

Snapped Achilles  
Playing touch rugby  
Two weeks ago

No, I am not too old!



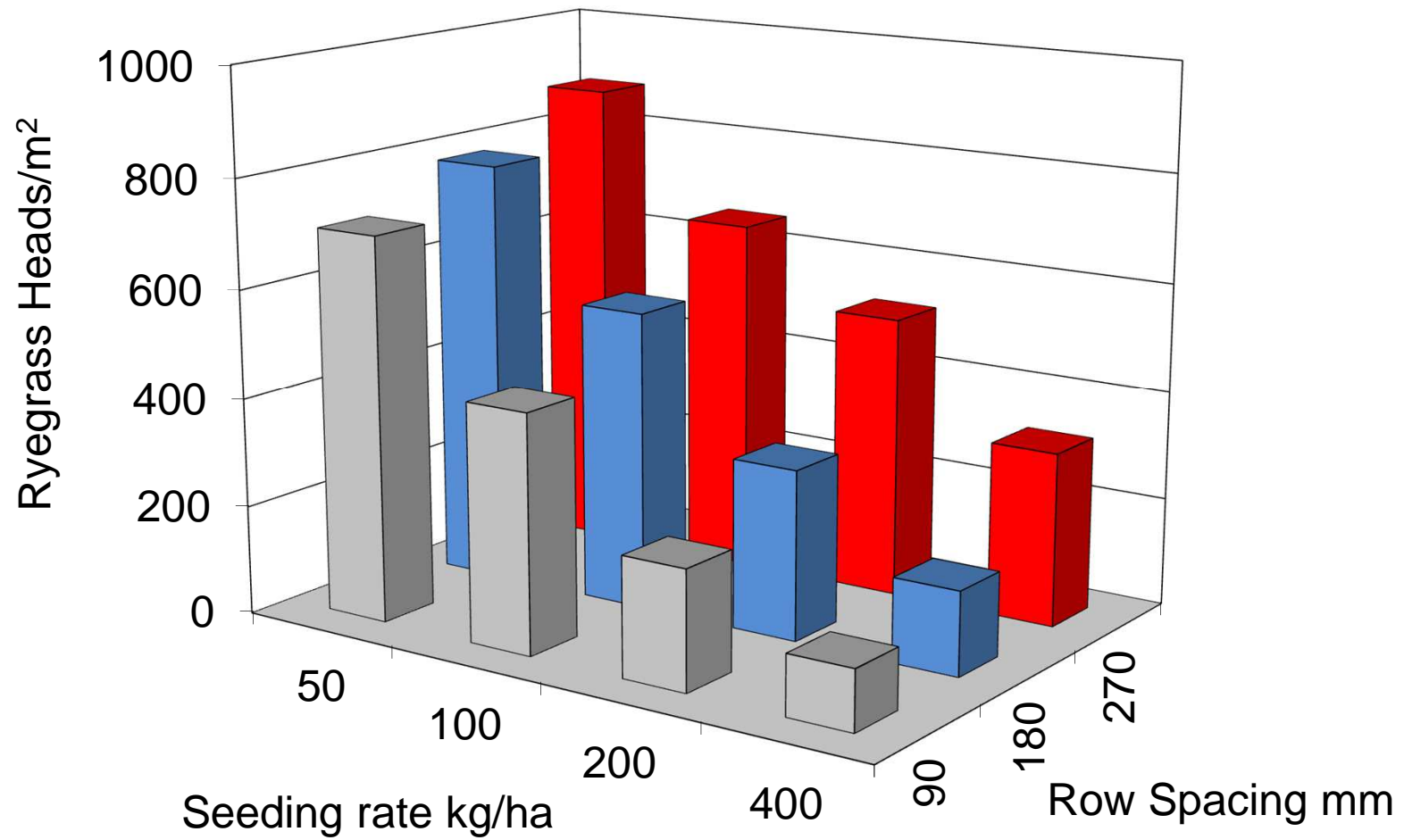
# Narrow row spacing

## Cost effective crop competition

Peter Newman, AHRI







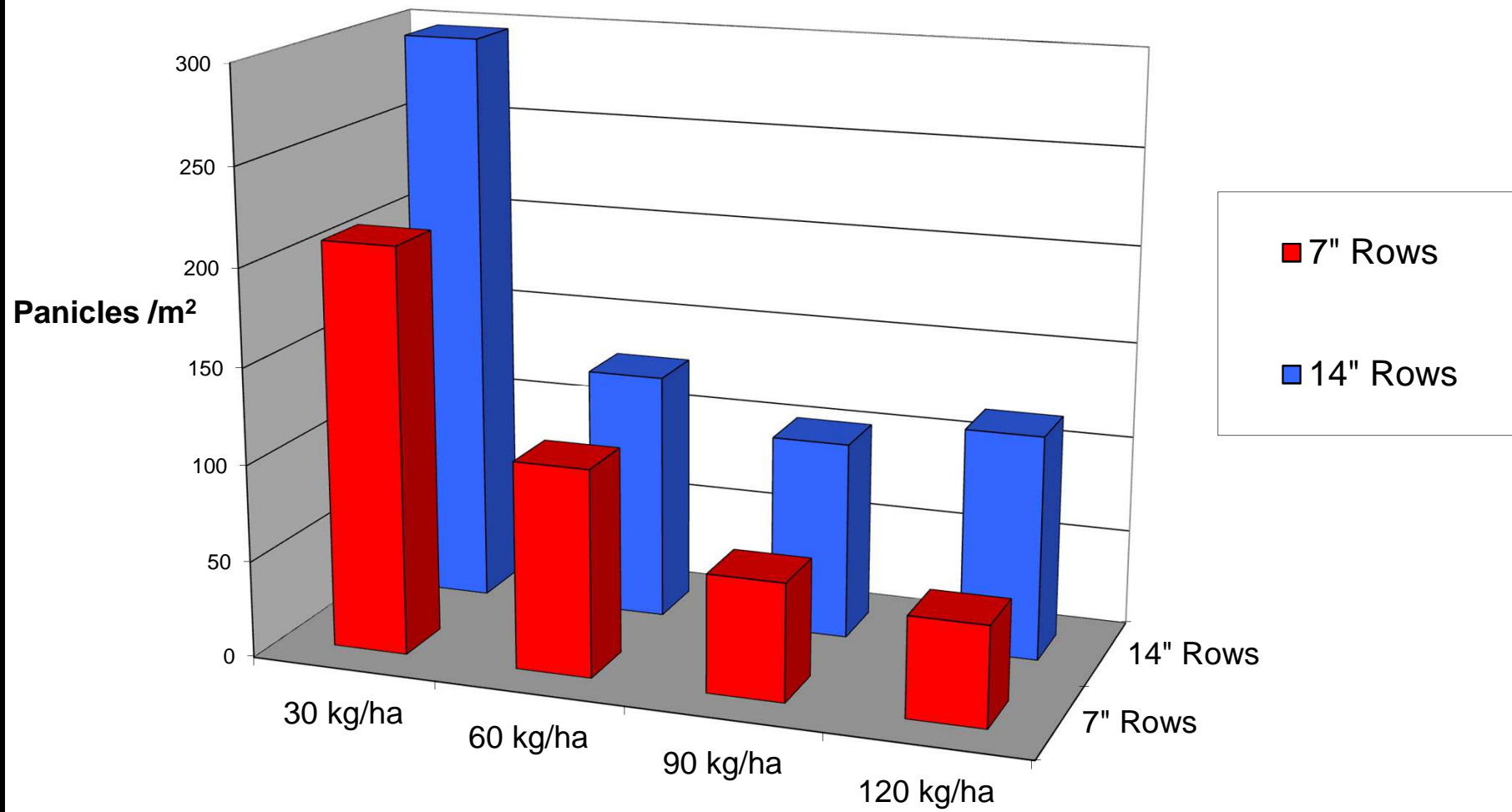
David Minkey



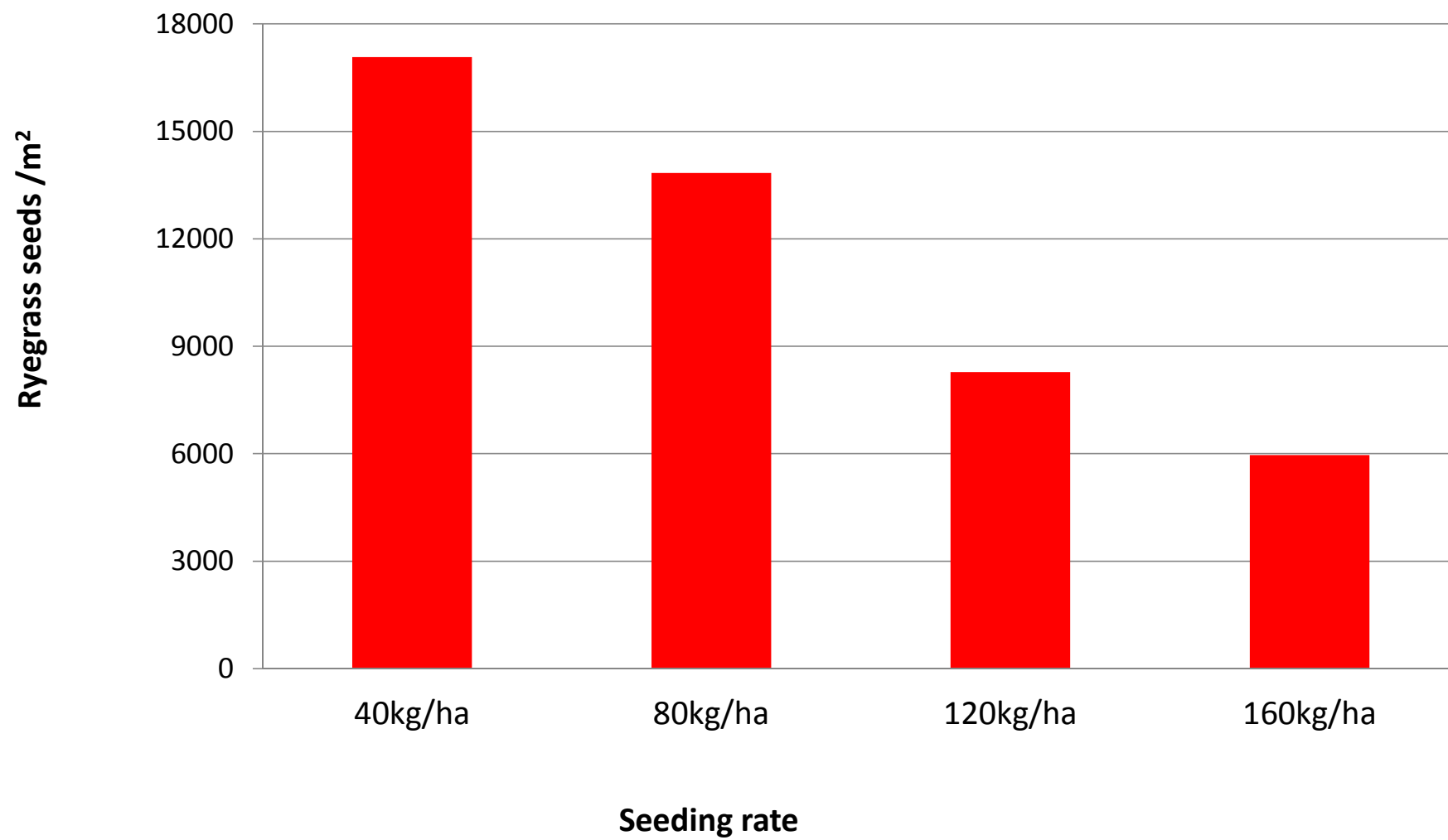
