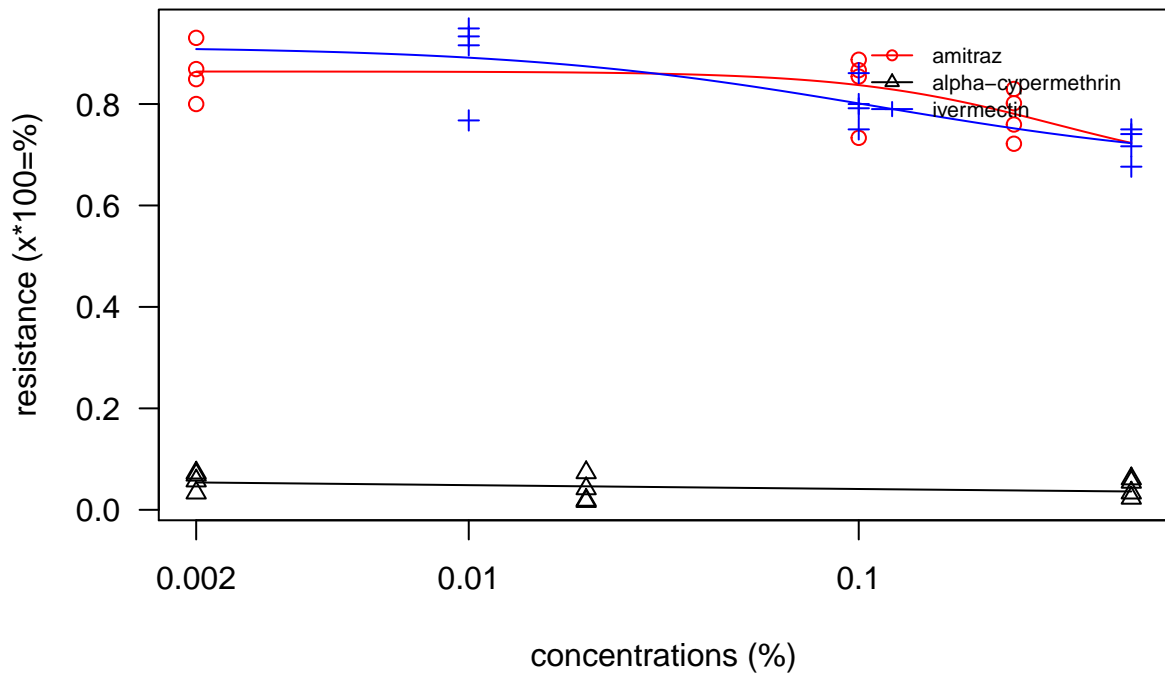
```

Farm 2



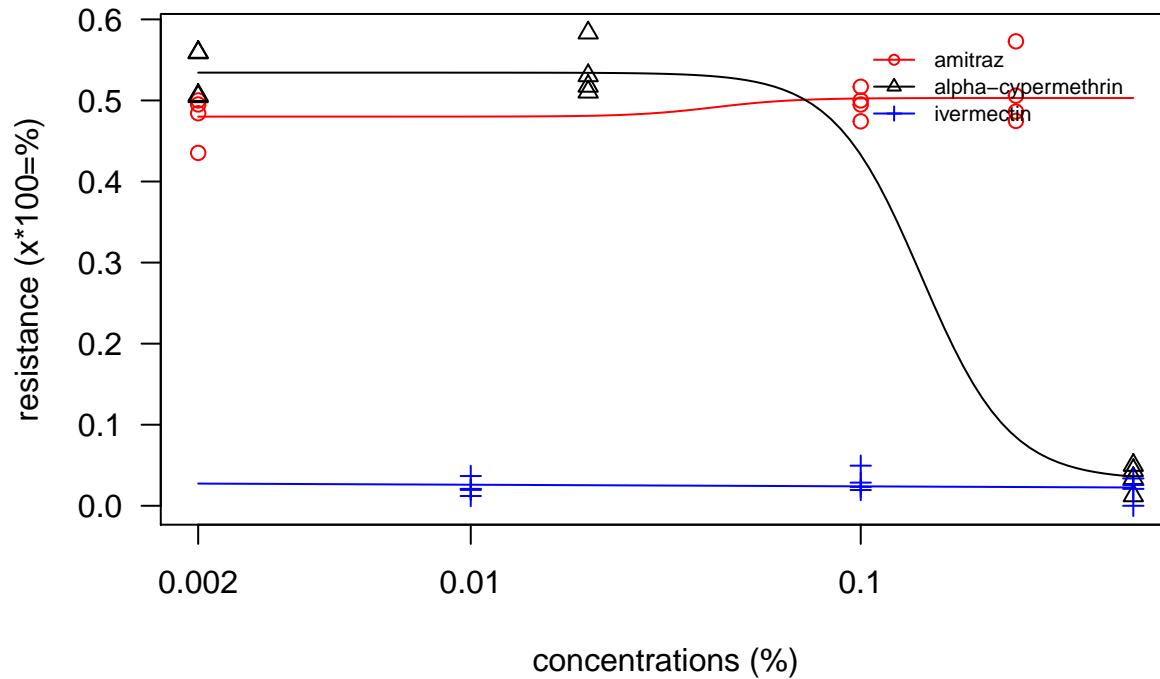
```
plot(f3a.l1,broken = T,type = "all", main="Farm 3",xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```

