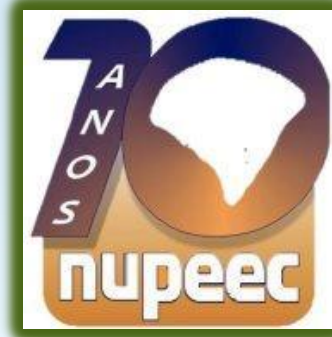




**UNIVERSIDADE FEDERAL DE PELOTAS**  
Núcleo de Pesquisa, Ensino e Extensão Pecuária  
[www.ufpel.edu.br/nupeec](http://www.ufpel.edu.br/nupeec)



**Efeito da somatotropina bovina (500 mg) administrada em intervalos de 10 dias sobre as respostas ovulatórias, a expressão do estro e a fertilidade em vacas leiteiras**

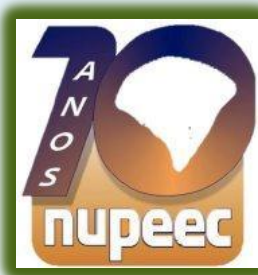
**Apresentador:** Lucas Balinhas Farias  
**Orientador:** Marcelo Moreira Antunes

**Pelotas, 03 de outubro de 2012.**

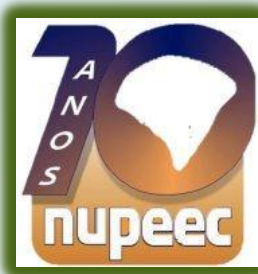
# *Journal of* Dairy Science®

Official Journal of the American Dairy Science Association®

**Fator de impacto: 2.564**



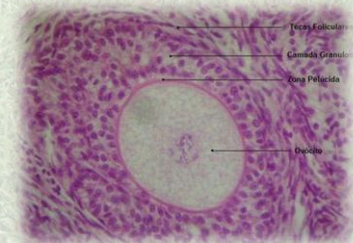
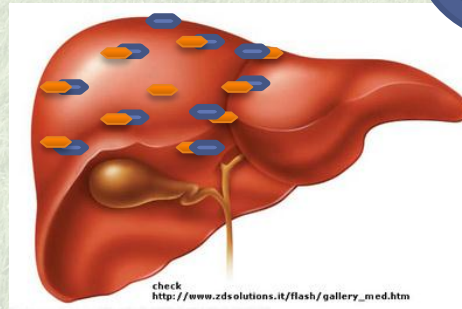
# Introdução



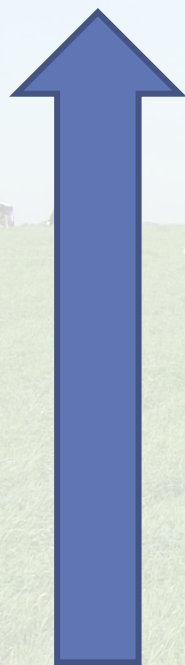
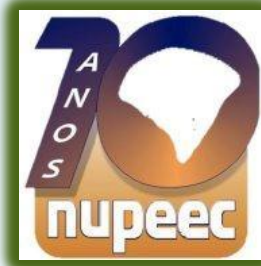
- Hormônio proteico
- Produzido na hipófise anterior
- Tem função homeorética

