

Regulation of Rodenticides

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Content

- Overview of why these changes are happening
- Concerns in relation to use of AR/AVKs
- Implementation of AR/AVK renewals in IE
- Categories of Users + Registration,
- Record Keeping + Restrictions at Point of Sale

Rodenticides - PT14s

- Anticoagulant Rodenticides (ARs) or Anti-Vitamin Ks (AVKs) renewed 2017.
- First Generation Anticoagulant Rodenticides (FGARs)
 - Warfarin
 - Coumatetralyl
- Second Generation Anticoagulant Rodenticides (SGARs)
 - Bromadiolone
 - Brodifacoum
 - Difenacoum
 - Difethialone
 - Flocoumafen
 - Chlorophacinone*

Importance of PT 14s

- Public Health
 - The Plague, Weil's disease, Salmonellosis, rat bite fever, Toxoplasmosis, Hantavirus syndrome (HVS) etc...
 - Transmitted through direct contact, inhalation or ingestion of faeces, blood, urine of rodents as well as scratches and bites.
- Economic impacts
 - Damage to Stored products, materials, buildings, wiring etc.
 - Risks to Pharmaceutical, Food business operators, Restaurants, Hotels, Farming etc.
 - Irreparable damage to effected industries reputation.

Concerns of DAFM

- Resistance to SGARs through incorrect use

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'I hate cunning super mices to pieces'



"Poison? I'll give it a miss"

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Seeing a plum-sized *mus musculus* scurrying across my kitchen floor hardly made my evening. But had I instead spied the naked tail of *rattus rattus* disappearing behind the cooker, I would certainly have been checking into a hotel until the exterminator gave the all clear.

My concerns would have been heightened had I known my guest was one of a growing band of urban mice with a tolerance to poisons and - most worryingly - an increasing unwillingness to have any truck with baits or traps.

UK exterminators have seen significantly more mice giving poison baits a wide berth in the past decade, says Richard Strand, executive director of the British Pest Control Association.

"We've witnessed the rise of behavioural resistance in mice. Where once they'd have gone quite happily into bait boxes, the past 10 years have seen them change their behaviour quite distinctly."

(Not) taking the bait

Richard Strand

No matter how good our poisons are, if the mice won't take the bait, we can't kill them

Rats have a PR problem



Applied Animal Behaviour Science 66 (2000) 323–333

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Cereal aversion in behaviourally resistant house mice in Birmingham, UK

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Abstract

In 1986, house mice in a small defined area of inner Birmingham were reported as not taking a variety of rodenticides from bait containers, a phenomenon labelled 'behavioural resistance'. This study investigated behavioural resistance by comparing the food preferences of West Midlands behaviourally resistant (WMBR) mice with those of normal (BC) mice. Nine bait boxes each containing one of nine different foods (cheese, chicken, tuna fish, peanut butter, canary seed, Cat stars, wheat, PCD (MOD) pellets and Non-tox) were introduced to 12 WMBR and seven BC sites (Experiment 1). The experiment was repeated in the laboratory with six pens of WMBR and six of BC mice (Experiment 2), and to investigate whether the preferences had a genetic basis the offspring were similarly assayed (Experiment 3). In each experiment the consumption of each food was measured over 7 days and the droppings around the bait boxes were counted to assess mouse activity. Food neophobia was noted in some populations of BC mice. Tested in the wild and in the laboratory WMBR mice showed an aversion to foods containing cereals, as did their offspring. These results, with other lines of evidence, strongly suggest that cereal aversion in WMBR mice has a physiological/genetic basis. Since cereal aversion allows WMBR mice to survive cereal-based rodenticidal baits, we conclude that WMBR mice have genetically based behaviours that allow them to survive poisoning regimes that kill other strains. © 2000 Elsevier Science B.V. All rights reserved.

Keywords: House mouse; Food preferences; Neophobia; Behavioural resistance; Bait avoidance

Concerns of DAFM

- Resistance to SGARs through incorrect use
- Secondary poisoning

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Monday, December 19, 2016
Richard Collins



More raptor deaths were logged during 2015 than in any year so far, writes



Concerns of DAFM

- Resistance to SGARs through incorrect use
- Secondary poisoning
- Non-approval of Active Substance Renewal in 5 years time



Changes to Use – AS Renewal

- Publication of the AS renewals in July 2017

COMMISSION IMPLEMENTING REGULATION (EU) 2017/1376
of 25 July 2017
renewing the approval of warfarin as an active substance for use in biocidal products of product-type 14

COMMISSION IMPLEMENTING REGULATION (EU) 2017/1381
of 25 July 2017
renewing the approval of brodifacoum as an active substance for use in biocidal products of product-type 14

COMMISSION IMPLEMENTING DECISION (EU) 2015/1737
of 28 September 2015
postponing the expiry date of approval of bromadiolone, chlorophacinone and coumatetralyl for use in biocidal products for product-type 14

