

# GUIDE TO CONTROLING INSECTS ON FARMS

**Pest Control Industry Experts** Manufacturer of professional pest control products for use on farm

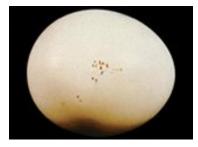
Poultry and livestock farms are the ideal 5-star accommodation for breeding flies! With the combination of muck, stable ambient temperatures and the intensification of farming throughout the UK leading to the increase of fly infestations.

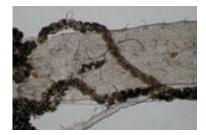
This is coupled with the UK's annual climate gradually warming up, with recorded temperatures soaring to highs of up to 38. 5 degrees Celsius. Milder winters and warm summer months accelerate the breeding and reproduction of all types of flies from larvae to adult resulting in fly population explosions.

## FLIES ARE A MAJOR NUISANCE ON FARM CAUSING STRESS TO ANIMALS, THE FARMER AND LOCAL NEIGHBOURS.

Flies are not only a nuisance, they also carry diseases, some of which are **zoonotic (transferable to humans)** as well as causing huge financial losses on farms around the world. For example, flies transmit disease such as Avian Influenza, Brachyspira, Salmonella, E. coli, coccidiosis, Anthrax, Dysentery and Tuberculosis.







Flies account for billions of pounds worth of losses in poultry and animal livestock production around the world. Having a good fly control program in place can spare your animals a huge amount of suffering and aggravation from both biting and non- biting flies. It will save you lots of time, money, increased production, increased conditioning of animals, as well as reducing disease.

### **Non-Biting Flies**

#### E.g. Common House Fly – Lesser House Fly

While it's true that non-biting flies can't actually bite the animal, they are still able to transmit diseases. The reproduction and feeding habits of flies, combined with the structure of their mouths and feet, mean that they are able to act as mechanical vectors for many pathogens; spreading viruses, worms and more. Flies are one of the key carriers of salmonella and are potentially responsible for transmitting the bacteria from unit to unit or farm to farm. Fly spots on eggs is another major issue, if found can result in a whole pallet being rejected and downgraded at a significant cost to the farmer. Flies are also linked with human infections including stomach bugs, blood poisoning and pneumonia. A fly can develop from Egg to Adult in under 7 days! A fly can lay up to 500 eggs over a few days! Scientists have calculated that a pair of flies beginning reproduction in April may be progenitors to 191,010,000,000,000,000,000 flies by August if all were to live. A major nuisance and impact on animal welfare and productivity!

### **Biting Flies**

#### E.g. Stable Fly

Biting flies are worse than non-biting flies because not only can they transmit diseases, worms and viruses; they also feed on blood and can cause anaemia and loss of condition in farm animals. In addition, animals may develop a hypersensitivity to the saliva from a biting fly, which can result in a painful skin condition. Both types of flies, biting and non-biting, can also cause loss of condition and weight loss in your animals simply by distracting them from eating, grazing or laying. This can have a huge impact on meat, milk and egg production with large financial losses.

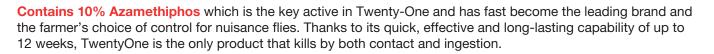
#### www.lodi-uk.com

# FLIES ARE NOT ONLY A PROBLEM FOR ANIMALS, PRODUCTION AND DISEASE, BUT ALSO IMPACT THE LOCAL ENVIRONMENT.

A poor fly control program can result in planning applications being refused for new sheds and barns. Environmental Health Officers may target your farm for nuisance flies. EHO have the power to serve farmers with abatement notices for failing to control nuisance flies on farm under 'The Clean Neighbourhoods and Environment Act 2005' Enforced 5th April 2006. Failure to comply with an abatement notice (which can be with the farm for life and transferred to new owners if the farm is sold) can result in a fine of up to £20,000 or a 6-month custodial sentence. Prosecution is a threat; local authorities are not afraid to prosecute.