Pode ser produzido exógenamente

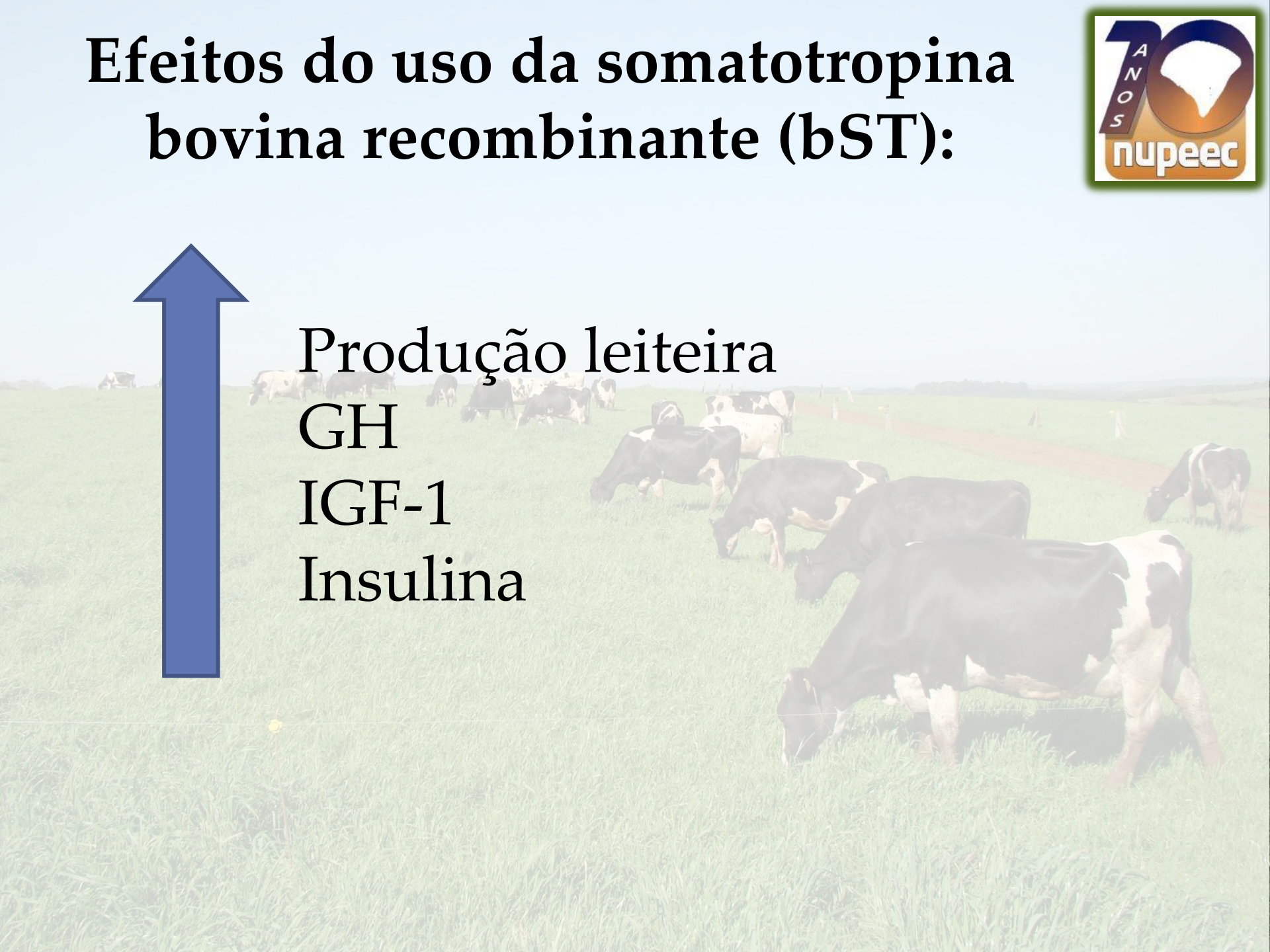
APLICAÇÃO DE BST



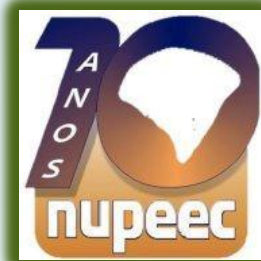
# Efeitos do uso da somatotropina bovina recombinante (bST):



