

# **Uso de suplementación inyectable de minerales y vitaminas y su efecto en el aumento de peso y el aumento diario de peso en terneros Nelore alimentados a pasto en el sur de Brasil**

## **Introducción**

El objetivo del estudio fue evaluar el aumento de peso (AP) y la ganancia diaria de peso (GDP) en terneros Nelore alimentados con pasto y agua ad libitum, y suplementación mineral por vía oral, recibiendo o no suplementos minerales y vitamínicos inyectables.

## **Materiales y Métodos**

El estudio se realizó en un establecimiento en la ciudad de Amaporã, ubicada en el noroeste del estado de Paraná, Brasil. El experimento utilizó 315 animales ( $12,7 \pm 2,65$  meses de edad,  $282,48 \pm 7,90$  kg de peso vivo [PV]) aleatorizados por PV y divididos en dos grupos: Grupo Tratamiento (G1) que recibió suplementación inyectable de minerales (Zn, Cu, Se y Mn) y vitaminas (A y E) (Adaptador MIN\_VIT, Biogénesis Bagó Brasil; 1 mL/50 kg de PV) y Grupo Control (G2) que no recibió la suplementación inyectable de minerales y vitaminas. Los animales se mantuvieron en el mismo grupo durante todo el estudio. Ambos grupos recibieron desparasitación oral con Closantel 7,5% (Galgosantel Oral, Biogénesis Bagó Brasil; 1 mL/10 kg de PV). Después de 36 días (D36), los animales se volvieron a pesar, donde el G1 recibió otra dosis de suplementación inyectable de minerales y vitaminas, y 33 días después, totalizando 69 días (D69) desde el inicio, los animales fueron pesados nuevamente para obtener datos de peso corporal final. Los datos fueron analizados con el software Statistical Analysis System for Windows SAS® versión 9.3.

## **Resultados y discusión**

El aumento de peso en el D69 fue mayor en el grupo de tratamiento ( $G1 = 50,15 \pm 3.30$  kg;  $G2 = 42,80 \pm 3.10$  kg;  $P = 0,01$ ) y la GDP en el D69 también fue mayor en el Grupo Tratamiento ( $G1 = 0,760 \pm 0,040$  kg/día;  $G2 = 0,640 \pm 0.040$  kg/día;  $P = 0,04$ ).

## **Conclusiones**

Por lo tanto, el uso de suplementación inyectable de minerales y vitaminas (Adaptador Min y Adaptador Vit, Biogénesis Bagó) fue eficiente para mejorar el aumento de peso y la ganancia diaria de peso en terneros Nelore en pastoreo. Considerando el precio de venta por kilogramo en Brasil (R\$ 9,50, Scot Consultancy, 20 de diciembre de 2023), podría impactar positivamente el resultado financiero de los establecimientos al mejorar el rendimiento animal.

## 1491 - Use of injectable mineral and vitamin supplementation and its effects in weight gain and daily weight gain in Nelore grassed calves in South Brazil

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### Objectives

The aim of the study was to assess weight gain (WG) and average daily gain (ADG) in Nelore calves fed with grass and water *ad libitum* and mineral supplementation *per os* receiving or not injectable mineral and vitamin supplements.

### Material and methods

The study was realized in a farm in Amaporã City, located in the Northwest of Paraná State in Brazil. The experiment used 315 animals ( $12.7 \pm 2.65$  mo old,  $282.48 \pm 7.90$  Kg body weight [BW]) randomized by BW and divided in 2 groups, Treatment Group (G1) that received injectable mineral and vitamin supplementation (KIT ADAPTADOR, Biogénesis Bagó Brazil; 1 mL / 50 Kg L.B.W) and Control Group (G2) did not receive the injectable mineral and vitamin supplementation. The animals were kept at the same group during the whole study. Both groups received oral deworming with Closantel 7.5% (Galgosantel Oral, Biogénesis Bagó Brazil; 1 mL/10 Kg Live body weight). After 36 days (D36), the animals returned to weight management where the G1 received another dose of injectable mineral and vitamin supplementation and 33 days after, totalizing 69 days (D69) from the beginning, the animals were weighted for a final body weight data. Data was analyzed with the software Statistical Analysis System for Windows SAS® version 9.3.

### Results

The weight gain in D69 was greater to treatment group ( $G1 = 50.15 \pm 3.30$  Kg;  $G2 = 42.80 \pm 3.10$  Kg;  $P=0.01$ ) and the average daily gain in D69 was greater to treatment group too ( $G1 = 0.760 \pm 0.040$  Kg/day;  $G2 = 0.640 \pm 0.040$  Kg/day;  $P=0.04$ ).

### Conclusions

Thus, the use of injectable mineral and vitamin supplementation (KIT ADAPTADOR, Biogénesis Bagó) was efficient to improve the weight gain and daily weight gain in Nelore calves in pasture and considering the kilograms sales price in Brazil (R\$ 9,50, Scot Consultancy, December 20<sup>th</sup>, 2023) it could impact positively the financial health of the farms by improving the animal performance.



