











Ant Control Programme: INSPECTION

The aim is to determine:

- // the location of all areas of ant activity
- $\ensuremath{\textit{\#}}$ the point(s) of entry into the structure
- $\ensuremath{\rlap/}$ potential nest sites and areas for re-invasion



the level of sanitation, the presence of food and water
 previous control measures

- // cleaning practices
- $\ensuremath{\textit{\#}}$ the areas posing difficulties or limitations for treatment

An inspector should:

- // have a good understanding of ant biology and behaviour
- // know the various treatment practices















Carpenter ants (camponotus sp.)

- Carpenter ants is polymorphic, large 6 17 mm, the colour depends of the species from black, black and red to golden. They are monogyn.
- o They like insects, meat, sweets and eggs!
- The nest begins in a pre existing cavity and will expand in dead damaged wood. Most colonies have a parent colony + satellite colonies.
- They are mostly active on night and need damp conditions





- > Carpenter ants cause damage to the wooden structure
- ➤ They excavate and weaken trees, beams....
- \succ The forage indoors and outdoors for food, in the old wood.

Treatment

- \checkmark Limit damp conditions of the area and remove water source
- \checkmark Treat when starts the season ; February to April.
- \checkmark Inspection or last year nest is compulsory
- ✓ Good knowledge of the specie and the site are key for success factors





Ficam W	
Ficam W –	
80% bendiocarb – wettable powder	
15g sachets	
12g/100m ²	

Bendiocarb - Avantages

Proven performance - Bendiocarb is an active ingredient used successfully in the world for more than thirty years

Broad spectrum insect control - Bendiocarb is particularly renowned for its unrivalled control of both wasps and ants

Residuality - Bendiocarb is photostable exerting prolonged residual insecticidal activity

A molecule defended for BPD by Bayer, no generic competition

Do not excit insects, easier to apply on wasp, good results on bed bugs









When and what to spray

- In case of infestation of polygynous species living outdoor as Argentina ant, creation of a insecticide barrier
- · To prevent re infestation as for carpenter ant
- Choice of product: either non repellent active substance or pyrethroids.











Maxforce® Quantum

Product profile

- ${\ensuremath{/\!\!\!/}}$ highly effective broad spectrum product for sweet and protein loving ants
- // liquid bait
- // low dose contains 0.03% Imidacloprid
- // long lasting palatability non-dry formula
- // curative and pre-emptive treatment
- // easy and time saving application
- // inconspicuous treatment, non repellent

BIOLOGY/ EFFICACY ON:

Consumption has been shown for the following species (and more, ask for the list):

- // Monomorium pharaonis (Pharaoh's Ant) // Tapinoma melanocephalum (Ghost Ant)
- // Lasius niger (Black Garden Ant)
- // Linepithema humile (Argentine Ant) // Lasius flavus (Yellow meadow ant)
- // Tapinoma sessile (Odorous House Ant)
- // Camponotus spp (Carpenter Ant)









What we learn from inspections



Location of pests

Extent of infestation

Correct identification

Environmental factors

 Structural deficiencies Safety considerations

How to apply the monitoring devices

To follow trends

- 1. To place first monitors a few days BEFORE the first application
- 2. To let them between 3 to 5 nights
- 3. To count or to take picture of each monitors when you arrive for the treatment
- 4. Same process a few days after treatment (from 4th to 15th day)
- 5. Then monitor after 2 or 3 months, depend of quantity of dust present in the site environment



Facts (Blattella germanica)



>Origin: South East Asia

≻Size: 13-16 mm

Development time: Eggs to adults 60 - 90 days, ~36 eggs per ootheca hatching after 16 - 22 days, Ootheca carried nearly until hatching

>Lifespan of adults and number of oothecae: 100-160 days, 4 to 8 oothecae in total

Distribution: Worldwide, most common species in buildings (kitchens and other food





















Resistance or bait aversion?

Resistance: The Active Substance was broadly used, and some insects are not anymore affected by the

killing effect of that substance

Aversion: Only for baits, the pests are not anymore attracted by the taste of the bait, so they don't touch it
in a classifier of the bait, so they don't touch it
in a classifier of the bait.

Recommendation: For baits, apply double rotation (AS + diet)













EFFICACY ON SILVERFISH BIOLOGY • 10 / 15 MM long

- Grey color
- Live in buildings at 20 to 24°C
- At 24°C, development from eggs to adult takes approx. 14 months, at 16°C they stop their activity. They
 can live up to 7/8 years
- Relatively immobile insect, lives in hidden places. They like books, card boxes storage boxes
- · Founded in warm and dry places, but also in toilets, bathrooms and
- · Their food is carbohydrates and occasionally proteins.
- Inspection is key in silverfish control.
- Sanitation of sites is important.





