

# ENHANCING FERTILITY AND IMMUNITY UNDER STRESS CONDITIONS IN LOCAL CHICKENS

## By

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## **Thesis**

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#### **ABSTRACT**

This experiment was carried out to evaluate the effect of agro-industrial by product in Inshas local strain under stress conditions. 360 birds aged 24-week-old were used in 10 treatments as Pomegranate peel and tomato pomace were supplemented at 2% and 4% powder or extracts in the diets of laying hens exposed to oxidative stress induced by Dexamethasone compared with negative and positive control groups for 12 weeks. The addition of pomegranate peels or tomato pomace reduced the adverse effects of oxidative stress on productive performance, physiological status of the body and blood components, as well as tissue integrity.

Based on obtained results, the current study recommends the possibility of using dietary pomegranate peels and tomato pomace powders up to 4% not only for alleviating the adverse effects of oxidative stress in the pre-peak laying period but also as a sustainable and economical approach for agriculture

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