## Twenty One Fly Killer

Twenty One is a uniquely formulated wettable powder for the control of both biting and non-biting flies in poultry, pig and livestock housing.



It is key to identify what type of fly you are trying to control in order choose the correct application method and to get the best results out of the product.

For the control of biting **stable fly** and non-biting flies when resting, Twenty One should be mixed with water sprayed directly on to walls and surfaces of the animal housing. It will kill any fly that encounters the product due to its residual effect.

To control non-biting flies such as **common and lesser housefly** mix with water or flat coke. It is best to paint in stripes onto walls, surfaces or boards which can be hung up in animal housing. These flies are attracted by the sexual pheromones and like to feed on the attractants, killing them by ingestion as well as by contact.

### How to use:

**Spray:** Mix 125g of product with 5 litres of lukewarm water then apply diluted product by spray to 100 square metres of surface. In case of very high infestation, mix 250g of product with 2 litres of water.

**Application rate:** Apply in stripes to surfaces where flies congregate.

**Paint:** Mix 500g of product with 500ml of lukewarm water covering approximately 5-10 square metres in total area.

**Tips:** It is proven that the best way to mix Twenty-One is with flat coke. Yes, I said flat coke! The acidity and extra sugar enhance the azamethiphos active ingredient. If applying as a paint onto boards apply in broad stripes. Flies will land on the untreated area and then walk and feed on the treated area.

Tel: 01384 404242



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Twenty One

AVAILABLE IN 1KG TUBS.



## Sheila Fly **Killer Bait**

Sheila is the ultimate product for attracting common and lesser house fly. Contains 1% azamethiphos, attractants such as cheese and honey as well as Z9 sexual pheromones.

### How to use:

Distribute granules generously, directly around the problem areas. Lightly spray the granules to increase the efficacy of the bait. Like TwentyOne it is beneficial to use Cola.

Step 1 - Best practice is to apply a thin and even layer of SHEILA onto a board

Step 2 - Spray a small amount of water or flat coke to allow the granules to stick to it.

Tips: We recommend that you leave an untreated margin of about 2-3 cm around the side and allow to dry for 10 minutes before trying to hang up in animal housing. Flies will land and feed from the outer edge killing them quickly.

Sheila can also be emptied into small trays and placed around animal housing where flies congregate.

## Perbio Choc RTU

Perbio Choc is the strongest ready to use fly spray in the UK and 4-5 times stronger than any other comparable insecticide.

Contains both 0.64% Permethrin and 0.63% Tetramethrin, nothing can compare to its ultimate power when killing all types of insects from flies to wasps to red mite.

Perbio Choc is a residual insecticide so best used where surfaces are not cleaned down as often to allow for more flies and insects to land on treated areas and achieve amazing results.

It can be both sprayed and fogged. Its coverage goes along way 625 m2 surface (Costs 6.4p per m2) treatment and 12500m3 (Costs 0.32p per m3) aerial fogging treatment.

The secret with Perbio Choc is applying very finely, almost misting on to surfaces with no run off. If you see run off, you are applying too much product and would advise changing to a finer nozzle. Due to the strength and carrying solvent of Perbio Choc you do not need to apply the same amount of product as everyday weaker dairy fly sprays. If applied correctly Perbio Choc works out more than 1/2 the price of weaker formulations which won't give the same coverage. If a fly infestation has got out of control Perbio Choc will eliminate all flies guickly in one treatment. Leaving a residual of up to 3 months. NOW registered and highly effective in controlling red mite. Perbio Choc has a very low surface retention when sprayed even on muck it will search out and kill the red mite. Available in both 1 litre spray gun and 5 litre drums.

#### **Application rate:**

Surface spray: Apply 50ml of product per 6.25 square metres Fog/ULV: Apply 0.4ml of product per cubic metre of treatable volume





AVAILABLE IN 2KG TUBS.