Department of  
Agriculture and Food



## 1999 - Brome / ryegrass seed heads /m<sup>2</sup>

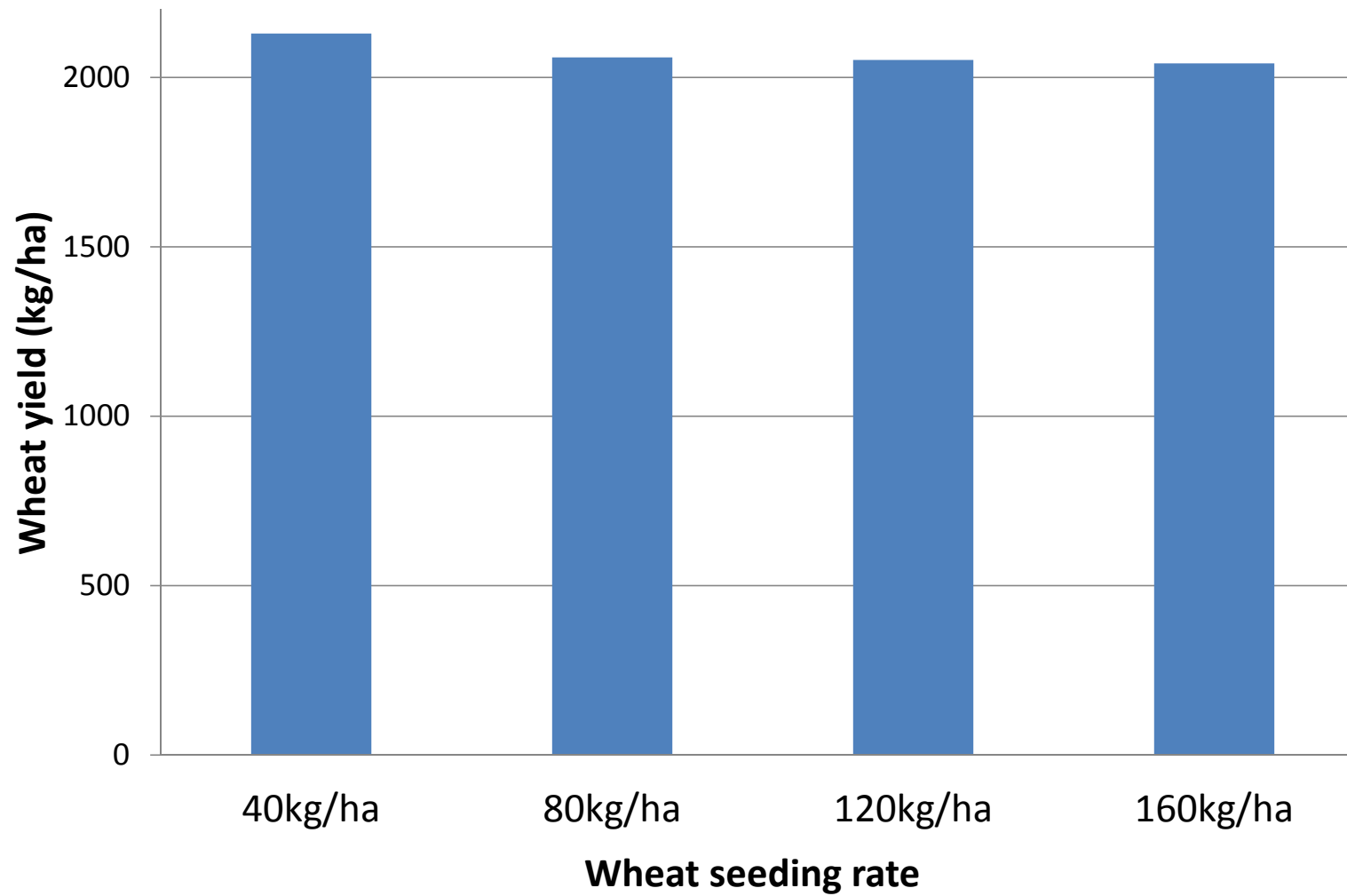


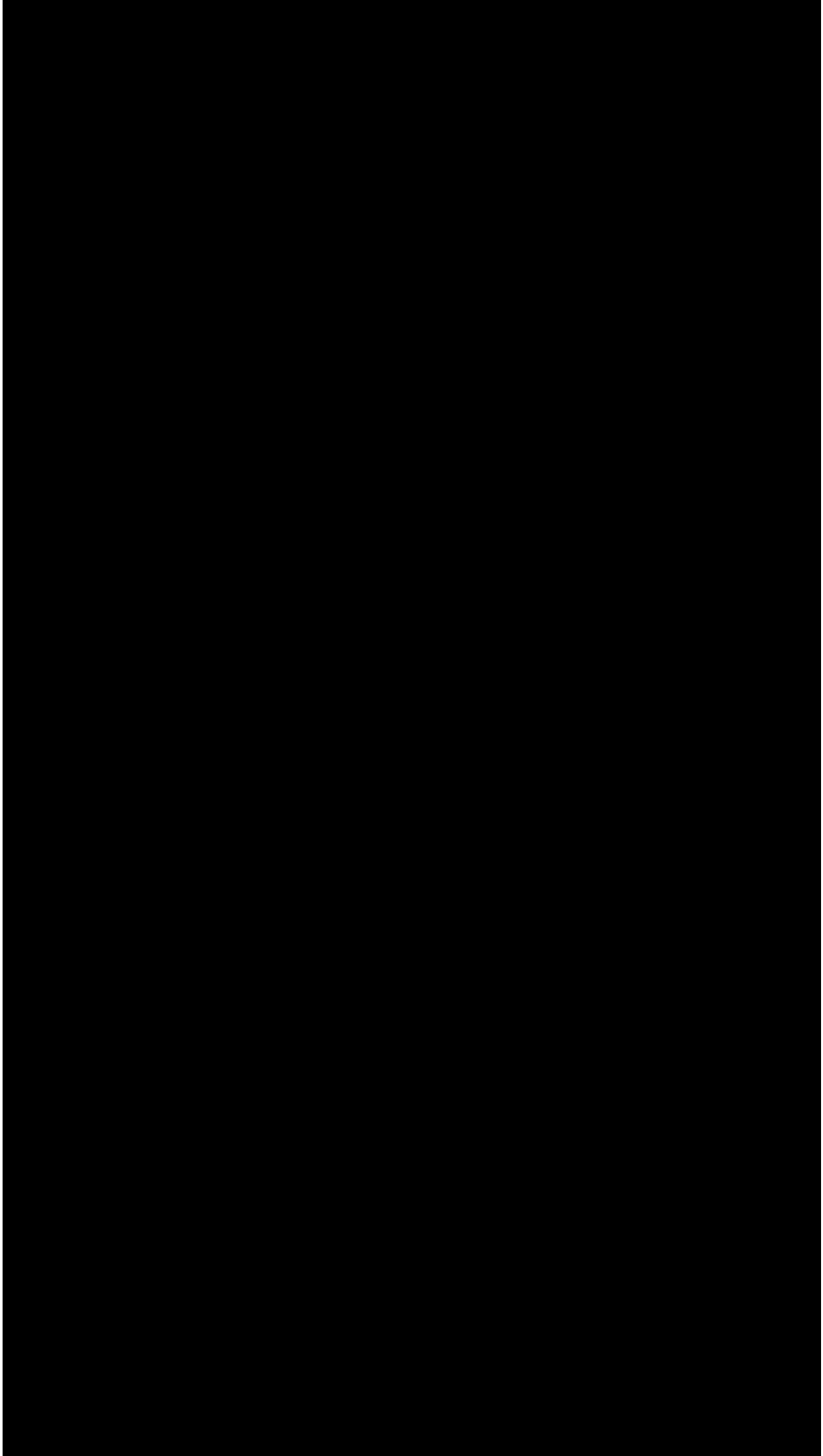
## 2012 - Ryegrass seed set /m<sup>2</sup>





## 2012 - wheat yield













30cm (12")



15cm (6")





