



Comparison of two organic selenium sources on broiler performance.

KEY FINDINGS

- B-TRAXIM® Se showed:**
- Improved growth performance compared to Se yeast.
 - Increased income compared to Se yeast.

INTRODUCTION AND OBJECTIVE

Selenium (Se) is an essential constituent of selenoproteins and plays structural, transport and enzymatic roles in the broiler's metabolism.

Numerous studies have demonstrated the improved Se bioavailability of organic compared to inorganic sources.

The objective of this study was to compare two organically bound selenium sources on broiler performance.

MATERIALS AND METHOD

The study was conducted on a commercial farm in Quebec, Canada.

Experimental design:

Two identical poultry barns were used in this study.

At trial start, 32 840 one-day-old male broilers (Ross Ross) were allocated to the two barns. Then, each barn was assigned to one treatment (table 1).

Table 1: Treatments

Se-Source	Added Se
B-TRAXIM®Se	0.3 ppm
Selenium Yeast	0.3 ppm

Experimental diet:

The four basal diets (starter, grower, finisher 1, finisher 2) were standard commercial diets with an average natural selenium content of 0.07 mg/kg.

The Se supplementation was conducted via a premix to manufacture the two experimental diets. The analyzed average dietary selenium contents of the two experimental diets are represented in table 2.

Table 2: Analyzed dietary Se contents

Treatments	Theoretical Se	Analyzed Se
B-TRAXIM®Se	0.37 ppm	0.31 ppm
Se yeast	0.37 ppm	0.36 ppm

The Se content of the yeast treatment was 0.05 ppm higher (+ 16%) than the B-TRAXIM®Se treatment.

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RESULTS AND CONCLUSION

Animal performance are presented in table 3.

Table 3: animal performance.

Parameter		Yeast	B-TRAXIM
Duration	[days]	39	38
Final BW	[kg/hd]	2.24	2.36
BWG	[g/hd/d]	57	62
FI	[g/hd/d]	106	106
FCR		1.85	1.70

Birds fed B-TRAXIM®Se were 120 g heavier than the ones fed Se yeast at the end of the study, representing a difference of 5.3%. Their feed conversion ratio was also improved by 8%.

The costs and income for each treatment is presented in table 4.

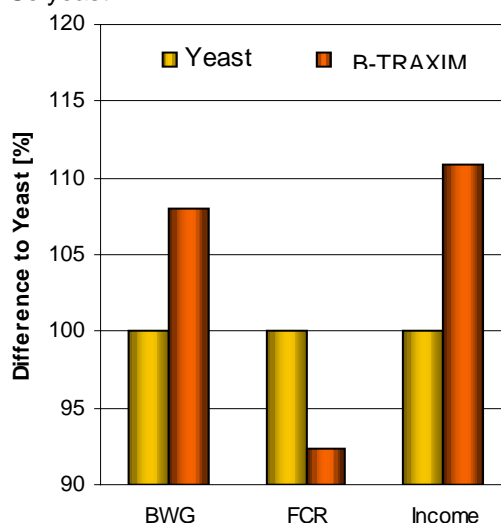
Table 4: Economics.

Parameter		Yeast	B-TRAXIM
Costs per animal			
Birds	[\$ CAN]	0.58	0.58
Feed	[\$ CAN]	1.20	1.21
Sale per animal			
	[\$ CAN]	3.00	3.15
Income per animal			
	[\$ CAN]	1.23	1.36
Income per kg slaughter weight			
	[\$ CAN]	0.54	0.57

The investment for buying the birds and feed represented a total of 1.78 \$ CAN per bird. At slaughter, the kg was paid 1.35 \$ CAN. The better growth performance achieved with B-TRAXIM®Se compared to Se yeast was reflected in the additional 0.15 \$ CAN per bird sold. The income was increased by 10.9% using B-TRAXIM®Se compared to Se yeast.

Major results of B-TRAXIM®Se are illustrated relatively to Se yeast in graph 3.

Graph 3: Results of B-TRAXIM®Se relative to Se yeast.



This study finally demonstrates that Pancosma's B-TRAXIM® Se, is an efficient source for broilers, showing, under field conditions, improved growth performances and return on investment to Se yeast.



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