## Digrain **C40 WP**

New and highly effective wettable powder with proven long-term residual activity. For use against insects such as flies, wasps, and ants in and around farmhouse.

For the control of flying and crawling insects such as cockroaches, fleas, ants, bedbugs, silverfish, woodlice, earwigs, millipedes, centipedes, houseflies, cluster-flies, mosquitoes, and wasps. For use on areas around the farm where pests may rest. 10g dilutes in 5 litres of water for routine treatments of flying and crawling insects. Our 2g sachets dilute in 1 litre of water for smaller doses. Proven 100% long term mortality on target insects.

### How to use:

Add 1-2 litres of clean water to the sprayer, and then add the product according to the table below. Use the blue scoop provided with this pack for dispensing the product. A 'rounded' scoop of product measures approximately 10g. Add the remainder of the water. Shake the sprayer to mix contents. Apply as a coarse low pressure spray. Make up spray as required. Do not store prepared spray overnight. 1 litre of ready-for-use spray treats 25 square metres of sprayable surface. Shake sprayer to re-mix contents if spraying is interrupted for more than 30 minutes.

### DO NOT USE SPRAY NEAR ELECTRICAL APPLIANCES, LIGHT FITTINGS, OR SWITCHES.

# WHY CONTROL **FLIES ON FARM?**

## Phobi CAPS

Phobi Caps is a micro-capsulated insecticide used in and around agricultural buildings and farms houses against crawling & flying insects such as flies, red mites, and mosquitoes.

Cypermethrin 9.2% w/w Prallethrin 0.46% Prallethrin gives the product a shock effect while the microencapsulation of Cypermethrin ensures the stability to light, temperature, and humidity. Thanks to the different sizes of capsules, the release of cypermethrin is regular and continuous. Shock effect and residual effect. After the treatment, the treated surface is covered with thousands of microcapsules.

### PHOBI CAPS WORKS IN LESS THAN 15 MINUTES AND PROTECTS TREATED SURFACES UP TO 12 WEEKS.

Do not reprocess until there is a new infestation. To preserve the capsules, remove the filters present in the nozzle and use a sprayer with a maximum pressure of 3 bars. Dose of employment for a 100m2 treatment: Dilute 50 mL of product in 5 L of water.

- 1. Fast knock down and residual
- 2. Odourless and non-staining
- 3. Active on porous and non-porous surfaces
- 4. Microencapsulation ensures long-term stability of the active against light, temperature and humidity
- 5. Different sized capsules within the active allows for regular and continuous release





**500ML DOSING BOTTLE** 



## Dairy Fly Spray

Contains Natural Pyrethrum with PBO synergist. This fantastic product is ideal for areas where fast knock down is required leaving no insecticide residue after treatment.

**Ideal for areas that are cleaned regularly or sensitive to insecticide use and organic farming.** Great for dairy parlours, egg packing rooms, animal housing, slaughterhouses, processing areas etc... The benefit of this bottle means farmers don't have to transport and pay for water when choosing a concentrate.

The dispensing bottle allows farmers to mix what they need without wastage and will make up to the equivalent 10 x 5 litre mixes of knock down product for under a £5.00. Saving farmers lots of money in the long run. There is no tainting or smell and can be sprayed or fogged. Any fly hit with this product will die very quickly.

#### **Application rate:**

**Spray:** For flying insects dilute 5-10ml of product with 500ml of water. Apply 50ml of diluted product per square metre. For crawling insects dilute 10-20ml of product within 500ml of water.

#### Apply 50ml of diluted product per square metre.

**ULV Spray:** For flying insects apply 100ml of undiluted product per 3000 cubic metres. Mist: For flying insects dilute 100ml of product within 900ml of water.

Apply 1000ml of diluted product per 3000 cubic metres.

### Digrain Aerosol

Digrain Control is a professional flying and crawling insect killer. Ideal for tagreting files, wasps, hornets and wasp nests. Both ready to use aerosol's in 600ml cans.