Farm 3



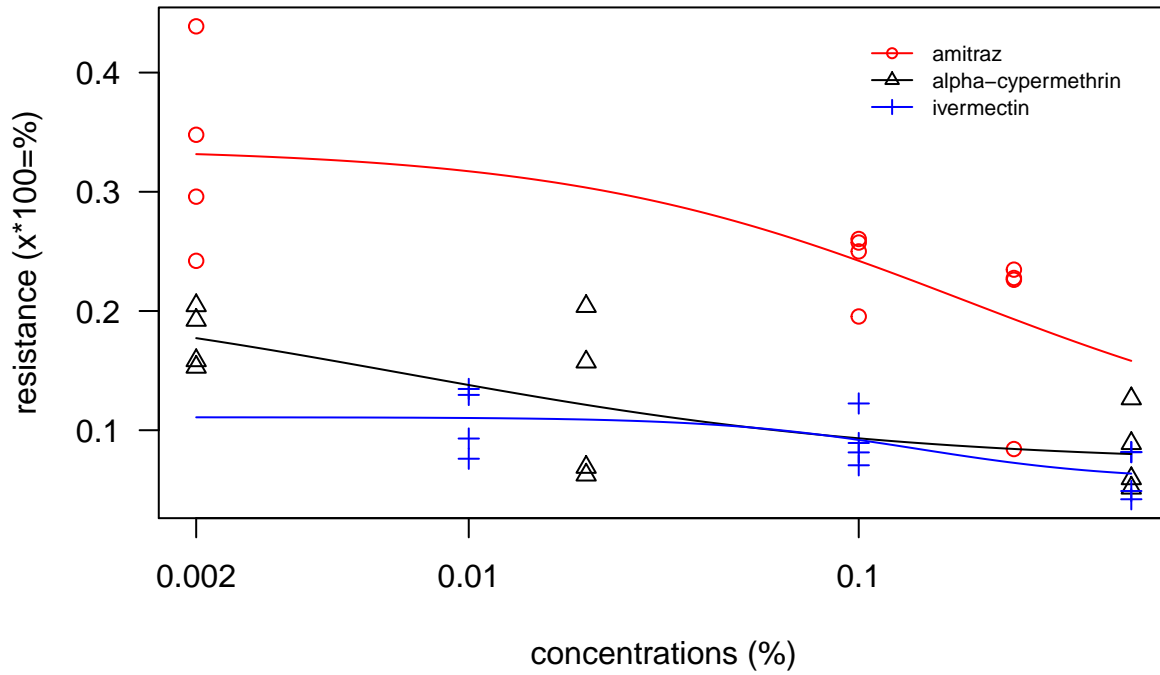
```
plot(f4a.l1,broken = T,type = "all", main="Farm 4",xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```

