



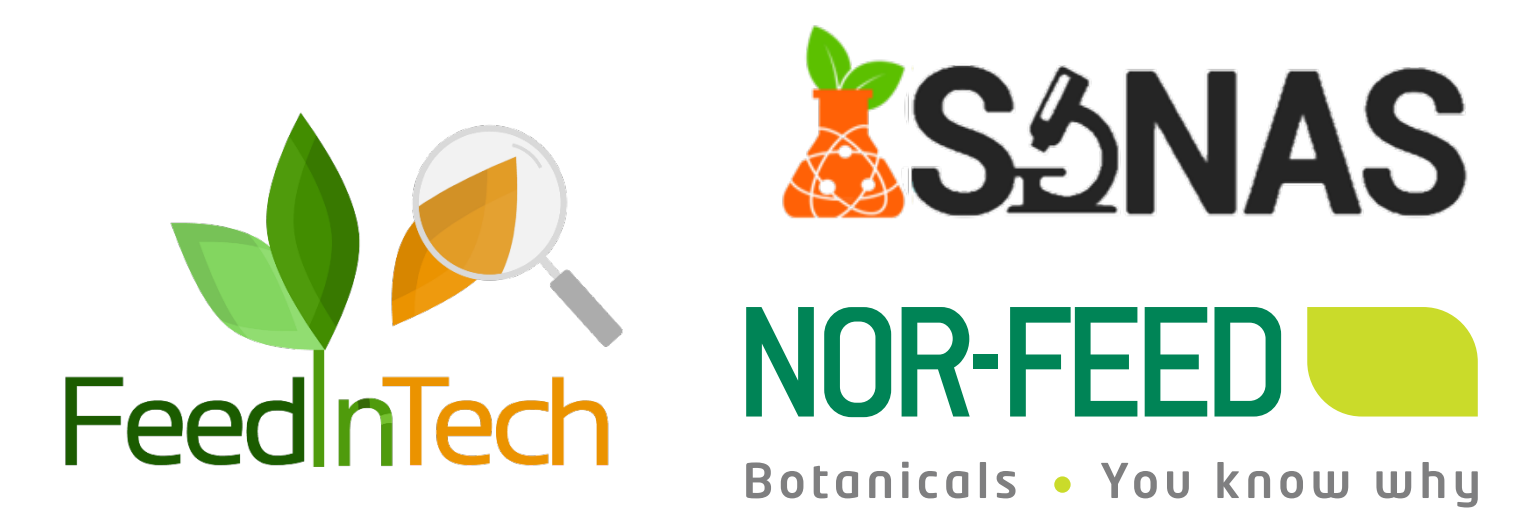
# Standardized Natural Citrus Extract dietary supplementation recover zootechnical performances losses due to the reduction of protein and energy levels in broiler chicken's feed

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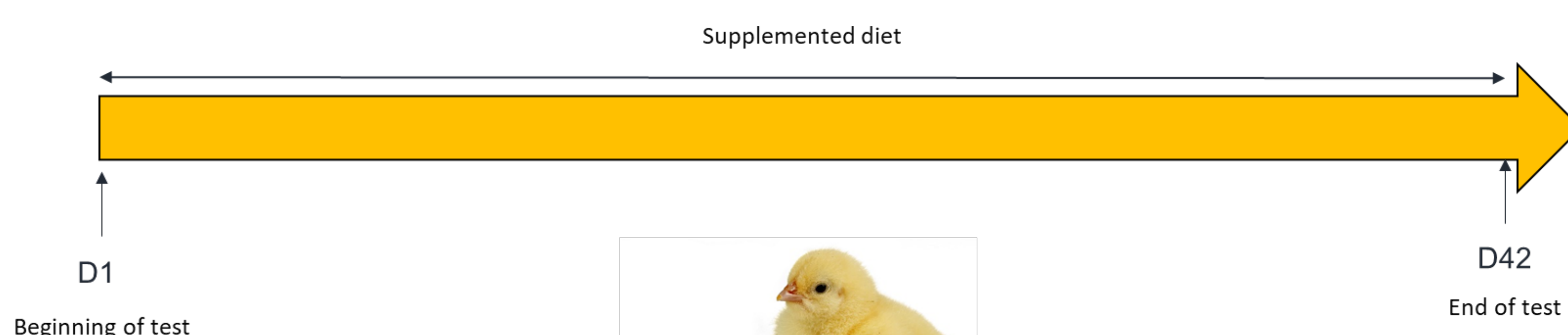


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## Introduction

Plant extracts are more and more used in animal feed. Some of them such as citrus extract had already demonstrated its positive effect under standard formula conditions on ADG and FCR. However, in the actually context in which the price for main raw material that constitute poultry feed are constantly increasing, we need to find solution to reduce feed cost. One of the most easiest solution consisted in reducing energy and protein levels in feed. Nevertheless, this can lead to a decrease of poultry zootechnical performances. The purpose of this study was to assess if feed supplementation with Standardized Natural Citrus Extract on a degraded ration in terms of energy and digestible amino acids could help recovers performances loss due to this feed degradation.