COMMISSION IMPLEMENTING REGULATION (EU) 2017/1383
of 25 July 2017
renewing the approval of floccoumafen as an active substance for use in biocidal products of product-type 14

COMMISSION IMPLEMENTING REGULATION (EU) 2017/1378
of 25 July 2017
renewing the approval of coumatetralyl as an active substance for use in biocidal products of product-type 14

COMMISSION IMPLEMENTING REGULATION (EU) 2017/1382
of 25 July 2017
renewing the approval of difethialone as an active substance for use in biocidal products of product-type 14

COMMISSION IMPLEMENTING REGULATION (EU) 2017/1377
of 25 July 2017
renewing the approval of chlorophacinone as an active substance for use in biocidal products of product-type 14

Common Name	IUPAC Name Identification Numbers	Minimum degree of purity of the active substance (%)	Expiry date of approval	Product type	Specific conditions
Bromadiolone	IUPAC Name: 3-[(1RS,3RS;1RS,3SR)- 3-(4'-bromobiphenyl-4- yl)-3-hydroxy-1-phenyl- propyl]-4-hydroxy- coumarin EC No: 249-205-9 CAS No: 28772-56-7	969 g/kg	30 June 2024	14	<p>Bromadiolone is considered a candidate for substitution in accordance with points (a) and (e) of Article 10(1) of Regulation (EU) No 528/2012.</p> <p>The authorisations of biocidal products are subject to the following general conditions:</p> <ol style="list-style-type: none"> (1) the product assessment shall pay particular attention to the exposures, the risks and the efficacy linked to any uses covered by an application for authorisation, but not addressed in the Union level risk assessment of the active substance. In addition, pursuant to point 10 of Annex VI to Regulation (EU) No 528/2012, the product assessment shall include an evaluation as to whether the conditions of Article 5(2) of Regulation (EU) No 528/2012 can be satisfied; (2) products shall only be authorised for use in Member States where at least one of the conditions set out in Article 5(2) of Regulation (EU) No 528/2012 is satisfied; (3) the nominal concentration of bromadiolone in the products shall not exceed 50 mg/kg; (4) products shall contain an aversive agent and a dye; (5) products shall not be authorised in the form of tracking powder; (6) products in the form of contact formulations, other than tracking powder, shall only be authorised for use by trained professionals indoors in places not accessible to children or non-target animals; (7) only ready-to-use products shall be authorised; (8) primary as well as secondary exposure of humans, non-target animals and the environment are minimised, by considering and applying all appropriate and available risk mitigation measures. These include for example the restriction to professional or trained professional use when possible and setting additional specific conditions per user category; (9) dead bodies and uneaten bait shall be disposed of in accordance with local requirements. The method of disposal shall be described specifically in the summary of the product characteristics of the national authorisation and be reflected on the product label.

Implementation in Ireland

- Renewal will be implemented exactly as stated in approval decision
- Three user categories with specific rules applied to their use
 - General Public (amateur)
 - Professional
 - Trained Professional

Implementation continued...

- Ensure only ‘trained professionals’ are purchasing and using product as specified for their category
 - (5) persons making products for trained professional users available on the market shall make sure that the products are not supplied to other persons than trained professionals.
 - Registration to prove competence – PMU No
 - Provide PMU to purchase product
 - Inspections of records
- Ensure only ‘Professionals’ are purchasing and using product as specified for their category
 - Herd/Flock No | (4) persons making products for professional users available on the market shall make sure that these products are not supplied to the general public.
 - Inspections of records

Implementation continued...

- User without proof of competence, i.e., without PMU/Herd/Flock No can;
 - Purchase amateur products
 - Hire a PMU
 - Carry out training to become a PMU
- Some individuals currently using professional use product won't be able to use professional use products in 2018 without completion of training.

Requirements to Register - PMU

- Currently Pest controllers must obtain the following certification to become a Pest Management Trained Professional User (PMU);
 - Pest management training to a minimum standard (i.e. Oqual Level2 or equivalent - RSPH Level 2 or IPCA Diploma)
 - Campaign for Responsible Rodenticide Use (CRRU) Wildlife Aware Training Course provides training whilst raising awareness of the requirement to protect wildlife and prevent secondary poisoning through responsible use

(8) primary as well as secondary exposure of humans, non-target animals and the environment are minimised, by considering and applying all appropriate and available risk mitigation measures. These include for example the restriction to professional or trained professional use when possible and setting additional specific conditions per user category;

NEW Requirements to Register - PMU

- From 1st July 2018 only the following certification will be accepted to register as a Pest Management Trained Professional User (PMU);
 - **Pest management training** to a minimum standard (i.e. Oqual Level 3 or equivalent – i.e., Lantra Level 3 or RSPH Level 3)
 - Campaign for Responsible Rodenticide Use (**CRRU**) **Wildlife Aware** Training Course if not incorporated into Level 3. This is part of the Lantra Level 3 in Pest Management

