

Validation of the EBENE method's measures for standard broiler

Amandine Mika¹, Laure Bignon¹, Virginie Bonnaud¹, Claire Mindus¹, Chloé Picchiottino¹, Christophe Souchet¹, Laura Warin¹, Vanessa Guesdon² and Isabelle Bouvarel¹

¹ITAVI, 37380 Nouzilly, France, ²ISA Lille, 59046 Lille, France; warin@itavi.asso.fr

The objective of the welfare project EBENE (Evaluation du BiEN-Etre animal) is to provide the French poultry and rabbit industries with a shared and practical method to assess animal welfare. This study aimed to validate the practicability (simple and fast – under 1 h) and the scientific reliability of the indicators and their measures for the indoor broiler production system. Two assessors carried out the measures on seven broiler farms, initially together on the same population sample and then a second time the following day. After collecting general information about the flock, behavioural measures (e.g. proportion of walking or foraging birds) were conducted on two areas of the building (4 m²/area). Then sanitary measures (e.g. proportion of lame or small birds) were assessed on three transects, allowing observation of 3/5 of the birds as birds are assumed to be homogeneously distributed in the building along five predefined transects. The total duration of the assessment was calculated and correlation tests were run to evaluate the repeatability of the measured indicators in order to validate the reliability of the method. A lower total duration than required in the objectives (26±5 min for the collection of behavioural data and 24±5 min for the collection of sanitary data) confirmed the practicability of the method. Intra assessor repeatability was validated except for the 'head injuries' indicator, rarely observed in our sample. Inter assessor repeatability was validated except for 'head injuries' and 'stretching' indicators. Calculated correlations between the indicators observed in farms and data collected at slaughterhouse is a first step to confirm the accuracy of our indicators. Work will continue to compile results. Following validation, a smartphone application will be developed to facilitate use of the methods.