## Material and methods



216 Arbor acres divided into 2 groups:

- PC group: **Standard diet** without supplementation;
- NC group: **Low cost** diet without supplementation
- NC-SNCE group: **Low cost** diet supplemented with 250 ppm of SNCE.

6 replicates of 12 birds per group

### Observed parameters

- Bodyweight
- Feed intake
- Mortality
- Feed conversion ratio (FCR)

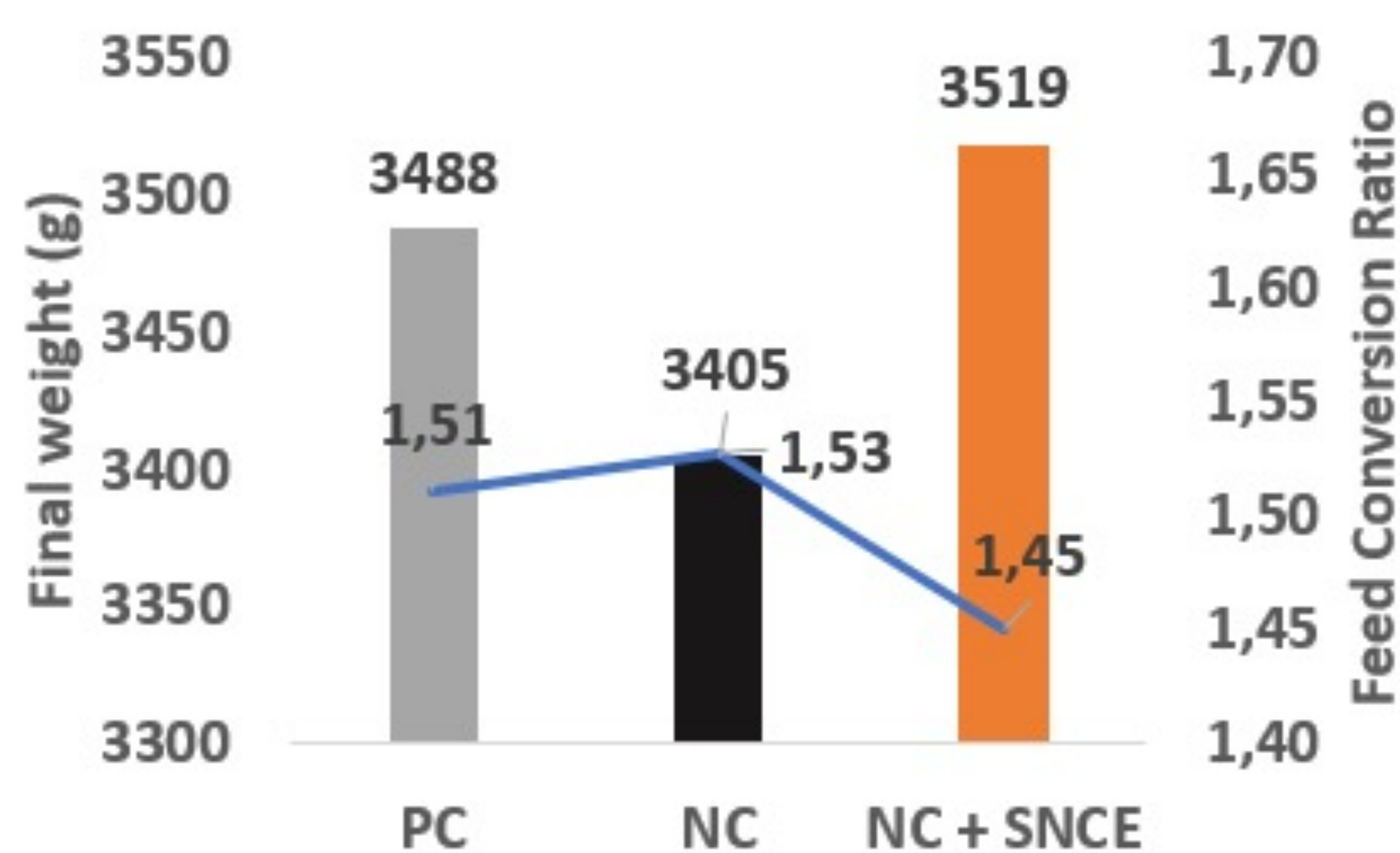
Day 1 and Day 42  
Per replicate

INGREDIENTS	Starter (0-18d)		Grower (18-42d)	
	PC	NC	PC	NC
		- 7%ME		- 7%ME
		- 5%AA dig		- 5%AA dig
CORN 7.6%	54,43	58,17	56,80	63,44
DH SMB 47.9% INRA	29,43	25,51	23,66	21,14
RICE BRAN, SE 14.4%	3,00	6,61	4,00	4,00
RAPESEED MEAL 37%	3,00	3,00	4,00	4,00
CORN GLUTEN MEAL 60.6%	2,00	2,00	3,00	3,00
SOYBEAN OIL	3,43		4,50	0,40
MCP 15.8% Ca, 20.8% P	1,70	1,65	1,26	1,25
Lime stone 36.4% Ca	1,31	1,34	1,25	1,26
