EGG STORE

Urates seen on eggshells under UV light are no cause for concern

Ultraviolet (UV) light, specifically at a wavelength of 365nm and filtered, is a non-destructive tool used to inspect hatching eggs. It can help identify changes due to washing or dry cleaning of hatching eggs that are not visible to the naked eye.

When cleaned, eggs can lose their natural protective cuticle layer, making them much more susceptible to bacterial contamination and other damage. UV light allows us to identify issues before they can harm hatchability and chick quality.

When examining eggs under UV light, it is important to distinguish carefully between urate crystals and manure residue.

Urate crystals are a natural substance birds produce as a byproduct of their metabolism and do not create extra contamination.

Manure residue, on the other hand, is faecal material found on the surface of dirty eggs. It is harmful because it contains bacteria and other pathogens that can contaminate the egg contents, causing hatch losses and poor chick quality.

Urate crystals typically appear white in color under UV light. In contrast, manure residue typically appears yellow, brown or green in color and is composed of a mixture of faeces, urine and other waste materials. One easy way to determine the type of residue present on an egg is to check its color under UV light.

Figure 1 *Appearance of pale brown faecal residue (right) and white urates (left) on eggs pictured under UV light.*