



Get Pelletwise!

SLUGS

The biggest pest problem in the
UK

WHY?

Winter cereals

**Grain hollowing of wheat
and leaf grazing**

**Often leads to crop
write off without treatment**

30% of wheat treated

Winter Oilseed rape

**Bite through stems and kill
plants – leads to crop wipe out
Provides microclimate for slug
breeding**

70% treated

Slug effect on oilseed rape

No metaldehyde pre- emergence
5 applications post + extra rape seeding
Crop too small for herbicides

45gai/ha metaldehyde pre-emergence only
No further slug pellets
Grass and broadleaved weeds controlled



Slugs oilseed rape

- foreground 1 x 45 g a.i. metaldehyde/ha straight after drilling
- background 5 slug pellet applications post, none pre-emergence



Headland treatment not important?

Headland soil consolidation reduces the effect of slugs on field boundaries but not bird damage!



Other crops

- Potatoes ‘whistlers’- slugs burrow into tubers esp. on Maris Piper, the main variety
- Salad crops esp. lettuce - leaf eating and contamination
- Peas contamination in frozen peas
- Blackcurrants - mechanical harvesting - snails – gritty juice!
- Strawberries - damage to fruit
- Plants and flowers - effect on quality

At what cost to agriculture and horticulture

- Often not a case of percentage reduction
- BUT
- Crop write off or total rejection of produce
- Bad years and less bad years – not predictable

Grower income 2008

- Cereals £3.2bn
- Fresh vegetables £1.1bn
- Plants and flowers £797m
- Potatoes £755m
- Fresh fruit £517m

