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**On-farm hatching in slow growing broilers: an experience out of the practice**

A. Schwarz\*, S. C. M. Vossler, N. Kemper, B. Spindler

\*lead presenter

anna.schwarz@tiho-hannover.de, Institute for Animal Hygiene, Animal Welfare and Farm Animal Behaviour (ITTN), University of Veterinary Medicine Hannover, Foundation, Germany

**Abstract:**

**Background/Objective:** On-farm hatching was shown to have overall beneficial effects on chicks’ health and growth. The main advantage is that the birds have direct access to food and water continuously from the start, and long transport times as well as handling in the hatchery is avoided.

**Methods:** In this study, on-farm hatching was tested for a slow growing broiler genetic (Ranger classic, Aviagen Inc. Huntsville, USA) under practical conditions on a commercial farm in Germany. For this purpose, on-farm hatched (OHC) and hatchery-hatched chicken (HHC) with the flock size of about 6,000 birds per house were fattened separately in two identical barns and followed over three production periods (PP). Both groups originated from the same breeder flock aged 22, 31 and 38 production weeks (PW), accordingly. Each PP, hatching rate, mortality, footpad lesions, average slaughter weight and percentage of discard animals at slaughter were assessed. Additionally, 50 chicken per group were weighed on day 1 (d1) and day 7 (d7).

**Results:** In all PP, the hatching rate was comparable between OHC and HHC. In OHC, it was 88.11% in PW22, 84.28% in PW31 and 73.74% in PW38 compared to 88.00%, 84.24% and 79.18% in HHC, accordingly. OHC were significantly heavier than HHC on d1 (p<0.05) and on d7 (p<00.5) with the exception of the third PP (p=0.08). Overall mortality for OHC at d7 was 2.1% compared to 1.7% for HHC and at the end of fattening period 3.82% compared to 3.31%, accordingly. At slaughter, OHC were overall 43.7g heavier than HHC, had 0.77% less footpad lesions but 0.08% more OHC compared to HHC were discard. Further PP are currently in progress.

**Conclusion:** The first results indicate that on-farm hatching can be an alternative solution to hatch the slow growing broilers on commercial farms.

**Keywords:** on-farm hatching, slow growing broilers, commercial farm