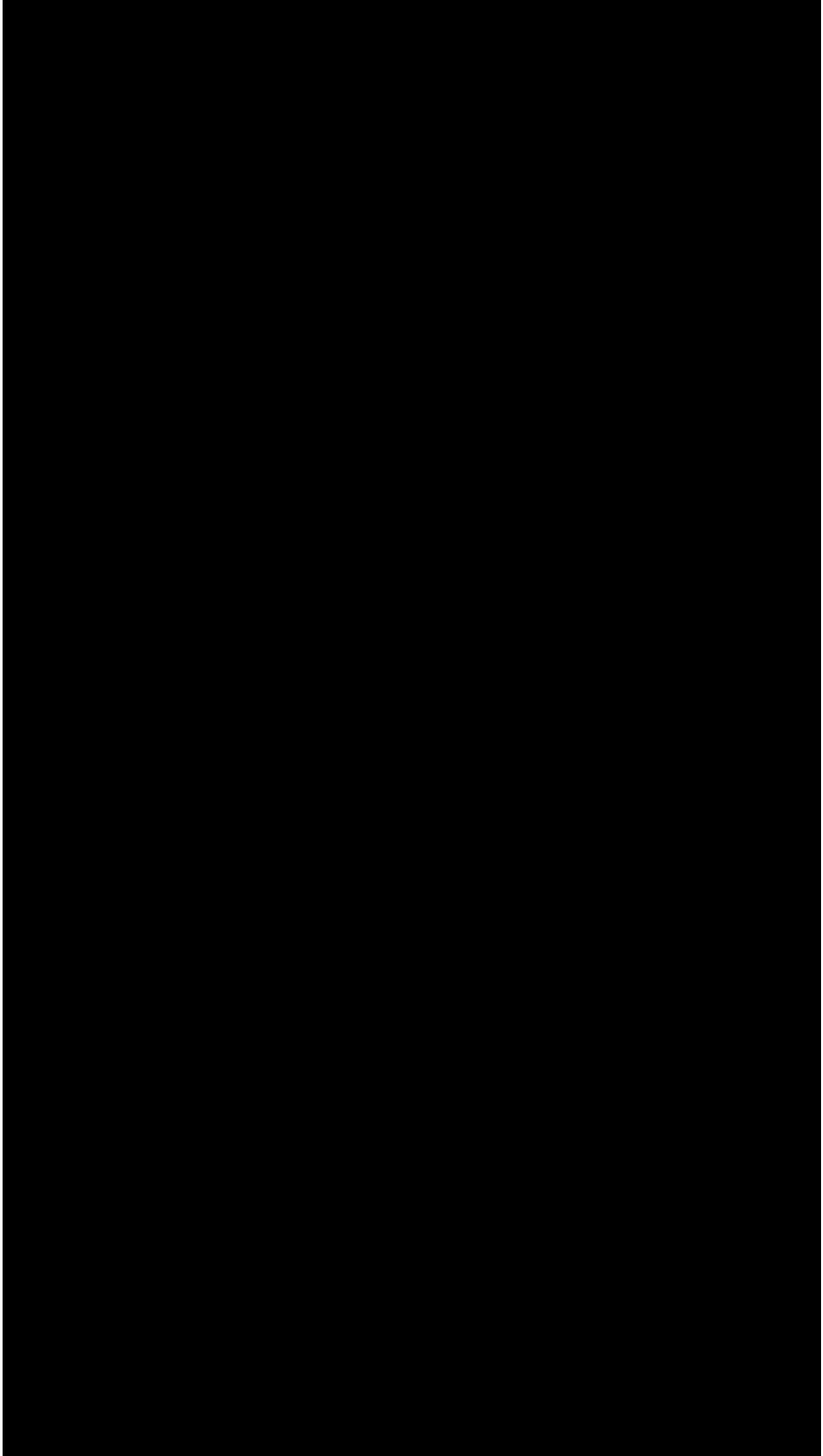
30cm (12")  
paired



15cm (6")  
ribbon





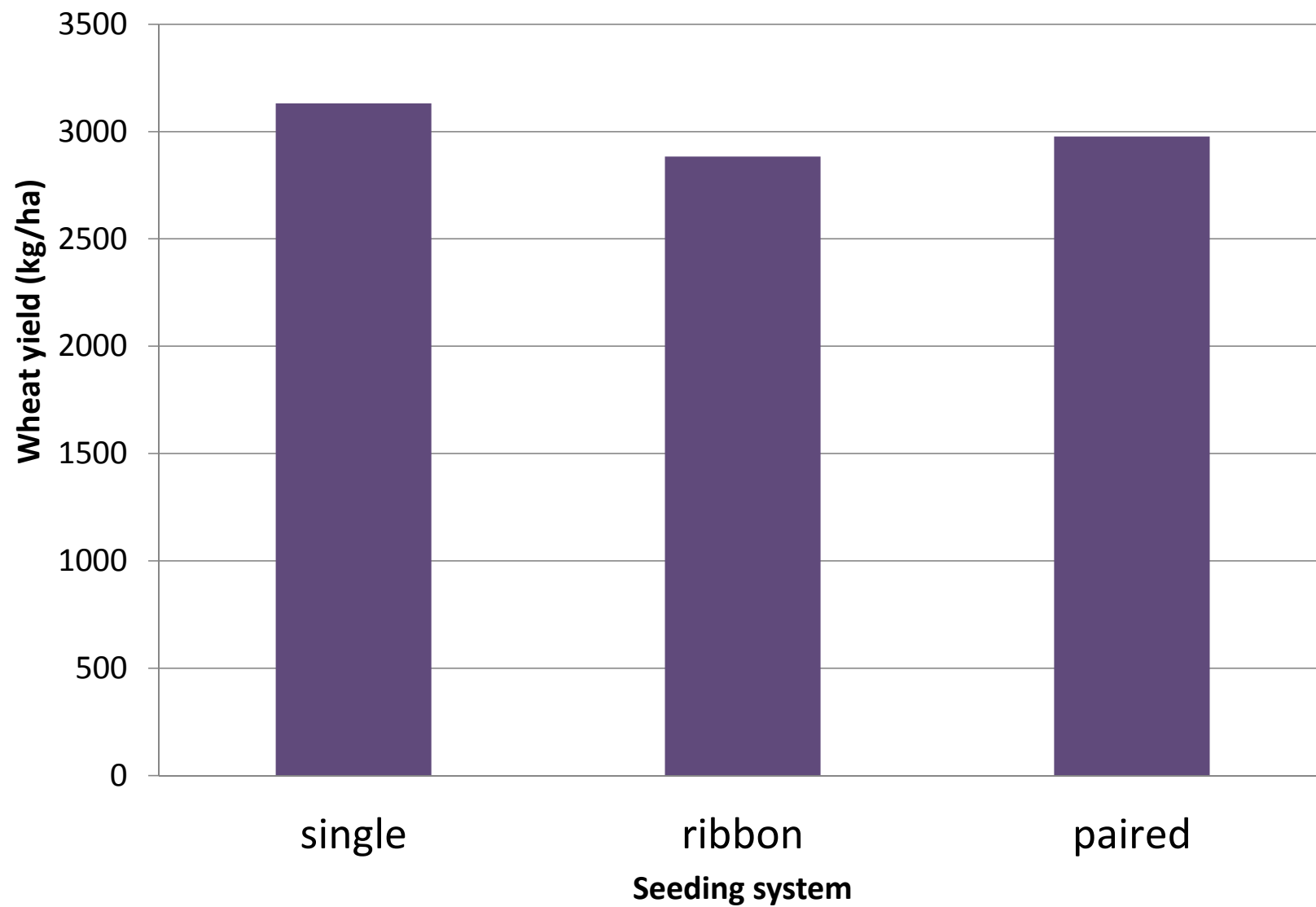