- Total £6.369bn

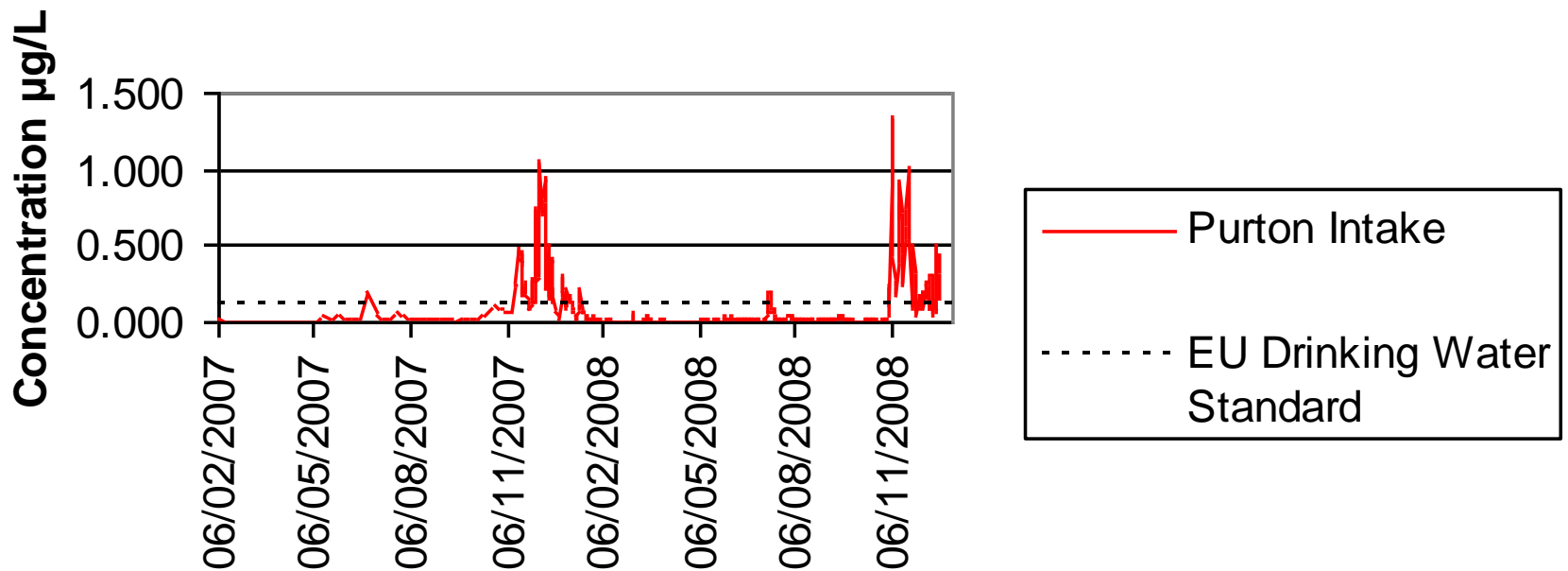
0.01% loss = £637m

So we need to control slugs and snails

- Metaldehyde slug pellets account for 80% of the pellets used
- And 80% of slug pellets are applied by spinning disc applicators on Quad bikes
- When is metaldehyde picked up in water?
 - Autumn/winter

WATER

Metaldehyde concentrations at Bristol Water Purton Intake



How does metaldehyde get into water?

Point source

Into drains from concrete

- Spillages
- Cleaning down machines

Mud + pellets from vehicles

Washing overalls?

- 26% disposable overalls

How does metaldehyde get into water?

Direct application

Spreading pellets into surface waters and ditches

Diffuse

Leaching through soil into field drains after heavy rainfall

Run off during heavy rain

ACTION

- Cherwell catchment study
- Pellet type leaching study
- Heavy promotional campaign

Manufacturers – improve packaging – split bags

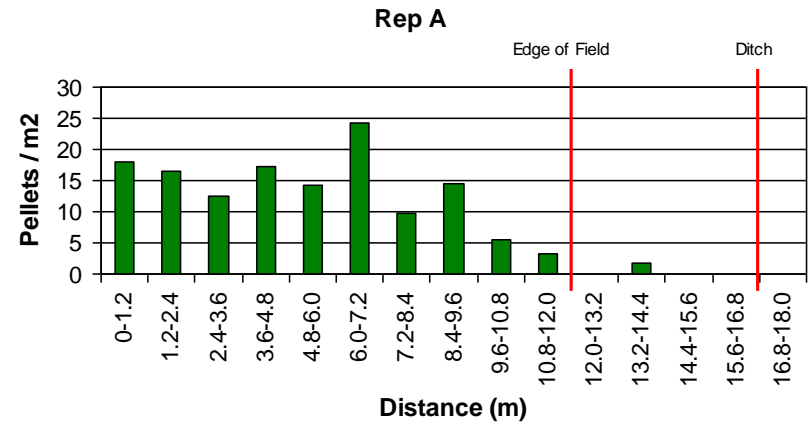
- Investigate pellet formulation

Distribution chain

- Clean up any spillages during storage and transport, however small



Advisors, Owners, Operators



Labels - Best practice action

- Slug pellets are pesticides and must be treated as such – **Get Pelletwise!**
- Do not apply within 5m of a water course or ditch
- Treat headland last to avoid carrying mud + pellets out of field
- Calibrate applicator before use for rate and spread width to side and rear
- Fill and clean applicator in field away from ditch and road – not in yard!

Best practice action

- Do not apply if heavy rain forecast or leaching and run off will occur esp. on heavy clay soils
- Minimise rates of active per hectare to give economic control

Industry proposed maximum rates

- 700 g ai/ha per season
- 250g ai/ha per application
i.e. per ha

5% - 5kg

4% - 6kg

3% - 8kg

1.5% - 15kg

(Recognised optimum number of pellets per sq m is 40 - some products achieve this at 3kg/ha, others at 7.5kg/ha)

Think not what water can do for me but what can I do for water!

- Keep pellets off hard surfaces to avoid drains
- Keep mud + pellets off roads
- Keep pellets out of water courses and ditches
- Use minimum active per ha
- Avoid spreading if heavy rain forecast
- Then we can continue to cost effectively protect our crops, food and water
- **SO NOW THE PRACTICAL BIT!!!**

www.getpelletwise.co.uk



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