



**PRODUCT  
INFORMATION**



We are pleased to introduce RatX™, our new patent-pending EPA FIFRA 25(b) minimum risk pesticide!! Formulated entirely from non-toxic food materials, RatX™ turns the page in rat and mice prevention. RatX™ is NOT a poison, it is an effective rat and mouse killer that provides you with the efficacy you need and the peace of mind you've always wanted.

RatX™ is a new approach to effectively kill unwanted rat and mouse pests from industrial buildings, livestock premises, homes, barnyards and any area where the unwanted pests inhabit. The science behind RatX™ is simple, and the novel approach using safe food grade materials is patent-worthy and is U.S. patent pending.

Rats cannot vomit. They cannot burp either, and they do not experience heartburn. Rats cannot vomit for several related reasons:

- (1) Rats have a powerful barrier between the stomach and the esophagus. They don't have the esophageal muscle strength to overcome and open this barrier by force, which is necessary for vomiting.
- (2) Vomiting requires that the two muscles of the diaphragm contract independently, but rats give no evidence of being able to dissociate the activity of these two muscles.
- (3) Rats don't have the complex neural connections within the brain stem and between brain stem and viscera that coordinate the many muscles involved in vomiting.

Rats have a powerful and effective gastroesophageal barrier, consisting of the crural sling, the esophageal sphincter, and the centimeters of intraabdominal esophagus (see above). The pressure at the two ends of this barrier is much higher than the pressure found in the thorax or abdomen during any phase of the breathing cycle (Montedonico *et al.* 1999b). The strength and pressure of this barrier make reflux in rats nearly impossible under normal conditions (Montedonico *et al.* 1999a), though Will *et al.* (1979) records low rates of regurgitation.

In order to vomit, the rat would have to overcome this powerful barrier. Evidence suggests that rats cannot do this, because (1) they can't open the crural sling at the right time, (2) they can't wrench open the esophageal sphincter and (3) rats lack the necessary neural connections to coordinate the muscles involved in vomiting.

Initial trials of RatX™ against the common brown rat (*Rattus norvegicus*) and house mouse (*Mus musculus*), have been 100% effective and without the concerns of death or damage to other wildlife including rat predators such as the American Barn Owl (*Tyto alba*). RatX™ is safe from all secondary poisoning because RatX™ is not a poison.

Used as an alternative food source rather than as a poison bait, RatX™ will cause death after some 2 to 5 days of regular feed intake and is 100% effective even among rat and mouse populations which are considered to be resistant to conventional methods.

#### **Only patent-pending RatX™ features:**

- FDA GRAS ingredients
- 100% food stocks
- EPA FIFRA 25(b) labeling
- Effective
- No secondary kill concerns
- Meets federal bio-derived mandates and standards
- Non toxic to pets, livestock, and poultry

*Efficacy, Safety, Economy* .....The mission statement of RatX™





## Table of Contents

Sales and Data Sheet

Product Label

MSDS Sheet

Patent Abstract

Independent Studies

Testimonials

Photos

EPA Stand of Rat Poisons

Trademark

USDA Biopreferred Listing

Federal Program/Mandate List

Product Comparison





## The Natural Way to Eradicate Rats & Mice

### USES:

- ✓ **Livestock Yards**
- ✓ **Pig & Poultry Farms**
- ✓ **Conventional & Organic Farming**
- ✓ **Equestrian Centers**
- ✓ **Game Farms**
- ✓ **Forestry & Woodland Management**
- ✓ **Food Processing, Packing & Storage Areas**
- ✓ **Domestic, Industrial & Retail Premises**
- ✓ **Secure Institutions**
- ✓ **Hospitals**
- ✓ **Schools**
- ✓ **Parks & Other Public Areas**
- ✓ **Safe To Use On And Around Nature Trails**

### FEATURES & BENEFITS:

- X NO Risk To Children Or Pets**
- X NO Risk To Livestock Or Birds**
- X NO Risk Of Either Primary Or Secondary Poisoning - Bird Of Prey Friendly**
- X NO Known Resistance**
- X NO Special Requirement For Transport, Handling, Storage Or Disposal**
- X NO Risk Of Contamination To Crops Or Food**
- X NO Environmental Pollution - Fully Biodegradable**

**For Professional Use Only**  
**Keep Out of the Reach of Children**

This product is exempt from registration with the Federal EPA under section 25(b) of FIFRA, and as such, is not registered with the Environmental Protection Agency. ConSeal International, Inc. represents that this product and its ingredients qualify for exemption from registration under FIFRA.

