Impact of Horizontal vs. Vertical Positioning of Gallus gallus Eggs during Incubation

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The purpose of this research project was to investigate whether the positioning of eggs vertically or horizontally during day one to day 18 of incubation yielded a higher percentage of chicks per egg set. On February 16, 2018, 90 eggs were split into two groups of 45 and set. Eggs set horizontally were marked with a H, Vertically set eggs were marked with a V and each groups of eggs were numbered one through forty-five to keep track of losses and development. Eggs were candled on day 18 to determine fertility percentage and how many early stage losses occurred. A divider was placed in the hatch tray to keep the two study groups separated during hatch so day one weights can be recorded. Eggs were set on February 16, 2018 at approximately 9:30 a.m. Humidity was be raised from 40-50% to 60-70%, eggs were placed in the hatch rack, and the incubator was put on lockdown on March 6, 2018. Hatch date was scheduled for March 9, 2018, once chicks were dry they were removed from the incubator to have their weights recorded to calculate an average weight for the two groups. Chicks from the horizontal placed group were determined to be larger at hatch (46.49 grams vs. 43.09 grams) and yielded less late stage losses.

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