## Biflex - The Termiticide Trusted by Millions

iflex has been a trusted name in termite management for nearly three decades. There's a reason for this: it works. With all the noise around so called 'non-repellent' technology, it's easy to overlook the benefits of Biflex as a termiticide. Here we have a closer look at why Biflex should be your go-to termiticide and why you need to be careful when using 'non-repellents'.

Biflex was launched by FMC back in 1995, the same year that organochlorines were banned in Australia. Biflex was a breakthrough product, powered by the synthetic pyrethroid active ingredient bifenthrin. Biflex quickly assumed the number one market leader position, proving to be an efficacious, reliable, long-lasting product, without the safety/environmental hangovers of previous chemistry.

Before we talk technical performance, these are the facts that make Biflex a trusted name in termite protection:

- Biflex has been on the market for nearly 30 years
- Over one million Australian homes have been protected with Biflex
- It has the longest protection of any termiticide on the market (ten years south of the Tropic of Capricorn)
- Biflex treatments are covered by insurance companies
- FMC backs Biflex with the \$1 million Eflex Warranty.

One of the reasons for its long-lasting performance is due to the unparalleled soil-binding properties of bifenthrin, the active used in Biflex. The Log  $K_{\rm ow}$  for bifenthrin is 6.0, whereas it is 4.01 for fipronil and 0.57 for imidacloprid. This means bifenthrin binds strongly to the soil and stays where it is applied.

Biflex is most certainly a repellent termiticide, and this is not a bad thing. It's very easy for customers to visualise how it works, creating a 'termite barrier'. But are 'nonrepellents' really non-repellent?

Best practice termite treatments require eradication of termites within the building before applying a treatment to the soil around the building. The main reason for this is that if you don't eliminate termites from inside the building before applying the soil treatment, you could trap active termites inside the building. If the nest is also underneath the building, inside the treated zone, you could be creating an ongoing problem.

There is the perception that this best practice treatment process doesn't or shouldn't apply to 'non-repellents' – being non-repellent, the treatment won't trap the termites inside the building, and its transfer effect capabilities will take care of any colonies. However, an increasing number of trials have demonstrated that this probably isn't the case.<sup>1,2</sup>

**BELOW:** Biflex applied to a trench around a pier – soil treatments can last ten years or more

**BELOW:** With its flexible application rate and formulation options, Biflex is ideal for charging reticulation systems

**BELOW:** Drill spacing ranges from 150mm - 300mm depending on soil type







A 2018 laboratory study by Assoc. Prof. **Thomas Chouvenc**<sup>1</sup> investigated the effects of a fipronil treated zone on the foraging behaviour of large populations of Coptotermes gestroi (using whole/intact colonies). The clever design not only used whole colonies, but provided a significant foraging area to create a reasonable distance (12 m) between the nest and the feeding site. The treatment was designed to represent a typical soilapplied treatment around a building. After two weeks, the first wave of termites entered the treated zone, and termites within a 1.5 metre radius of the fipronil treatment zone had died. The accumulation of such a large number of dead bodies near the treated area resulted in what Dr Chouvenc called "secondary repellency" (also called behavioural repellency). The colonies avoided the treated area for the remaining ten weeks of the experiment, using alternative foraging galleries. Effectively, the 'nonrepellent' termiticide had created a repellent barrier. In the field, this would result in termites being trapped inside a building if a soil treatment was applied without eradicating active termites from the building.

In the same trial (using whole/intact colonies), after three months of the termites foraging close to the fipronil treated zones, there was no variance in the size of the colonies when compared to the untreated control colonies. Therefore, the termites that died as a result of foraging through the fipronil treated zone were quickly replaced by the colony. Whilst some insecticide transfer may have

taken place transfer over short distances, there certainly was no colony elimination or even a significant impact on the population.

All of this illustrates the need to treat all termiticides the same when you are applying a treated zone; ensure all active termites are eliminated from the building before applying the treated zone and make every effort to apply as close to a complete and continuous treated zone as humanly possible, no matter what type of termiticide is used.

With Biflex delivering long-lasting and trusted performance, covered by insurers and backed by FMC, it is certainly worth questioning the value of paying the premium for these 'non-repellent' products, especially with the pricing pressures in the current economic climate. In this regard, Biflex also offers a truly flexible label, allowing for reduced application rates for a reduced duration of protection. Not only does this provide for further options when cost pressures are an issue, but is ideal when managing reticulation recharging programs.

So, when you focus on the facts, Biflex delivers trusted performance and significant benefits for pest managers. Perhaps Biflex should be your go-to termiticide?

