

Meat quality traits in chicken supplemented with different sources and concentrations of selenium

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INTRODUCTION

- In 2008, Brazil produced 11.360 million ton. of chicken, of which 3.500 million were exported. These are from intensive systems.
- Selenium is associated with several physiologic processes, including synthesis of amino acids and proteins. It is also an efficient antioxidant.
- Supplementation of chicken rations with Selenium has a positive effect on the immune system and in reproductive performance.

OBJECTIVES

Evaluate the effect of diet supplementation with selenium on meat quality of chicken breast.

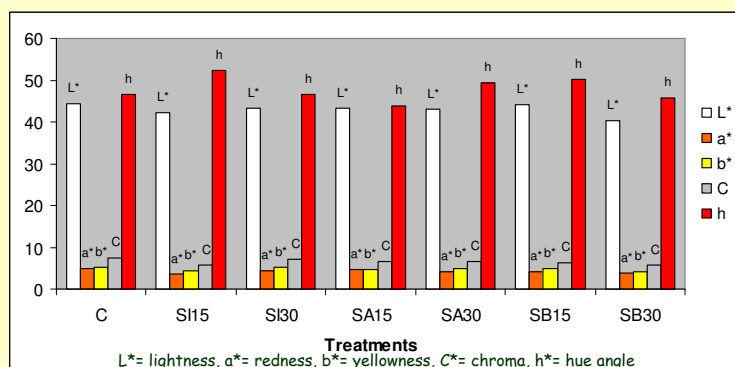


MATERIALS & METHODS

- A total of 1440 male chicks (Cobb-500) was distributed in 48 plots, as follows:
 - 1 control group (6 reps)
 - 6 groups supplemented with Se in 3*2 factorial (7 reps)
 - 3 sources of selenium
 - inorganic
 - organic A
 - organic B
 - Two levels of supplementation
 - 0,3 and 0,5 mg/kg
- One chicken (45 d) was taken from each plot, transported and slaughtered in commercial abattoir. The breasts were frozen (-35°C) and stored (-18°C) for 4 weeks.
- Measurements taken in 6 points of *pectoralis major* muscle:
 - pH
 - color (CIELAB system)
 - shear force
 - cooking loss

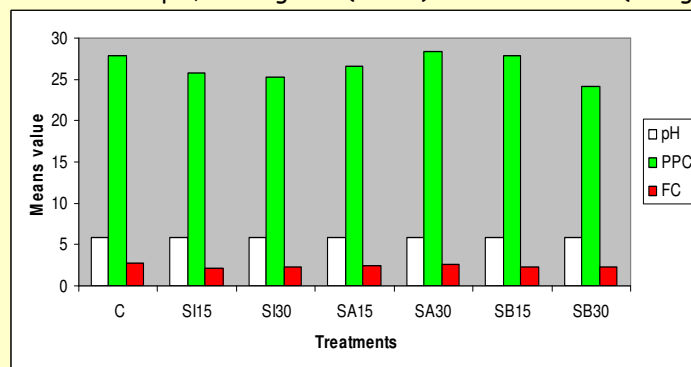
RESULTS

Means for color parameters



Supplementation with selenium did not affect color parameters of meat

Means for pH, cooking loss (PPC %) and shear force (FC Kg)



Supplementation with selenium did not affect pH, cooking loss or shear force of meat

CONCLUSIONS

Supplementation with selenium did not affect the quality of breast meat in chicken.