

STRATEGIC POTATO FARMS



Strategic Farm North

Results Day || 23.1.19



To plant headlands or not?

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What and why?

- Should headlands be planted?
- What is the average yield difference?
- What is the difference in crop quality between the inside of the field and the headlands?
- What are the cost implications? On farm and at packing
 - Productivity
 - Time
- Alternatives?
- Conclusions

Headland diagram



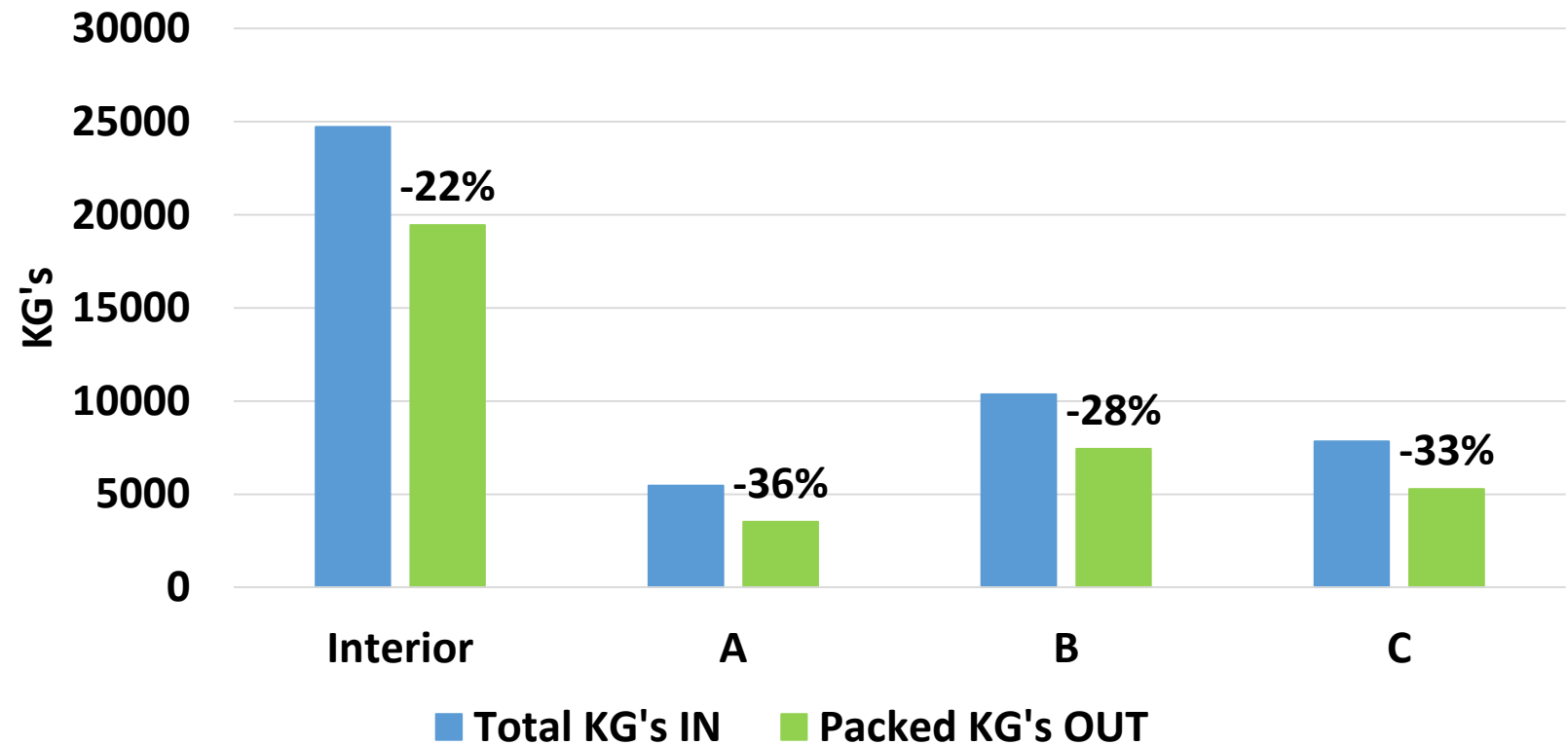
A

B

C

Pack-out and yield

Pack-out

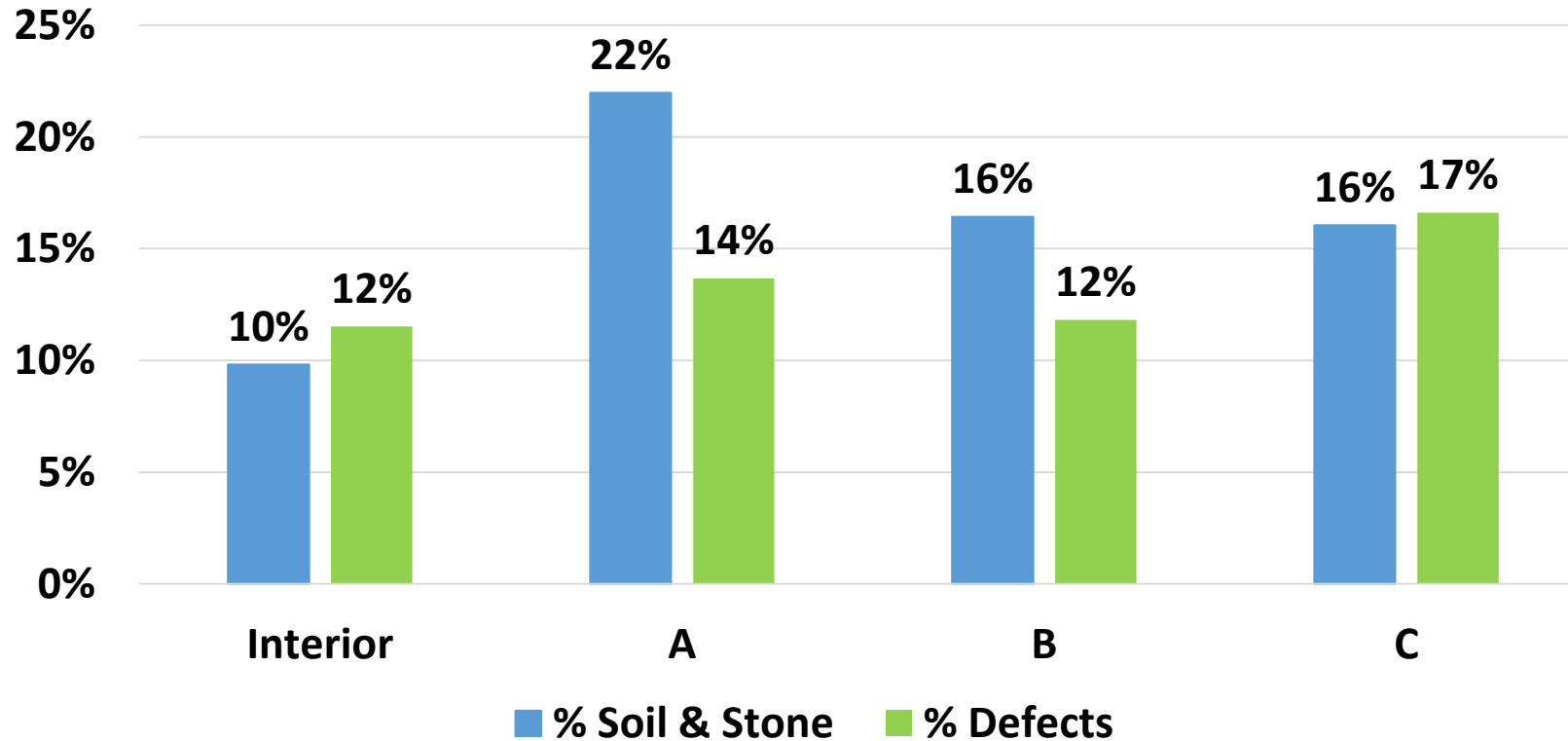


Average of headland (components A,B & C) 32%

	Field Yield t/ha	Pack-out Yield t/ha
Interior	35.94	28.28
A	9.21	5.93
B	13.07	9.38
C	9.13	6.15