Produção leiteira  
GH  
IGF-1  
Insulina

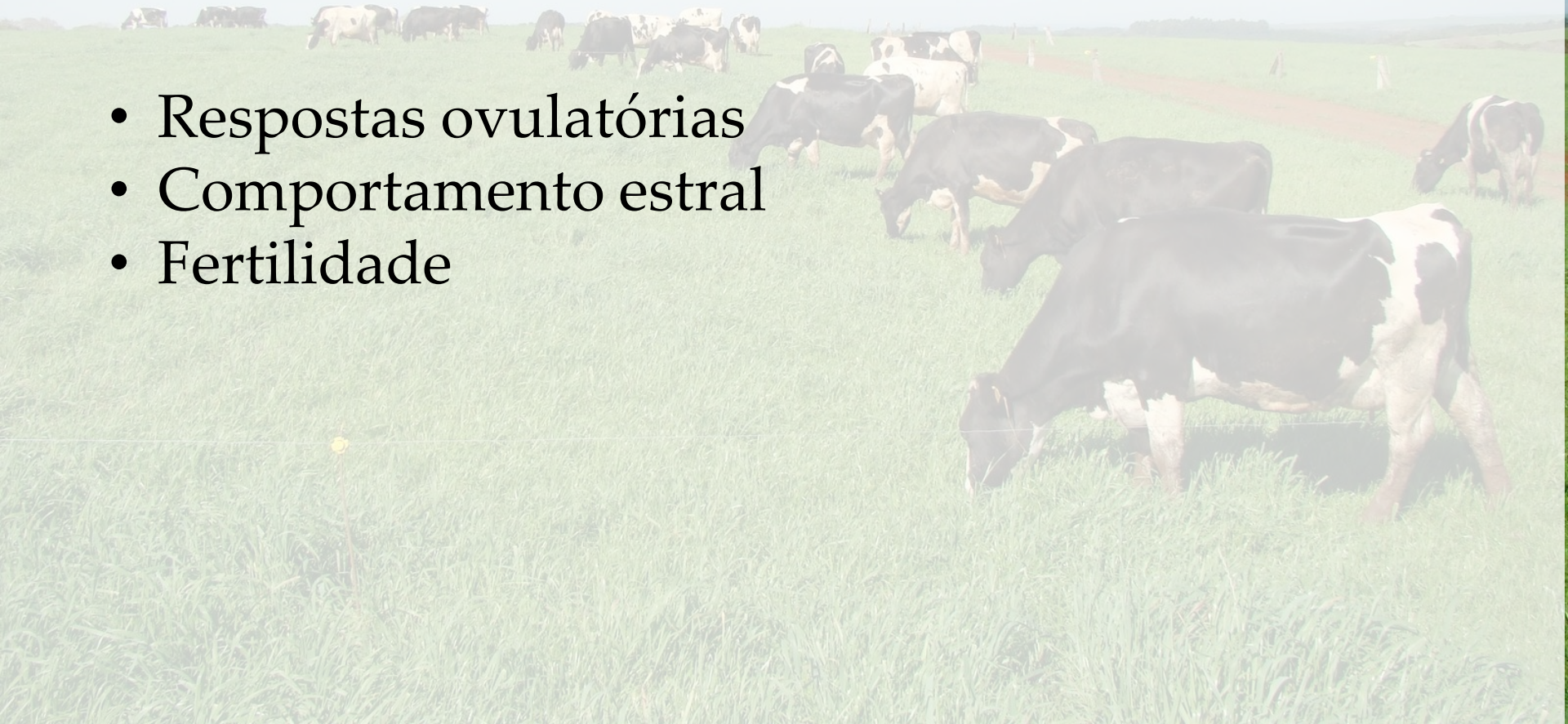


# Objetivo

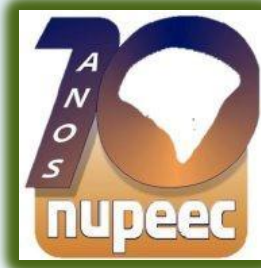


Avaliar o efeito de 500 mg de bST exógena administrada a cada 10 dias sobre:

- Respostas ovulatórias
- Comportamento estral
- Fertilidade



# Materiais e Métodos



Vacas da raça Holandês

→ 156 primíparas

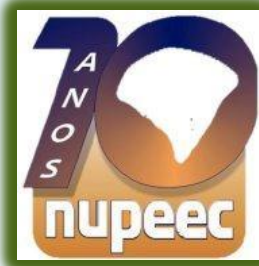
→ 243 multíparas

Free-Stall

Total Mix

Realizado na California - EUA

# Materiais e Métodos

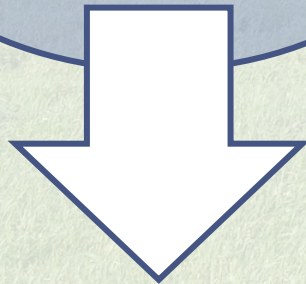


## Tratamento

83 primíparas  
123 multíparas

## Controle

73 primíparas  
120 multíparas



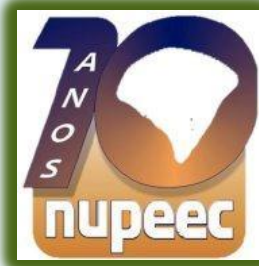
bST

Intervalo  
10 dias

bST

Total: 6  
aplicações

# Materiais e Métodos



Ultrassonografia dos ovários para determinar diâmetro do folículo dominante e tamanho do corpo lúteo;

Coletas de amostras de sangue de 64 vacas  
três vezes por semana durante 9 semanas

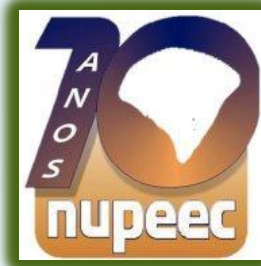
→ 31 controle  
→ 33 bST

Avaliação do comportamento estral por sensores de pressão de monta com transmissores radiotelemetricos;

Ordenhadas duas vezes ao dia;



# Materiais e Métodos



Diagnóstico de gestação

Dia 33 pós IA



Dia 66 pós IA

Escore de Condição Corporal (ECC)

