Abstract

The quality programme in the incubation plant of an important commercial poultry enterprise in Mar del Plata, Argentina, was evaluated. A total of 9,410 eggs from heavy breeders, Cobb 500 genetic line, between 33 and 38 weeks old, were analysed during six consecutive weeks. Candling was performed at 12th day of incubation, damage was identified at 18th day of incubation and embryodiagnosis was performed in unhatched eggs at hatching. Percentages of infertility (I), upsidedown eggs (IN), contaminated (C), early (FT) and transfer cracks (FET), early (MET), middle (MEI) and late embryo mortality (META), pips (PNN), hatch of fertiles (EF), hatchability (N), cull chicks (PDD), dead chicks (M), malformed (M) and hatched eggs from upside-down eggs (NIN) were obtained. MET was classified according to embryo development time in 18, 24, 48, 72 or 96 hours of incubation. Percentages, excluding PM, M and NIN, were compared to breeders standards by means of a 95% confidence interval. I, MEI, META, C, FT, FET, IN, PNN and PDD were not different from standards, and in some cases (I) were significantly better (p<0.05). However, MET and EF were in many cases lower (p<0.05) than standards. MET reached 52.1 % of the total at 24 hours of incubation which can be associated to inadequate initial egg handling.

Keywords

embryodiagnosis, incubation, candling, broilers.