SALT	0,34	0,34	0,23	0,24
SODIUM BICARBONATE 27% Na	0,20	0,20	0,20	0,20
CHOLINE CHLORIDE 60%	0,05	0,06	0,05	0,05
BS PREMIX	0,20	0,20	0,20	0,20
L-LYSINE HCL	0,31	0,34	0,31	0,31
DL-METHIONINE	0,27	0,24	0,22	0,19
L-THREONINE	0,08	0,08	0,07	0,06
PELLET BINDER	0,20	0,20	0,20	0,20
COCCIDIOSTAT	0,05	0,05	0,05	0,05
<b>TOTAL</b>	<b>100,00</b>	<b>99,99</b>	<b>100,00</b>	<b>99,99</b>
Cost (Baht)	<b>14,20</b>	<b>12,57</b>	<b>14,13</b>	<b>12,49</b>

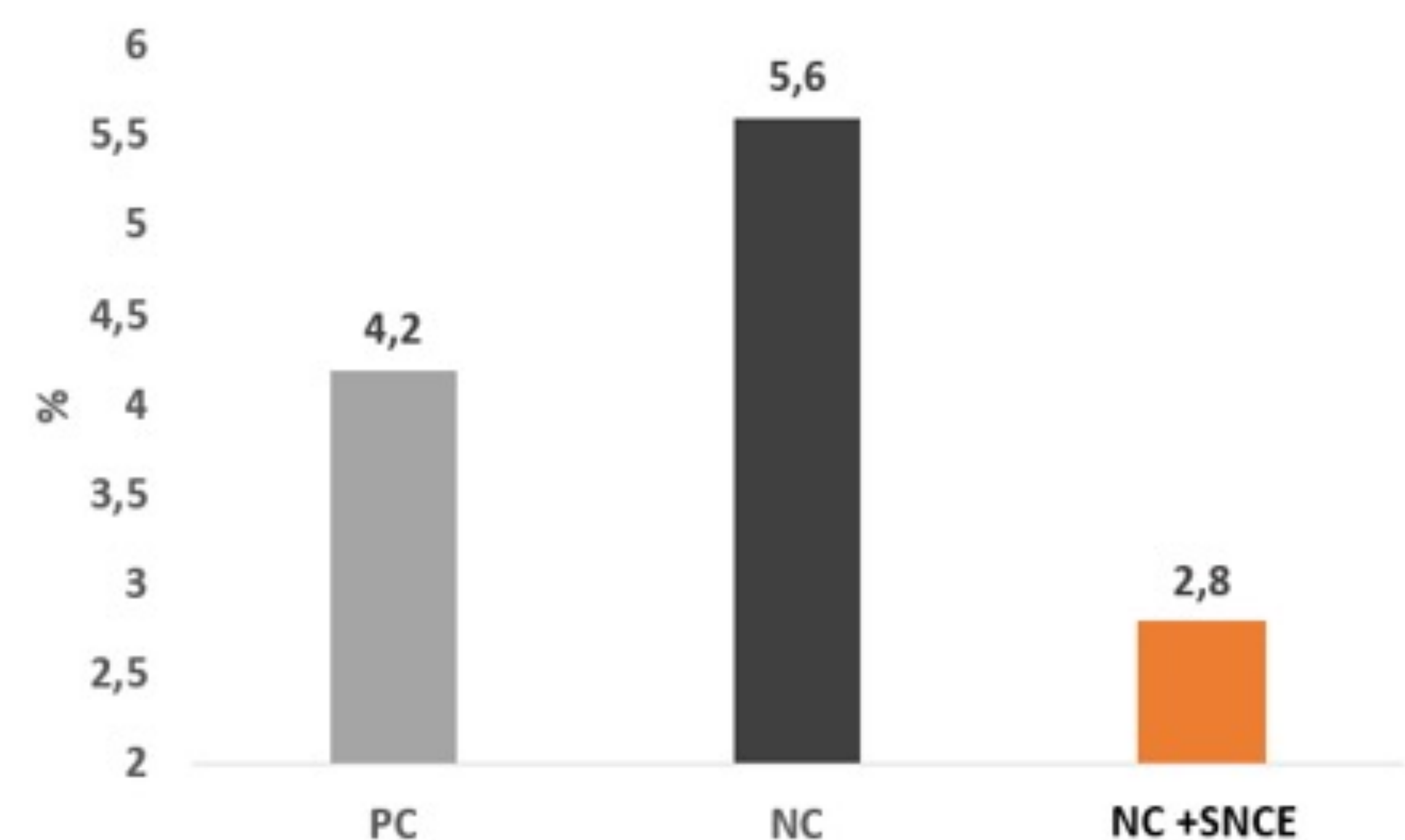
feed formulation

## Results

### Performances



### Mortality



SNCE Supplementation effect on birds fed with low cost diet:

- Significant effect on final weight
- 5,04% FCR improvement
- Reduction of mortality

## Conclusion

SNCE supplementation allow to recover birds' performances losses due to energy and amino-acids levels reduction ✓

SNCE seems to be a good solution o reduce feed cost ✓