Farm 4



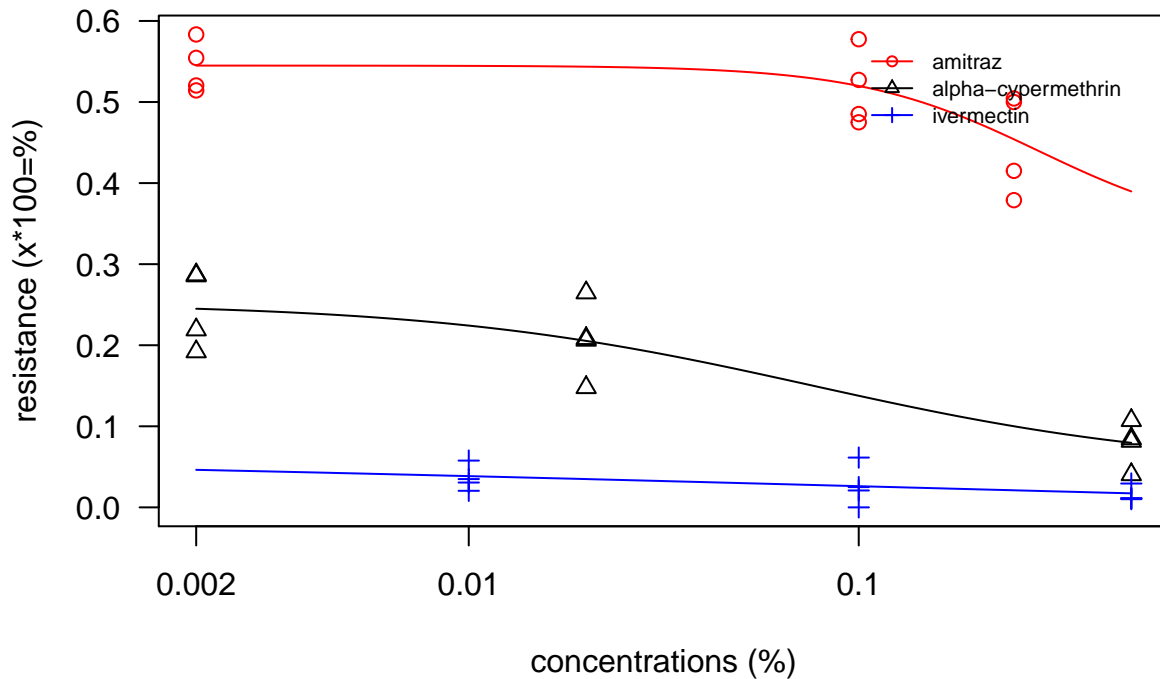
```
plot(f5a.l1,broken = T,type = "all", main="Farm 5",xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```

