

A Clean House for a Great Start

An Introduction to VIR-check

A good start for broiler flocks begins with healthy chicks in a clean house. Pathogenic micro-organisms are a continuous threat for broilers' health as they can cause illness, immunosuppression and poor performance. That's why we developed a test to check whether broiler houses have a low viral load at the start of a new cycle. The number of cleaning and disinfection protocols is endless; the same for the chemicals used. A check of the efficacy is often missing, mainly because good tools are lacking. Visual inspection doesn't give information on the success of the disinfection. Bacterial sampling and ATP testing provide more information about the disinfection result regarding bacteria, but representativeness is questionable as only very small parts of the broiler house are sampled.

Insights into the Intestinal Pathogen Viral Load

Using the VIR-check, you are able to test the prevalence and viral load of five contagious and resistant intestinal viruses: rotavirus A and D, chicken astrovirus, avian nephritis virus 3 and reovirus. Broilers around the age of six to seven days with a high viral load in their intestines have likely been subjected to viruses at a very young age. A field study in Dutch poultry showed that approximately 100 per cent of the flocks tested positive for these viruses during the cycle,

except for rotavirus D: only 50 per cent of the flocks were positive. The naked viruses tested with VIR-check are more resistant to disinfectants than other micro-organisms: when you don't find these also the other pathogens will be gone/very low.

Easy Sampling and Clear Results

The VIR-check provides a good indication of the viral load in the house upon the arrival of the chicks. The results are transformed by a formula into the so-called VIR-check score. You will receive the results in a clear report with a brief explanation, the test results and a visual representation of the score.

Sjaak de Wit, Developer VIR-check

"Disinfecting and cleaning broiler houses is time-consuming and there's not always time. Poultry farmers sometimes need to make choices; what product should I use, how long will I clean and in what sequence? And even if the broiler house is clean, there's always the question of how clean it actually is. Research has shown that at slaughter age, nearly one hundred per cent of the broilers have suffered an infection with reovirus, chicken astrovirus, avian nephritis virus-3 and rotavirus A. Half of them have been exposed to rotavirus D. If the broiler house is not disinfected effectively, this means that viruses are already lying in wait for the fresh batch of chicks to arrive. This is not the good start that every poultry farmer aims to achieve.

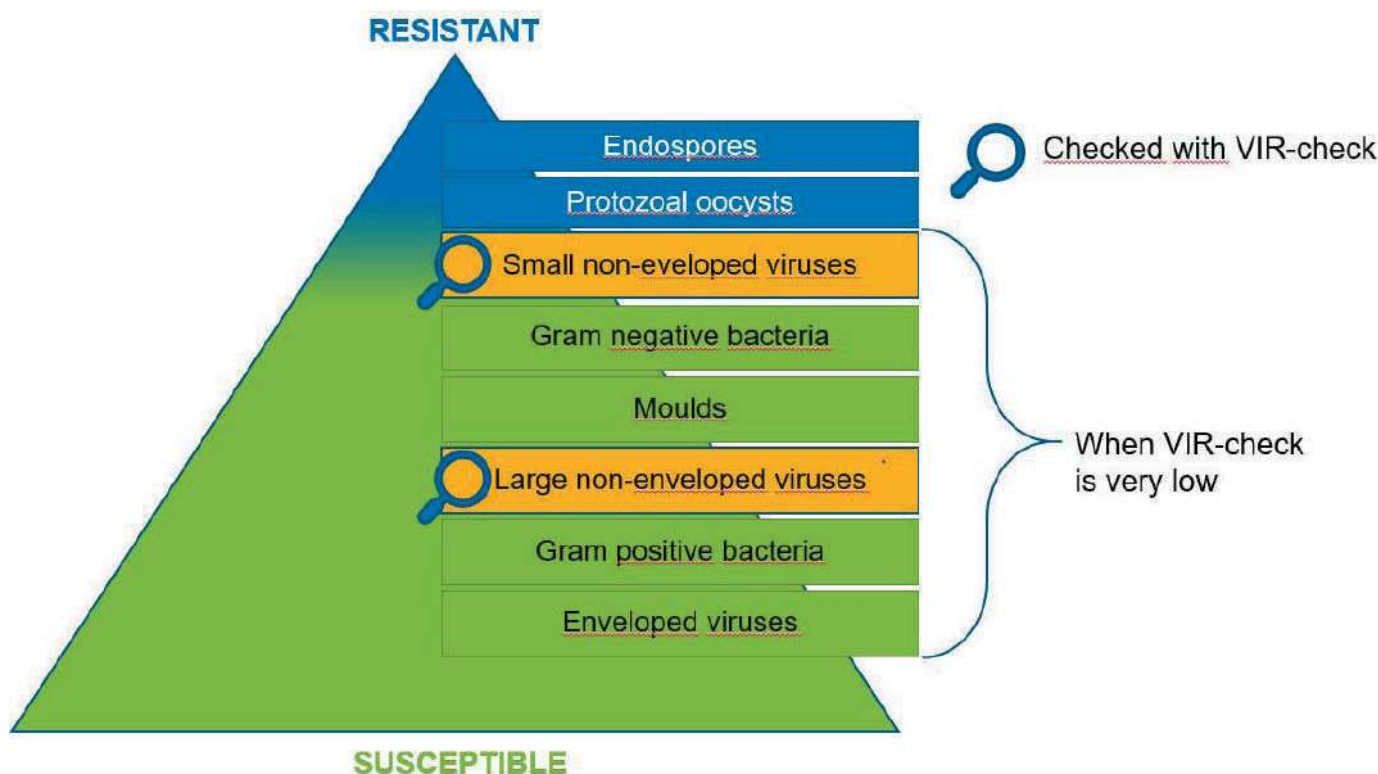


Figure 1. Relative susceptibility of groups of micro-organisms to disinfectants. Adapted from: Gerald McDonnell and A. Denver Russell Clin. Microbiol. Rev. 1999



“The newly developed test allows you to simply check for the presence of the above-mentioned five viruses. The results give an impression of how successfully the broiler house has been cleaned and disinfected. They have been designed based on the traffic lights format: green is good, red is bad and in the case of orange, we recommend a different cleaning and disinfecting method next time around. It’s not a cleaning protocol, but it does help make choices in keeping with the farm’s needs. A tool to give the chicks the best possible start in life. For poultry farmers, it provides insight into the success of their cleaning and disinfection work. They immediately know whether their efforts are truly paying off.”

For more information about VIR-check visit our website www.VIR-check.com or send an e-mail to support@gdanimalhealth.com



Sjaak de Wit

Sjaak de Wit gained his veterinary qualification at the University of Utrecht in 1989 and completed a PhD degree, concerning diagnosis and transmission of infectious bronchitis virus, in 1997 at the University of Utrecht.

His job as an immunologist and senior researcher at Royal GD has included responsibility for the quality and accreditation of serological tests for poultry pathogens, test development, applied research and on-site consultancy at farms, hatcheries and integrations. In 2016 he became president of the European College of Poultry Veterinary Science.