## Wheat yield - wheat seeding rate

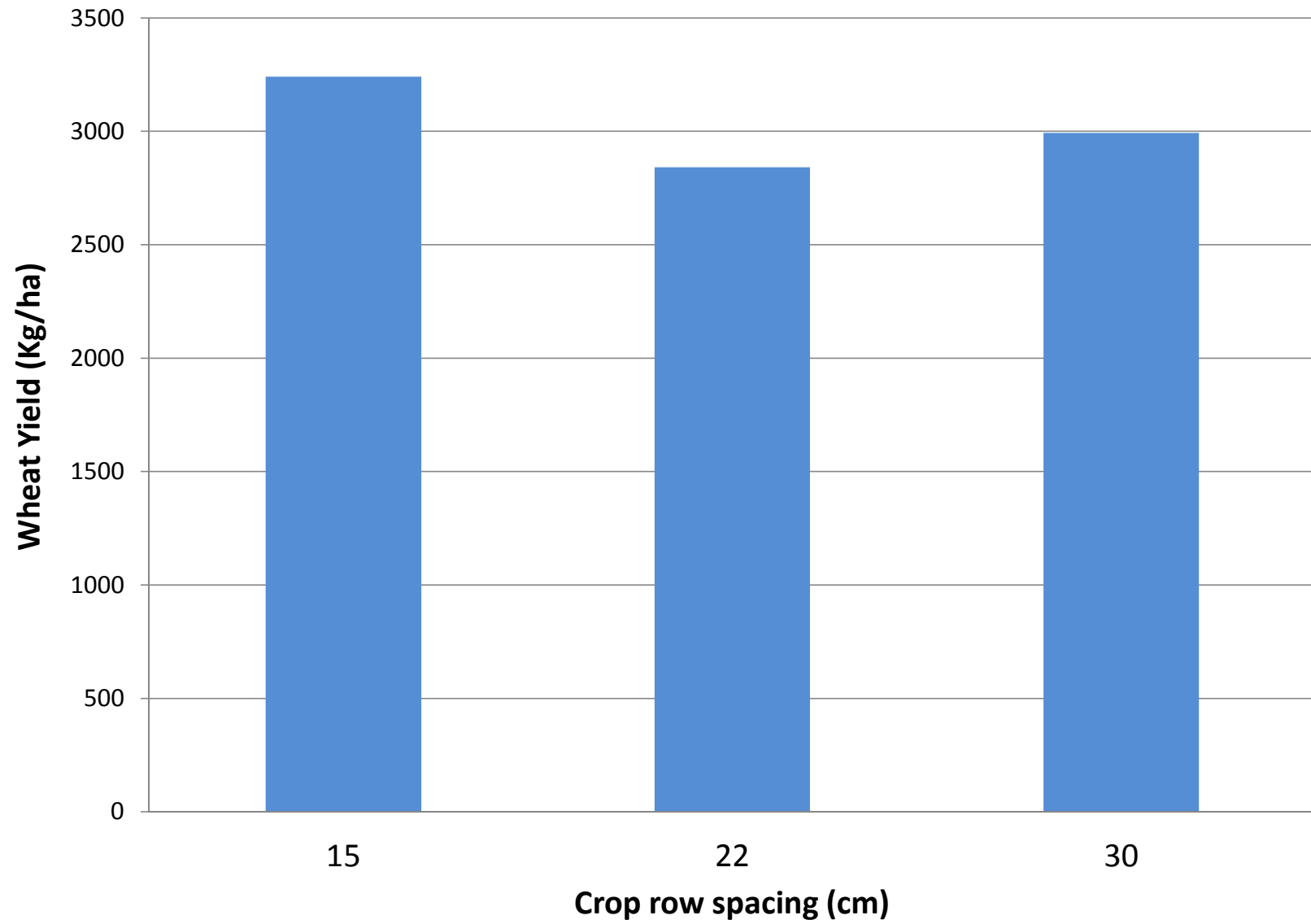




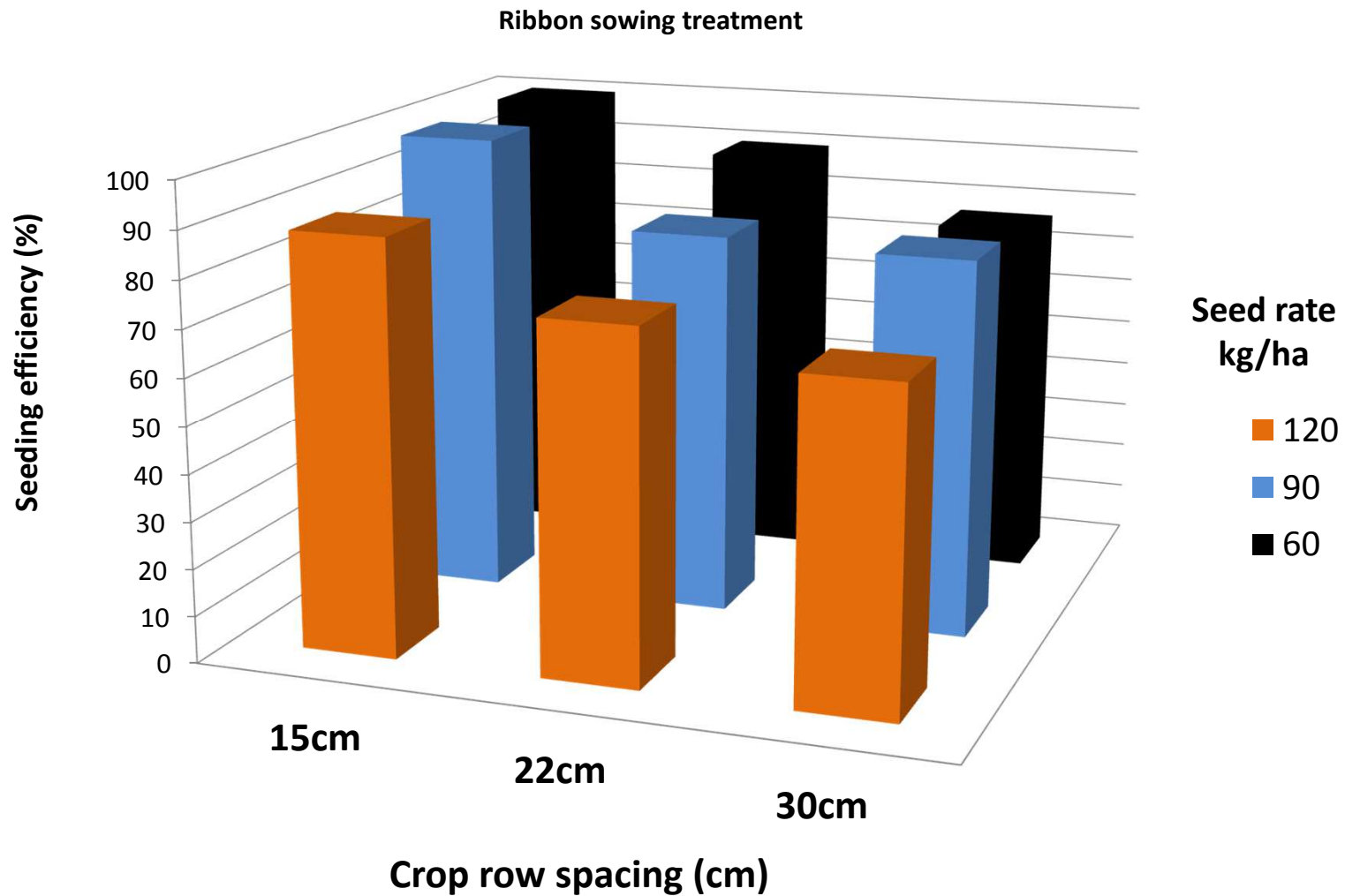
**Wheat yield - seeding system**