Trained Professional Use Products

- Requirements;
 - Register as a PMU
 - Provide **PMU at POS**
 - Only use product as specified on labels
 - Customer contracts with proposed baiting strategy/IPM identified
 - **Records** of bait purchased, returned & destroyed
 - Keep records of IPM, baiting strategies, location of bait points, dates and amounts of bait/traps applied and dates bait & rodent bodies collected.
 - No pulse baiting for products containing Difenacoum and Bromadiolone
 - Permanent baiting **ONLY** when other *methods insufficient*, only using products containing bromadiolone or difenacoum.

In addition to the general conditions, the authorisations of biocidal products to be used by trained professionals are subject to the following conditions:

- (1) products may be authorised for use in sewers, open area or waste dumps;
- (2) products may be authorised for use in covered and protected bait points as long as they provide the same level of protection for non-target species and humans as tamper-resistant bait stations;
- (3) products shall **not** be authorised for use in **pulse baiting treatments**;
- (4) products may **only** be authorised for use in **permanent baiting treatments** at those sites with a **high potential for reinvasion when other methods of control have proven insufficient**;
- (5) persons making products for trained professional users available on the market shall make sure that the products are not supplied to other persons than trained professionals.

Professional Use Products

- Requirements;
 - Provide Herd/Flock No at POS
 - Only use product as specified on labels
 - Records of bait purchased, returned & destroyed
 - Keep records of IPM, baiting strategies, location of bait points, dates and amounts of bait/traps applied and dates bait & rodent bodies collected.
 - NO permanent or pulse baiting
 - Must use tamper-resistant bait boxes

In addition to the general conditions, the authorisations of biocidal products to be used by professionals are subject to the following conditions:

- (1) products shall not be authorised for use in sewers, open area or waste dumps;
- (2) products shall not be authorised for use in permanent or pulse baiting treatments;
- (3) products shall only be authorised for use in tamper-resistant bait stations;
- (4) persons making products for professional users available on the market shall make sure that these products are not supplied to the general public.

In and around building ONLY

General Public Use Products

- Requirements;
 - Only available with **lower concentration of active substance**
 - Only use product as specified on labels
- Restrictions to pack size

In addition to the general conditions, the authorisations of biocidal products to be used by the **general public** are subject to the following conditions:

- (1) products shall **only** be authorised for use **in tamper-resistant bait stations**;
- (2) products shall **only be supplied** with a **maximum quantity of bait per pack of**:
 - (a) for products against mice only:
 - (i) for grain, pellet or paste baits: 50 g;
 - (ii) for wax block baits: 100 g;
 - (b) for products against rats only, or mice and rats:
 - (i) for grain, pellet or paste baits: 150 g;
 - (ii) for wax block baits: 300 g;
- (3) products against **Rattus norvegicus** and **Rattus rattus** shall only be authorised for use **indoors or in and around buildings**;
- (4) products against **Mus musculus** shall only be authorised for use **indoors**;
- (5) products shall **not be authorised for use in permanent or pulse baiting treatments**;
- (6) persons making products available on the market shall ensure that the products are accompanied by information on the risks associated with anticoagulant rodenticides in general, measures to limit their use to the minimum necessary and appropriate precautionary steps to be taken;
- (7) products in the form of loose bait formulations, such as grain or pellets, shall only be authorised in formulations that are supplied in sachets or other packaging to reduce exposure to humans and the environment.

Restrictions at Point of Sale

- **Proof** needs to be presented at **point of sale** (POS) to purchase products for professional and trained professional use.
- Personal details provided at POS to purchase
- Professional products not available in amateur stores, i.e., Woodies, B&Q





Record Keeping



Authorisation holder/Marketing company

- Condition of authorisation requires **annual submission** of following data;
 - Quantity of product manufactured in Ireland (if applicable)
 - Quantity of product imported to Ireland + dates
 - Names and address of customer(s)
 - Quantity received by each customer
 - Quantity returned by each customer
- Need to inform wholesales/retailer of requirements to also keep records, **Request + Record proof of user category** to ensure products are only supplied to the correct user category.

(5) persons making products for trained professional users available on the market shall make sure that the products are not supplied to other persons than trained professionals.

(4) persons making products for professional users available on the market shall make sure that these products are not supplied to the general public.

- Need to provide the relevant information to end-users and information on the risks associated with AR to amateur users

Wholesale/Retail

- Wholesalers/Retailers of rodenticide shall;
 - Make sure that Prof/trained prof products are **not supplied to general public**.
 - Make sure that Prof users supply herd/flock number
 - Make sure Trained prof users supply PMU Number (checked on DAFM website)
 - Supply information to amateur users on risks associated with A.R.
- All **records** should be maintained for a period of **5 years** from the date of invoice creation and must be made available to an authorised officer of DAFM on request.