Dia 37



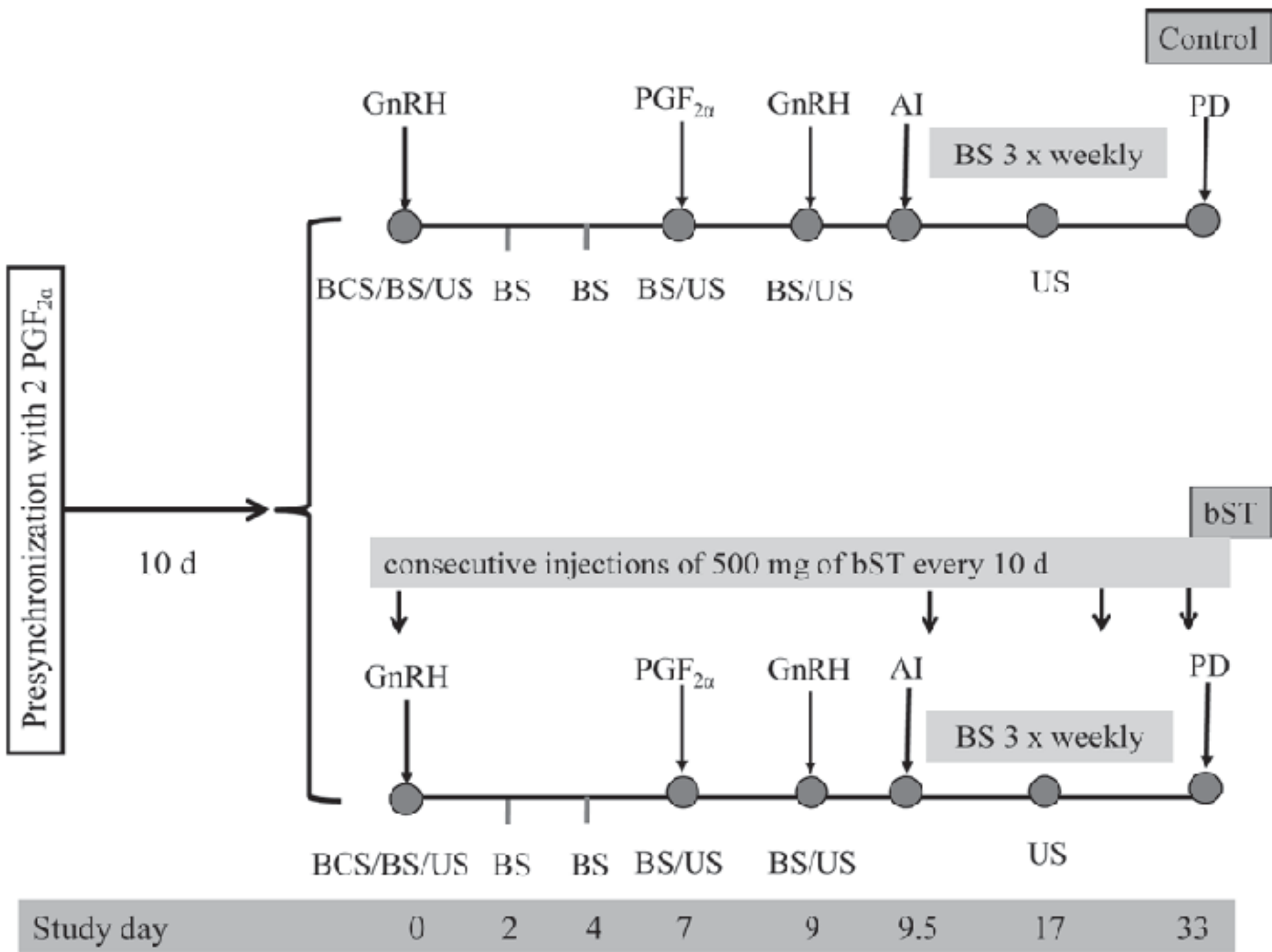
Dia 68



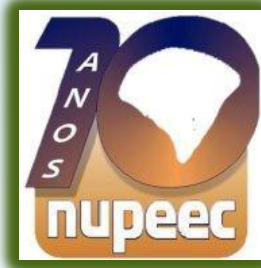
Dia 104



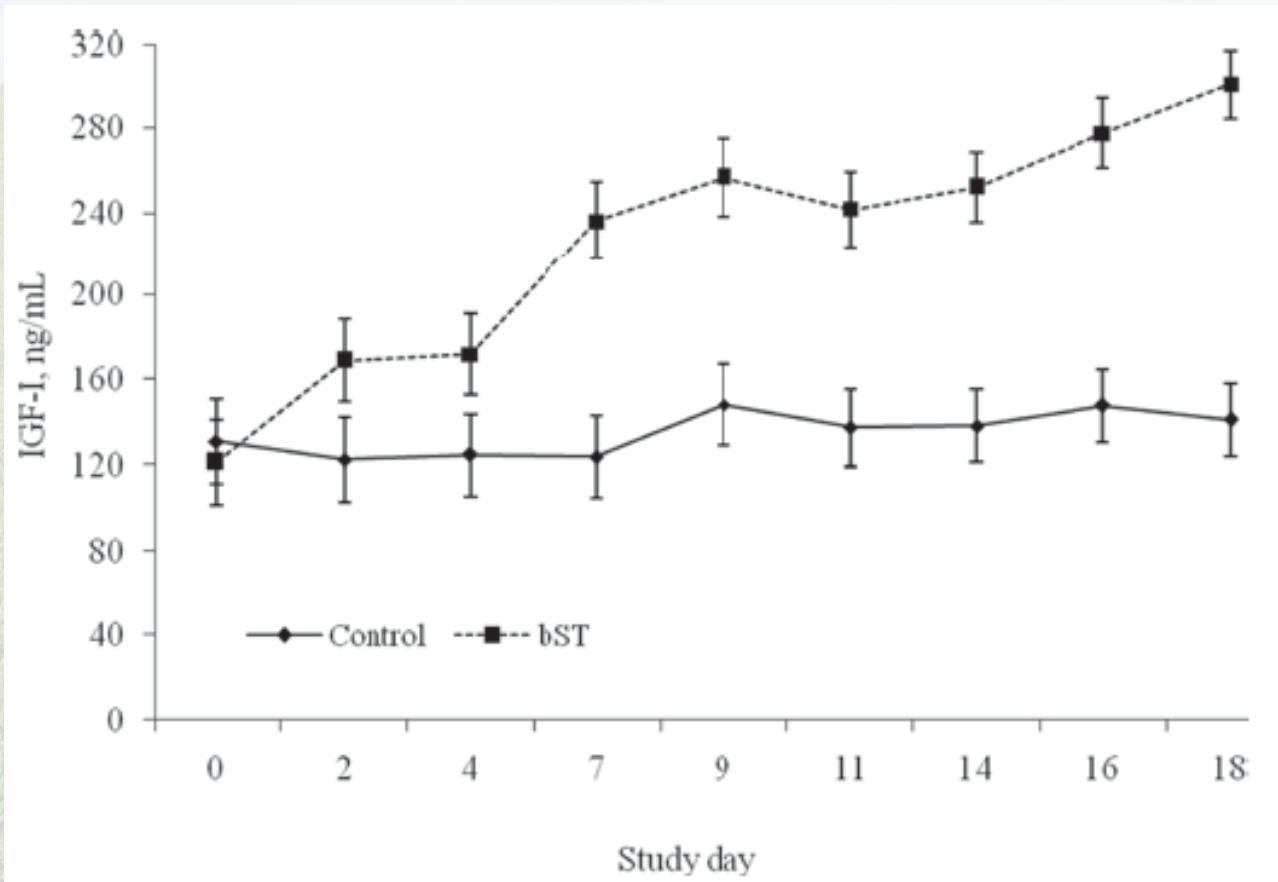