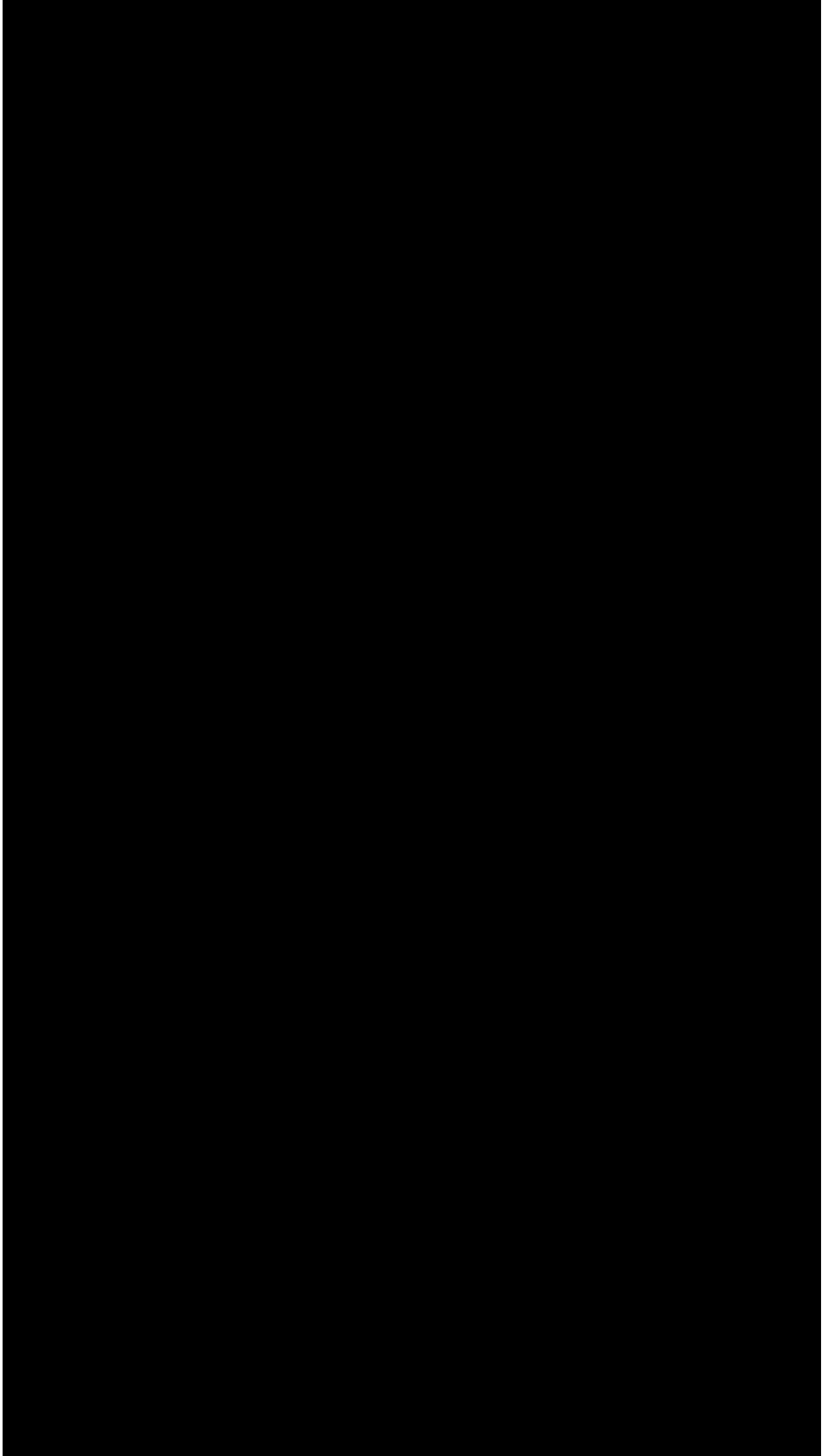


## Wheat yield - crop row spacing



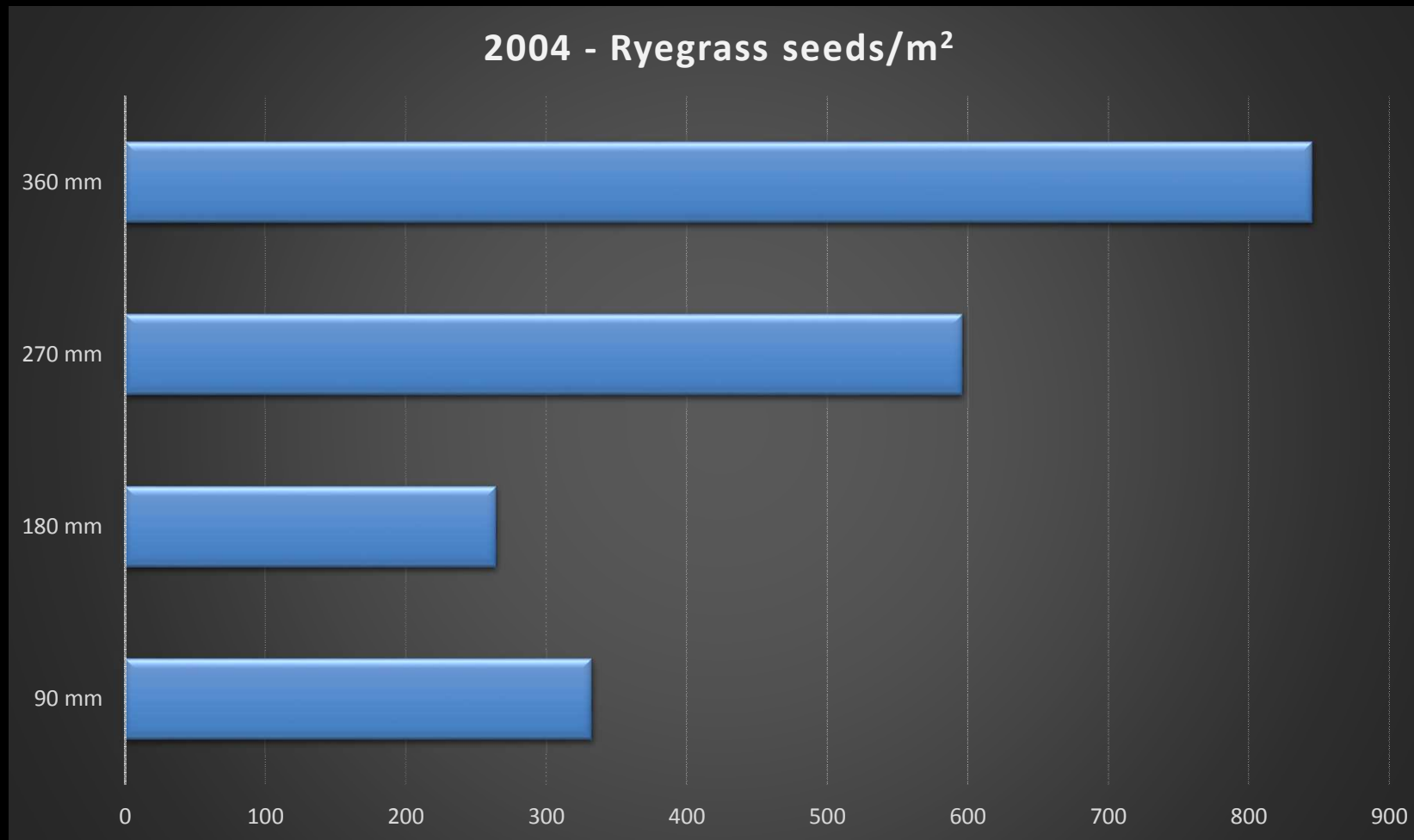
# Seeding Efficiency - % of seeds that emerge





