

Using Slug Pellets Wisely (leaflet No10 produced 2012)

At Orchard Acre Farm we use a variety of methods to control slugs from damaging our crops. Our first and most important way is to boost the natural predators who actually enjoy eating slugs AND slug's eggs.



The next level is to physically trap the slugs.

We do also use NON toxic slug pellets, this guidance note applies to the use of toxic and non toxic pellets. The practice of using pellet on our edible crops is reserved for sensitive and valuable crops like strawberries or at the time of transplanting young seedlings. Our experience is that once a plant becomes established a certain amount of damage can be tolerated.

Toxic Methiocarb Pellets and Spray

Methiocarb is one of a group of chemicals called carbamates, which includes herbicides, fungicides and, especially, insecticides. Again, pellets contain around 4 per cent active ingredient, plus cereals and other attractants. They tend to be more expensive and are certainly more poisonous than metaldehyde pellets. Methiocarb is less important as a contact killer, acting more as a stomach poison when eaten.

Metaldehyde is said to be more effective than methiocarb under cooler wetter conditions, although this is disputed - recent trials have shown little difference in the overall effectiveness of the two chemicals. Slugs that have been poisoned move around for a while, then swell up with fluid and become immobile, dying shortly afterwards. In dry conditions this swelling can be reduced and a some slugs may appear to recover. Methiocarb breaks down more slowly than metaldehyde, which can be both an advantage and a disadvantage (see below).



Pros and Cons of the Two Chemicals

If you must use a chemical slug killer, choose **metaldehyde** pellets whenever possible. To begin with, methiocarb is also an insecticide, which means that it will kill many of the predatory beetles (clogs) which are themselves helping to control your garden slugs. As these beetles take longer to recover their numbers than do the slugs, you might well be making matters worse in the long run. Methiocarb is about ten times as poisonous to mammals as metaldehyde, so it is a dangerous chemical to have around yourselves or your food. In practice, metaldehyde and methiocarb are responsible for a similar number of poisoning cases although the volume of metaldehyde products is much higher. Metaldehyde mainly poisons pets, especially dogs, when the latter have access to packets of pellets or when pellets are wrongly applied. All slug pellets should be stored in an inaccessible place and you should never leave packets unattended in the garden. Spillages should be cleaned up immediately. Methiocarb, because it is so poisonous, will frequently make an animal ill before it has had time to take in a fatal dose. Worms can be killed by it and, at least in spray form, it may affect the growth of some plants.



From a garden wildlife point of view, therefore, slug pellets of either type should be avoided where possible. Birds and hedgehogs may under certain circumstances be killed by eating pellets, although the introduction of coloured pellets (usually blue) may deter the former so if you use molluscicides **avoid the cheaper, non-coloured formulations**. Wildlife may also be harmed by eating the poisoned slugs, although this probably only applies to methiocarb-based pellets. The formulation of slug pellets is very like that for dog food, with added poison, so it is little wonder that they are eaten by creatures other than those at which they are aimed. Indeed, the Ministry of Agriculture once advised the use of carbamate-based slug pellets for the control of mice on farms. **The majority of poisonings of pets seen by vets are as a consequence of slug pellet use**. So the message is use metaldehyde in a real emergency where slugs are devastating a crop and when no alternative system seems to work. Otherwise choose non chemical methods.

Using Pellets Efficiently and Safely

It is an important principle of pest control that the minimum dose that will do the job should be used. Pesticide that does not reach its target will undermine the overall effectiveness of your control measures, in this case by hitting your garden "friends", the predators and parasites of slugs and other pests.

As a rule of thumb, a maximum of **100 mini pellets per square meter** should be used, which results in about **10 cm of space between each one**. Spread them any more densely and most will not be taken up, while the repellent effect may actually reduce the kill. That is why the use of small heaps of pellets should be avoided. Use at the recommended rate will prevent pets and wild animals from taking up a lethal dose of pellets. Confine dogs during application to prevent them from believing they are being fed and remember that curious toddlers are likely to put anything unusual (like bright blue pellets) in their mouths.

Choose the evening before a warm, humid night if possible. Confine the use of pellets to limited areas. The edges of walls, paths and lawns are the sorts of places in which slugs like to hide away during the day, where they can find damp, dark, cool refuges. When using pellets in a crop, **do not throw them around wildly or you run the risk of some lodging in plant and contaminating your food**. If at all practicable, protect birds and hedgehogs from the pellets by using netting. It is a very good idea to remove and kill any slugs around the pellets the next day because many will be paralysed but not dead. Such speedy treatment, and removal of chemicals, will minimise the risks to non target creatures.

There are no stated safety periods in this country between treatment and eating associated crops. However, such restrictions apply elsewhere in Europe and it would be wise to err on the side of caution and wait at least a week - even longer if you have used methiocarb spray.

How to control slugs using NON pellet methods is another whole story

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