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# Cereal and OSR Insecticide ai’s & Groups 1979/80

## Group 1A
- **Carbamates**: pirimicarb (Aphox)

## Group 1B
- **Organophosphates**
  - azinphos-methyl (Gusathion)
  - chlorpyrifos (Dursban)
  - demeton-s-methyl (Metasystox 55)
  - dimethoate (Dimethoate 40)
  - disulfoton (Disyston P-10)
  - etrimfos (Ekamet)
  - fenitrothion (Dicofen)
  - fonofos (Dyfonate 10G)
  - formothion (Anthio)
  - heptenophos (Hostaquick)
  - malathion (Malathion 60)
  - mevinphos (Phosdrin)
  - omethoate (Folimat)
  - oxydemeton-methyl (Metasystrox R)
  - phosalone (Zolone)
  - phorate (BASF Phorate)
  - quinalfós (Savall)
  - thiometon (Ekatin)
  - triazophos (Hostathion)

## Group 2A
- **Organochlorines**
  - DDT (Arkotine DDT)
  - endosulfan (Thiodan Liquid)
  - gamma-HCH (Gamma-Col)

## Group 3A
- **Pyrethroids**
  - permethrin (Ambush)

## Group 3B
- **Group 3B**
  - pirimicarb (Aphox)

## Source
List of Approved Products and their uses for Farmers and Growers ACAS
# Cereal and OSR Insecticide ai’s & Groups 2016/17

## Pyrethroids
- alphacypermethrin (Contest)
- betacyfluthrin (Gandalf)
- cypermethrin (Toppel)
- deltamethrin (Decis)
- esfenvalerate (Sven)
- lambda-cyhalothrin (Hallmark Zeon)
- tau-fluvalinate (Mavrik)
- zetacypermethrin (Fury)

### Group 3A
- Cereals – BYDV grain aphids, gout fly, yellow cereal fly, summer grain aphids, blossom midge
- OSR – CSFB, pollen beetle, peach potato aphids, stem weevil, seed weevil, pod midge, cabbage aphids

## Neonicotinoid
- thiacloprid (Biscaya) – peach potato aphids, OWBM, pollen beetle, (CSFB)
- acetamiprid (InSyst) – pollen beetle (CSFB)

### Group 4A

## Organophosphate
- dimethoate (Danadim) – summer aphids

### Group 1B

## Pyridine(Azomethine)
- pymetrozine (Plenum) - peach potato aphid pollen beetle

### Group 9B

## Pyridine
- flonicamid (Teppeki) - summer aphids

### Group 9C

## Oxadiazine
- indoxacarb (Explicit) – pollen beetle

### Group 22A
Examples of IPM Techniques for Pest Control in Combinable Crops

• Later drilling to reduce risk of BYDV – lower yields/reduced profitability, fear of wet weather
• Earlier drilling to limit impact of wheat bulb fly – increased weed, pest and disease pressure
• Varietal resistance eg: orange wheat blossom midge/TuYV – few other pests
• Increase speed of emergence through varietal choice, starter fertilisers, biostimulants, etc to outgrow pests eg: Cabbage stem flea beetle – lacking trials info
• Rolling seedbeds to limit impact of slugs, CSFB, WBF – time available/conditions
• Avoid growing pest susceptible crops/destroy green bridge eg: OSR/slugs, peas/pots/WBF, beans/ stem nematodes, BYDV green bridge – rotations, profitability
• Soil and seed testing eg: WBF, stem nematodes – mapping, cost, responsibility
• Catch cropping/pheremones to attract pests away from crop eg: pollen beetle, codling moth – efficacy, complications to cropping, info
• Biofumigant crops eg: mustard and nematodes - trials info
• Biological control products - aphids, etc – cost, efficacy, production and storage
• More use of monitoring/thresholds before spraying to reduce selection pressure – lack of info, reliability, rapid pest build up, final accountability for outcome

‘Use as much as necessary but as little as possible’ - LEAF
### Key Pest Thresholds in Cereals and OSR

#### Gout fly (Chilo partellus)
**Thresholds**
- Limited evidence suggests that treating winter wheat is economic if eggs are found on more than half of plants at GS12.
- Currently, there is no threshold for spring-sown crops.

#### Bird cherry-oat aphid (Phyllocoptes fructiphila)
**Thresholds**
- No satisfactory thresholds for treatment exist. If aphids are present, it should be assumed that they are mating by D4.

#### Grain aphid (Sitobion avenae)
**Thresholds**
- Examine plants soon after full emergence. If more than 10% are damaged, an insecticide is recommended.

#### Orange wheat blossom midge (Cephalops longula)
**Thresholds**
- Pheromone traps: 50 or no more mids: General risk is the next week. Monitor crops for damage.
- More than 120 mids: Very high risk. Treat wheat crops at susceptible growth stages 033-056 as soon as possible.
- Visual crop inspection. For feed crops: 1 mid per 3 ears. For milling and seed crops: 1 mid per 6 ears.
- Sticky trap: A catch of around 10 mids per trap indicates a significant risk.

#### Bean seed flies (Delia pteretis and Delia sonetis)
**Thresholds**
- Fewer than 100 eggs/m²: Seed treatment justified in spring-sown cereals.
- 100-200 eggs/m²: Seed treatment justified in late-sown and spring-sown cereals.
- 200-500 eggs/m²: Seed treatment justified in late-sown and spring-sown cereals.
- Egg treatment may be justified.
- More than 500 eggs/m²: Egg hatch spray justified in early-sown cereals; seed treatment and egg hatch spray justified in late-sown and spring-sown cereals.

#### Wheat bulb fly (Delia coarctata)
**Thresholds**
- Winter wheat: 10 eggs/m². Spring wheat: 50 eggs/m².

#### Brassica pod midge (Daireura brassicae)
**Thresholds**
- Northern UK: 0.5 per plant.
- Elsewhere: 1 per plant.

#### Cabbage seed weevil (Ceutorhynchus assimilis)
**Thresholds**
- Winter-sown rape: >13% of plants infested before petal fall.
- Spring-sown rape: >24% of plants infested before petal fall.

#### Cabbage stem weevil (Ceutorhynchus pratensis)
**Thresholds**
- Winter-sown rape: >13% of plants infested before petal fall.
- Spring-sown rape: >24% of plants infested before petal fall.

#### Cabbage stem weevil (Ceutorhynchus quinquelinatus)
**Thresholds**
- Winter-sown rape: >13% of plants infested before petal fall.