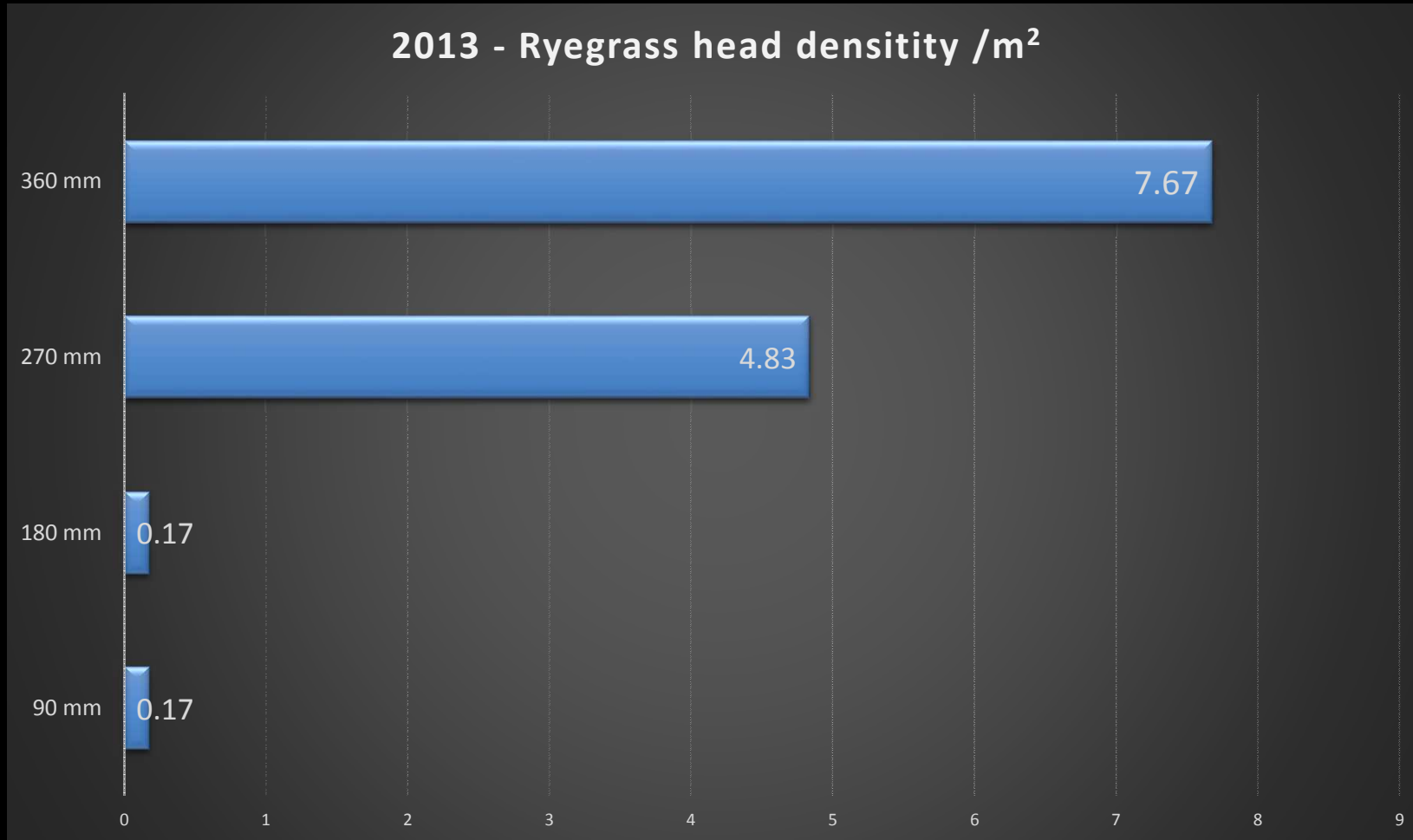
# Glen Riethmuller

## 27 year trial – stubble retained



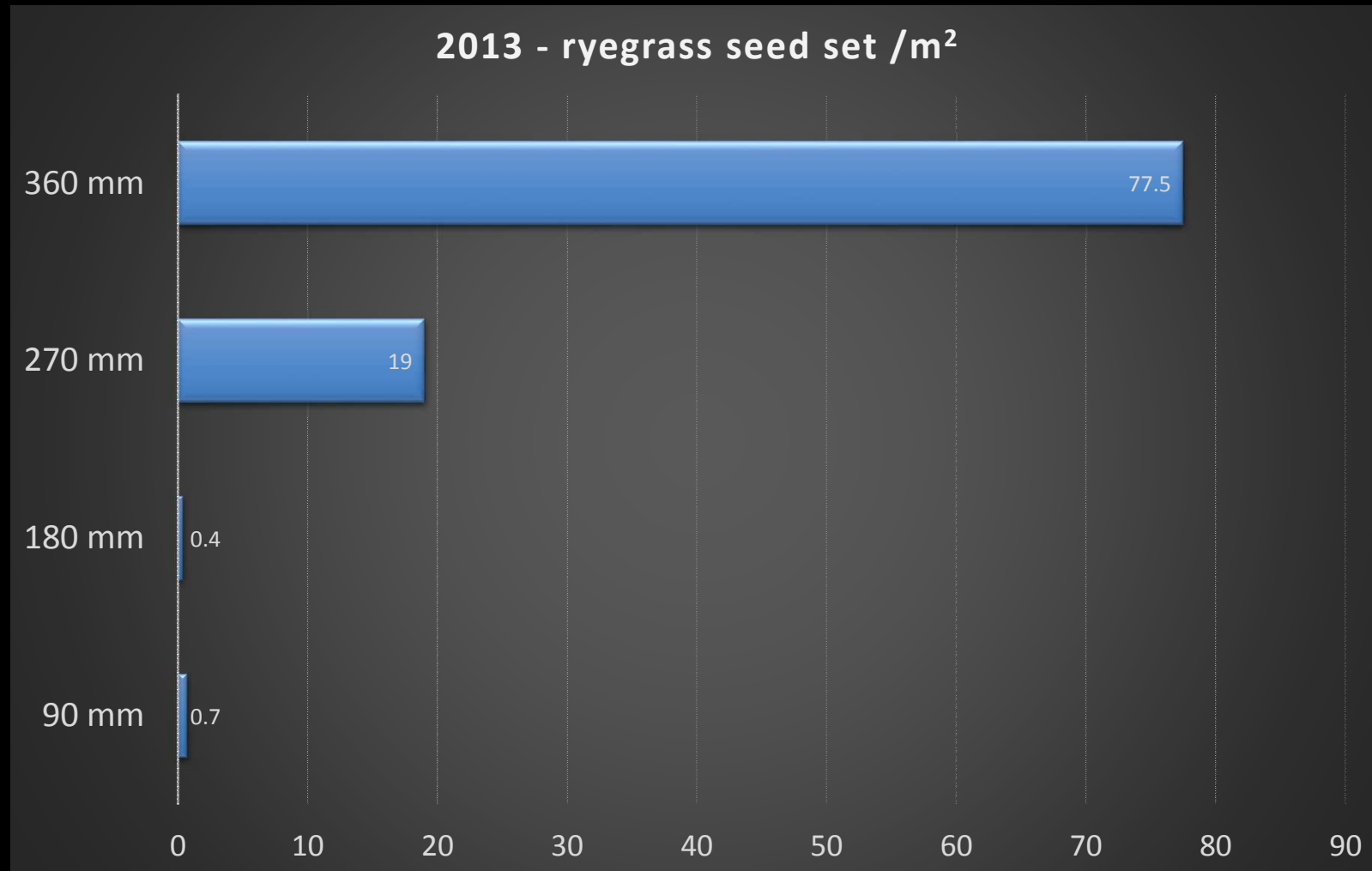
# Glen Riethmuller

## 27 year trial – stubble retained



# Glen Riethmuller

## 27 year trial – stubble retained





## Row spacing of winter crops in broad scale agriculture in southern Australia



4/16/17

Graham Centre Monograph No. 3

Brendan J. Scott  
Peter Martin  
Glen P. Riethmuller

**GRDC** Grains Research & Development Corporation  
Your GRDC working with you

EDITED BY  
Toni Nugent and Catriona Nicholls

1% / inch



## Benefit compared to 12"

	10" (25cm)	7.5" (19cm)
