

Successful incubation and hatching with intelligent biosecurity

The concept of biosecurity is becoming more and more relevant in animal production, but there are places where it takes on an even more important role than normal, and that is in incubator plants and hatcheries.

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These kind of premises are evolving fast and they normally consist of several rooms with different environments, corridors, ventilation equipment, water systems and ducts, etc. In other words, they are complex structures and not just broiler sheds.

Some of the environments that we create within an incubator are very favourable for the development of pathogens as there will be many places to grow and hide (from the cleaning and disinfection process) and then contaminate, therefore compromising the whole process.

Intelligent biosecurity

For this reason, we have to adopt a strategy of intelligent biosecurity, adapting the resources for each specific place, and counting on the latest technology equipment, like OX-DISAIR, and safe products with proved efficacy like OX-VIRIN and OX-AGUA 2G.

We have to remember that the hazards may be introduced in different ways, and that is why we call it Intelligent Biosecurity.

Water is one of the vehicles that is normally forgotten. Some pathogens, like pseudomonas, are very prone to proliferate within the aqueous environment, and special mention must be made to biofilms and water ducts. We have to bear in mind that, in certain countries, this water is going to be used to provide humidity to maintain the environment for the incubation process.

In addition, the water will be used for the whole cleaning and



disinfection process, which creates a hazard when working with water that is not properly controlled. As mentioned before, if water is the vehicle, then pathogens will be in environments where it will be very easy for them to proliferate and grow.

For this reason, and within our concept of Intelligent Biosecurity, one of the keys is to have proper water management.

Ox CTA count on OX-AGUA 2G for this purpose. We can rely on its proved broad spectrum efficacy and on its safety for the eggs, the staff, and the environment.

Cleaning and disinfection

Another way or vehicle for pathogens to get in would be through contaminated eggs. Some pathogens, like salmonella or aspergillus, can easily get into the process through contaminated eggs, and as eggs are going to be moving through the premises, we have to be thoroughly careful to avoid spreading the pathogens.

Cleaning and disinfection of the premises is vital for this, but some other measures like environmental disinfection in the reception rooms, where local legislation allows it, are of great help to safeguard the success of the process.

For this purpose, we have to ensure that the cleaning and

disinfection process is carried out following established protocols without skipping any step.

Due to the normal kind of dirt that we will always find within hatchery premises, which includes egg debris, we must use an alkaline detergent, such as OX-NETAL 2. This will perform effectively against the organic dirt.

After that, once all the surfaces are exposed and ready to be disinfected, we must finish the process with OX-VIRIN, which will be our best ally for this purpose. We can rely on its fast acting, broad spectrum efficacy and its safety for the eggs, the staff and also the environment.

It does not leave any residue, so there is no need to rinse after using it as the product will naturally biodegrade, contributing to the success of the process.

There is one more step that will make the difference and one that is essential in our Intelligent Biosecurity approach – the use of the equipment OX-DISAIR.

Some of the pathogens mentioned before, especially aspergillus, are likely to get in through the air. For this reason we have to put in place proper barriers to stop it, but also consider that the aim of the process, is to remain profitable.

Using OX-DISAIR is the most cost-effective way to control these hazards. In addition, it will provide extra security due to its mode of

action, especially when we consider the complexity of the premises.

Regular cleaning and disinfection without this step, even if done thoroughly, is quite likely to miss certain spots, and the pathogens, that can be transmitted through the air pose a serious risk and could compromise the whole process.

As OX-DISAIR performs an environmental and surface disinfection through the air, we will not miss any spot. It will even get into the ventilation system and, due to the size of the droplet, we will not be adding any humidity into the process.

The combination of OX-DISAIR with OX-VIRIN is vital for the success of the incubation and hatching process and the versatility of the combination will make the job easier for staff.

This is something that we can apply at different steps of the process – as a terminal disinfection after finishing with the regular cleaning and disinfection protocols, but also as an environmental disinfection with the eggs in the reception room (if the local legislation allows) in order to avoid the entrance of pathogens through contaminated eggshells.

We can also perform regular environmental disinfection within the incubation rooms, again only if the legislation allows us to do it, and anywhere where we think disinfection is needed.

The perfect tool

As explained before, the safety of the product, together with the high performance of the equipment, creates the perfect tool to perform biosecurity in the best way, making sure that micro-organisms will not affect the success of the process.

Grupo OX is a company that has been producing disinfectants and technological solutions in biosecurity for more than 25 years.

We know well the steps where we can have an Intelligent Biosecurity approach to a hatchery to ensure the success of the whole process, with an easy and profitable solution for any specific situation. ■