

**OREGO-STIM IMPROVES BROILER BREEDER PRODUCTIVITY AND EGG QUALITY**

**SUMMARY**

- ✓ The breeder industry suffers huge losses from the breakages of hatching eggs (Hunton, 2005).
- ✓ In this study (Soliman et al, 2016) Orego-Stim® improved hatchability, egg quality and egg production compared to control diets.

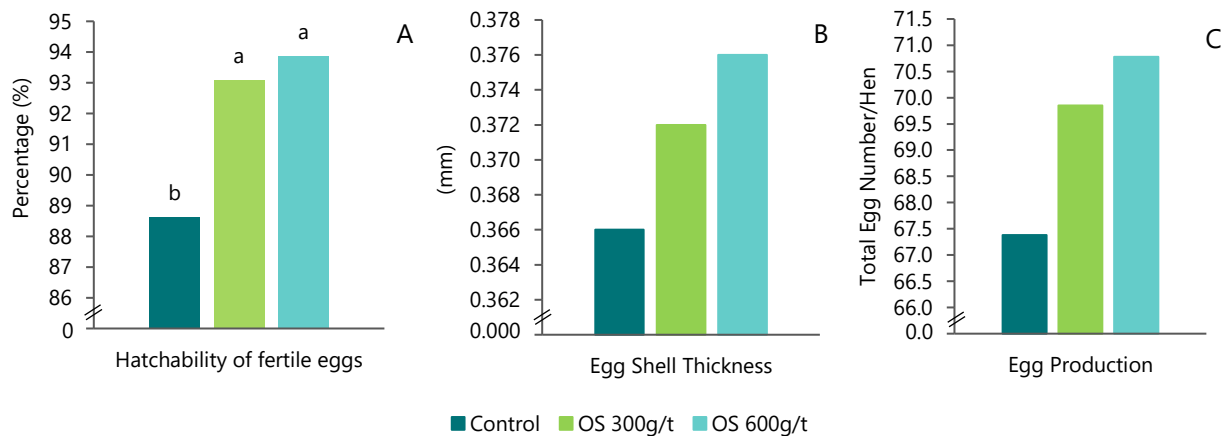
**BACKGROUND**

- ✓ Small improvements in broiler breeders after peak production (30 weeks), can greatly improve profitability.
- ✓ Production of high quality eggs is essential to chick embryo preservation. The egg shell protects the developing embryo, facilitates gas exchange, and provides calcium once yolk stores have depleted (Devegowda and Ravikiran, 2008; Nys et al., 2004).
- ✓ This work was conducted to assess the efficacy of Orego-Stim® on improving gut health, and the indirect effects this has on broiler breeder egg production, egg quality and hatchability.
- ✓ Orego-Stim® is a high quality eubiotic composed of 100% natural oregano essential oil.

**TRIAL DESIGN**

An independent study was conducted at Inshas Poultry Breeding Station, Animal Production Research Institute (Egypt) to assess the effect of Orego-Stim® (OS) on broiler breeder egg production, egg quality and hatchability. Ninety-nine (90 hens, and 9 cockerels) 24-week-old broiler breeders were assigned to one of three dietary treatments with differing levels of Orego-Stim (Control, 0; OS 300g/t; or OS 600g/t) with three replicates (10 hens: 1 cockerel per replicate). At 40 weeks, a total of 45 eggs (15 eggs from each treatment group) were collected, enabling egg quality analysis. Parameters considered included shell weight and thickness. Egg production and hatchability were also monitored.

**RESULTS**



**Figure 1. Effect of Orego-Stim on broiler breeder egg hatchability (A), shell thickness (B) and production (C).** <sup>ab</sup>Different superscripts denote significant difference ( $p \leq 0.05$ ). Adapted from Soliman et al., 2016, Egypt. Poult. Sci. 36:67.

- ✓ Hatchability of fertile eggs was significantly increased in both Orego-Stim groups compared to the control (Fig. 1A).
- ✓ Egg shell thickness was numerically increased in eggs from hens fed Orego-Stim (Fig. 1B), which could help to reduce the incidence of cracked eggs and contribute to increased hatchability.
- ✓ At 40-weeks-old, hens fed OS 600g/t and OS 300g/t produced 5% and 3.7% more eggs respectively, compared to the control fed hens (Fig. 1C).
- ✓ Feeding Orego-Stim helped to improve egg production, hatchability and egg quality, and could offer improved profitability to broiler breeder enterprises.