Reduction in row spacing (cm)	5	11
Wheat yield benefit (kg/ha)	40	88
<b>\$/ha benefit</b>	<b>\$10.80</b>	<b>\$23.76</b>

# Cost compared to 12"

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Extra fuel (\$/ha) – worst case	\$1.20	\$3.50

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Extra fuel (\$/ha)	\$1.20	\$3.50
Delayed sowing cost (\$/ha)	0	\$5.56

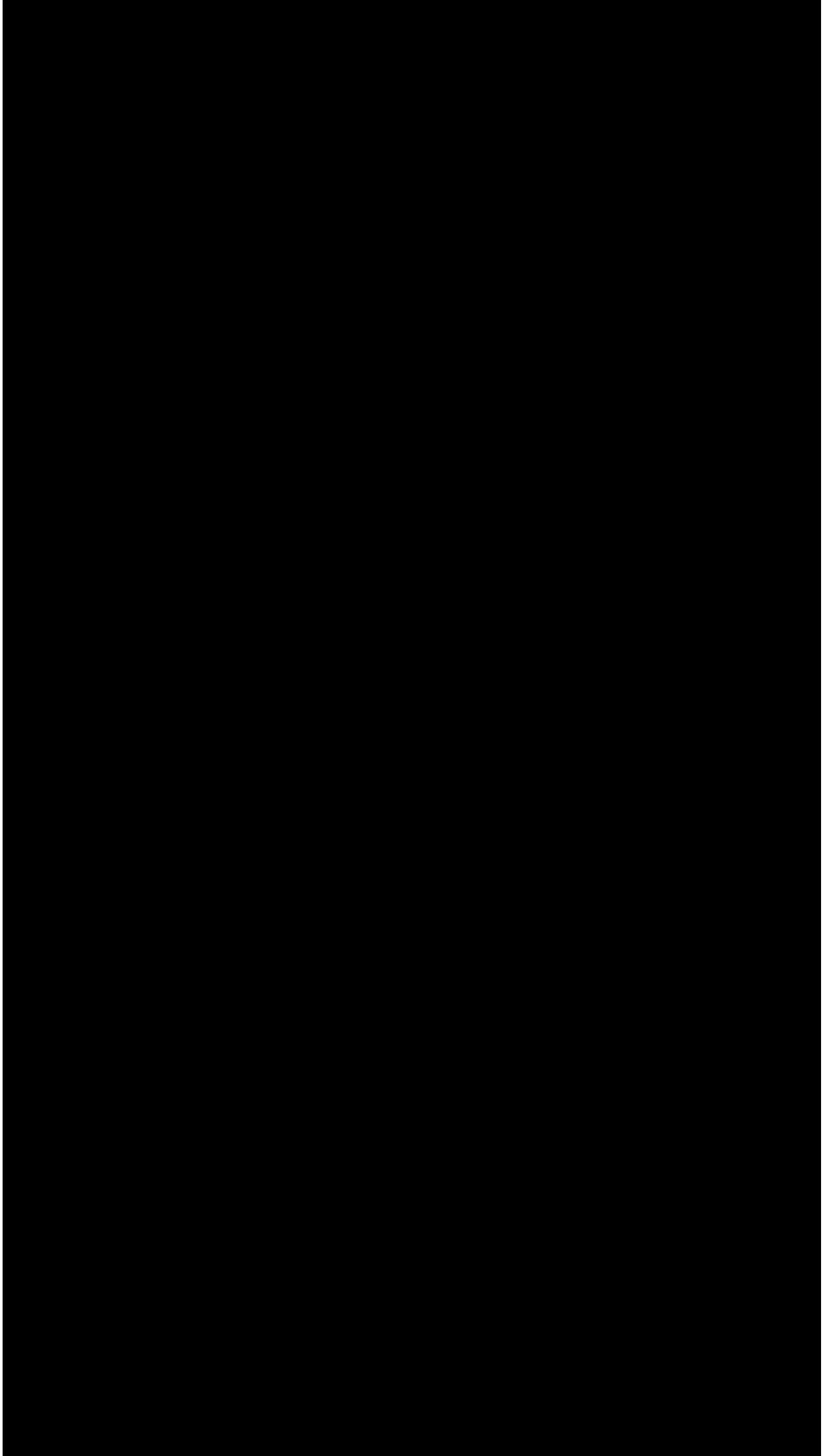
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<b>Total extra cost /ha</b>	<b>\$2.01</b>	<b>\$10.56</b>

# Scoreboard

	10"	7.5"
Cost	\$2.01	\$10.56
Benefit	\$10.80	\$23.76
<b>Net Benefit \$/ha</b>	<b>\$8.79</b>	<b>\$13.20</b>