PATENT PENDING

Manufactured by: ConSeal International, Inc., Norwood, MA 02062

### Why RatX™ Works:

The specific mode of action of RatX™ and its inherent safety to non-rodents is based on a range of characteristics unique to rats and mice:

- Rats and mice are opportunistic feeders and can consume up to 10% of their body weight.
- Rats and mice cannot vomit or regurgitate.
- Rats and mice have a unique digestive system in which the caecum (sack between large and small intestine) plays an active role.

### How RatX™ Works:

RatX™ is consumed as a food source as part of a rat's or mouse's natural eating habit. After ingestion, dehydration commences causing blood thickening & circulatory collapse, whereby rats and mice become lethargic, retreat to their burrow, lapse into a coma and die.

### Applying RatX™:

For most effective control RatX™ must be the primary food source available to the rat or mouse – following these simple rules will ensure success:

- Clear away all other food sources from the area to be treated.
- Bait all areas where rat or mouse activity is seen - particularly along runs and around holes.
- Keep bait dry as wetting may reduce effectiveness.
- Continue to bait until rat or mouse activity ceases.
- Effective control is achieved with up to 40-60 grams or 1 ½ to 2 ounces of product per rat and 10-15 grams or ⅓ or ½ ounce per mouse.

**Sizes Available:** 1 lb. pail, 25 lb. pail and 50 lb. bag

Results:

1. Rat and mouse activity declines as death occurs within 4 to 7 days of regular feed intake – sightings reduce as rats and mice generally die in their burrow.
  2. Fecal droppings become bleached in color & larger in size\*.
  3. An absence of smell from decomposition due to dehydration – similar to mummification.
- \*Change in color and size of the fecal pellets are an indicator of product acceptance and consumption and can be up to 3 times larger than pellets from non-treated rats and mice.

#### ACTIVE INGREDIENTS:

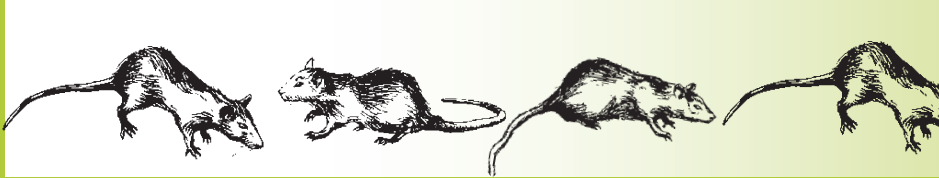
Corn gluten meal ..... 1.0 %

#### INERT INGREDIENTS:

Corn cobs, Maltodextrin, Sorbitol, Wheat Flour,  
Wheat germ oil ..... 99.0 %

TOTAL ..... 100%





## The Natural Way to Eradicate Rats & Mice

### USES:

- ✓ Livestock Yards
- ✓ Pig & Poultry Farms
- ✓ Conventional & Organic Farming
- ✓ Equestrian Centers
- ✓ Game Farms
- ✓ Forestry & Woodland Management
- ✓ Food Processing, Packing & Storage Areas
- ✓ Domestic, Industrial & Retail Premises
- ✓ Secure Institutions
- ✓ Hospitals
- ✓ Schools
- ✓ Parks & Other Public Areas
- ✓ Safe To Use On And Around Nature Trails

### FEATURES & BENEFITS:

- X NO Risk To Children Or Pets**
- X NO Risk To Livestock Or Birds**
- X NO Risk Of Either Primary Or Secondary Poisoning - Bird Of Prey Friendly**
- X NO Known Resistance**
- X NO Special Requirement For Transport, Handling, Storage Or Disposal**
- X NO Risk Of Contamination To Crops Or Food**
- X NO Environmental Pollution - Fully Biodegradable**

### RatX™ FREQUENTLY ASKED QUESTIONS

**Q: Why does RatX™ kill rats & mice and not harm humans and other animals?**

**A:** Because all rats and mice have a digestive system that is different from other animals. The way rats and mice absorb water through their lower gut is quite different to any other animals, including humans and birds.

