

Technical User Guide

LODI UK LAUNCH

HARMONIX



Revolutionising rodent control in UK Farming
thanks to our **brand new active**



Suitable for
**outdoors,
open areas
& burrows**

- ✓ Proven rodent control within
7 Days with 50% less bait
- ✓ Prevent rodent damage & reduce disease
on farm **in only 3 days** using advanced
Stop Feed Effect technology



USE BIOCIDES SAFELY: ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE.
For further product information refer to product label or www.lodi-uk.com/gems-harmonix. Harmonix® Rodent Paste contains 0.077% w/w (0.075% w/w pure) Cholecalciferol. UK-2020-1686, EBFA 70856. Bayer CropScience Ltd. © Copyright of Bayer 2021.

EXPLORE THE MARKET LEADING
LODI'S GEMS RANGE



SCAN TO WATCH OUR
PRODUCT VIDEO GUIDE
& search our distributor list online
www.lodi-uk.com/gems-harmonix

Lodi's Gems Harmonix Rodent Paste

TECHNICAL USER GUIDE

HOW TO USE HARMONIX ON YOUR FARM

Farmers today face challenges in on-farm rodent control:

- Application/use restrictions of product labels
- Time taken to control large infestations
- Financial loss
- Sustainability & environmental security



In this technical user guide, we introduce Lodi's Gems Harmonix Rodent Paste as part of our market leading range. Discover our new revolutionising product and how best to use it on your farm.

1. On-farm Pest Management
2. Rodent Identifier
3. 5-Step Rodent Control Guide
4. Lodi's Gems Harmonix Rodent Paste
 - a. Product Overview
 - b. New Cholecalciferol active
 - c. 7-day Rodent Control with Stop Feed Effect
5. Using Lodi's Gems Harmonix Rodent Paste:
 - a. Open-Areas, Burrows, Straw Stacks & Silage Bails
6. Choose Your Farm Location:
 - a. How to Control Rodents on Poultry Farms
 - b. How to Control Rodents on Pig Farms
 - c. How to Control Rodents on Livestock Farms
 - d. How to Control Rodents on Arable & Crop Farms
7. Environment Checks & Secondary Poisoning
8. Record Keeping & CRRU Best Practice
 - a. Farm Rodent Monitoring Log
 - b. Farm Rodent Eradication Campaign Log
 - c. Rodent Survey & Treatment
 - d. Bait Location Plan
9. Additional Support, Video Guides & Stockists



FIND YOUR LOCAL STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste ON-FARM PEST MANAGEMENT

Rodent infestations of rats and mice can cause significant problems with disease control, building damage and feed loss on farms.

Farms, feed bins and livestock units offer three factors which account for infestations to take hold when readily available: shelter, food, and water. Rodents can shelter around sites in hedge rows or burrows nearby. Once inside buildings, rodents burrow under slats, inside walls, insulation within the walls and roof. Though at first unnoticed, when seen during the day it is a sign of a significant infestation.

£2410 of feed eaten by 200 rodents annually



Rodents cost farmers financially for five main reasons:

- Feed loss, 200 rats can eat up to £2410 of feed per year - £12 per rodent
- Feed contamination will add to this figure above
- Damage to buildings and equipment
- Operational shutdowns due to repair or disease disinfection
- Fires started by electrical failures and chewed wires

This is in addition to the risk to animal health posed during operational failures, fires, feed contamination and disease spread.

LODI UK OFFERING FARMERS TRUE ALTERNATIVES



Lodi UK are the only UK manufacturer now to offer three families of active ingredient for use on farms providing true choice.



FIND YOUR LOCAL STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste

KNOW YOUR RODENT

Know your rodent characteristics to ensure best practice and control when using Lodi's Gems Harmonix Rodent Paste:



Rats can fall over 50ft, jump 3ft and swim for ½ mile... over three days if needed. Rats feed up to two times per night, sharing food and water sources in a group of rodents moving up to 100ft from their nest. Rats are cautious of new surroundings and food sources.

Norway Rats (*Rattus norvegicus*)

- Large, thick body (7½ to 10 inches long)
- Tail length, 6 to 8½ inches (shorter than body)
- Climbs but prefers to live below ground in a burrow
- Brown or grey colour varies
- Blunt snout, small eyes, and small ears
- Droppings are a blunt spindle shape (¾ inches long)



Black Rats (*Rattus rattus*)

- Large but thin body (13 to 17 inches long)
- Climbs as does not often live below ground in a burrow
- Pointed snout, large eyes, and large ears
- Droppings are a spindle-sausage shape (less than ½ inches long) with pointed ends.

