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FERNANDA KELLY

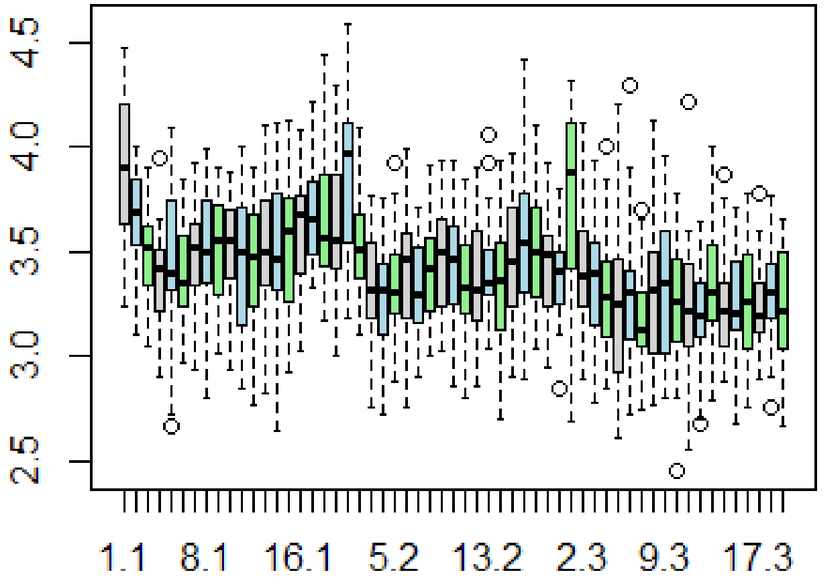
www. rladiesgyn.com

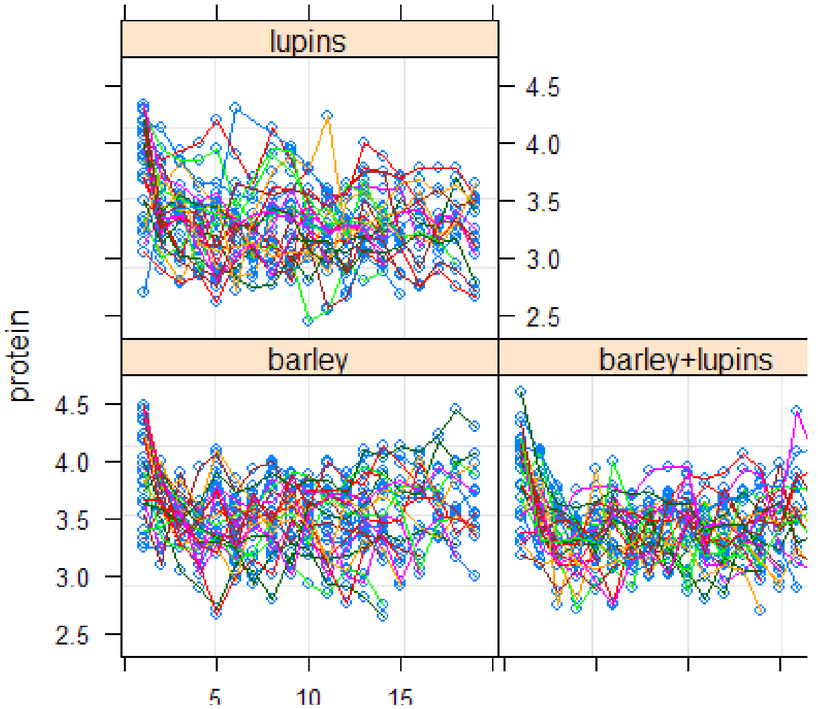
ANÁLISE DE DADOS LONGITUDINAIS.

Ouviu falar?