Farm 5



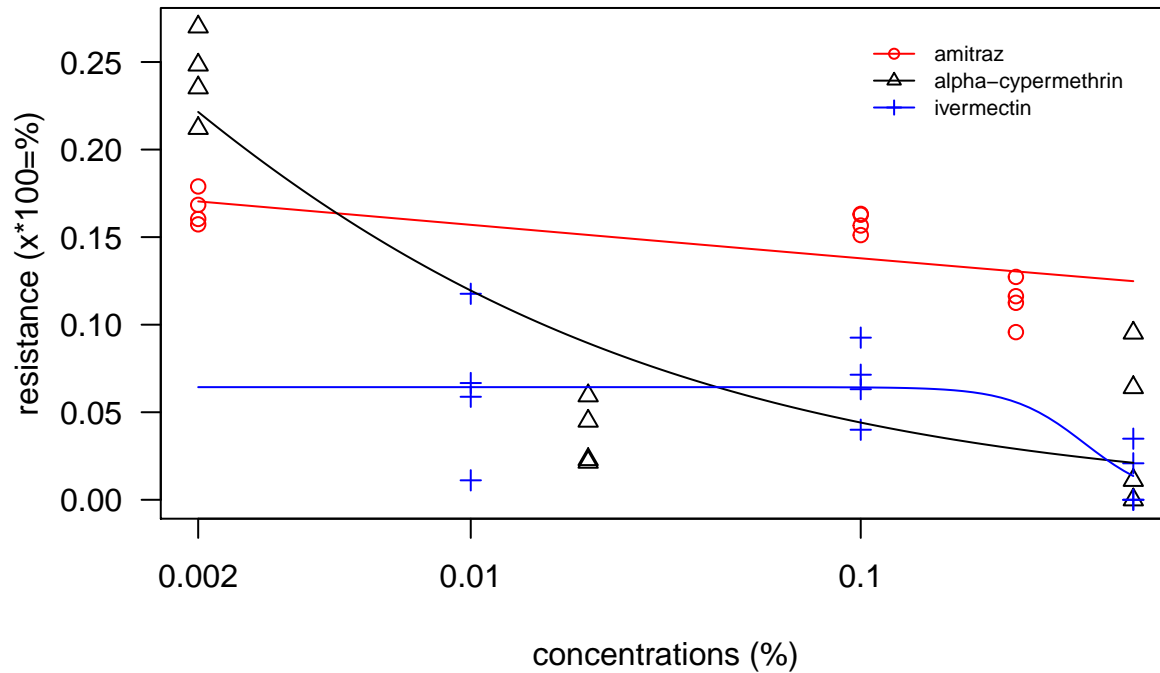
```
plot(f6a.l1,broken = T,type = "all", main="Farm 6",xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```

Farm 6



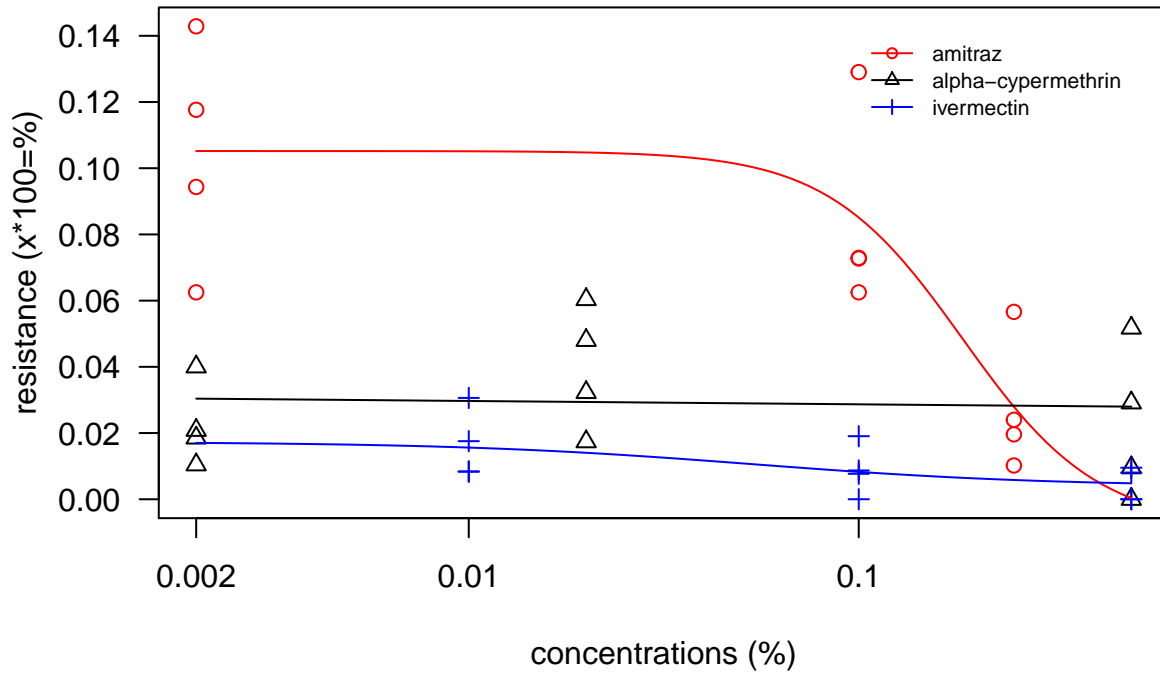
```
plot(f7a.l1,broken = T,type = "all", main="Farm 7", xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```