House Mice (*Mus musculus*)

- Large, thick body (5½ to 7½ inches long)
- Tail length, 3 to 4 inches (shorter than body)
- Brown or grey colour
- Small eyes, and large ears
- Small droppings
- Home range of 25ft to food source
- Very curious



Determine rodent populations (1 = low infestation, 4 = high):

1. Signs of activity but no rodents spotted - 1 to 100 rodents on the farm
2. Some sightings at night - 100 to 500 rodents on the farm
3. Sightings each night and occasionally during the daytime - 500 to 1,000 rodents
4. Many spotted during the day - up to 5,000 rodents on the farm



For every rodent you spot, there can be 20 to 50 hidden on-farm

Rats and mice are linked to diseases such as salmonellosis, colibacillosis, coryza, pasteurellosis, mycoplasmosis, hemorrhagic enteritis, hymenolepiasis, capillariasis, and ascaridiasis (Donald et al., 2002).

FIND YOUR LOCAL
STOCKIST

www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste

5 STEP RODENT CONTROL GUIDE

FOR EFFECTIVE CRRU COMPLIANT CONTROL

1

Monitor Rodent Activity Regularly



Checking for rodent activity all year round is key to keeping the risk of infestations low. Carry out a brief inspection every week to check for signs of activity:

- Rat **burrows** under buildings
- Loop **smears** on beams or rafters
- Rat holes in dirt banks, damaged doors, holes or **entry points**
- **Runs** on the ground between potential feeding areas
- **Droppings** in ventilation ducts, next to food and equipment stores



Lodi's **non-toxic** UV Blocks and UV Paste will aid you as a monitoring feed to **confirm** rodent **activity** before baiting.

UV Blocks and Paste are formulated with a **UV tracker** that causes rodent urine to glow, allowing you to **trace** where the **rodents** are hiding and control them quickly.



2



Bait with Lodi Gems Rodenticides

Rodenticides such as the Lodi Gems range is the most successful way to control rodent infestations when they occur. For farmers looking to use Gems to control their rodent populations, there are a few things to know:

- Lodi UK provides e-learning courses with Lantra. **If you don't have CRRU approved Farm Assurance certificates such as Red Tractor**, the course enables you to purchase professional rodenticide pack sizes of 3kg and above
- Bait in and around key areas across the farm: **buildings, drains, sewers, and feed stores**

Choose the right formulation for your needs:

- **Ruby and Jade Bait**, containing Difenacoum and Bromadiolone, are best to use **first when approaching** a rodent problem, following CRRU guidelines and Farm Assurance schemes
- **Sapphire Bait** is designed to solve the toughest rat and mouse infestations. As a **single-feed poison** containing Brodifacoum, it delivers a lethal dose in one feed
- **Black Pearl**, containing Alphachloralose, is specifically formulated to control mice fast, working in **under 24 hours**

Prevent resistance build-up towards a specific bait and keep rodents interested in eating them, change the active ingredient of your rodenticide periodically (Ruby, Jade, Sapphire).



FIND YOUR LOCAL STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste

5 STEP RODENT CONTROL GUIDE

EFFECTIVE CRRU COMPLIANCE

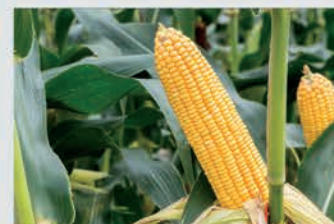
3

Limit Potential Food Sources



Farms should be kept clear of food sources whenever possible. Spillages lying around can allow the rodent to feed away from the rodenticide and may cause efforts to control infestations to be ineffective.

- Use a **non-toxic** UV tracker near to feeding areas to monitor activity - if rodent activity is evident, replace monitoring with Gems rodenticides



4

Keep the Farm Tidy



Rubbish and waste (whether organic or man-made) around a farm are an ideal place for rodents to shelter and remain out of sight from both farmers and natural predators.

- Maintaining a **tidy farm** and clearing food spillages is essential to rodent control



5

Proof Farm Buildings



Proofing buildings, machinery, wiring, and other areas around the farm from rodents is essential.