## DIGRAIN CONTROL PROFESSIONAL FLYING AND CRAWLING INSECT KILLER 600ML

The strongest flying and crawling insect killer aerosol on the market. Available in a very large 600ml can. A customer favourite. Fast results. 0.25% Permethrin 0.24% Tetramethrin

#### **Application rate:**

Apply a 10 second burst per square metre of surface or apply short 1-2 second bursts directly at insects.

#### **DIGRAIN WASP & HORNET PROFESSIONAL 600ML**

Fires 18ft of strong killing spray for quick results. The powerful spray allows you to begin treating a wasp nest from 18ft away before walking right up to the nest spraying in close proximity and finally destroying it. 0.25% Permethrin 0.24 % Tetramethrin.

#### **Application rate:**

Spray product for 15-18 seconds per nest from a distance of 2-3 metres or spray short 1-2 second bursts directly at insects.



600ML AEROSOLS



### 500ML DOSING BOTTLE

## Digrain Bugster EC

Digrain Bugster 1 litre is a all-purpose professional-use concentrated insecticide by Lodi UK. Designed for use a surface spray or when both hot or cold fogging.

**Digrain Bugster is an effective control method against flying and crawling insects** including red mite, flies, fleas, moths, wasps and more. Digrain Bugster contains a generous 2% of Lodi's much-loved prallethrin active offering a fast knockdown with great results in minutes. Coupled with cypermethrin, a trusted residual, Bugster is a general-purpose insecticide that every farmer should have in his armoury. Digrain Bugster can inside livestock buildings (barns, stables, dairies & treatment rooms). This product cannot be used on porous surfaces, clothing, bedding, or plants. Up to 12 weeks residual killing action in ideal conditions. **Contains: Prallethrin 2% w/w Cypermethrin 10% w/w** 

**Spray Application:** Against flying insects, the product should be applied where insects can be found, namely on windows, door frames, beams and walls. In the case of regular use, the product must first be diluted 200 times in water (for example, 25 ml/5 litres of water) before being applied in quantities of 5 litres of liquid per 100m<sup>2</sup>. In the case of substantial infestations, double the dose (for example, 50 ml/5 litres of water) before applying in quantities of 5 litres of liquid per 100m<sup>2</sup>. Leave the building 30min to 2h before re-entry and let dry before returning animals.

Fogging treatment: Only for inside use.Cold fogging: The product must be diluted 100 times in water (50 ml in 5L for 500m<sup>3</sup>)Hot fogging: The product must be diluted 200 times in water (25ml in 5L for 500m<sup>3</sup>)

Leave the building sealed for 4-6 hours after treatment.

## 10m Fly Glue Roll

The unique design combines a specially crafted surface impregnated with fly sex pheromones and covered with specially formulated attractive glue. It can be used as part of your monitoring process.

An easy to install kit designed to effectively tackle resting flies. **Particularly good for hanging in large areas just above livestock.** As the fly leaves the animal looking for somewhere to rest it is attracted to the thin sticky white tape where it is caught and trapped stopping it going for its next feed or it's chance to lay more eggs. Again, the kit can be used to monitor fly activity.

## Organ-X Fly Trap XL

## Quote: "After 2 days, it's catching every fly in Shropshire"

The Organ-X Pro-Formula Fly Trap XL is a non-toxic solution to fly problems. Using fast-catch technology, **each trap can catch up to 40,000 flies.** 

The Organ-X Pro-Formula Fly Trap XL can be used in gardens or outside farm buildings, animal housing, industrial and waste sites. The bag is made from durable plastic with a strong handle, reducing the risk of breakage and leakage. The ideal monitoring tool during the warmer months to look out for increased spikes in fly activity and to use as part of a strategic fly management control program.





### **1 LITRE DOSING BOTTLE**

## Maggots Larvicide

Maggots is a fly larvicidal product which is specially formulated to eliminate and control nuisance fly larvae.