Farm 7



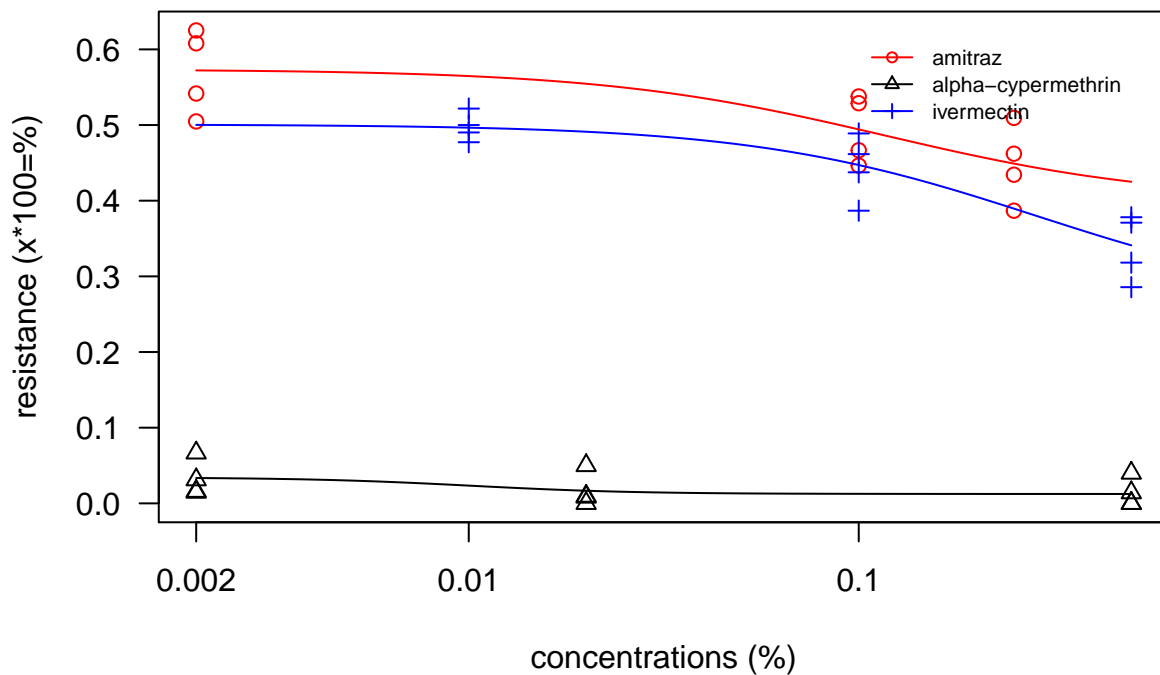
```
plot(f8a.l1,broken = T,type = "all", main="Farm 8",xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```

Farm 8



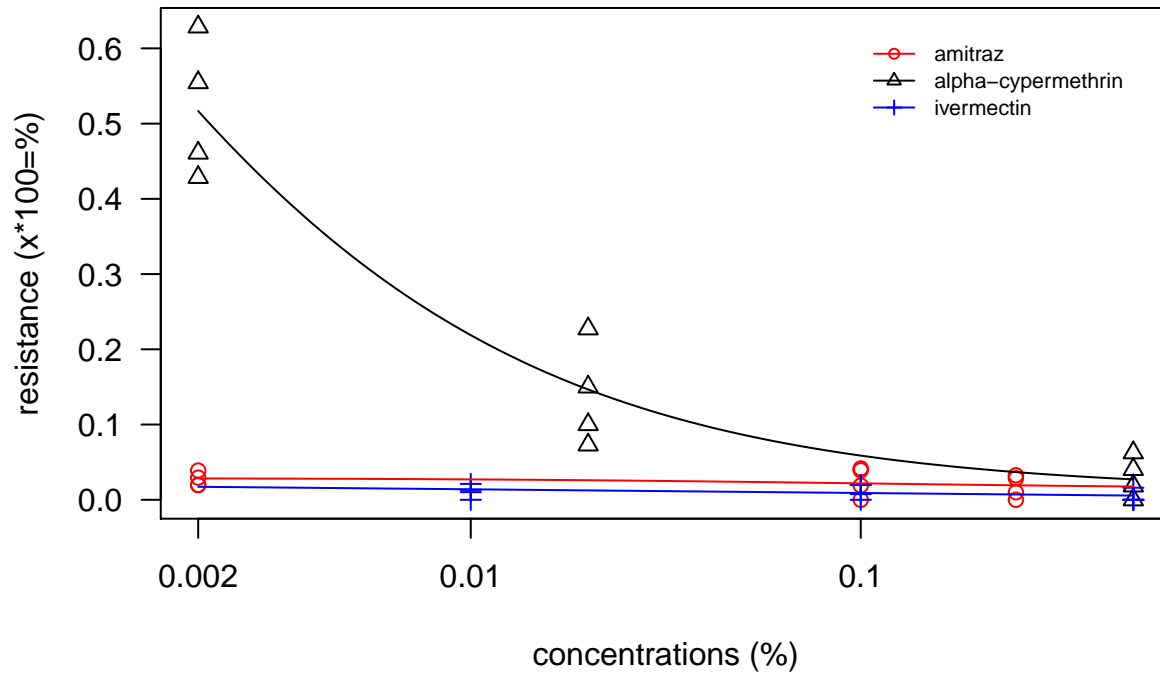
```
plot(f9a.l1,broken = T,type = "all", main="Farm 9",xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```