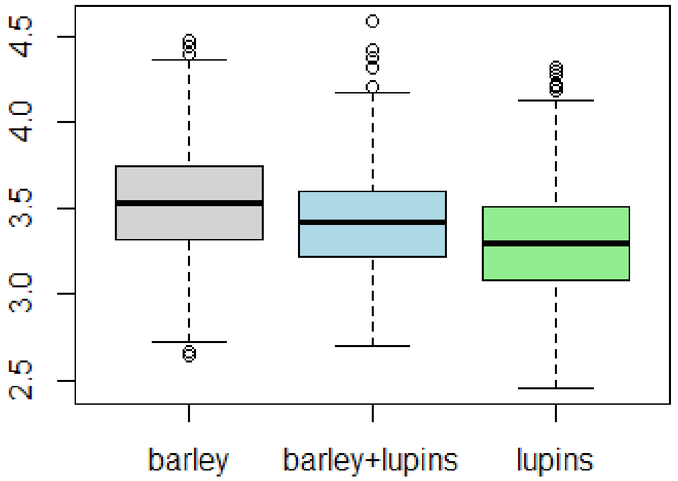
Medidas repetidas constituem dados longitudinais.

UMA BREVE INTRODUÇÃO





Caracterizar mudanças nas proteínas e fatores que influenciam essas mudanças.



