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**Effects of egg washing and storage temperature on the quality of eggshell cuticle and
eggs**

Running head: washed egg quality during storage

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ABSTRACT

This study investigated the quality of washed and unwashed eggs stored at 7 °C (WC and UC for washed and unwashed eggs, respectively) and 25 °C (WR and UR for washed and unwashed eggs, respectively) for 4 weeks. The results show that the Haugh unit, albumin pH, thick albumin ratio, yolk index, air cell size, and S-ovalbumin content of UC were significantly the most superior, followed by those of WC, WR, and UR, in that order.

Scanning electron microscopy and cuticle staining confirmed the damages and decreased cuticle coverage caused by washing and extended storage. Attenuated total reflection Fourier transform infrared spectroscopy revealed that cuticle composition changed significantly after

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