- Proof areas, use **wire mesh** and fill any **holes** on the ground and in **drains** and **sewers**, protect cabling with an **anti-rodent spray** and use physical barriers to **stop entry**



Effective action against rodents helps to protect crop yields and livestock from disease and cross-contamination. It is also vital to maintain a safe working environment for farm staff, protect nearby residents, and ensure food safety standards are met.



In addition, following best practice with rodent control ensures compliance with government acts, regulation, and farm audits. For example, under the Clean Neighbourhoods and Environment Act, farmers and waste sites must keep fly and rodent infestations under control otherwise they could be fined up to £50,000**.

FIND YOUR LOCAL
STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste PRODUCT OVERVIEW

Lodi's Gems Harmonix® Rodent Paste is the result of years of innovation leading to the development of a completely new solution, based on the active substance cholecalciferol. Available in an optimised bait matrix and in modern, sustainable packaging.

As a new edition to Lodi's Gems range, Harmonix® Rodent Paste is a highly effective ready-to-use non-anticoagulant rodenticide for the control of rodents. It provides farmers with an innovative and flexible solution to rodent problems which untreated can lead to disease, property damage, fire risk, and costly repairs.



The introduction of Harmonix has no known resistance and is proven to be twice as effective as anticoagulants using half the bait and working in as little as 7 days.

Key innovations Lodi's Gems Harmonix® Rodent Paste

- Open areas and burrows
- Proven to be twice as effective as anticoagulants working in as little as 7 days
- Stop feed effect occurs after 2-3 days
- No resistance
- Reduced risk to non-target species

Suitable for **outdoors,**
open areas & burrows



**SEARCH FOR YOUR
NEAREST STOCKIST**



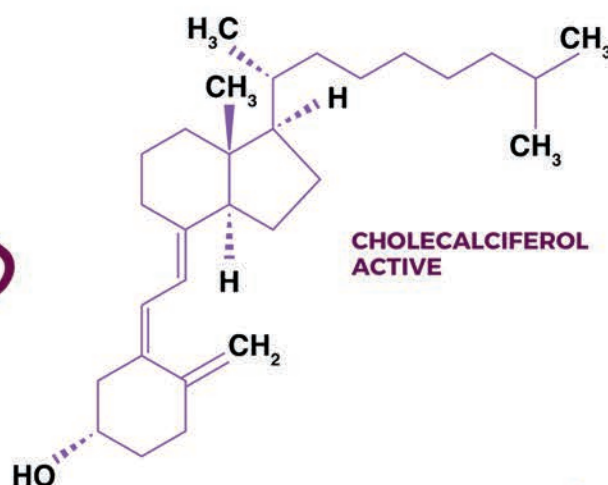
**FIND YOUR LOCAL
STOCKIST**
www.lodi-uk.com/gems-harmonix



Harmonix®
Rodent Paste

Lodi's Gems Harmonix Rodent Paste NEW CHOLECALCIFEROL ACTIVE

- Rodents need very small quantities of calcium each day.
- Once ingested, cholecalciferol causes excessive or high levels of calcium in the blood.
- Excess calcium in the rodents system results in the bone matrix calcium being mobilised into its ionized form (free within the blood and not attached to any proteins).
- Calcium crystals are formed and this known as calcification. Stomach, lungs, blood vessels and kidneys affected.
- Heart issues are created as the myocardial tissues that form the heart loose their ability to contract and release.
- Decrease in heart rate, loss of consciousness.
- Capillary damage causes renal failure, hypertension and bleeding. Central nervous system depression, lower rate of breathing, lowered activity levels, weakness and reduced appetite.
- The massive increase in the calcium levels within the rodents body trigger a response that tells the rodent to stop feeding.
- The stop feed effect means that the rodent will consume less rodenticide.
- Stop feed effect can be seen 36 – 48hrs after consumption of a lethal dose.