Trials in The Netherlands

Traps :



Treatment:

- where insects travel as under wood paneling, skirting boards, trapdoors....
- Cracks crevices, wall cavities, floor and roof insulation, behind furniture, sinks
- · As close as possible in the harborage of silverfish
- · Repeat treatment different times as insects don't move often

BAYER	Results	Table 1: The number of silverfish counted at the fixed locations before and after treatment									
		Days									
			-14	-7	0	Average before	7	21	49	63	Reduction (%)
	All insects are not going to traps.	House 1	67	54	68	63	13	0	0	0	100
	co 2 tochnics of monitoring: trans	House 2	70	81	88	79.7	16	3	2	0	100
	and visual.	House 3	15	13	17	15	3	0	0	0	100
		House 4	20	17	21	19.3	6	0	1	0	100
		Average									100
	Occupants have seen huge										Increase (%)
	decrease arter 2 weeks	Control	20	17	21	19.3	24	26	25	26	135
											100
	They did not see silverfish after	Table 2: T	he numl	ber of si	lverfish	counted in th Day	e traps	before	and afte	er the tr	eatment
	They did not see silverfish after 21 days	Table 2: T	he numi	ber of si •7	lverfish 0	counted in th Day Average before	ve traps 5 7	before	and afte	er the tr 63	eatment Reduction (%)
	They did not see silverfish after 21 days	Table 2: T House 1	he numi	ber of si -7 14	lverfish 0 28	counted in th Day Average before 21	se traps	before	and after 49 3	er the tr 63	Reduction (%) 90
	They did not see silverfish after 21 days	Table 2: T House 1 House 2	he numi	ber of si -7 14 14	0 28 16	counted in th Day Average before 21 15	se traps	before 21 3 1	and afte 49 3 0	er the tr 63	Reduction (%) 90 93
	They did not see silverfish after 21 days	Table 2: T House 1 House 2 House 3	he numi	-7 -7 14 14 14	0 28 16 17	counted in th Day Average before 21 15 15.5	we traps 5 7 4 4 0	21 3 1 0	and afte 49 3 0 2	er the tr 63 2 1 0	eatment Reduction (%) 90 93 100
	They did not see silverfish after 21 days	Table 2: T House 1 House 2 House 3 House 4	he numi	-7 -7 14 14 14 9	0 28 16 17 10	counted in th Day Average before 21 15 15.5 9.5	te traps 5 7 4 4 0 7	21 3 1 0 3	and afte 49 3 0 2 3	er the tr 63 2 1 0 1	eatment (%) 90 93 100 89
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Points of entries

In buildings, treat all the fluids boxes based on the entry in the site:

- Water
- Electric wires and sockets
- Any other tubes as phone, gas, alarm...

ightarrow Number of drops depend of the infestation localized inside







Cockroaches motorways

In the apartment, inspection + treatment alongside all the fluid tubes where cockroaches can go in hidden harborage (colonies).







Drops must be hidden

Find a way to place your drops in hidden places, that they will not be cleaned and where cockroach will be quiet to taste the product



Note:

If you find a colony, apply 3 à 10 points

As there many females who have just put down their oothecaes in the colony, and as they ate a little during incubition

incubation

Period, there are very hungry and they eat a

lot the first food they find as MAXFORCE gel, so over consummation of gel.





















Calibration Italy 3 different sprayer and nozzles







Main features of K-Othrine® SC25

Established Active Ingredient - Deltamethrin: pure active isomer

Potent Insecticide - High intrinsic insecticidal activity

Broad Spectrum Control - Active against a wide range of arthropods

Long Lasting Activity Photostable insecticide
 Particulate suspension Can be used in fogging



The Natural Solution to Insect Control

Water-Based Natural Pyrethrins Minimal mineral oil/volatile organic compound content
 FFAST™ anti-evaporant technology

63

- Flexible Space or surface spray Ready-to-use ultra low volume aerosol, or diluted for mist, fog or coarse spray treatment
- Broad Spectrum Control Provides flushout, rapid knockdown and kill

Acceptability in Use - Ideal for use in public hygiene including food handling situations

Pyrethrins typically exhibit rapid flushout of insects from their harbourages



Botanical insecticide complex from Pyrethrum cinerariaefolium Originally identified in antiquity Employed in AquaPy with the synergist piperonyl butoxide



Aquapy

Patented Aqua technology - FFAST: Film Forming Aqueous Spray Technology



FFAST improves the spray behavior of the water based formulation: FFAST retards the evaporation of water from droplets FFAST prolongs the time airborne of droplets

Similar effectiveness to conventional products that need to be diluted with diesel or oil.



































Caution, the product could leave marks or stain.

The product can potentially leave blue marks on certain surfaces and should not be used on sensitive surfaces.

*It is recommended that a test patch is done initially in an inconspicuous area.

Excess foam should be cleaned away with dry disposable tissues which can then be disposed of in accordance with local requirements.







