mEAT quality

Practice Abstract

Resting enrichment for broiler chickens

APPLICABILITY

Theme/Keywords

Chickens, broilers, welfare, resting, perch, platform

Context

Applicable inside, outside and in covered verandas and in all types of broiler systems. Platforms and perches may reduce heat stress (broilers can go away from the litter) and can thus be applied in warm climates.

Geographical coverage

Worldwide

Required time

Once these are installed, only additional cleaning time in between production cycles and depending on the layout installation time at the start of the cycle.

Period of impact

Beneficial effect on welfare during the whole production cycle

Equipment

Perches or platforms, possibly equipment to adjust perches in height or to remove platforms (lifting to the ceiling)

Best in

Intensive, extensive, free-range and organic broiler production systems

Problem

Chickens, including broiler chickens, prefer an elevated resting place. In practice, elevated resting places are usually not provided and thus the need to perform this natural behaviour is often not met under commercial conditions.

Solution

Provide elevated resting areas for broiler chickens in commercial housing systems.

Benefits

Benefits include improved welfare, as the resting enrichment meets the need for an elevated resting area. If platforms are used, chickens can also rest under the platforms, meeting the need for shelter when resting. In addition, there can be beneficial effects on leg health. For example, if litter quality is suboptimal, elevated resting areas prevent contact with the suboptimal litter and reduce the risk of contact dermatitis on the feet and hocks. Increased exercise related to walking on platforms or jumping to perches may improve leg strength and, thus, walking ability.

Practical recommendations

There can be different types of elevated resting areas:

Perches. The material should be easy to clean. Perches should not be round and slippery and not made of metal. Preferably perches are made from wood or plastic and in an oval shape. Perches that can be adjusted in height are preferred so that both young broilers and heavy broilers can jump onto the perches. Perches should be stable. Fast-growing broilers can have difficulty accessing and staying on perches due to their body conformation. Perches are, therefore, more suitable for slow-growing broilers (growth rate of 45 g/day or lower). If barrier perches are used, ensure that young chicks can reach water and food, as they might be too small to climb over the perches.

Platforms. Both fast- and slow-growing broilers use platforms very well. Platforms can be made of plastic (woven wire or solid) and should be easy to clean. Substrate can be distributed on the platforms. The platform height should be suitable for inspecting broilers under the platform. Platforms also provide protection, and broilers not only prefer to sit on but also under platforms.

Preferably, ramps should be provided that are not too steep, to enable birds to climb the platform at a young age and to prevent joint problems.

Figure 1: Chickens resting on a round metal perch (Source: I. de Jong, Wageningen Livestock Research)

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Figure 2: Elevated platforms with ramps (left) and elevated platforms without ramps (right) (Source: I. de Jong, Wageningen Livestock Research)

On-farm application

System approach

Make sure that sufficient platform or perch area is available, at least 1 m/1000 birds for perches and 5% of the floor area for platforms, but preferably more. Platforms and perches can be installed along the length of the house in between feeder and/or water lines. Monitor the use of platforms and perches and adapt the height or material if these are not well used by the birds, and check whether the layout allows proper movement of broilers through the house.

Figure 3: A-shaped metal perches at different heights (Source: I. de Jong, Wageningen Livestock Research)

FURTHER INFORMATION

Further readings

1. Effects of providing single versus multiple enrichments on slower-growing broiler behaviour and welfare — Research@WUR
2. Review of environmental enrichment for broiler chickens — Research@WUR
3. Use of different types of enrichment in slower growing broilers: a pilot study — Research@WUR
4. Rest and activity enrichment use by slower-growing broilers: a pilot study — Research@WUR

About this practice abstract and *mEATquality*

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mEATquality: The *mEATquality* project aims to provide consumers with better-quality pork and broiler meat and animals with a high level of welfare by developing scientific knowledge and practical solutions together with farmers and chain partners.
The *mEATquality* project, an H2020 project, is coordinated by Wageningen Research (The Netherlands) and is a multidisciplinary team of 17 partners organisations representing 7 EU countries. The project is running from October 2021 to September 2025
Project website: www.meatquality.eu/
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