FIND YOUR LOCAL STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste

7-DAY RODENT CONTROL USING 50% LESS BAIT WITH STOP FEED TECHNOLOGY

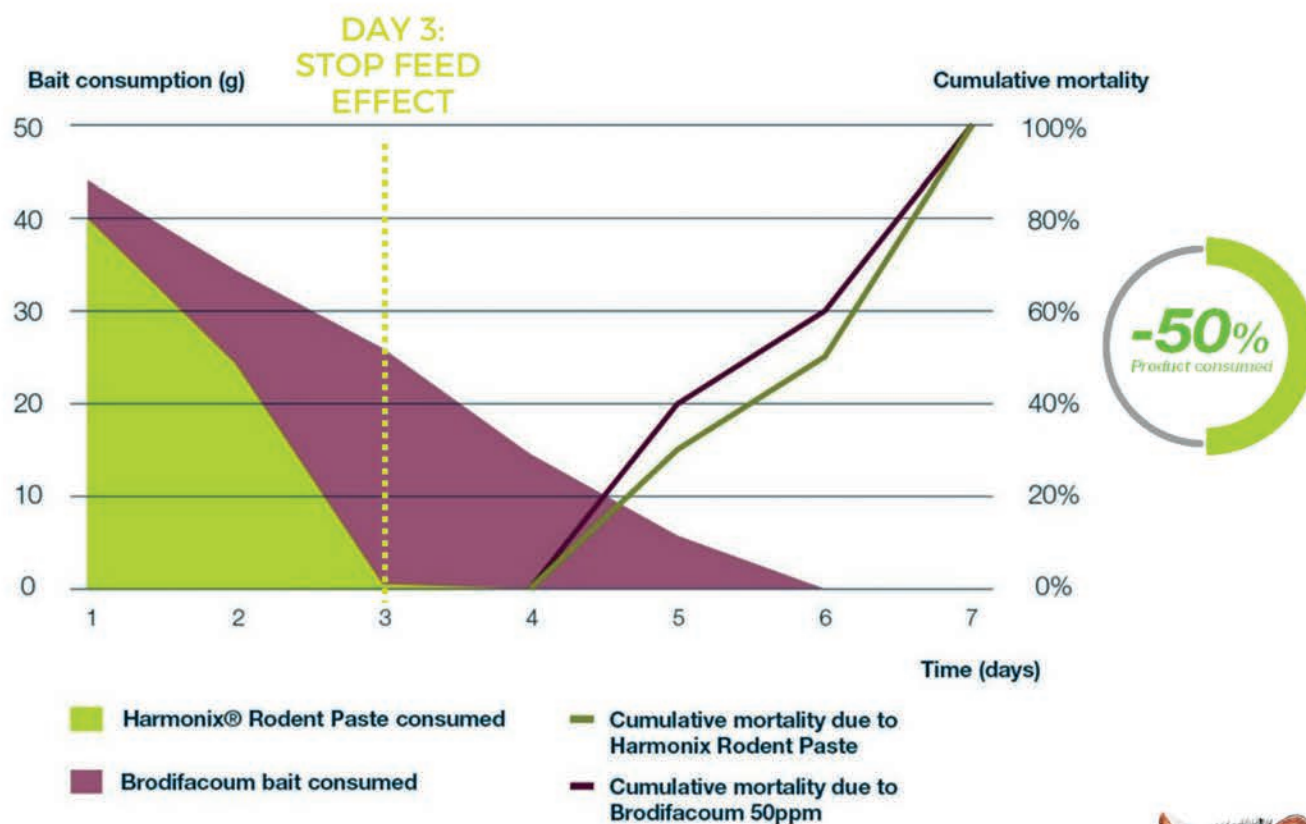


Lodi's Gems Harmonix® Rodent Paste is an exceptionally powerful rodenticide that controls rodents in as little as 7 days using half the bait of other products.

Containing 0.077% Cholecalciferol which is fast-acting and encourages rodents to cease feeding within 3 days, reducing activity significantly.

This Stop-Feed Effect also minimises the risk of contamination and damage caused by rodents on farms.

The efficiency of Lodi's Gems Harmonix® Rodent Paste provides a cost-effective way to control rodents. With half the bait, you can control the same amount of rodents as a rodent with less product making it more efficient.



FIND YOUR LOCAL STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste USING LODI'S GEMS HARMONIX RODENT PASTE IN OPEN-AREAS & BURROWS, AROUND STRAW STACKS & SILAGE BAILS

The best rodenticide for use in outdoor settings such as in burrows, silage and open areas?



Lodi's Gems Harmonix Rodent Paste is formulated to control rats and mice outdoors in burrows, vulnerable areas around and inside farm buildings. Rodent control is important in this for:

1. Reducing loss or fouling of feed
2. Preventing disease outbreaks as rodent can carry and spread pathogens both biologically and mechanically. Rodents can spread disease between disinfected facilities and buildings.
3. Stop damage to wiring, insulation and other infrastructure
4. Protect personal health on and near farm activity

Controlling rodents on farm therefore is an essential part of any biosecurity plan.