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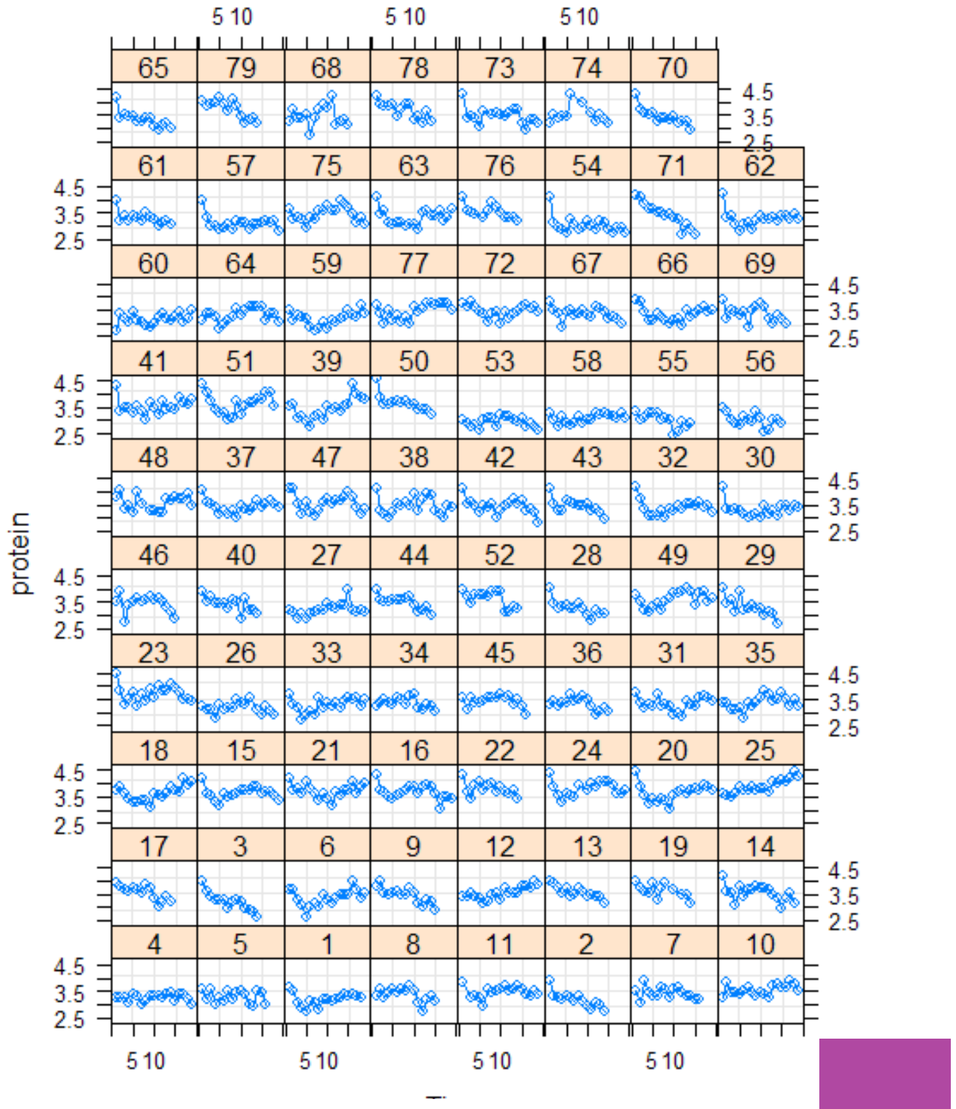
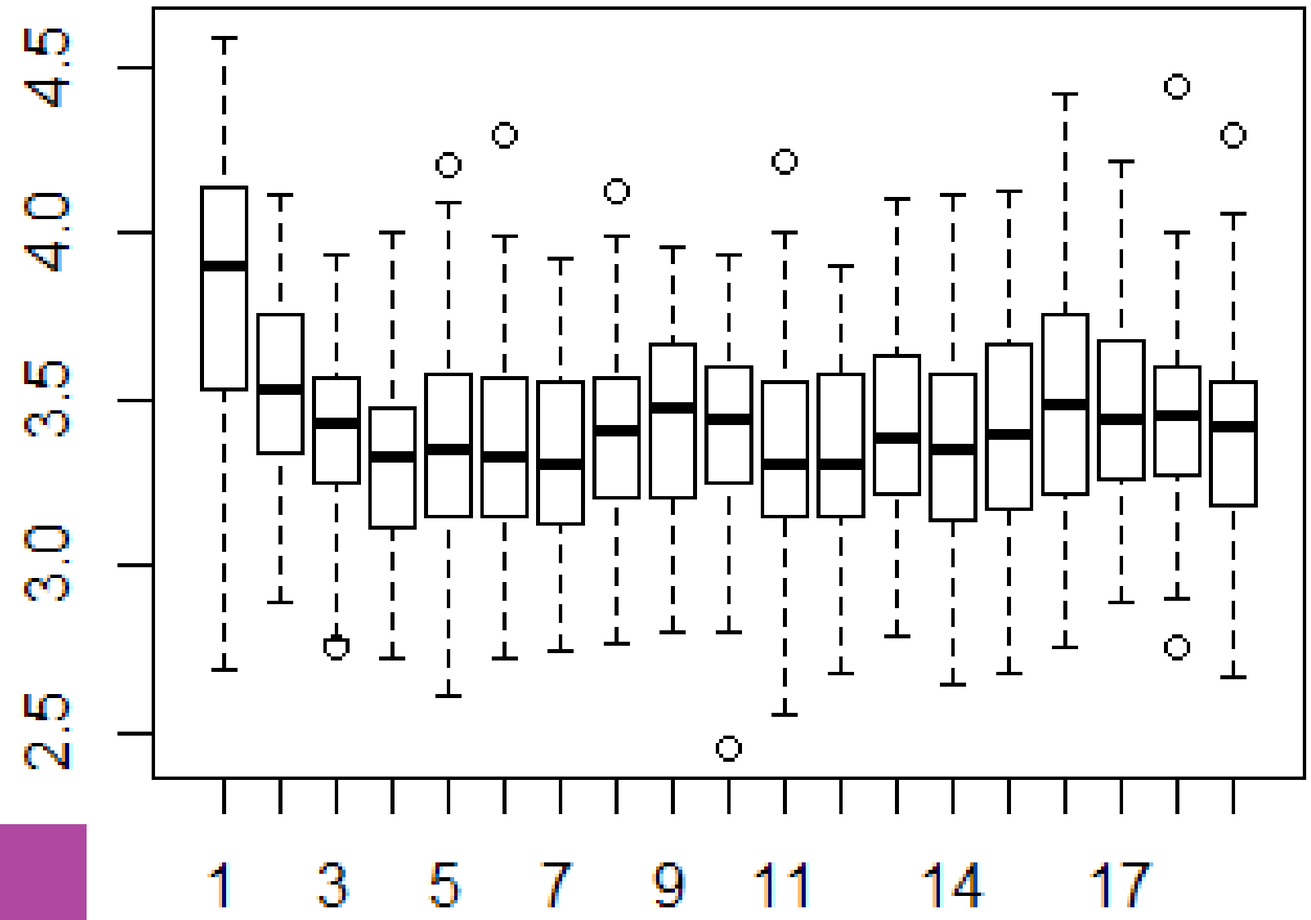