This unique digestive system is a part of what makes rats and mice different from other animals.

**Q: What would happen if my cat or dog ate a mouse or rat killed by RatX™?**

**A:** Nothing, because RatX™ contains no poison, there is no risk of secondary poisoning. Your cat and dog are perfectly safe as are horses, poultry and other farm livestock. It is the same for birds of prey.

**Q: How does RatX™ work?**

**A:** It coats the lining of a part of the rat or mouse's lower gut. This coating of the "fine hairs" in the lower gut, called villi, disrupts the message system to the rat or mouse's brain causing it to stop drinking. This leads to dehydration, blood thickening, kidney dysfunction, coma and eventual death.

**Q: How long does it take to kill a rat or mouse?**

**A:** When used correctly death will occur within 4 to 7 days of regular feeding. More rats and mice may be seen during this period as they become lethargic and slower to react to disturbance.

**Q: How much does it take to kill them?**

**A:** Between 40 to 60 grams per rat and 10 to 15 grams per mouse.  
To encourage consumption, other sources of food should be cleared away.

**Q: What is it made of?**

**A:** Natural vegetable and cereal grain materials.

### RatX™ Do's and Don'ts

#### Do's

- Do thoroughly read and understand the instructions for use.
- Do thoroughly survey area to find rat and mice locations and main areas of activity.
- Do clear away sources of alternative food or make it difficult for rats and mice to access them.
- Do make notes on the above to use for reference.
- Do use the product as a food source.
- Do provide enough product in trays or boxes, approx 200gm or 7 ounces, 6 feet apart in areas where rats and mice are present.
- Do make up small parcels of product using clinging food packaging film or small sandwich bags and place directly into rat and mouse holes.
- Do keep the product dry at all times.
- Do place the product into voids through which rats and mice are running.
- Do re-visit, re-survey and re-fill boxes, trays, holes and make notes regularly.

#### Don'ts

- Do not under estimate the amount of rats or mice present.
- Do not expect the rats and mice to come in search of the product you apply.
- Do not use the product as scatter bait.
- Do not use the product alongside any other foods to try and attract rats and mice.
- Do not place any food out for wild animals or birds.
- Do not mix the product with any other rat or mouse eradication products.
- Do not expect the product to be eaten immediately; it may take a while for the rats and mice to get used to the new, unfamiliar boxes or trays that you have placed.
- Do not pour the product into holes.
- Do not store the product next to other items with strong smelling odors or in damp areas.

Distributed By:







## SUGGESTED BAIT LOCATIONS FOR THE EFFECTIVE CONTROL OF RATS & MICE:

- ✓ Around Ponds & Water Features
- ✓ Holes Under a Patio
- ✓ Under Garden Structures
- ✓ Access Points to Buildings or Under a Greenhouse
- ✓ Holes in Lawns
- ✓ Around Houses
- ✓ Near Livestock & Poultry Housing

## FOR THE EFFECTIVE CONTROL OF RATS AND MICE

### FOR THE EFFECTIVE CONTROL OF RATS AND MICE:

- ✓ Formulated for Indoor & Outdoor Use
- ✓ Non-Toxic Rat and Mice Control
- ✓ 100% Naturally Derived
- ✓ Safe for Use around Livestock and Pets

#### ACTIVE INGREDIENTS:

Corn gluten meal..... 55.0%  
Sodium chloride..... 2.0 %

#### INERT INGREDIENTS:

Maltodextrin, Sorbitol, Wheat flour, Wheat germ oil ..... 43.0%  
Total ..... 100 %