Lodi's Gems Harmonix® Rodent Paste is a highly effective ready-to-use rodenticide for the control of rodents in a wide range of areas such as:

- In and around buildings
- Open areas
- Burrows
- Around silage and bails
- Waste areas

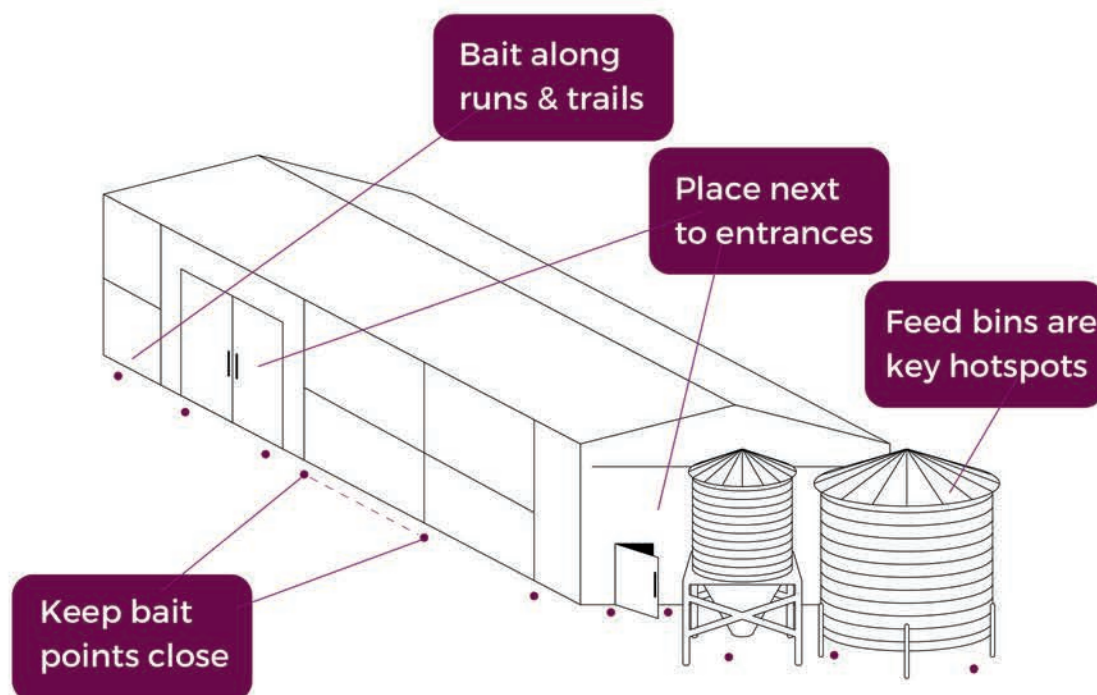


FIND YOUR LOCAL
STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste

HOW TO CONTROL RODENTS: OUTSIDE OF POULTRY, PIG, LIVESTOCK AND DAIRY UNITS



Permanent baiting: should be done around nesting sites, entry points or immediate vicinity of buildings using the same amount of bait per baiting point. Sites under a permanent baiting regime should be inspected regularly.

Direct application of ready-to-use bait into the burrow (outdoor around buildings and outdoor open areas and waste dumps only): Baits must be placed to minimise the exposure to non-target species. Cover or block the entrances of baited burrows to reduce the risks of bait being rejected and spilled.

Target organism	Dose (per baiting point)	Level of infestation	Distance between baiting points – tamper resistant bait stations or covered and protected baiting points
Mice	20 g (1 sachet)	High	2-5 linear metres
		Low	5-20 linear metres
Rats	100-200 g (5-10 sachets)	High	3-10 linear metres
		Low	10-20 linear metres

FIND YOUR LOCAL STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste

HOW TO CONTROL RODENTS: INSIDE POULTRY UNITS



Poultry units are a hotspot for rodent activity. Place plenty of bait stations around the building to control rodents fast (see label).



Place bait stations against walls, near doors & entry points and under workstations around egg packing areas away from poultry.

Follow these three tips:



Place bait in all areas of high rodent activity and surrounding possible hotspots.



Wearing gloves is essential while handling bait for safety but also to prevent human scents causing bait/station shyness for the rodent.



Ensure you place enough bait stations with Lodi's Gems Harmonix Rodent Paste near all rodent runs and trails.

