

Evaluation of key characteristics of group nests relevant for nest choice of laying hens

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Key words

Behaviour, Husbandry, Laying hens, Welfare, Egg production, Authorization procedure

Aim of the study

The aim of this study was to evaluate the importance of the nest attributes "nest floor slope", "design of front curtains" and "design of the nest access facilities" on the hens' nest preference and laying behaviour. The results should facilitate future decisions on the appropriateness of group-nests for laying hens in the content of the Swiss authorisation procedure for housing systems and equipments.

Material and methods

The study included three experiments. The 1st and 2nd on nest floor slope and front curtain design was done in eight pens with 20 white laying hens and the third on nest access facilities in a larger pen with 20 compartments was used.

Results and significance

In nests with flatter floors (12%), hens sit more and longer and the visits with sitting and egg laying were more frequent, indicating that hens appreciate a flatter floor. Therefore, a moderate floor inclination positively influences hen's welfare. Hens appreciate front curtains sliced in stripes, which allows them to enter and leave the nest along its whole width. Sliced curtains enhance nest exploration behaviour. More mislaid eggs, more balancing and more body contact were found in pens equipped with perches as nests access facilities compared to pens with platforms. This study recommend to provide nest with floors with only a weak inclination, to use front curtains that offer more than one entrance and to use grids rather than perches as nest access.

Publications, posters and presentations

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