**To be used in:** Poultry Houses, Dairy and Calf Units ,Pig Fattening and Pig Breeding Units, Sheep and Goat Units, Horse Stables, Refuge and Refuge Transfer Sites



### AVAILABLE IN 10 & 20KG TUBS.

### Maggots contains a highly effective and specific growth regulator called Cyromazine.

It is easy to use and is a water soluble granular larvicide which can be directly sprinkled on slurry or best sprayed after dilution in water. This treatment stops larvae developing which ultimately breaks the fly cycle so flies will be eliminated. The Maggots larvicide offers a long residual effect and is safe to use around livestock and calf rearing areas. Fly larvae feed in the top four inches (100mm) of muck and straw bedding area. It is important that the product is applied in four-inch (100mm) intervals. Spot-on animal treatments struggle and ultimately fail to cope with the number of flies during summer months and still allow flies to bite animals as well as lay their eggs. They become totally ineffective, with some resistance and cost farmers lots of money.

Cyromazine attacks the larvae of flies and prevents them from completing their life cycle into adulthood. The prevention of the larvae's growth and development stops the larvae from moulting their skins. The new Maggots larvicide containing Cyromazine is specifically developed for controlling fly larvae. It is the only effective way of stopping fly problems and the results can be seen on the adult fly population in approximately two weeks after the first application of Maggots.

Maggots targets 80% of a fly lifecycle. This ensures that the problem is tackled at source as prevention is better than a cure. With up to 7,000 maggots in 1kg of muck fly problems can occur very quickly. Flies are responsible for a number of diseases in your livestock or poultry house including Salmonella and Brachyspira which can dramatically reduce production levels or in the worst cases shut down your farm. Maggots will help to reduce liquefaction of manure, leading to easier removal of muck which will ultimately save time and money and produce better manure quality. The product is proven to reduce ammonia and help to reduce odour (therefore reduces ventilation costs). A decrease in fly population is proven to increase productivity in animal housing. Maggots should be used as part of a routine fly management program alongside adulticide products TwentyOne and Sheila Fly baits. Digrain Fly Reel Kits should be used for monitoring fly population and activity and reduce chances of further fly egg laying. Lodi have the experience and expertise in controlling flies. Why get annoyed when you can get in touch and ask for our help. We have the answers and the tools to do the job. We have helped farmers served with abatement notices, environmental health issues, planning applications for farm buildings and many more situations up and down the UK.

Application	Dose Rate	Treated Area
Dry Scattering	500 g	20 m <sup>2</sup>
Spraying (Directly onto muck)	500 g / 5l of water	20 m <sup>2</sup>
Spraying (Indirectly – through slatted floor units)	500 g / 15l of water	20 m²

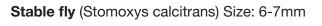
## **Fly Identification**

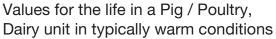
### **'KNOW YOUR ENEMY'**

It is very important to be able to identify the type of fly in your shed or unit as it will have an impact as to how you moni- tor and treat the infestation. Below are diagrams and descriptions of the three key target species found on poultry, pig, dairy and livestock farms.

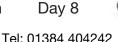
### Common House fly (Musca domestia) Size: 6-7 mm

Lesser house fly (Fannia cannicularis) Size: 5-6mm





Day 1 Egg Larvae Days 4 Pupa Days 2 **Pre-oviposition** 











## Larvenol Larvicide



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#### AVAILABLE IN 1 & 10KG TUBS.

### A UNIQUE ACTIVE TO UK ON-FARM FLY CONTROL Larvenol is an insect growth regulator product with granules of 0.4% S-Methoprene, a new unique active sold by Lodi UK.

The specialist IGR is designed with a progressive release formula using to control maggots and larvae in calf/animal rearing and livestock premises. Indoor and outdoor use. Potentially effective up to 8 weeks depending on area of use and infestation.