Neste gráfico podemos observar o nível de proteína no leite da vaca pelo tempo de medição (em semanas após o parto)

PROTEÍNA AO LONGO DO TEMPO



EFEITOS FIXOS.

Efeitos **aleatórios?**

O fator vai ter um conjunto de atributos, não importa qual a população que a pessoa está inserida.

MODELAGEM

MODA=LMER(FORMULA = PROTEIN ~ TIME*DIET + (1| COW), REML = F)
MODB=LMER(FORMULA = PROTEIN ~ TIME*DIET + (TIME| COW), REML = F)

DATA: NULL
MODELS:
MODA: PROTEIN ~ TIME * DIET + (1 | COW)
MODB: PROTEIN ~ TIME * DIET + (TIME | COW)

	DF	AIC	BIC	LOGLIK	DEVIANCE	CHISQ	CHI DF	PR(>CHISQ)
MODA	8	489.15	530.74	-236.58	473.15			
MODB	10	360.58	412.56	-170.29	340.58	132.57	2	< 2.2E-16 ***

SIGNIF. CODES: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

A PARCELA ALEATÓRIA FOI ESCOLHIDA.

MODELAGEM

MODA1=LMER(FORMULA = PROTEIN ~ TIME + (TIME| COW), REML = F)
MODB1=LMER(FORMULA = PROTEIN ~ TIME + DIET + (TIME| COW), REML = F)
MODC1=LMER(FORMULA = PROTEIN ~ TIME * DIET + (TIME| COW), REML = F)

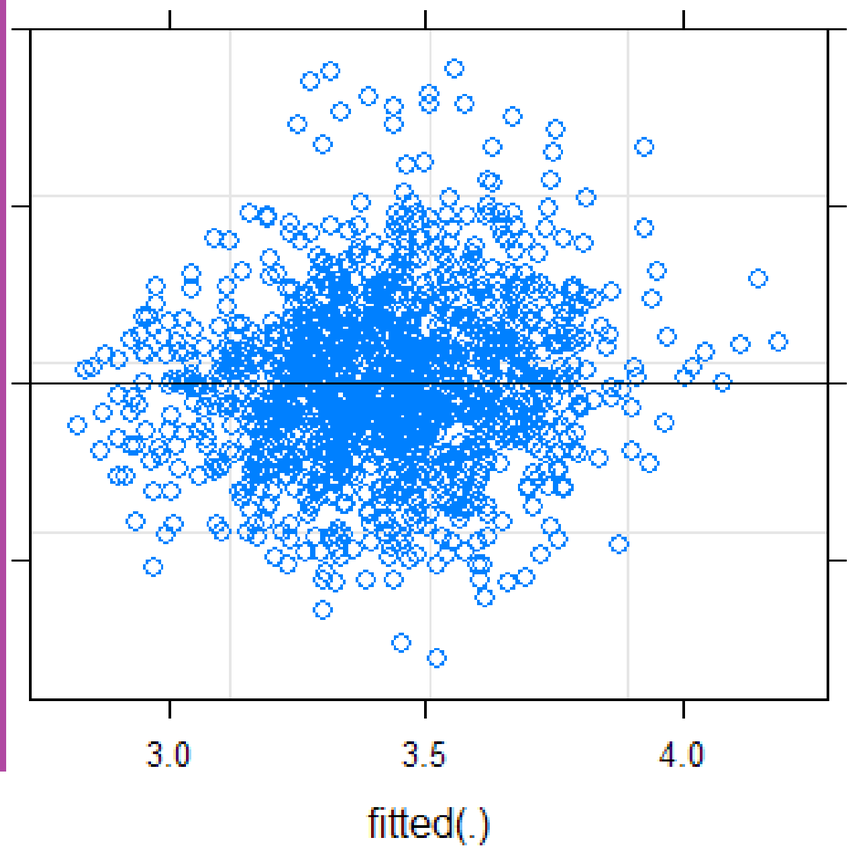
DATA: NULL
MODELS:
MODA1: PROTEIN ~ TIME + (TIME | COW)
MODB1: PROTEIN ~ TIME + DIET + (TIME | COW)
MODC1: PROTEIN ~ TIME * DIET + (TIME | COW)

