In early January Bayer announced that Ficam D (1.25% bendiocarb), the mainstay of wasps’ nest treatments, could only be used indoors. Product with the old label is no longer available to purchase and any stocks held must be used up by 25 July 2019. So, what to use instead? Pest Technical Advisory Board member, Richard Strand, examines the implications and alternatives.

**Good news and the not so good news**

The good news is that the product has recently been re-approved – this really is good news. Keeping Ficam D on the UK market for use by professional pest control technicians is a major success for the Bayer regulatory teams in the UK and Europe. The not so good news is that a wide range of insects that fell within the definition of ‘crawling insects’ (with the exception of ants) has now gone from the label and, when used against wasps’ nests, there are several tricky restrictions limiting how the product can now be used.

Let’s look at some of these new label instructions and how they should be/may be interpreted.

The headline change is that the product will be restricted to ‘indoor use only’. It is, according to the label: ‘For control of wasps and hornets (nests), including Asian hornets’ nests, as an indoor treatment’.

The first element of ‘label interpretation’

Bayer emphasises that the ‘indoor’ definition does include nests inside the eaves of houses, even when the product is applied from outside.

But what about outdoor ‘four-sided’ structures? If the structure has four walls, a ceiling and a door – such as a garage or a shed – that would be OK. A greenhouse which is a more temporary structure – probably not. These, along with open-fronted structures, such as Dutch barns, another favourite spot for nesting wasps, are not thought to be sufficiently secure to meet the Health & Safety Executive’s (HSE) expectation of ‘indoors’.

It is also worth noting that although Asian hornets are covered by the new approval, the nests of these insects are usually outside. Fortunately, at present, Asian hornet nests remain the responsibility of the Department for Food and Rural Affairs (DEFRA). Bayer, along with the other manufacturers, is working with DEFRA to develop effective ways of controlling Asian hornets. We await guidance on that particular use.

**Nests removed after treatment**

Wasps’ nest control is one of the few areas of pest control where, assuming good access, the technician can leave the site sure that the problem has been resolved.

Follow up treatments are not always factored into quotes for wasp nest treatments. Aspects of the new label suggest that this may have to change.

The new label states: ‘After treatment the nests should be removed, if possible, and disposed of in a controlled manner...’

Further, the label requires that the technician applies ‘an impervious surface covering’ to surfaces that could be contaminated during the treatment. To remove that covering immediately after treatment would seem to heighten the risk to the technician of attack by wasps. In any event, it may take some time for any dust that did not penetrate the nest to settle and for the sheeting to offer the protection intended.

**Follow up visits?**

Taking these two label requirements together suggests that a follow up visit for wasp treatments may become necessary in some situations, the purpose of that second visit being to remove both the nest and the protective sheeting. All of that said, there are plenty of situations where the nests are in cavities, or are not accessible and,
so, nest removal will not be possible and sheeting cannot be applied.

The objective of applying impervious covering to the treatment area is to prevent contamination beyond the nest. How far this needs to extend is open to the judgement of the technician, in the situation that prevails.

But how should this covering be dealt with after use? If contaminated sheeting is carried out of the loft hatch and through someone’s home, it may shed dust along the way, spreading contamination. The contaminated sheet would, therefore, need to be stowed in a protective bag on being lifted and removed from site.

What then? Should the sheet be disposed of after each use? – we are in an age where the single use of plastics is frowned upon – if not, how will this sheeting and the bag it is carried in, be cleaned for reuse?

The regulatory authorities, as may be expected, show a general concern about excessive accumulation of biocides in the environment where they may impact on a wide range of non-target species. One way of addressing this is to limit the number of re-treatments that may be applied to a site. This principle can be found on a number of recent biocide labels and it is present on the new Ficam D label. The number of treatments that can be carried out with the product, per annum is limited to 11.

This should not present undue problems. I hope that none of us need that many goes at destroying a wasps’ nest!

However, does the ‘application site’ mean the individual wasps’ nest, or the roof space in which the nest is situated. There may be more than one and these may come to light only after the treatment? Here, thankfully, the answer is thought to be that the ‘application site’ is the location and not the individual nest.

So what about treatment outdoors?

So how are pest controllers going to deal with nests that are not ‘indoors’? This is likely to be a question that they will be confronted with sooner rather than later, as those in sheds, rockeries, and bushes are the very nests that tend to be noticed first.

Coupled with the fact that the Median wasp (Dolichovespula media) tend to build their nests in hedges where they are quickly noticed. This species’ life cycle also runs several weeks in advance of the common and German wasp.

We have come to accept the ‘Hierarchy of Control’ for rodent management. Perhaps we should apply those principles to wasps’ nest control. Is a treatment always necessary? Where the wasps pose no risk, do their nests need to be destroyed in the first place? If they do, are there options other than the use of insecticide?

Some years ago I wrote an article on biocide-free pest control and used an incident with a wasps’ nest as an example. A householder complained of a wasps’ nest in a greenhouse and was adamant that no insecticide was to be used. The job was refused by a long list of pest controllers whose default treatment was the application of insecticide dust, until one agreed to look at the job.