# Use of injectable mineral and vitamins supplementation and its effects in weight gain and daily weight gain in Nelore grassed calves in South Brazil

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## Introduction

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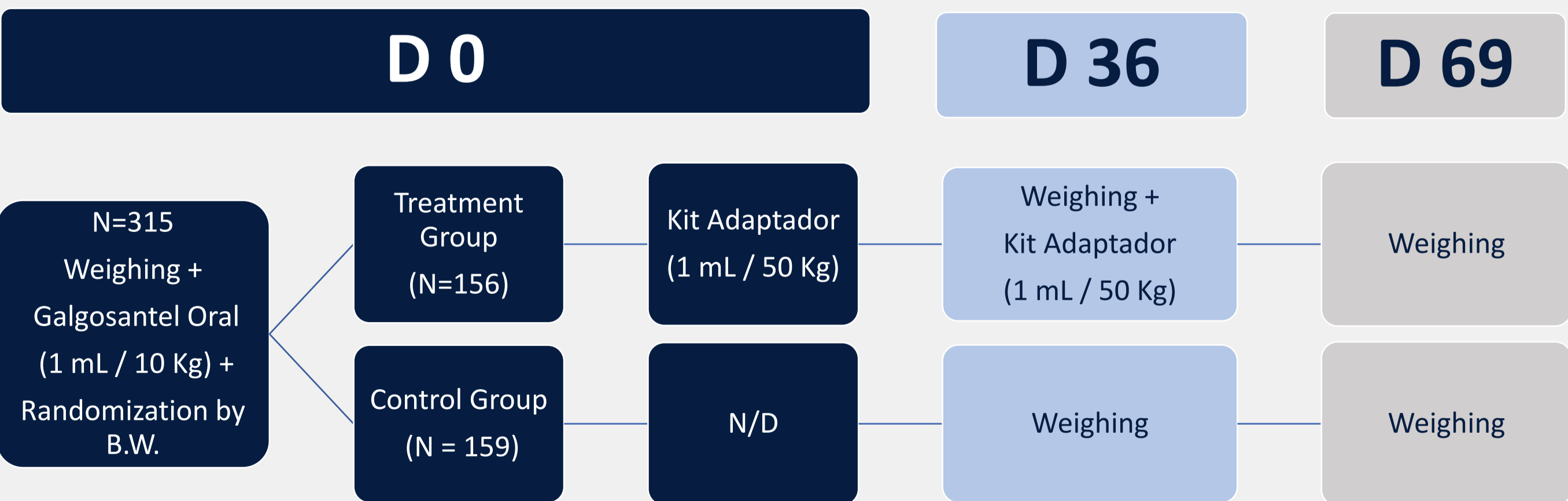
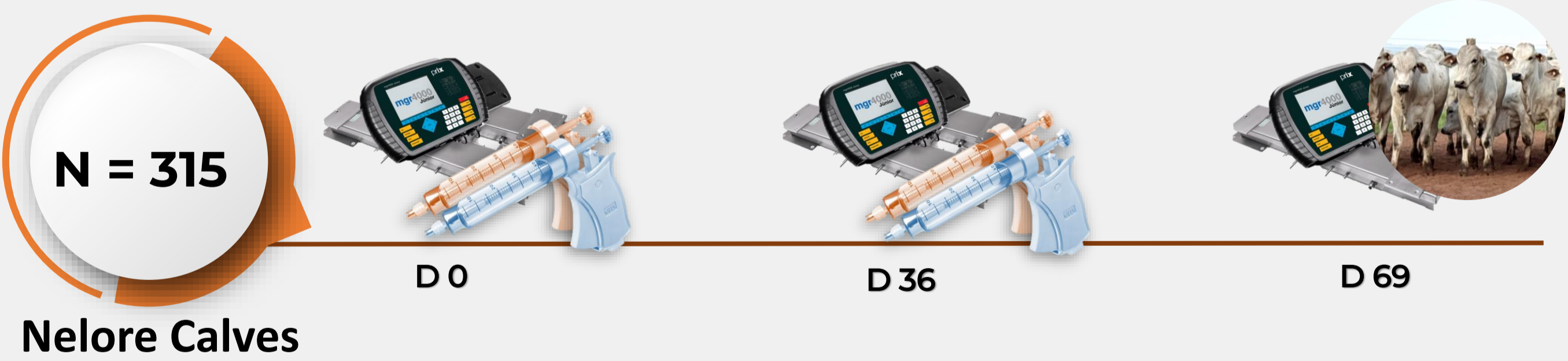
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## Results and discussions

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Use of injectable mineral na vitamins supplementation (Kit Adaptador, Biogénesis Bagó) and its effects			
Metrics	Treatment Group (n=156)	Control Group (N=159)	Prob
Average age (months)	12,8	12,6	0,82
Average B.W. 1 (kg)	282,75	282,20	0,94
Average B.W. 2 (kg)	312,20	309,40	0,07
Average B.W. 3 (kg)	332,90	325	0,04
Total Weight Gain (KG)	50,15	42,80	0,01
A. D. G. (KG)	0,76	0,64	0,04



## Conclusions

Thus, the use of injectable mineral and vitamin supplementation (KIT ADAPTADOR, Biogénesis Bagó) was efficient to improve the weight gain and daily weight gain in Nelore calves in pasture and considering the kilograms sales price in Brazil (R\$ 9,50, Scot Consultancy, December 20<sup>th</sup>, 2023) it could impact positively the financial health of the farms by improving the animal performance.