Dia 137



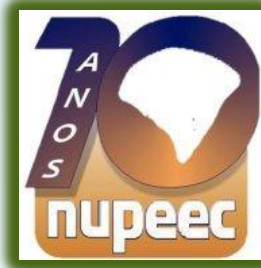
# Resultados



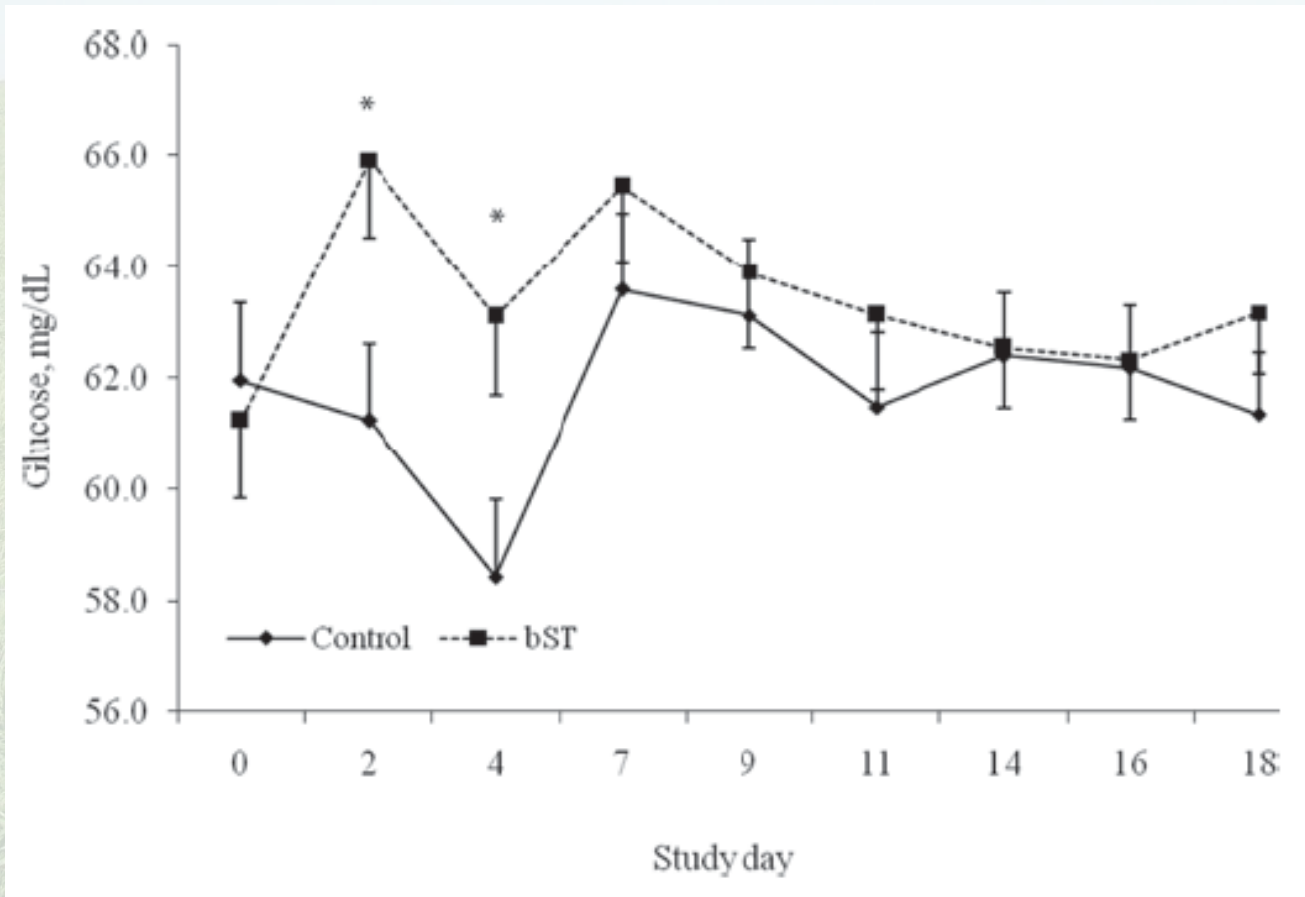
Concentrações de IGF-1:



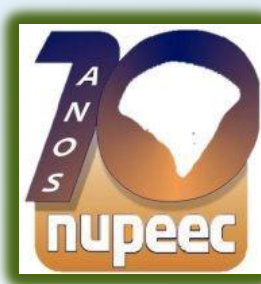
# Resultados



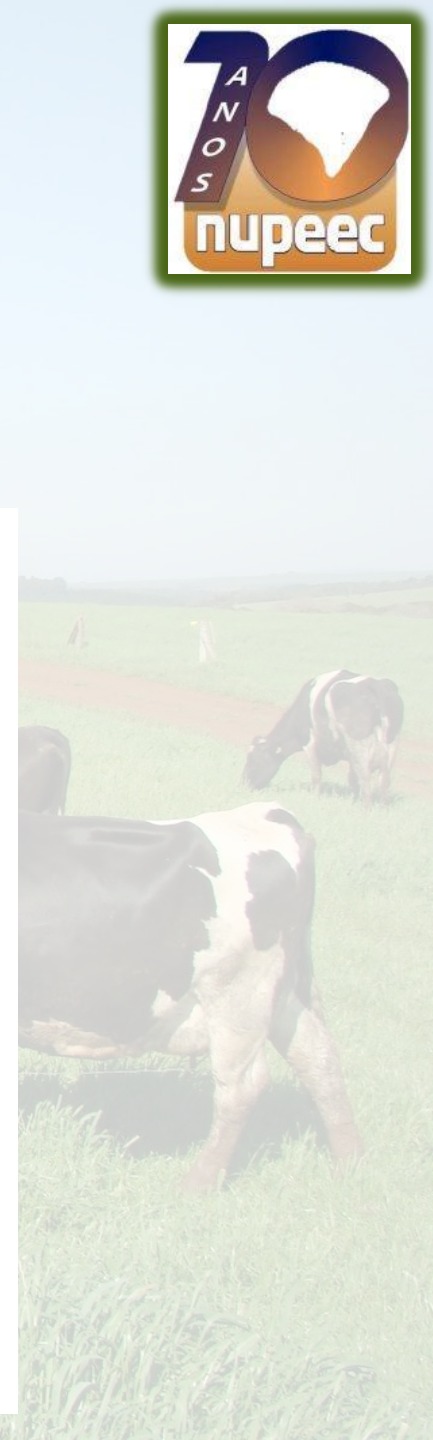
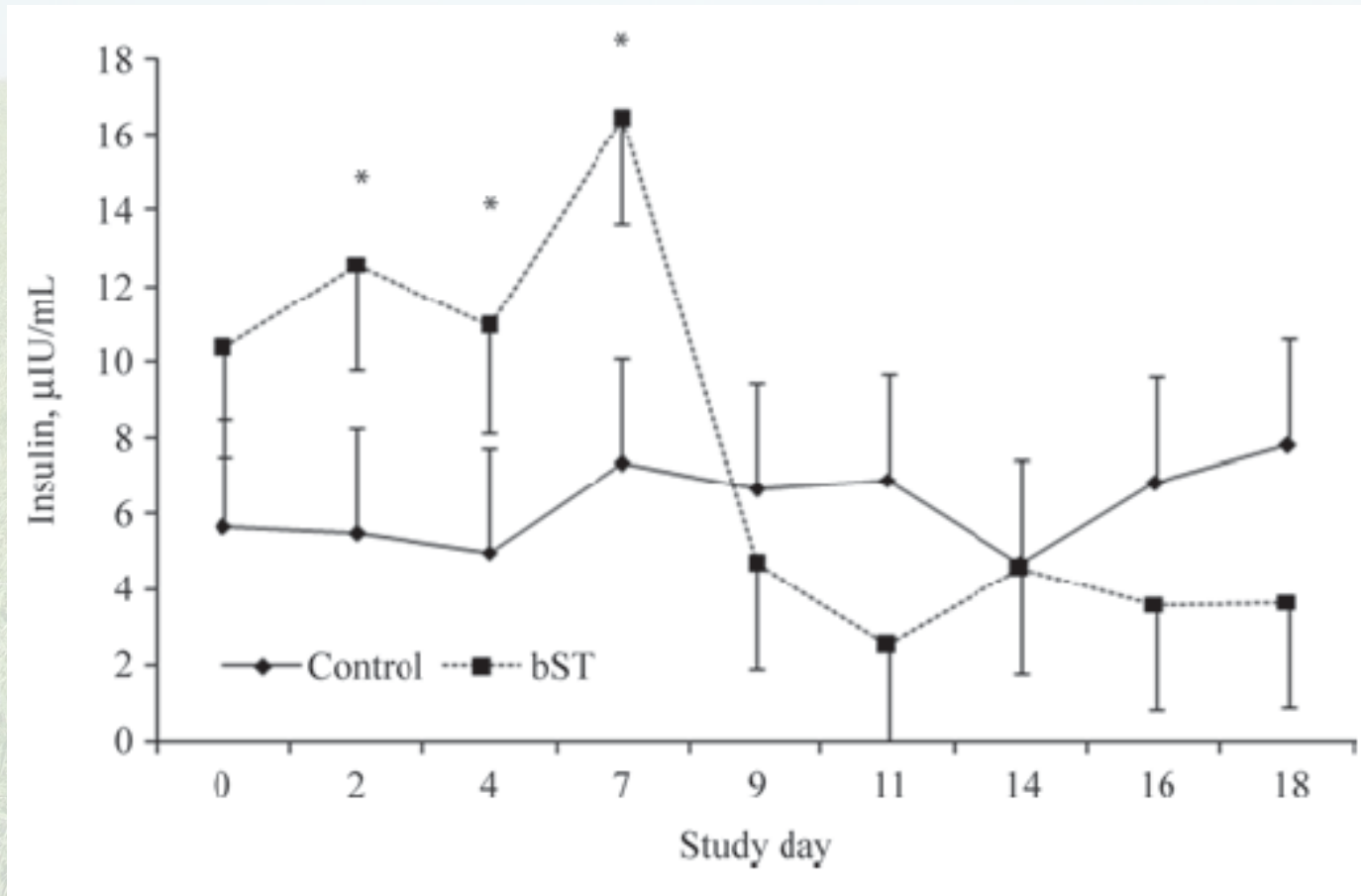
Concentrações de glicose:



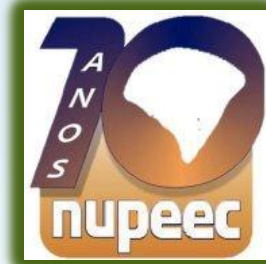
# Resultados



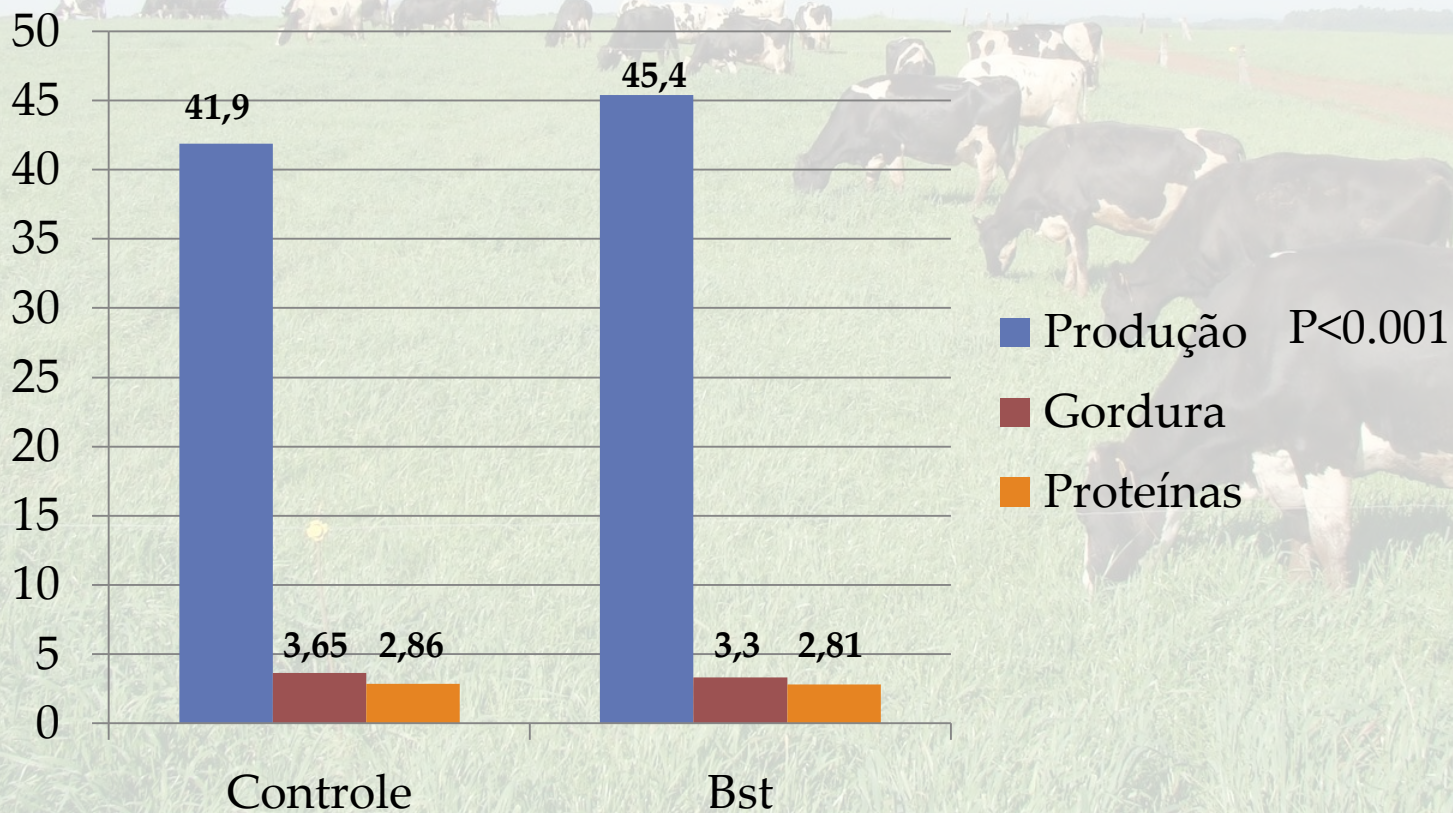
Concentrações de insulina:



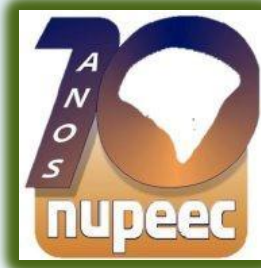
# Resultados



Leite:



# Resultados



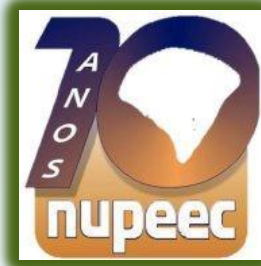
Estradiol:

- Vacas bST: maior média e maior pico;

Resposta Ovariana:

- Vacas bST: maior ovulação após 1<sup>a</sup> aplicação de GnRH, porém não houve diferença ao final do protocolo Ovsynch

# Resultados



Detecção do estro:

Não diferiu entre os grupos;

Duração do estro:

**Tratamento**

5,7 horas

**Controle**

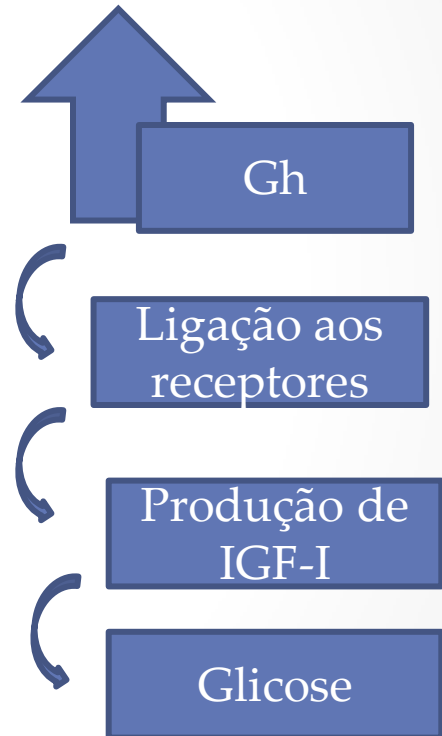
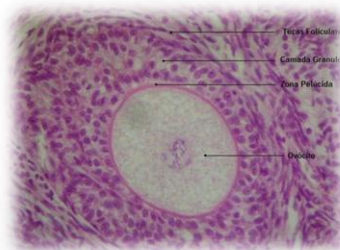
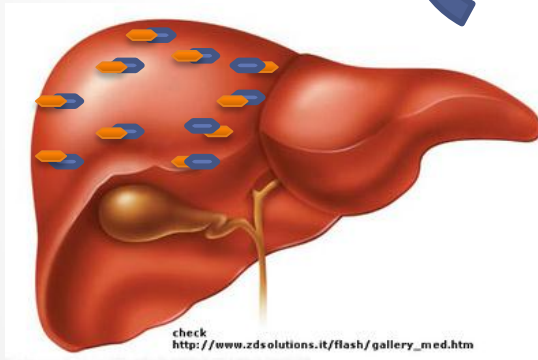
7,6 horas

$P = 0,04$



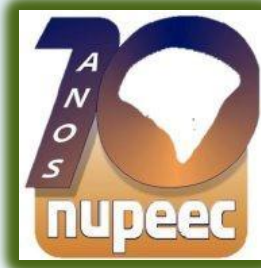
# Resumindo...

APLICAÇÃO DE BST



Responsividade FSH e LH

# Resultados



Taxa de Prenhez:

Não diferiu entre os grupos;

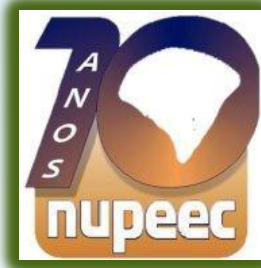
ECC:

Controle: 3,0

bST: 2,88



# Conclusão



Maior produção leiteira = R\$

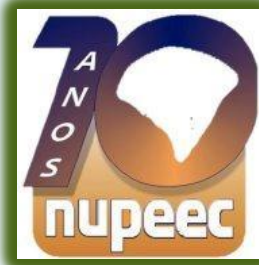
$3,5\text{Kg} \times 10\text{d} = 35\text{ kg} \times \text{R\$ } 0,7 = \text{R\$ } 24,5$  custo de  
 $\text{R\$ } 17,5 = \text{R\$ } 7$

Vacas tratadas com bST mantiveram ECC ,  
portanto, vacas controle mantiveram o escore

↑IGF-1

Insulina e glicose apenas nos primeiros dias

Não influenciou as taxas de prenhez



**Obrigado pela atenção!**