The nest was destroyed and removed. The pest controller concerned later observed that, on reflection, several other possible non-chemical solutions came to mind involving water, heat treatment and mechanical removal of the nest.

The above case, also illustrates an aspect of human behaviour – if you have a universal solution to a problem, why look elsewhere? Unless we are forced to, we don’t think beyond the easy option!
Non-biocidal products

There are non-biocidal products available.

Diatomaceous earth based products are a possibility. If used, they will be much slower acting than Ficam D and it is unclear whether the dust will be so readily distributed around the nest as other powders. Provided the weather remains dry and the risk to people is low, this option may be feasible.

Another non-biocidal option is the use of aerosols designed to freeze the nest. ‘Frost sprays’ are currently being trialled. These come into their own when confronted with small exposed nests – just the type that are likely to be found outside.

Other insecticide dusts and aerosols

Having discounted either no treatment or a biocide-free solution, there are other insecticides that can be considered.

Bendiocarb is not the only insecticide that will kill wasps! And, in any case, Ficam W spray can still be used outdoors. There are also others to choose from.

There are dust products based on permethrin and deltamethrin that will certainly work if applied correctly. The synthetic pyrethroids are thought to agitate the nest more than do carbamates. The technician will have to give greater consideration to his/her own safety, as well as that of the customer, and may need to think in terms of deploying a wider exclusion zone during and following treatment.

There is also at least one organophosphate (OP) product, namely Quartz, containing the active azamethiphos. This has an approval for both indoor and outdoor use and may offer an alternative that, like the carbamates, does not aggravate the nest. It also seems to have overcome the past problem with OPs, as Quartz is described as odourless.

What about dust application equipment?

If technicians are now to be choosing between a range of dust products, are there implications for the application equipment manufacturers?

Tony Gardener of GPS, the manufacturer of the PA2 professional powder dust applicator says: “It’s business as usual!”

The carrier for most of the dusts is of much the same consistency and, certainly for the PA2, Tony is content that other insecticidal dusts will be delivered equally effectively as Ficam D. Care will need to be taken to clean out the applicator when switching products, however.

Sprays and aerosols

As long as the label permits it – and watch for changes as these products go through approval review – a number of water-based sprays may be effective, such as Ficam W.

These might work well for small nests inside insecure structures such as sheds and greenhouses. Used in underground nests, a large amount of the spray will just seep into the soil, causing contamination.

Also available are a number of aerosol wasp destroyers, some of which are foam sprays. These jet the insecticide at, or into, the nest, sometimes from a considerable distance.

Some, but not necessarily all, of the alternative products available

Practical viewpoint

Chris Hannath, biologist for Universal Pest Control in Nottingham, notes that Ficam D has been a solution for wasps’ nests in almost all circumstances.

His view is that there will be no single replacement for the product in situations where it can no longer be used. Rather he sees that pest professionals will have to select the most appropriate from a range of approaches to fit the circumstances. In his opinion this has to be good news empowering professional pest controllers.

Grahame Turner, technical & training manager at Mitie, is concerned about safety and the risk of getting stung: “Ficam D has been an excellent standard product for all wasp nest control, with low risk of stings.

We are now likely to need to stock and use a variety of products and application techniques for different
situations, balancing safety, treatment efficiency and legal compliance. Of paramount concern is the risk to both technicians and customers of an allergic reaction to stings and anaphylactic shock.”

John Hope, technical manager for the National Pest Technicians Association, expressed concern about some aspects of practicality of the new label instructions.

When it comes to personal protective equipment, for example, the label instructions focus entirely on protecting the user from exposure to the chemical. This is, perhaps, not surprising, but the instructions appear to ignore the threat from the wasps themselves and raise some contradictions.

The label calls for type 4 protective coverall to EN14605. How is this to be worn with a bee suit? Bearing in mind that the technician will be required to wear a particle filter mask under his/her bee veil, how practical will this level of PPE be in a roof space on a hot day in July? The label specifies nitrile gloves. If these are to protect against stings as well, thick (0.38mm or greater), gauntlets will be necessary!

John points out: “The new labelling potentially leads to closer exposure to wasps when installing impermeable membranes to limit dust exposure. This may involve getting ‘up close and personal’ to a treated nest, usually in the height of summer. Does this take into account the wider health and safety picture, i.e. heat exposure etc in already hot loft spaces?”

For the future

In summary, the pest control industry still has its product of choice and it can still be used in the majority of the places that it traditionally has been used. In most cases, but not all, where it can’t be used, alternative solutions exist and are practical.

Use of Ficam D from this summer onwards may require more diligence – but then we should be diligent with all biocides.

Technicians would be advised to carry with them a few alternatives when setting out on a wasp job. Over the years pest professionals have been challenged time and time again, to rethink how to resolve pest problems when restrictions are placed on old favourites.

‘Professionalism’ has, in the long run, benefitted pest controllers not hindered us. As John Hope says: “Anything that makes people think before using a chemical is good, after all that is what COSHH has been dictating for years.”