**PERFECT FOR BOTH PROFESSIONAL AND DIY USE**

**Keep Out of the Reach of Children**

**Net Weight: 1 lb. / 454 gm.**



#### DIRECTIONS FOR USE

**INDOOR USE:** Prior to treatment, all likely food sources must be removed or made unavailable to rats and mice. Place bait trays at bait points where there are signs of rat and mouse activity, like fresh droppings, inside or near rat runs and feeding areas. Place 40-60 grams or 1 1/2 to 2 ounces of RatX™ per rat and 10-15 grams or 1/3 or 1/2 ounce per mouse into small bowls or feeding trays approximately 6 feet apart throughout the infested area. Protect bait points from non-target animals and from water. Inspect bait points frequently and replace any eaten bait. Replace any baits which become wet and re-site in a dry locations. Keep topping up bait points until there are no more takes for 48 hours.

**OUTDOOR USE:** Place bait points where there are signs of rat or mouse activity, like fresh droppings or near burrows, runways, feeding places and at points of entry around the perimeter of buildings. Place 40-60 grams or 1 1/2 to 2 ounces of RatX™ per rat and 10-15 grams or 1/3 or 1/2 ounce per mouse into bait stations or wrap in clinging food packaging film and place in drainpipes, open ended boxes or under sheets of metal/wood secured at an angle against a wall (to keep the bait point dry) at intervals of approximately 6 feet , reducing to approximately 4 feet in areas of high infestation. Protect bait points from non-target animals and (as the baits must be kept dry) from water. Inspect bait points frequently and replace any eaten bait. Replace any baits which become wet and re-site in a dry location. If you require more bait trays within the activity area, we suggest you use flowerpot saucers or something similar.

RatX™ can also be placed directly into rat or mouse holes, nesting or feeding areas. Wrap 40-60 grams or 1 1/2 to 2 ounces of RatX™ per rat and 10-15 grams or 1/3 or 1/2 ounce per mouse in clinging food packaging film and push down the burrow. Rats and mice carry disease so never use unprotected hands. Push product into burrows with a long stick or similar. Replenish packets daily until there are either no more takes, or no rat activity, for 48 hours.

Rats and mice carry disease. Therefore, remove all remains of bait and bait containers after treatment and dispose of safely. Search for rat and mice bodies and dispose of safely (e.g. burn or bury). Do not dispose of in refuse sacks, dumpsters and transfer stations.

When handling, use precautions to avoid the possibility of disease transmission. Use disposable rubber gloves. Apply household disinfectants at recommended concentrations to rat or mouse droppings, nest and surrounding area, and allow for at least 15 minutes contact time before removal. Clean the area with paper towels or a mop. Thoroughly wash hands with soap and water and dispose of gloves.

This product is exempt from registration with the Federal EPA under section 25(b) of FIFRA, and as such, is not registered with the Environmental Protection Agency. ConSeal International, Inc. represents that this product and its ingredients qualify for exemption from registration under FIFRA.



Manufactured By:  
ConSeal International, Inc.,  
Norwood, MA 02062

PATENT PENDING





Patent Number 13/441,652

## Patent Abstract

A rodenticide composition and method for using the same to exterminate rats and mice. The composition features a mixture of a natural dehydrant capable of dehydrating a rat or mouse that consumes it, a natural carrier matrix, and an optional flavoring. The natural carrier matrix can include a plant-derived grain-based, nutbased, legume-based, or starchy tuber-based composition or combinations or derivatives of the foregoing. The natural dehydrant can be corn gluten meal, soy hydrolysate, soybean oil, castor oil, linseed oil, sodium chloride, cottonseed oil, any other suitable natural dehydrant, combinations thereof, or any other suitable material derived from any of the foregoing. Once the rodenticide composition is prepared, it may be placed in areas frequented by or infested with rats and mice so as to kill the rats and mice once they consume the composition.



