



# Detecting coccidiosis (*Eimeria spp.*) with AeroCollect® – quick, simple, and accurate

- **Simple sampling** – an AeroCollect® air sample is simpler and considerably less time consuming compared to traditional sampling and/or lesion scoring.
- **Testing of a whole flock** – with AeroCollect® there is no need to rely on a few investigations of individuals. The whole flock is tested with a single air sample.
- **Quick test results** – AeroCollect® air samples can be processed within as little as 2 hours in the laboratory compared to traditional testing, which can take days.
- **Closer monitoring of coccidiosis in flocks** – with simple sampling and quick results comes the prospect of improved monitoring, quick detection, and improved production management.

Cohen's kappa value = 0.97

**Detection of coccidiosis with AeroCollect®**

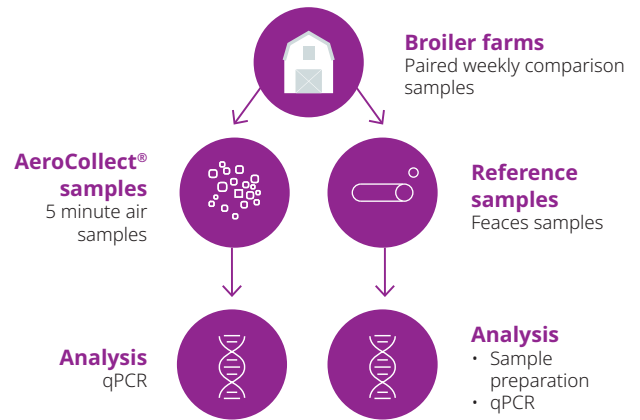
The AeroCollect® system is validated for the detection of *Eimeria spp.* in poultry samples in accordance with the guidelines described in EN ISO 16140-02:2016. The study was carried out in commercial broiler flocks using fecal samples or vaccination status, as reference samples.

In the study samples were collected from flocks vaccinated with a live attenuated vaccine. These flocks served as positive control flocks. Samples collected from young broilers receiving coccidiostat treatment served as negative control samples. Finally, two separate controlled infection studies performed in independent labs have confirmed the detection of *Eimeria spp.* in the collected AeroCollect® samples.

The measure of agreement between the results of the AeroCollect® sample and the official status of the flock, Cohen's kappa, was found to be 0.97 which constitutes a "near perfect agreement".

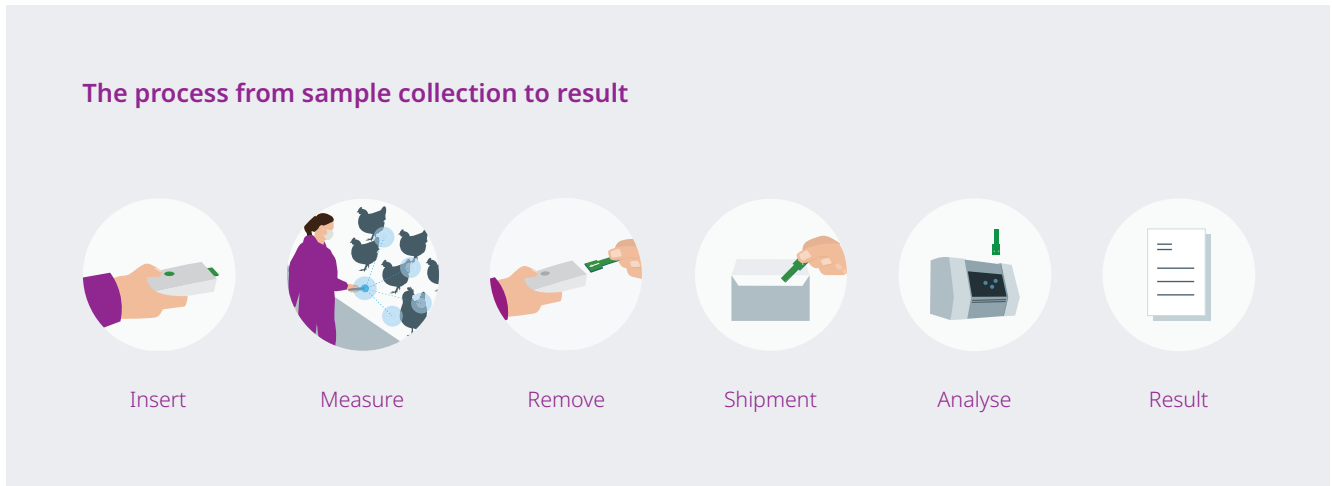
**Compared to faeces samples**

Sensitivity	SE	97.2 %
Specificity	SP	100 %
Accuracy	AC	98.3 %
Cohen's Kappa	κ	0.97 (Near perfect agreement)



**Multiple pathogen testing**

An additional benefit that is generic to the AeroCollect® is that each sample contains enough material for several analyses. Therefore, it is possible to screen for a range of the most common production related pathogens in your region (i.e. Avian influenza, IBV, IBDV, APEC, mycoplasmosis, Marek's disease) on the same sample that is collected for e.g. the *Campylobacter* and *Salmonella* tests. The eluted samples may also be stored centrally as a sample library of previous rotations should the need arise for further analyses of previous flocks. Note, that the AeroCollect® samples contain both respiratory and intestinal pathogens and may be analysed for both bacteria and virus.



### **When should testing for coccidiosis with AeroCollect® take place?**

As testing with AeroCollect® is simple and the analysis is quick, testing can be done quite often and easy. Frequent testing and quick results allow for improved monitoring for the presence of *Eimeria spp.* in flocks, which is the best foundation for timely detection of outbreaks. This increases the chances of successfully dealing with an outbreak with minimal consequence to the production and welfare of the flock.

**Would you like to learn more about what AeroCollect® can do for you and your company?**

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