

Understanding the physiology of shell pigmentation and colour deterioration in laying hens



Organisation: UNE

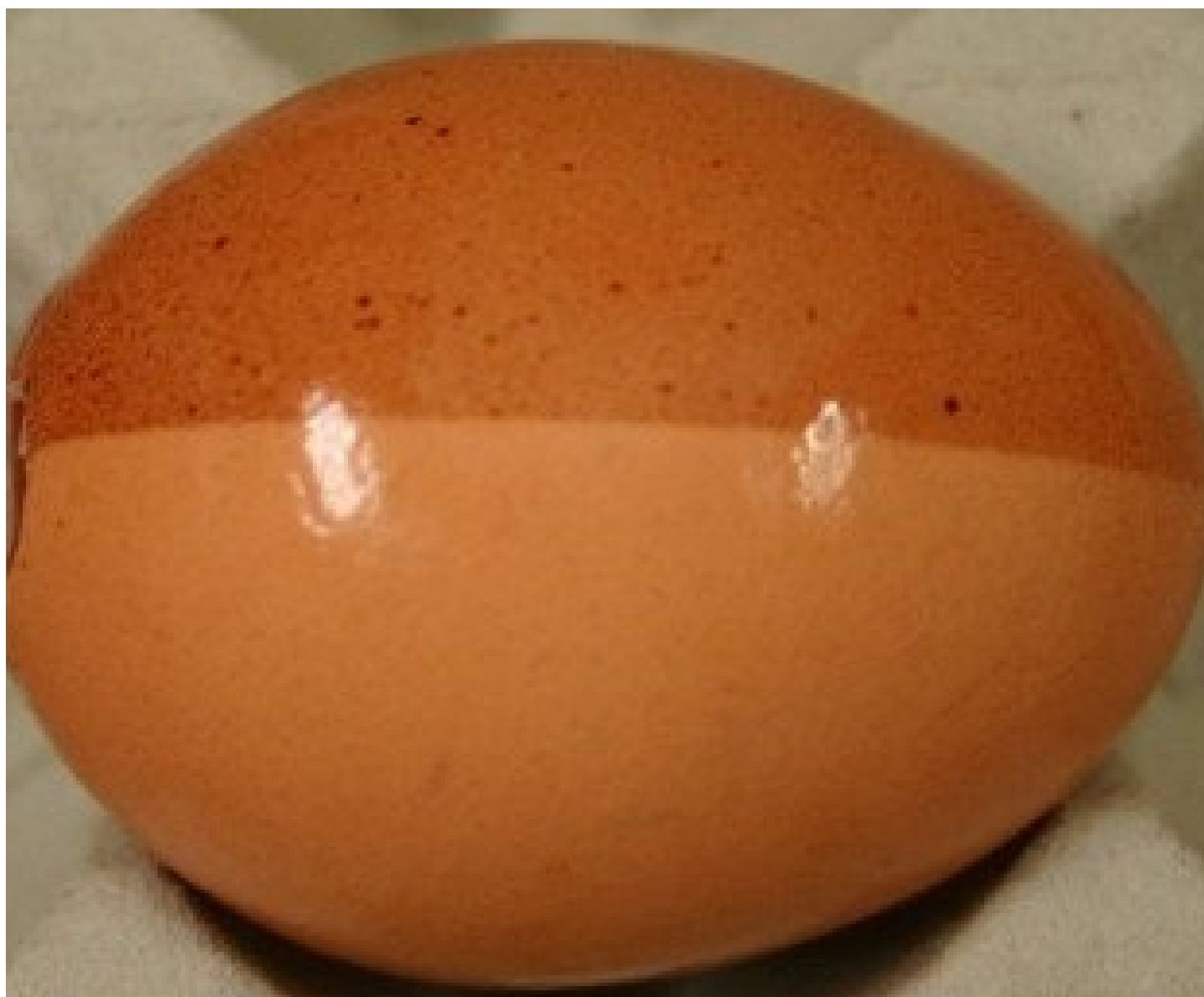
Publication: 1 October 2015

Researchers: J.R. Roberts and P. Scott

Categories: Animal Welfare

Tags: brown eggshell colour, brown pigment, eggshell colour deterioration, eggshell pigmentation, eggshell quality, hen age, layer production systems, protoporphyrin, eggs

Quantitative information concerning the location of pigment in the layers of the egg shell and identification of sites of pigment synthesis in the oviduct.



The objective of this project was to gain an understanding of the factors causing lighter shell colour. The project aimed to produce a comprehensive literature review on eggshell colour and, through a series of experiments, to determine the location and nature of pigment in eggshells (shell and cuticle), and the location and nature of pigment synthesis in the oviduct. The project also aimed to identify ways of maintaining shell colour in older flocks and in alternative production systems.