Methoprene is a compound with a molecular structure closely similar to a juvenile hormone (JH). Acting as an IGR it disrupts normal insect development. This is because juvenile hormone is necessary for insects continue their development. With each stage, the amount of the hormone naturally reduces and the insect develops into an adulthood. In this case, the constant presence of S-Methoprene during the cycle inhibits the targeted insect from maturing.

An added benefit of the product its mode of action helps reduce a negative impact on beneficial insects with entomologists recommending rotating between insecticide classes, Methoprene is also shown to be more compatible with dung beetles, a non-target insect.

### ATTACK AND KILL BEFORE THEY CAN FLY

Mult Fly Eggs KILLS MAGGOTS & FLY LARVAE TARGETS BOO OF A FLY'S LIFECYCLE OF A FLY'S LIFECYCLE OF A FLY'S LIFECYCLE OF A FLY'S LIFECYCLE A CANVARTING CANVART CANV

Larvenol is the ideal solution for farmers looking for an easy-to-use way to control fly numbers around animals and livestock, especially during the warmer seasons.

Starting as early as possible during the season prevents flies breeding and establishing themselves. Controlling the larvae stage (80% of the flies lifecycle) you greatly reduce the amount of adult flies (Stable/ House/Lesser/Horn/Face Flies) that are the main nuisance and transmitters of disease, infections, and loss of production of livestock due to summer mastitis, New Forest Eye (infectious bovine keratoconjunctivitis) to constant irritation leading to feed inefficiency, resulting in weight loss.

#### MONITOR

Monitoring fly activity with Digrain sticky Fly Reel kits, Digrain Glue Rolls and TwentyOne/Sheila insecticides treated onto fly bait boards helps monitor and identify any potential threat of fly numbers increasing before it actually happens.

Totally eradicating flies is not possible, but the earlier you start a tactical approach to controlling breeding fly larva will dramatically reduce the impact of the warmer months ahead and will effectively reduce the volumes of chemicals needed.

Leave breeding areas untreated and the consequences can be awful for both you the farmer, livestock, and even your neighbours plus chemical controls start to become more of an impact with bigger volumes required.

Pour on products have minimal effect on flies and will not control large numbers where an effective fly control program has not been established. Usually around 3-4 treatments per season are required. They are generally used because of the ease of use with a simple pour down the backs of animals. They have potential issues of resistance and they don't protect the underside of livestock.

### Simple Larvenol Application Calf/Animal Rearing Area Use

- 1. Apply Larvenol whilst no animals and bedding are present.
- 2. Apply granules by manually spreading to a clean/bare floor at a rate of 30g per meter squared. Make sure the whole floor is covered. Especially around walls, partitions, under feeders and troughs.
- 3. Apply bedding such as straw over the top of Larvenol
- 4. Allow livestock into treated area
- 5. As the bedding becomes slightly moist from the livestock the granules become effective in a slow release.
- 6. The S-Methoprene kills the larvae once they hatch from any flies laying their eggs in the bedding. Larvenol kills larvae by contact and ingestion.
- 7. Fly Larvae live in top 4 inches of bedding. Monitor bedding and muck depth, also monitor activity on sticky fly reel kits, glue rolls and treated fly bait boards to judge if a re-application is required.
- 8. The recommended Larvenol treatment interval depends on management and housing systems as well as on climatic conditions. It can vary from 2-3 weeks up to several months. Often, 4-8 weeks intervals suffice.
- 9. Larvenol 1kg covers 33.33 m2 (5.77m x5.77m of floor area) an ideal partner for farmers in the fight against nuisance flies. Also available in 20kg buckets
- 10. Use as part of a Fly Resistance Management Plan. Use alongside or alternating with Maggots larvicide, fly baits such as Twenty One/Sheila, knockdown, Residual insecticides such as Phobi Caps/Perbio Choc/Digrain C40WP to prevent fly resistance.
- 11. Lodi UK have a dedicated UK Fly control expert with technical back up and on farm support. We can help solve any fly issues you may be experiencing or want to prevent. Please contact us for further help and information on TEL: 01384 404242 or email sales@lodi-uk.com