FIND YOUR LOCAL
STOCKIST
www.lodi-uk.com/gems-harmonix



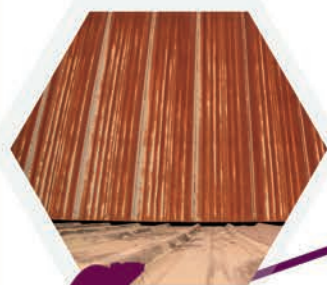
Lodi's Gems Harmonix Rodent Paste

HOW TO CONTROL RODENTS: INSIDE PIG UNITS

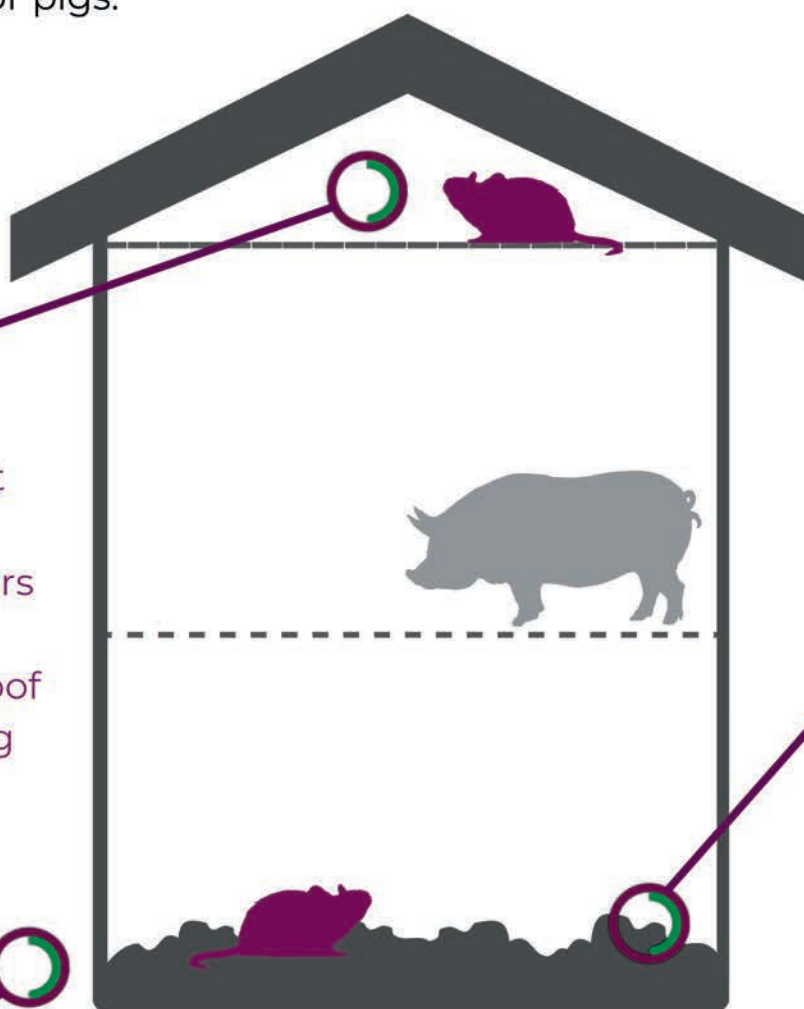


Rodent infestations are common in and around pig units as there is a lot of feed, shelter and water available to rats and mice.

As well as cost implications, rodents can spread disease and cause distress for pigs.



Place bait in bait stations along beams and rafters to control infestations in roof spaces above pig living areas.



Lower bait on metal wires down into the muck collected below slats. Ensure bait is retrievable and safely away from pigs.



Ensure all entry points to buildings are secured, checked and baited to control infestations inside and out.

FIND YOUR LOCAL STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste

HOW TO CONTROL RODENTS: ON ARABLE & CROP FARMS



With over 20 million tonnes of grain produced in the UK annually, grain stores on arable farms are prone to rodent infestations, often mice.

Lodi's Gems Harmonix Rodent Paste has a higher water content than blocks. This makes the formulation ideal for controlling mice, which need water from their food.



Clean up as much spilt grain as possible and fix bait stations against walls, near doors & entry points in stores and buildings.

