For Immediate Release

Date: October 16, 2024

Parasight System Provides Improved Ascaridia galli Detection in Chickens

Lexington, Kentucky – October 16, 2024 – Parasight System Inc. proudly announces the utilization of its cutting-edge automated fecal egg count (FEC) system for the detection and quantification of Ascaridia galli ova in chicken feces. This groundbreaking technology, utilized in collaboration with Wilson Veterinary Co., marks a significant advancement in poultry health management.

Addressing a Growing Challenge in Poultry Production

The rise in global chicken production, accompanied with a shift towards more humane poultry farming practices, including cage-free, free-range, and organic systems, has also been accompanied by an increased prevalence of A. galli, a parasitic roundworm that causes substantial production losses and health issues in chickens. This trend has produced a need for more efficient and reliable monitoring tools.

A Leap Forward in Fecal Egg Counting

The Parasight System offers a sophisticated solution to the limitations of traditional manual fecal egg counting methods. Conventional techniques, such as the McMaster method, are labor-intensive and require specialized training, often leading to variability in results. In contrast, the Parasight System utilizes automated fluorescence-based technology to enhance both accuracy and precision in detecting A. galli eggs.

Validation and Performance

In a recent study, the Parasight System was validated against the manual McMaster method. The study, conducted with 20 chicken fecal samples and involving 200 counts per method, demonstrated that the Parasight System not only detected significantly more eggs, but also provided higher precision. The system showed a strong statistical correlation ($R^2 = 0.7879$, $P < 0.0001$) with the manual method and a notable improvement in precision ($P = 0.0391$).

Key findings include:

- The Parasight System detected 15 times more eggs on average compared to the McMaster method.
- The Parasight System exhibited a mean coefficient of variation (CV) of 22.0%, significantly lower (and therefore superior) than the McMaster method’s 38.9%, with respect to precision.

Implications for Poultry Management

The Parasight System's automated approach streamlines the fecal egg counting process, making it faster and more accessible and convenient for poultry farmers and veterinarians. This system minimizes the need for extensive training and manual labor, offering a reliable tool for effective anthelmintic treatment programs and health surveillance in poultry operations.

Looking Ahead

Future research will focus on evaluating the system's performance with lower egg counts and its applicability to other poultry species, including turkeys, and extending its capabilities to other parasite species of clinical interest in poultry. The Parasight System represents a significant step forward in managing parasitic infections in poultry, supporting the industry's shift towards more sustainable and humane practices.

For more information about the Parasight System and its applications, please visit www.parasightsystem.com.

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About Parasight System Inc.:

Parasight System Inc. is a leading provider of advanced veterinary diagnostic solutions. Dedicated to innovation and precision, Parasight is transforming veterinary care with its patented technologies that deliver fast, accurate diagnostic results.

About Wilson Veterinary Co.:

Wilson Veterinary Co., located in Needham, Indiana, specializes in veterinary solutions and support services, partnering with leading companies to advance animal health and welfare.

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