### **Key Advantages**

- 1. Easy to use- around walls, partitions, under feeders and troughs manure heaps, slurry pity
- 2. Very effective
- 3. Part of a fly management strategy to controlling flies and reduce the risk of resistance on farm
- 4. Cost effective compared to other methods
- 5. Reduces the need for large chemical volumes and controls if managed early enough
- 6. Prevents Fly infestations becoming in-controllable
- 7. Increases productivity of livestock
- 8. Reduces the risks of infection and disease caused by flies
- 9. Reduces the impact to farmers and local neighbours
- 10. Full back up and product support from the UK's leading fly control experts



## Alphi Azamethiphos 10%

TREATMENT PROTOCOL AGAINST DARKLING BEETLES (Alphitobius Diaperinus) Lesser mealworm or Litter Beetle

### Living Habits

Adult beetles' nest in soft materials such as insulation material of poultries, but also in the upper soil layers along the exterior of poultries. The beetles leave these nesting sites to feed and then lay eggs in the litter, preferably near feeding and drinking facilities, in addition to wet and warm locations. The larvae feed on moist organic material.

### **Eradication & Prevention**

To keep the Darkling beetle away, development sources such as old manure and feed residues should be cleaned up as much as possible. Clean as often as possible the manure in one go. The collected manure should be disposed of immediately. In addition, stable walls can be fitted with a smooth aluminium profile at seal height. Use insulation material with a hard top layer (PVC or aluminium). Seal off the ends with U profiles, which are often made of PVC

### Harmful Effect Economic Impact

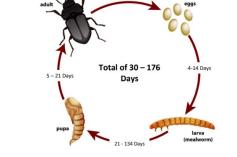
Darkling beetles cause structural damage to insulation when they burrow into walls to pupate. It can decrease the insulating ability of poultry barns. By burrowing through materials such as Styrofoam.

#### **Biosecurity Impact**

Darkling beetles are known vectors of 60 or more diseases that poultry are susceptible to, such as Newcastle disease, avian influenza, Marek's disease, infectious bursal disease, Salmonella spp., 26 pathogenic types of E. coli, etc.

#### **Flock Performance Impact**

Darkling beetles can decrease flock performance. For example, young birds choose to feed on darkling beetles first and feedstuff second. This fills their gut volume with indigestible beetle shells and can cause distress to the birds when they defecate.



DARKLING BEETLE LIFE CYCLE

**Alphi acts as an adulticide** with larvicidal action against darkling beetles, so the product has a double effect against them. It's a WG formulation which makes it more residual on different surfaces. It's organophosphorus with no cross-resistance. Pulverizing the product is an advantage since it's applied on the harbourage areas of beetles:

- 1. Along the walls, cracks and crevices where the darkling beetles are hiding in the insulations
- 2. Under the litter and the feed lines (harbourage area for larvae)

### You should pay particular attention to areas where feed and drinking water are spilled on the litter. These locations create a particularly optimal breeding ground for beetles.

Darkling beetles tend to come out of hiding once a new flock arrives, this is when and where they'll get in direct contact with Alphi since it is pulverized in bands along the perimeter of the walls, under the feed lines, on the litter and the lower part of the walls.

DOSAGE APPLICATION DOSAGE WATER TREATED SURFACE PULVERIZATION 500 g 10 L 100m<sup>2</sup>



# ON FARM FLY MONITORING REPORT

Shed Ref/No:

Monitored By:

Date of Inspection

Image: Sector of the sector

Draw diagram of shed/unit indictaing each of the monitoring points.

Monitoring Point No.	Maggot Activity	Fly Activity	Fly Qty	Muck Condition	Fly Species	Muck Dept
	Yes/No	Yes/No	Number	Description	Record Species	mm