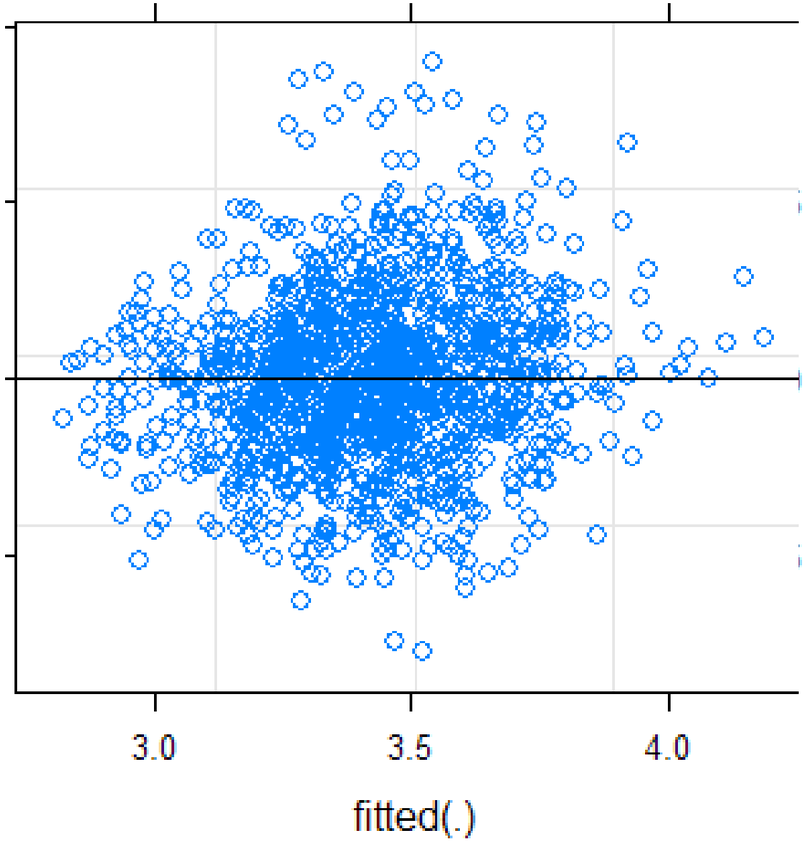
	DF	AIC	BIC	LOGLIK	DEVIANCE	CHISQ	CHI DF	PR(>CHISQ)
MODA1	6	368.72	399.91	-178.36	356.72			
MODB1	8	358.12	399.70	-171.06	342.12	14.6082	2	0.0006728 ***
MODC1	10	360.58	412.56	-170.29	340.58	1.5343	2	0.4643393