Wheat only – 2 t/ha. 8 kg/ha/cm











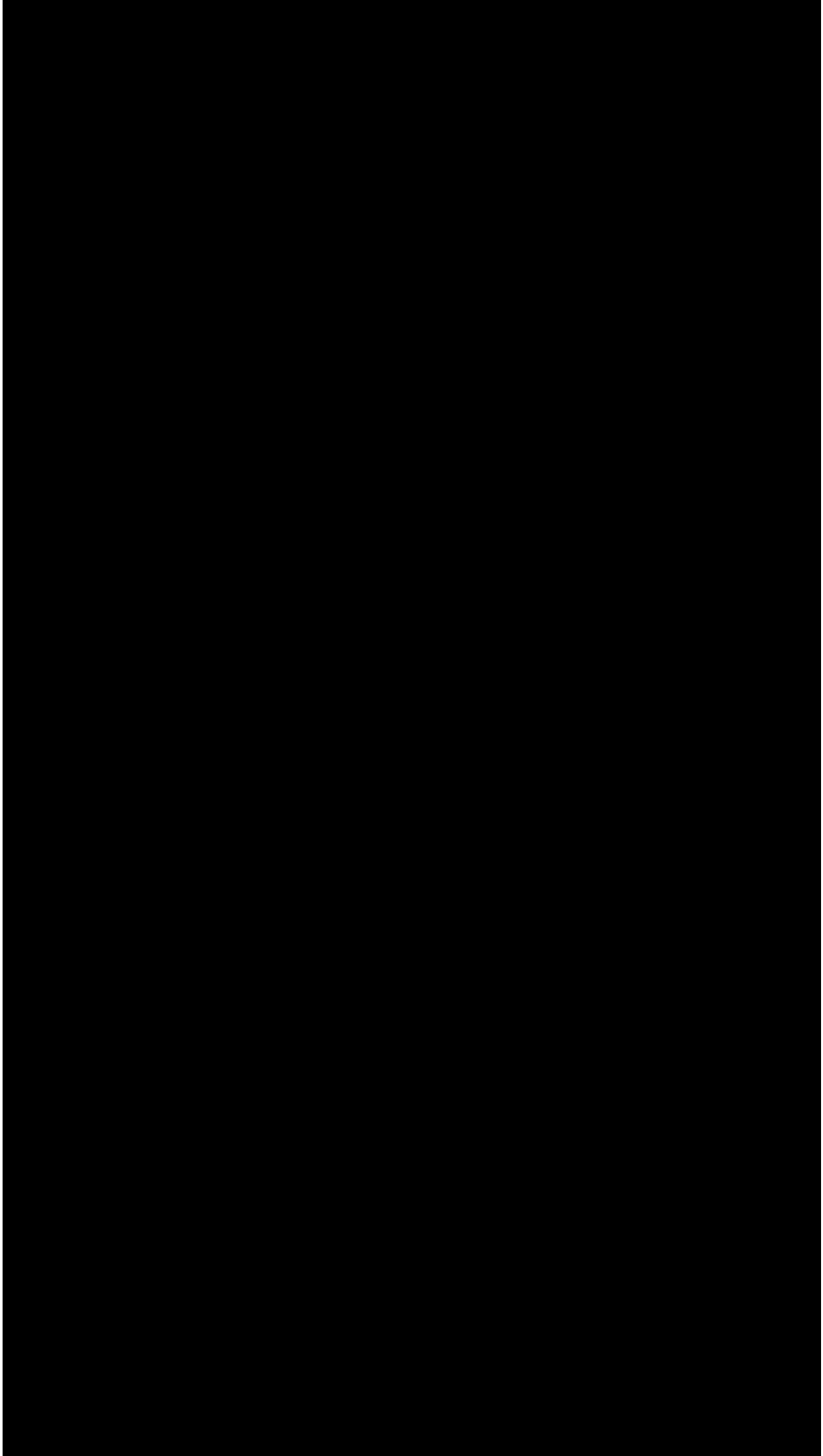














# Crop Orientation

## 50% reduction in ryegrass seed set

# **for free**

Catherine Borger

Department of Agriculture and Food WA



East-west



North-south





# 10 Point Plan

The 10 Point Plan helps you win the battle against crop weeds. Follow the links below for practical tips and tricks to implement these strategies on-farm, and further information on the research to back up these steps.

## 1. ACT NOW TO STOP WEED SEED SET

- Research and plan your WeedSmart strategy
- Understand the biology of your weeds
- Be strategic and committed



[read more...](#)

## 2. CAPTURE WEED SEEDS AT HARVEST

- Consider your options – chaff cart, narrow windrow burning, baling, Harrington Seed Destructor
- Compare the financial cost per hectare



[read more...](#)

## 3. ROTATE CROPS AND HERBICIDE MODES

## 4. TEST FOR RESISTANCE TO ESTABLISH A

AHRIinsight is a regular email service providing up to date research information and news from the Australian Herbicide Resistance Initiative.



## AHRIinsight #10

### AHRI Mythbusters - can 2,4-D induce resistance in ryegrass?

What if you accidentally sprayed the wrong herbicide? Agronomists of yester-year developed a handy trick. They found that if they accidentally sprayed an oat crop with Hoegrass® (diclofop-methyl), they could stop crop damage in its tracks if they quickly applied 2,4-D. The grand question is...does it actually work? The 'myth' says yes. What does the science say?

The AHRI Mythbusters team got the answer!

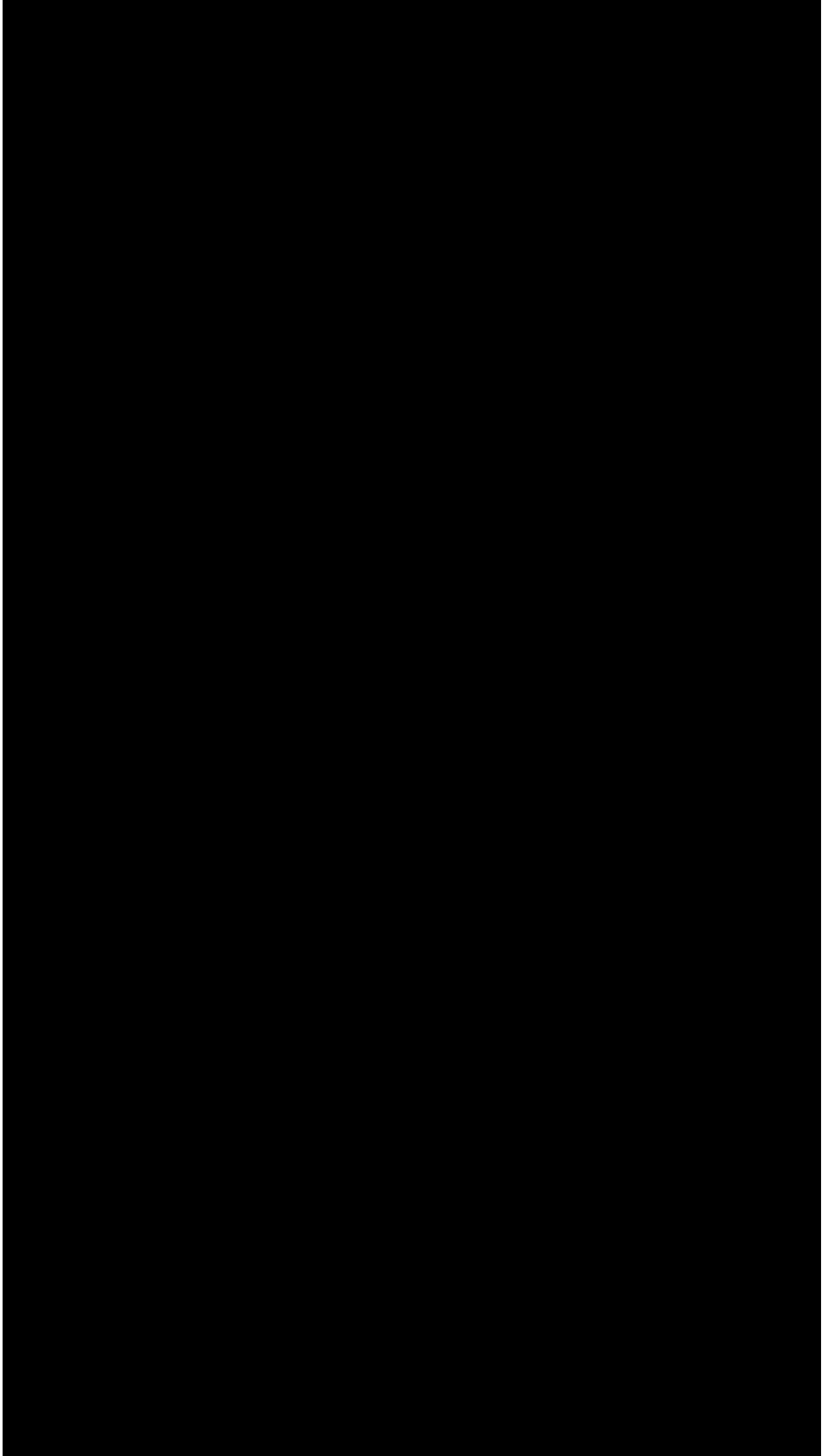
In this latest AHRI research, Dr Heping Han and others found that when they pre-treated ryegrass with 2,4-D amine it became resistant to Hoegrass®. This is likely due to 2,4-D causing a spike in P450 activity which enabled the ryegrass to metabolise (eat) the herbicide before it

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@peterdnewman



# Thank you





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To receive regular updates on AHRI research and other information about herbicide resistance