

ID : 525

PREFERENCE FOR DIFFERENT TYPES OF RESTING AREAS IN BROILER BREEDERS

A. Mens*(1), I.De jong(1), R.Van emous(1)

(1)Wageningen University and Research, Wageningen Livestock Research, Wageningen, Netherlands

* *Corresponding author*: annemarie.mens@wur.nl

Chickens prefer to sleep on an elevated area during the night. In addition, chickens also use elevated resting areas for fleeing, comfort behaviour and thermoregulation during the day. Current national regulations do not require elevated resting areas for broiler breeders during rearing. However, increasing concerns about animal welfare are pushing towards including perches in broiler breeder husbandry, although hardly any research has been done on broiler breeders' preferences for resting areas. We observed the preference for particular resting areas in female Ross 308 broiler breeders, housed in 24 floor pens (40 pullets/pen at d0) with 4 feeding treatments in a 2x2 factorial design. From 3 weeks of age onwards, pullets received either control diets (CON) or diluted diets (DIL) containing oat hulls and they were fed once (FO) or twice (FT) a day. The FO pullets were fed at 0815 h (100% amount of feed) and the FT pullets at 0815 h (60% amount of feed) and 1215 h (40% amount of feed). The pens contained elevated plastic slats (25% of the floor area), 2 plastic mushroom shaped perches (2m), wood shavings as litter material, 2 feeding troughs and a drinking line (7 cups) above the slats. From 16 to 40 weeks of age, the number of animals per resting area (litter, slats, perches, drinking line and nest (from 22 weeks of age)) were counted biweekly, half an hour after lights went off. Data were analysed with analysis of variance as a randomised block design. During rearing (until 21 weeks of age) 51% of the pullets rested on the slats, 33% on the perches, 9% on the drinking line and 7% on the litter. During production, more hens tended to rest on the litter (10%; $p=0.09$) and less hens rested on the perches than in rearing (25%; $p<0.001$). This shift is probably due to use of the nests as an additional resting place. The number of hens resting on the slats (49%) and drinking line (9%) was similar to the rearing phase. Interestingly, in both rearing and production, FT animals rested more on the slats than FO animals (45 vs 52%; 36 vs. 65%, $p=0.002$). During rearing, this effect tended to be enhanced by diluting the diet ($p=0.067$). As a consequence, FT animals rested less on the perches than FO animals ($p<0.001$) in both phases (29 vs 20; 43 vs. 23%; $p=0.014$). In conclusion, broiler breeders preferred to rest on elevated slats compared to perches and litter. Feeding management seems to influence the preferred resting area.