

SPRAY-VAC[®] *Spectrum*

Spray-Vac has been the trusted for protecting vaccines in your aerosol vaccinations since 1999. It is now available in a new formula, Spray-Vac Spectrum.

Animal Science Products, Inc. has adopted the technology you have effectively used for decades with your coccidiosis vaccination programs in the hatchery.

Have you ever wondered why your newly placed chicks were red when they arrived to the farm from the hatchery? The red dye commonly used for coccidiosis vaccinations in the hatchery is not meant to serve as visual marker of the vaccinated birds. The red dye actually stimulates the preening activity of the day old chicks and thus the ingestion of the vaccine yielding immunity. The spectral response, how colors are seen and the reactions to what is seen, varies greatly between humans and birds.

The light we see affects our brain and several biological functions within our body as well. The light that we are able to detect is known as the visible spectrum. The same biological impacts from light are observed in animals including poultry, but with one significant difference. The visible spectrum and spectral sensitivity, or what is actually seen by the bird, is vastly different than humans. This is why turkeys and chickens can behave differently under the same light intensity from two different sources that appears to be identical to the human eye. Chickens and turkeys absorb light through their eyes differently than do humans. Humans and poultry utilize retinal light perception but poultry have the ability to sense light through the pineal gland commonly referred to as the "third eye" which is situated on the dorsal surface of the brain. The pineal gland of avian species is involved in the control of circadian rhythms and sexual activity. The circadian rhythm is a 24-hour cycle in the biochemical, physiological, and behavioral processes of all animals.

There are three major areas of importance with lighting in commercial poultry. 1) Spectral Composition: the distribution of wavelengths. 2) Photoperiod: the number of hours of light and dark in a 24 hour period. 3) Light Intensity: the total amount of luminous power produced in the visual part of the spectrum. Having taken these factors into consideration Animal Science Products, Inc. developed Spray-Vac Spectrum, which contains the same vaccine rescuing properties of Spray-Vac but now has the addition of a proprietary dye which increases the preening activity of your poultry flocks to help maximize immunization. Our proprietary dye has been designed around spectral response of poultry in both the high and low ends of light intensity which makes it effective in increasing the preening activity post aerosol vaccination in virtually any lighting program.



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