

**Location:** Scotland

**Plot reference:** Kirriemuir

**Crop:** Main crop Potatoes      **Variety:** Valor

**Date:** 26.10.2015 (assessed)

**Trial aim:** To compare and assess the effect on tuber yield and yield within marketable constraints when applying the Glenside treatment against the control which is the standard farm practice.

**Treatments:**

1. Glenside Bioscience in Action
2. Control – standard farm practice



**Assessment method:**

6 x 1.8m digs were selected at random in each treatment block. These tubers were then washed, graded and each category weighted individually. The following table gives an accurate account of the results.

**Yield weights and tuber numbers averaged form all digs. Summary**

Treatment	Control	Bioscience	Difference	Difference
45-85mm Tubers	52	57	5	+ 10.4%
45-85mm Weight	9.3	11.1	1.8	+ 19%
< 45mm, >85Tubers	10.8	7.5	- 3.3	- 40%
< 45mm, >85 weight	2.3	0.75	- 1.55	- 67%
Total Tubers	62.5	64.5	+ 2.0	+3.2%
Total weight	12.1	11.85	-0.25	- 2.1%

Although Bioscience did not increase total Yield, Bioscience did increase sale able yield by 19.5%

The actual Saleable yield from the control was 21.4T/ac (52.9T/Ha) the yield from the Bioscience was 26.3T/ac (63.2T/Ha) + 19.5%

**Financial benefits**

Treatments	Control	Bioscience
Total yield T	68.8	67.42
Saleable yield T	52.9T (81.1% of Total yield)	63.2T (93.4% of total yield)
Saleable yield value (£150/T)	£7935	£9480

**The Bioscience program added a £1,545 GM contribution/Ha (£625.5/ac) over control.**

## Detailed plot data

Bioscience	Total Tubers	Total Weight	Tubers 45-85mm	Tubers >85mm	Tubers <45mm	Saleable Weight
Plot 1	60	11.3	54	0	6	10.7
Plot 2	64	11.7	58	0	6	11.0
Plot 3	68	12.5	60	0	8	11.6
Plot 4	69	12.3	58	0	11	11.3
Plot 5	67	12.1	60	0	7	11.4
Plot 6	61	11.2	52	0	9	10.6
Average	64.5	11.85	57	0	7.8	11.1

Control	Total Tubers	Total Weight	Tubers 45-85mm	Tubers >85mm	Tubers <45mm	Saleable Weight
Plot 1	65	12.2	53	2	10	10.4
Plot 2	57	10.4	48	1	8	8.5
Plot 3	63	14.4	50	7	6	9.8
Plot 4	62	12.2	54	1	7	10.3
Plot 5	63	11.1	50	1	12	9.6
Plot 6	65	12.2	55	2	8	10.2
Average	62.5	12.1	51.7	2.3	8.5	9.8

Control Plot 3 had 7 tubers that were over 85 mm which increased Total weight but decreased Saleable weight