20 Sept 2012

## RatX Field Test Results From Poultry Operations

Field tests with RatX Rodenticide Bait pellets was conducted at several commercial poultry operations in Indiana, Iowa, and Minnesota in August-September 2012 for controlling the house mouse, *Mus musculus*. The house mouse is a major pest in confined livestock and poultry operations.

Field test sites included the following locations:

- Rose Acre Farms (eggs):  
Newton Co. Indiana  
Guthrie Center, Iowa
- Creighton Farms, Indiana (eggs)
- Gold N Plump, Minnesota (broilers)
- John Z. Zimmerman's Turkey Farm, Minnesota (turkeys)

The protocol followed by these cooperators was as follows:

For each test site use 4 rodent traps for RatX bait and 4 for the rodent bait product normally used. The traps used were Kness Pro-Ketch Mouse Traps.

Place equal amount of bait per trap noting which traps have the RatX bait and those using the other bait.

Place traps in areas of noticeable "active" mice activity inside the facility. Keep the traps at these same locations throughout the trial. Randomly place the traps with each bait at these sites.

Place the traps up against a solid vertical surface (wall) with the trap openings closest to the wall. Mice tend to run next to a wall and will enter the traps easiest this way.

Make daily observations for mice caught in each trap, noting if mice are dead or alive. Also note bait consumption.

For each day, if mice are trapped, remove them and re bait the trap for the next day observation.

Run the trial with the 8 traps for 14 days.

Keep a simple tally by date using the following table, using a different tally for each trap (specify which bait used):

Day/Date	Trap #/Bait	# Live Mice	# Dead Mice	Was Bait Replaced (Yes/No)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				



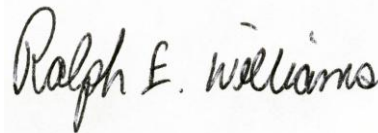
## Results and Discussion:

Based on field test results it was observed that RatX performed as well as registered products currently used in attracting and killing mice in the traps by all cooperators. During the testing times of August and early September, however, mice populations within the facilities tested were generally lower than fall conditions when mice move into the facilities when outside temperatures begin to cool. Even though this was the case adequate testing did show significant results.

Observations made by Rose Acre Farms staff indicated that mice captured and killed in RatX baited traps appeared to die quicker than conventional rodenticide bait products they generally use. This observation was based on observing dead mice in the traps without any signs of cannibalism that often occurs when multiple live mice are in the same trap for extended periods. All cooperators were impressed with the non-toxic formulation of RatX based on soybean ingredients making it safe to use around livestock and poultry.

From these positive results all of the participating cooperators would consider using RatX as a safe alternative for rodent control. There are effective rodenticides on the market that are either anti-coagulants or non-anti-coagulants such as vitamin K derivatives designed as single dose baits. With RatX providing a quick kill it should compete very effectively with these existing products.

Even though lower mice populations were present during testing at these commercial poultry operations, RatX was effective in attracting and killing mice, at least as effectively as conventional products on the market. Given the non-toxic nature of RatX it will be a very suitable alternative for use.

A handwritten signature in black ink that reads "Ralph E. Williams". The script is cursive and fluid, with the first letters of each word being capitalized and prominent.

Ralph E. Williams, Ph.D, D-ABFE  
Professor of Entomology  
(765)494-4560  
rew@purdue.edu



## Testimonials

Under construction.





Using RatX® eliminates the presence of flies and maggots as the patent pending dehydration process of RatX® eliminates the body fluids required for fly infestation.





## EPA Takes a Stand Against Rat Poisons!

**EPA Rodenticide Ban: Agency Moves To Ban Rat, Mouse Poisons Like D-Con And Hot Shot**



WASHINGTON — The government is moving to ban the sale of some popular rat and mouse poisons such as D-Con and Hot Shot in an effort to protect children and pets. The Environmental Protection Agency said Tuesday it is taking the step to reduce the thousands of accidental exposures of children that occur every year from rodent-control products.