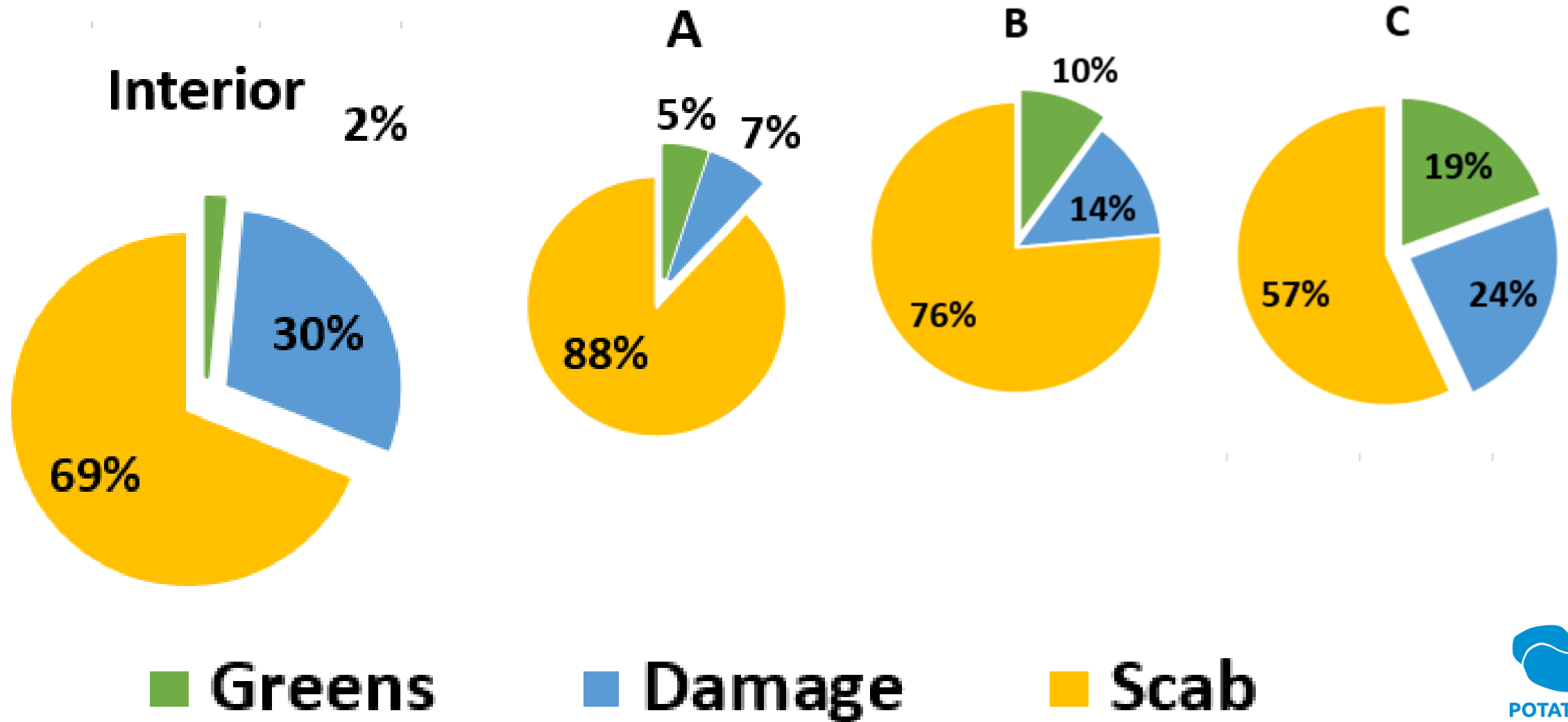
Soil, stone and defects

Topline waste by type



Average of headland (components A,B & C) – Soil & Stone 18%, defects 14%

Defects by type



Timings- Planting & Harvest

Planting

- Average planting time = 1.01 Ha/hr
- Headlands recorded as taking 3 times longer to plant
- Headlands have to be dragged again before planting

Harvest

- Average harvest time = 1.35 Ha/hr
- Headlands recorded as taking 2.5 times longer to harvest
- First 3 beds take 3.5 times longer
- This time is reduced using a self propelled harvester

Cost implications on farm

- Average cost of packing crop =£7,200/ha
- 25% of this is on machinery and labour at planting/ harvest.
- With planting and harvest taking 2.5 times longer to complete it would add £2,700/ha to the cost.
- If we then overlay this with the reduced yield achieved on headlands we can gauge the true cost of headlands.

Cost implications on farm

	Field yield	Pack-out yield
Interior	£ 200.33	£ 254.60
A	£ 1,074.92	£ 1,669.48
B	£ 757.46	£ 1,055.44
C	£ 1,084.34	£ 1,609.76

This is an extreme year where weather has had a major impact on yields and as such the cost/ ha is very high.

However this does show that even in a year where the free-buy price is high, planting headlands still might not make sense.

Cost implications at packing

- Top line Waste +10% difference headlands vs interior
 - AHDB 4yr average Maris Piper free-buy price (£199/t) = £19 /t cost to the industry.
- Throughput - runtime inefficiencies.
 - 20% less kg/hr headlands vs interior
 - +12 minutes longer required to pack same volume of potatoes
- Labour requirement
 - Increase in number of graders 4 to 5 = +25% labour, £7.83/hr NMW.
 - Increase in time £5.16/t/hr vs £8.02/t/hr NWM.



Opportunistic alternatives?



- Run-off prevention
- Trap crops/ fumigant
- Functional benefits- soil structure, easier turning...
- Wind break –soil erosion
- ELS/ HLS?



Conclusions

- Individual fields will be different
- Seed price and availability
- Individual grower assessment
- Varietal and market choice
- Is it viable?

Upcoming events

SPot Results days & Storage events	
23 January	Strategic Farm North - results
24 January	Storage event - West
30 January	Spot West - results
12 February	Roadshow – Cambs/Suff/Essex
13 February	Roadshow – South. Linc's
26 February	Roadshow - Norfolk
28 February	Spot Scotland - results
5 March	Storage event – East Mid's
6 March	Roadshow - Cheshire
7 March	Roadshow – North. York's

Agronomy events	
5 February	Worcestershire
7 February	Suffolk
12 February	Vale of Glamorgan
12 February	North Yorkshire
21 February*	Berkshire
27 February	Wiltshire

Provisional SPot North dates

Note the change of location: Eastoft in 2019

- Field walk – 6th June 2019
- Open day – 16th July 2019
- Field walk – 15th August 2019
- Haulm destruction day- date TBC

A vibrant landscape of a green field at sunset. A path leads from the foreground towards the horizon where the sun is setting, casting a warm glow over the scene. The sky is filled with colorful clouds, and the field is lush and green. In the background, there are rolling hills and a small village.

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