(6) persons making products available on the market shall ensure that the products are accompanied by information on the risks associated with anticoagulant rodenticides in general, measures to limit their use to the minimum necessary and appropriate precautionary steps to be taken;

Record Keeping – Wholesale Prof / Trained Prof Use Products

- For purchases from suppliers or returns from customers, i.e. **GOODS IN** Record;
 - Name and address supplier
 - Name of the product
 - IE/BPA No.
 - Pack size; Quantity purchased / returned
 - Date purchased / returned
 - The batch numbers.
- For sales, i.e. **GOODS OUT** Record;
 - The name and address of each business supplied with rodenticides
 - The name of the product(s)
 - The IE/BPA No(s)
 - The pack size(s);
 - The volume(s) supplied;
 - The date purchased;
 - The PMU No (only applicable for purchase of trained professional use products by pest control companies)
 - The Herd/Flock No (only applicable for purchase of professional use products)
 - The batch numbers of the product(s) supplied

Record Keeping – Retailers

Prof / Trained Prof Use Products

- For purchases from suppliers / returns from customers, i.e. **GOODS IN** Record;
 - Name and address supplier
 - Name of the product
 - IE/BPA No.
 - Pack size
 - Quantity purchased / returned
 - Date purchased / returned
 - The batch numbers.
- For sales, i.e. **GOODS OUT** Record;
 - The name and address of each individual purchasing rodenticide products or the waste disposal company;
 - The PMU No of the purchaser for trained professional products
 - The Herd No/Flock No. of the purchaser for professional products
 - The name of the product(s)
 - The IE/BPA No(s)
 - The pack size(s)
 - The volume(s) supplied
 - The date purchased or disposed of

Record Keeping – Pest Control Companies Bulk Buying

- Pest control companies order products in bulk and distribute to their staff.
- The central stores of the Pest Company will be *treated the same as a retailer* and **records** must be kept of goods in and goods out.
- PMUs must sign out product from stores and records kept by pest company and PMU.
- Product can be purchased by a member of the administration team on behalf of PMUs from wholesaler using the template on DAFM website, Records must be kept.

NEW - Record Keeping – PCO stores purchasing in Bulk for PCOs

- For purchases from suppliers / returns from customers, i.e. **GOODS IN** Record;
 - Name and address supplier
 - Name of the product
 - IE/BPA No.
 - Pack size
 - Quantity purchased / returned
 - Date purchased / returned
 - The batch numbers.
- For products given to staff/destroyed, i.e. **GOODS OUT** Record;
 - The name & address of PMU collecting/receiving product or the waste disposal company;
 - The PMU No
 - The name of the product(s)
 - The IE/BPA No(s)
 - The pack size(s)
 - The volume(s) supplied
 - The date purchased or disposed of

Record Keeping – Facility Management Companies or similar

- **Contract** with PMU specifying the type of rodent baiting strategy employed,
- Environmental **risk assessment** and **IPM**
- Name(s) of operators and PMU number
- **Map** of campus with bait points identified
- **Records** of bait applied (details on end user slide), dates of application and collection of unused baits and rodent bodies

Record Keeping – End User

- **Details of product** purchased/returned/destroyed
 - name and address of supplier/council etc.
 - Date,
 - Product name,
 - IE/BPA No,
 - Volume of product,
 - Batch number.
- **Site Survey, Mapping, IPM, Risk Assessment**
 - Date of application of traps/product (name/approval no), amount applied
 - Date of collection of unused bait/traps, amount and location
- Use **reference document** generated by CRRU Ireland on Rodent Pest Management Records as aide for developing internal record keeping – CRRU Website

Record Keeping – End User

- List of customers and contracts if repeat visits required.
- Risk assessment of site and IPM employed
 - map of site with
 - Baiting/trap/monitoring points identified
 - Areas where children, companion animals etc. have access (if applicable)
 - Sensitive sites for non-target wildlife (if applicable)
 - Places where rodent activity were identified
 - Points where rodents have access to food and water
 - Points where rodent proofing required
 - Identification of harbourage to be removed
 - Sites for burial of rodent carcasses (if applicable)
- Dates of application of product, IE/BPA No, Batch No, Amount applied to each location on map
- Dates of bait collected and location point on map

Enforcement of Regulation

- Periodic inspections of;
 - Wholesaler/retailer
 - Companies procuring PMUs
 - End users
- Inspection will review;
 - Biocidal products on site
 - Records as detailed in previous slides for AVKs.

Summary

- Big changes to the industry
- Requirements to carry out recognised training to register as PMU to purchase and use trained professional use AVKs
- Requirements to keep high quality records
- Inspections of records to check compliance

Questions ?