"Today's action will help keep our children and pets safe from these poisons," Steve Owens, assistant administrator for EPA's Office of Chemical Safety and Pollution Prevention, said in a statement.

The EPA said children are particularly at risk for exposure to rat and mouse poisons because the products typically are placed on floors and young children sometimes place bait pellets in their mouths.

The agency had given pesticide manufacturers until last week to research, develop and register new products for residential consumers that would be safer for children, pets and wildlife. Since that call for new safety standards in 2008, some manufacturers have released products with new bait delivery systems and less toxic baits, the agency said. But the EPA said a handful of companies have said they will not adopt the safety measures. Those are the companies the EPA ban would target. Dale Kemery, a spokesman for the EPA, could not give a timeline for how long it would take to ban the pesticides that do not comply with the new standards.

The companies are Reckitt Benckiser Inc., manufacturer of D-Con, Fleeject, and Mimas; Woodstream Inc., manufacturer of Victor; Spectrum Group, manufacturer of Hot Shot, and Liphatech Inc., manufacturer of Generation, Maki and Rozol. The EPA said the companies were not in compliance with the new safety standards under the Federal Insecticide, Fungicide and Rodenticide Act, the law that controls the distribution, sale and use of pesticides.

The EPA also intends to ban the sale and distribution of rat poisons containing brodifacoum, bromadiolone, difethialone and difenacoum directly to residential consumers because of their toxicity as well as concerns about the dangers they pose to wildlife. These products will still be available for use in residential settings, but only by professional pest controllers.





# RATX

<b>Word Mark</b>	<b>RATX</b>
<b>Goods and Services</b>	IC 005. US 006 018 044 046 051 052. G & S: Rodenticides
<b>Standard Characters Claimed</b>	
<b>Mark Drawing Code</b>	(4) STANDARD CHARACTER MARK
<b>Serial Number</b>	85559939
<b>Filing Date</b>	March 5, 2012
<b>Filing Basis</b>	1B
<b>Original Filing Basis</b>	1B
<b>Owner</b>	ConSeal International Incorporated CORPORATION FLORIDA Suite 2 90 Kerry Place Norwood MASSACHUSETTS 02062
<b>Attorney of Record</b>	James David Johnson
<b>Type of Mark</b>	TRADEMARK
<b>Register</b>	PRINCIPAL
<b>Live/Dead Indicator</b>	LIVE







RatX™ helps facilities and Government agencies meet newly implemented Federal Executive Orders and VOC Requirements:

**Executive Orders:**

13352 Facilitation of Cooperative Conservation

13101 Greening the Government through Waste Prevention, Recycling & Federal Acquisition

13134 Developing & Promoting Bio Based Products & Bio Energy

13148 Greening the Government through Leadership in Environmental Management

**Other Programs:**

USDA Farm Bill Section 9002

CEQA California Environmental Quality Act

AQMD South Coast Air Quality Management District

FSRIA Farm Security & Rural Investment Act

**USDA BiopREFERRED Listing:**

Under Construction



## RatX™ -- The Safer Alternative

	RatX™	TomCat™	Hawk™	Motomco™	Agrid-3™	Just One™	Jaqua™	ConTrac™	Rampage™	B-10 Rat Pellets™
<b>EPA Exempt</b>	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
<b>Child &amp; Pet Safe</b>	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
<b>FDA G.R.A.S.</b>	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
<b>100% Natural</b>	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
<b>Carcinogen-Free</b>	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
<b>No Secondary Kill Concerns</b>	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
<b>Poison</b>	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓

**RatX™ - Efficacy, Safety, Economy!**

RatX™ is a trademark of ConSeal International, Inc.

RatX™ is Patent-Pending

For more information, contact:

ConSeal International Inc. • 90 Kerry Place, Suite 2 • Norwood, MA 02062 • 781-278-0010



For more information, please contact:

ConSeal International, Inc.  
90 Kerry Place, Suite 2  
Norwood, MA 02062

781-278-0010

[www.consealint.com](http://www.consealint.com)  
[www.ratxproducts.com](http://www.ratxproducts.com)