Farm 9



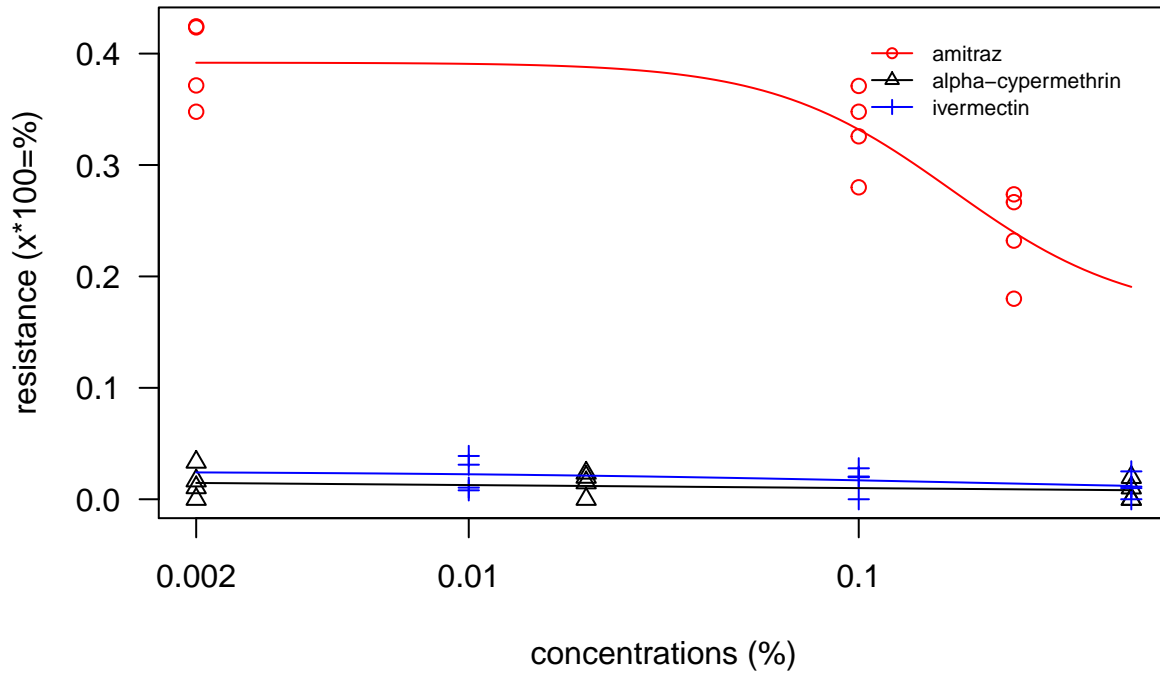
```
plot(f10a.ll,broken = T,type = "all", main="Farm 10",xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```

Farm 10



```
plot(f11a.ll,broken = T,type = "all", main="Farm 11",xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```


Farm 11



```
plot(f12a.l1,broken = T,type = "all", main="Farm 12",xlab = "concentrations (%)",
     xlim = range(Predic$conc), ylab = "resistance (x*100=%)", col=c("red", "black","blue"),
     cex.legend = 0.7, lty=1, lwd=1)
```

Farm 12

