

2021 Stokes Bay Small Plot Fertiliser Trial

Background

The BioAg fertiliser trial was established in 2019. The trial has 6 treatments with 4 replications and compares various BioAg products and rates against an annual application of single super. The biomass is measured by mowing with a push behind mower and weighing the catchings. The site is not grazed. In 2021 the site received the annual and biennial applications of fertiliser.

What was done

The site is located on W & J Stantons at Stokes Bay on a sandy soil. The pasture is a perennial veldt grass and serradella with a light smattering of capeweed and annual ryegrass. The site experienced a hot burn in January 2020 with the treatments

closest to the scrub line suffering the most damage to the pasture base. This was still evident in 2021 and the data from these plots has since been removed from the analysis.

The 2021 season broke in mid-May meaning that pasture leaf area/size was small going into the cold wet winter. Fortunately spring rains continued into November. Three cuts were taken during 2021. Since there are now 3 years of data the means per year are reported.

Results

There was no significant difference on a dry matter basis between all fertilizer products, nor was there an effect of the cumulative amount over the four harvest times.

Treatments	Product & Rate	P	S
A	CONTROL	0	0
B	275kg/ha BioAg Superb (8.6P, 6.9S) - biennial	23.65	18.975
C	200kg/ha BioAgPhos S10 (11.7P, 10S) - biennial	23.4	20
D	125kg/ha Single (8.8P, 11S) - annual	11	13.75
E	135kg/ha BioAg Superb (8.6P, 6.9S) - annual	11.61	9.315
F	275kg/ha Superb (8.6P, 6.9S) + 2tlime +TE - biennial	23.65	18.975

Table 1: Treatments and kgs of P and S applied at time of application

Funding & Sponsorship

- BioAg
- W & J Stanton

Further Information

Jenny Stanton
M 0484 602 946
E jennybehenna@hotmail.com

Phil Toy (BioAg)
M 0458 440 225

Treatment	2019	2020	2021	Mean
275kg Superb – biennial (B)	10001	4016	5060	6359
200kg PhosS10 – biennial (C)	9370	3257	4259	5629
125kg Single – annual (D)	9347	2741	4082	5390
135kg Superb – annual (E)	9364	3620	4573	5852
275kg Superb+lime+Trace Elements –biennial (F)	10006	4110	5209	6442
SE	417	389	399	342
CV	9%	22%	17%	12%
P val (rb)	0.349	0.203	0.358	0.230
Covariate	99	-1292	-1318	-898
SE of Cov.	421	472	441	389

Table 2: Means and standard errors of each treatment at each harvest time. Units are kg/ha

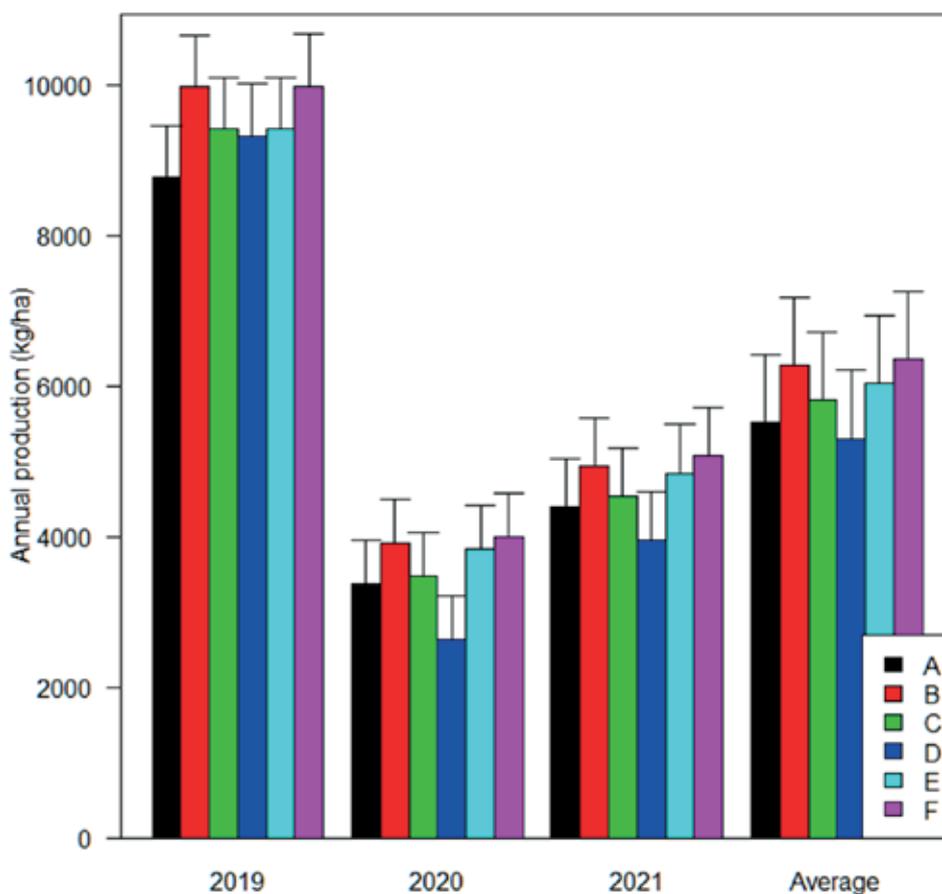


Figure 1: Bar plot of averages across treatments of cuts at each date for Parndana trial. Error bars are standard errors. Refer to codes in Table 1 to identify treatments. Data analysed by Rho Environmetrics Pty Ltd.