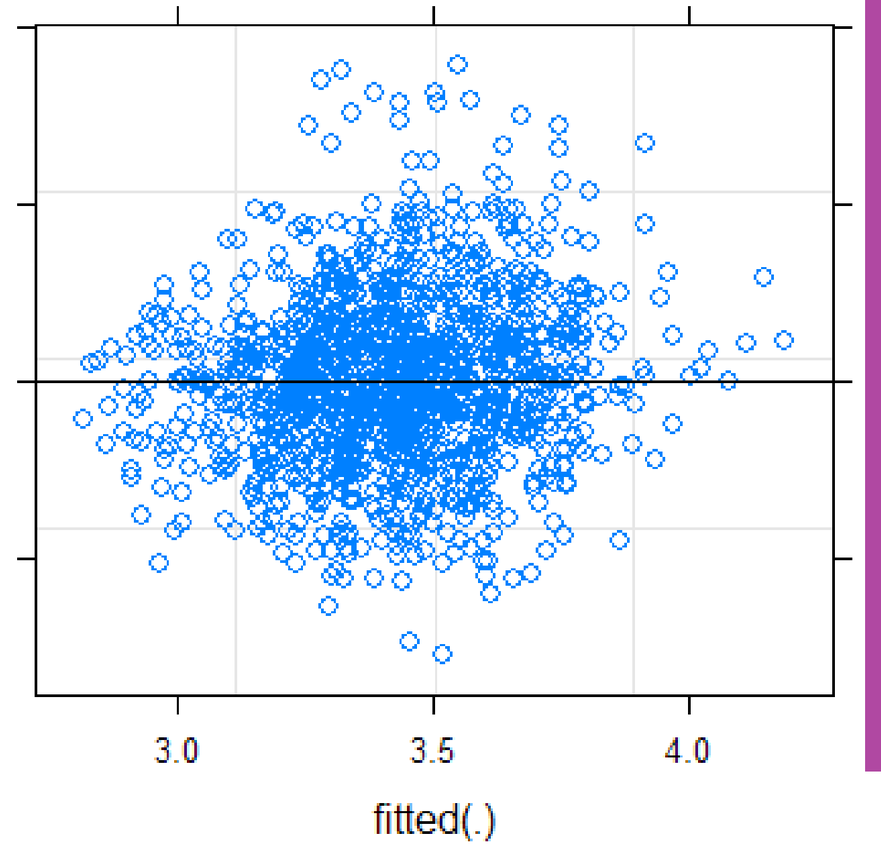
SIGNIF. CODES: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

A PARCELA FIXA FOI ESCOLHIDA.