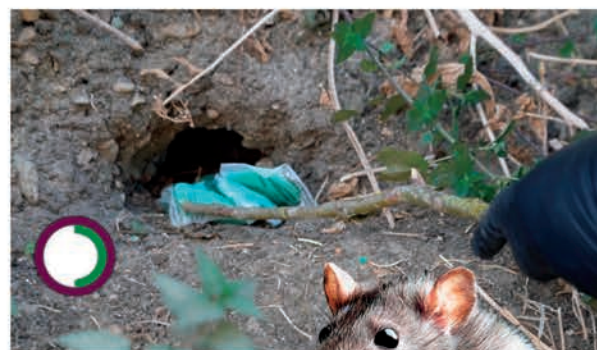


Tip:



Proof wires and entry points to buildings to prevent rodents entering, causing structural damage and fires. Check vital areas such as machinery for signs of activity.

Lodi's Gems Harmonix Rodent Paste is formulated to control rats and mice outdoors in burrows. These are key places where rodents will shelter nearby to grain stores and buildings. Place 100-200 g (5-10 sachets) of bait in the hole and cover it.



FIND YOUR LOCAL STOCKIST

www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste

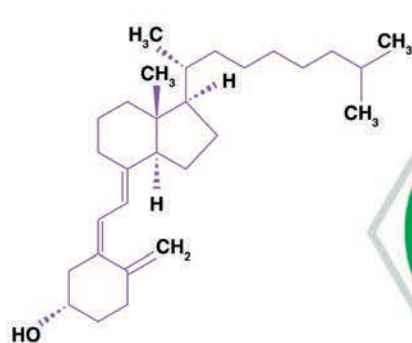
CONSIDER SUSTAINABILITY & SECONDARY POISONING

Non-persistent in the environment
& non-bioaccumulate

10,000

mice baited with Harmonix Rodent Paste would be eaten by a dog to reach a lethal dose

**LD50 figure based on residue found in mice.*



Harmonix Rodent Paste contains a naturally occurring active compound

80%

less product plastic in our packaging.



A new innovation towards greater sustainability

FIND YOUR LOCAL STOCKIST
www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste **RECORD KEEPING**

Why is record keeping important?



Demonstrate that a fully integrated rodent management strategy is in place on farm.

Help to identify changes and monitor rodent activity.



Comply with farm assurance and registration schemes with buyers and customers for audits.



Rodenticide use and records must meet the needs of legislation and assurance schemes:

- Ensure you understand legal obligations
- Check requirements of assurance schemes and customers
- Undertake COSHH, risk assessments and keep
- Safety Data Sheets used for the assessments
- Follow label recommendations



To protect wildlife while promoting and providing effective rodent control through the responsible use of rodenticides in rural areas.

The CRRU Code The rodenticide industry, acting as a whole, has recognised the need to address the concerns surrounding the responsible use of rodenticides and the need to ensure that rodenticides are used correctly and in ways that will minimise the exposure of wildlife.

For the full CRRU code please visit:
www.thinkwildlife.org/crru-code



FIND YOUR LOCAL STOCKIST

www.lodi-uk.com/gems-harmonix



Lodi's Gems Harmonix Rodent Paste

FARM RODENT MONITORING LOG

Farm/Company: _____ Sheet No: _____

Monitoring date	Findings and Actions	Person's Name



INFESTATION LEVEL	Rats (R. norvegicus and R. rattus)	Mice (Mus musculus)
LOW TO MODERATE	100-200g per baiting point every 10-20 m	20g per baiting point every 5-20 m
HIGH	100-200g per baiting point every 3-10 m	20g per baiting point every 2-5 m

FARM RODENT ERADICATION CAMPAIGN LOG

Farm/Company: _____ Sheet No: _____

Ref. Num	Date Bait Removed	Location	Signs of Rodent (Smears, runs etc)	Target Rodent	Control Method/Product	Application Date	Total Quantity Used	Rodent Bodies Found	Follow Up? No/Yes +Date	Person's Name



INFESTATION LEVEL	Rats (R. norvegicus and R. rattus)	Mice (Mus musculus)
LOW TO MODERATE	100-200g per baiting point every 10-20 m	20g per baiting point every 5-20 m
HIGH	100-200g per baiting point every 3-10 m	20g per baiting point every 2-5 m

FARM RODENT ERADICATION CAMPAIGN LOG

Farm/Company: _____ Sheet No: _____

Ref. Num	Date Bait Removed	Location	Signs of Rodent (Smears, runs etc)	Target Rodent	Control Method/Product	Application Date	Total Quantity Used	Rodent Bodies Found	Follow Up? No/Yes +Date	Person's Name



