



## Palatable baits, what are the criteria?

Hélène Frontier\*



Bait production line. Photo: Liphatech

**W**hat is the secret of making a good quality rodenticide bait? Effectiveness depends on the bait being consumed and it will only be consumed if it is palatable. The challenge is that rats are neophobic and food competition can be problematic. So how to ensure the best palatability for the baits? To answer this question, we went to visit the Liphatech production centre, in Agen (France), where Mr Arnaud Hot, the production manager, gave us a tour.

### State-of-the-art, to be reactive

While other manufacturers and distributors offer solutions against a multiplicity of pests, Liphatech has an industrial strategy dedicated to rodent control. Their flagship products are

cereals, soft baits and blocks; rodenticides with a reputation for their good palatability.

Entering the French production site (the company has another site in the US) where thirty people work, you cannot help but notice its size. The place is vast in order to meet peaks in production which implies significant investment in capacity and flexibility from on-site staff. "We supply France and the international market, and we have cyclically very big orders in rodenticides for rat or mice," explains Mr Hot. "To be responsive to the market, all our products are manufactured using fully automated processes, and we do not subcontract any of our production."

### Good ingredients

If properly positioned, rodenticide baits will be consumed, provided they are palatable. "Raw materials have a very big impact on the palatability of the rodenticide," says

Arnaud Hot, "so they are very rigorously chosen in partnership with our suppliers."

Precise specifications are used for the selection of the different varieties of cereals used in the manufacture of the baits. Once the raw materials are selected, they enter the manufacturing process that is specific to each formulation (specific recipes and industrial technologies).

The goal is to make the bait as palatable as possible in order to be effective. The grain is not just mixed with the active ingredient; each formulation also has definite technical characteristics which help address the specific problems that Pest Control Operators face, such as the durability of the product.

"The formulations are developed with the R&D department and are filed by the regulatory service dedicated to biocidal activity, to obtain market authorisations," says Mr Hot.

### Trade secret: the process

Each marketed product must contain the same dose of active ingredient with doses ranging from 25 mg to 50 mg of active substance per kilogram of finished product. "After specification and the formulation," explains Mr. Hot, "all the know-how of Liphatech lies in the unique processes that allow us to homogeneously distribute these very low doses of active ingredient in the bait. Each production batch is controlled by our quality department", he adds.

To better understand, we witness the fully automated manufacturing process of baits in the form of cereals. All the ingredients are mixed in a regular and continuous manner with automatic dispensers. "All manufacturing processes are unique and fully automated on cereals, soft baits and blocks, our three flagship rodenticides", he explains.

It is understood that the company invests annually hundreds of thousands of Euros in high tech industrial process equipment. The company named this production approach the "LT Process". If you are interested in knowing more, the doors of the industrial site are open to you but if that is too far to go you can also play a video of the process by logging on to YouTube and searching for "Liphatech LT Process". ■

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