FIFTED



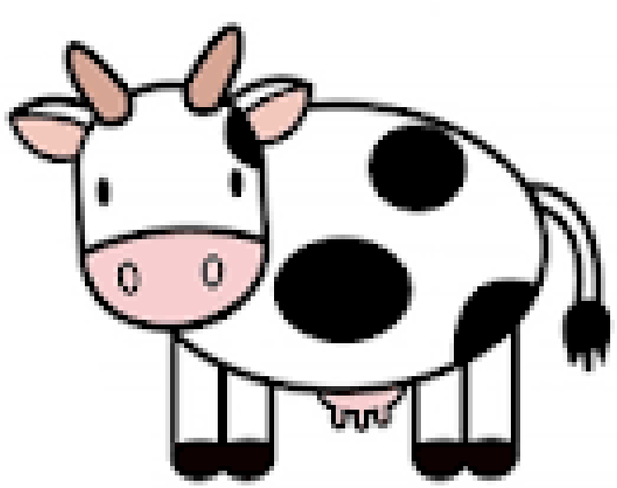




MODB1

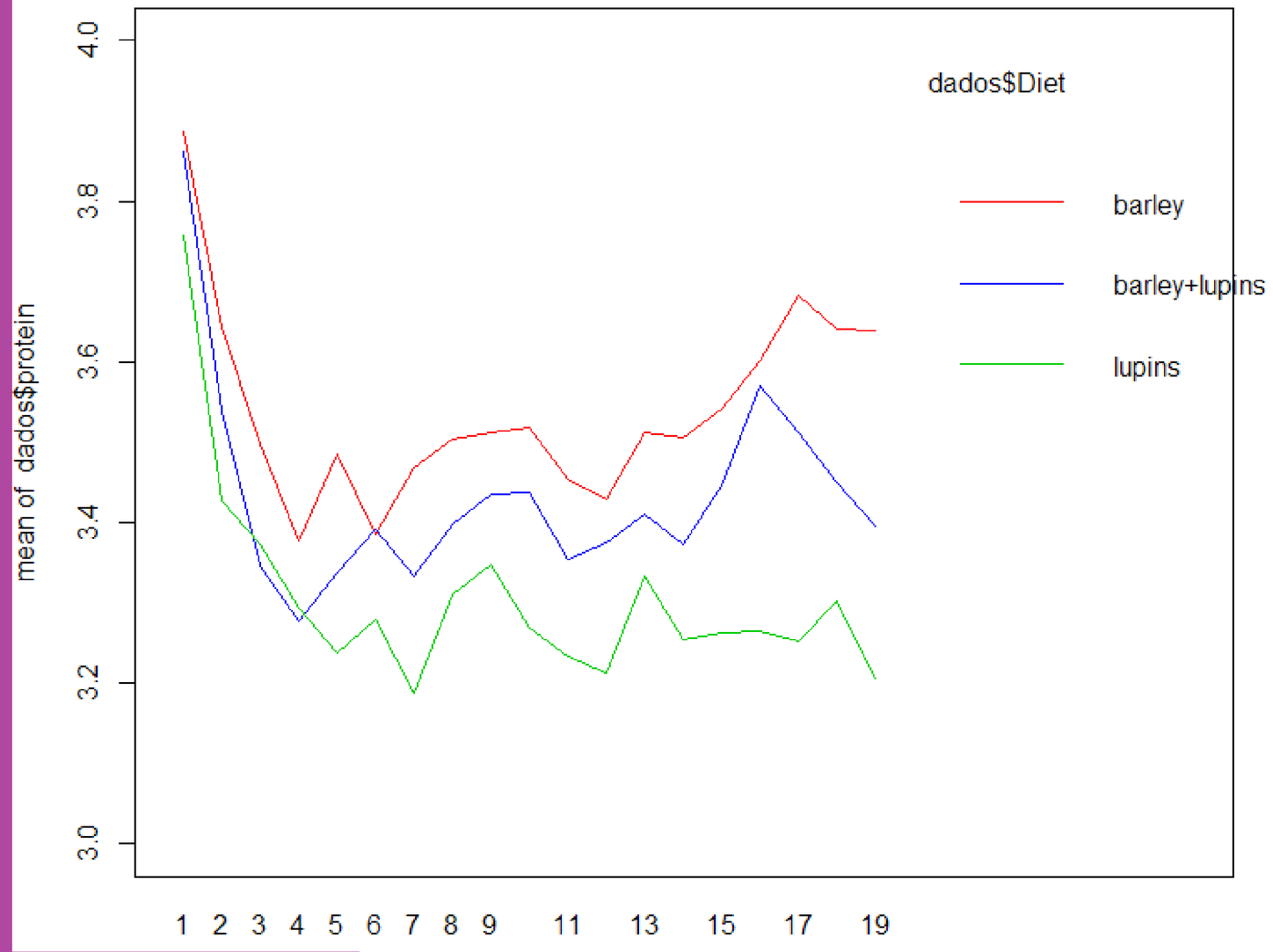
MODA1

MODC1



+Tempo
+*Cow*

Tempo + Dieta



+Tempo
+*Cow*

Tempo + Dieta

+Barley

MODELAGEM

LINEAR MIXED MODEL FIT BY MAXIMUM LIKELIHOOD ['LMERMOD']
FORMULA: PROTEIN ~ TIME + DIET + (TIME | COW)

FIXED EFFECTS:

	ESTIMATE	STD. ERROR	T VALUE
(INTERCEPT)	3.616574	0.043924	82.337
TIME	-0.012491	0.003153	-3.961
DIETBARLEY+LUPINS	-0.094164	0.048706	-1.933
DIETLUPINS	-0.197188	0.048729	-4.047

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Muito Obrigada!