INFESTATION LEVEL	Rats (R. norvegicus and R. rattus)	Mice (Mus musculus)
LOW TO MODERATE	100-200g per baiting point every 10-20 m	20g per baiting point every 5-20 m
HIGH	100-200g per baiting point every 3-10 m	20g per baiting point every 2-5 m

RODENT SURVEY & TREATMENT

Farm/Company: _____

Sheet No: _____

How to use

Bait point	1/01/15		8/01
1. GRAIN STORE DOOR	CT 250g	carcase disposal method	PT 100

Inspection record	Inspection date				
Bait point					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Key: NT = No take PT = Partial take C T = Complete take
L = Lost D = Disturbed by non-target animal/bird

Treatment Start / /

Treatment End / /



INFESTATION LEVEL

Rats (*R. norvegicus* and *R. rattus*)

Mice (*Mus musculus*)

LOW TO MODERATE

100-200g per baiting point every 10-20 m

20g per baiting point every 5-20 m

HIGH

100-200g per baiting point every 3-10 m

20g per baiting point every 2-5 m

RODENT SURVEY & TREATMENT

Farm/Company: _____

Sheet No: _____

How to use

Bait point	1/01/15		8/01
1. GRAIN STORE DOOR	CT 250g	carcase disposal method	PT 100

Inspection record	Inspection date				
Bait point					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Key: NT = No take PT = Partial take C T = Complete take
L = Lost D = Disturbed by non-target animal/bird

Treatment Start / /

Treatment End / /



INFESTATION LEVEL

Rats (*R. norvegicus* and *R. rattus*)

Mice (*Mus musculus*)

LOW TO MODERATE

100-200g per baiting point every 10-20 m

20g per baiting point every 5-20 m

HIGH

100-200g per baiting point every 3-10 m

20g per baiting point every 2-5 m

BAIT LOCATION PLAN

Farm/Company: _____

Sheet No: _____

Draw a layout of the building or farm area surveyed and detail any signs of activity and/or proofing hygiene issues.



INFESTATION LEVEL	Rats (<i>R. norvegicus</i> and <i>R. rattus</i>)	Mice (<i>Mus musculus</i>)
LOW TO MODERATE	100-200g per baiting point every 10-20 m	20g per baiting point every 5-20 m
HIGH	100-200g per baiting point every 3-10 m	20g per baiting point every 2-5 m

BAIT LOCATION PLAN

Farm/Company: _____

Sheet No: _____

Draw a layout of the building or farm area surveyed and detail any signs of activity and/or proofing hygiene issues.



INFESTATION LEVEL	Rats (<i>R. norvegicus</i> and <i>R. rattus</i>)	Mice (<i>Mus musculus</i>)
LOW TO MODERATE	100-200g per baiting point every 10-20 m	20g per baiting point every 5-20 m
HIGH	100-200g per baiting point every 3-10 m	20g per baiting point every 2-5 m

Lodi's Gems Harmonix Rodent Paste

WATCH OUR TRAINING ONLINE USER GUIDE VIDEO SERIES ON-FARM

LEARN HOW TO USE LODI'S GEMS HARMONIX RODENT PASTE ON YOUR FARM



Dave Reece introduces Lodi's Gems Harmonix® Rodent Paste with Ken Black in a comprehensive video guide series looking at best practices in rodent control on farm. The new videos accompany a full technical guide PDF which will be available online from September. For any further queries please contact the Lodi UK team.

Topics covered in our video series:

- Burrows
- Open Areas
- Silage
- Feed/grain stores
- Livestock units
- Poultry units
- Pig units
- Arable farms



Burrows and Open Areas Use <small>Close guide</small>	Dairy & Livestock Farm Use <small>View guide</small>	Poultry Unit Farm Use <small>View guide</small>	Pig Unit Farm Use <small>View guide</small>	Arable & Crop Farming <small>View guide</small>
--	---	--	--	--

BURROWS AND OPEN AREAS USE



Using Lodi's Gems New Rodenticide for UK Farm Rodent Control



Burrow baiting with the only UK rodent paste



Spotting rodent activity in Open areas and burrows within farms



Baiting with Lodi's Gems Harmonix Rodent Paste in open areas and burrows within farms

SCAN TO WATCH OUR PRODUCT VIDEO GUIDE & search our distributor list online at lodi-uk.com/gems-harmonix



FIND YOUR LOCAL STOCKIST
www.lodi-uk.com/gems-harmonix

