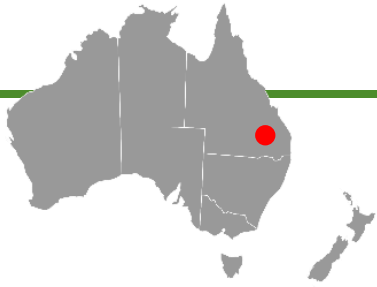
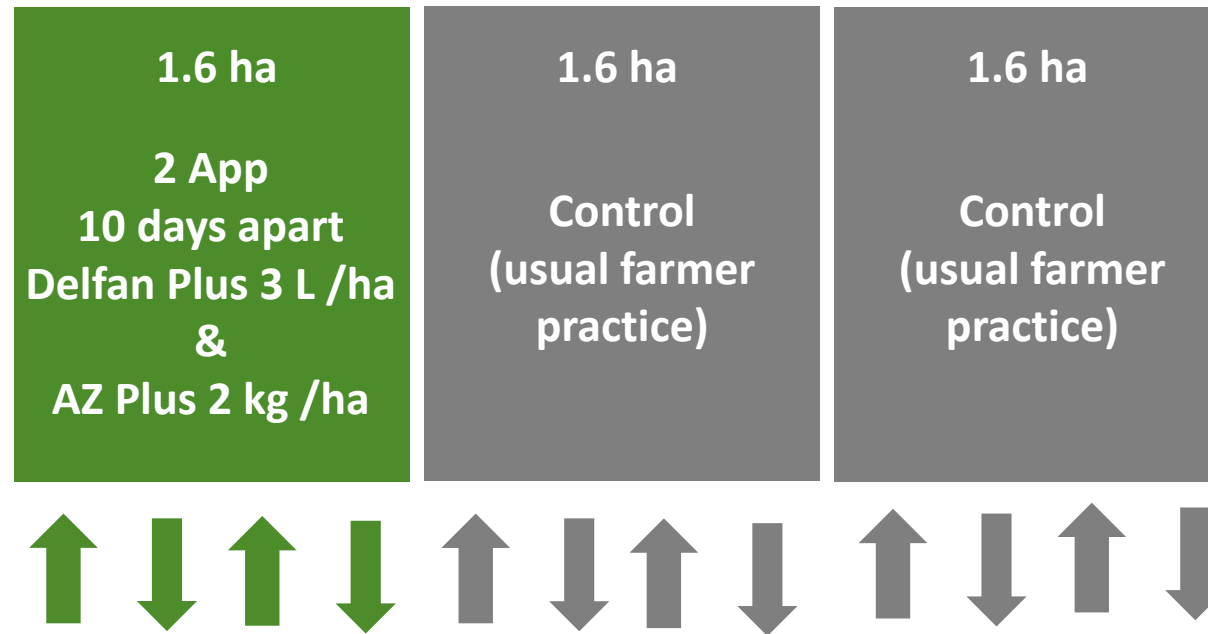


# Trial: Delfan Plus + AZ Plus in Lucerne Hay



|                      |   |
|----------------------|---|
| <b>Crop:</b>         | <b>Lucerne var. LM 99</b>   |
| <b>Product:</b>      | <b>Delfan Plus + Tradecorp AZ Plus</b>                                  |
| <b>Aim:</b>          | More Bales, Shorten Recut Interval                                      |
| <b>Application:</b>  | Boom spray 250L /ha   |
| <b>Rate:</b>         | 2 App: Delfan plus 3L /ha & Tradecorp AZ Plus 2 kg /ha 10 days apart    |
| <b>Start date:</b>   | <b>4-7-17</b>   |
| <b>Harvest date:</b> | <b>21-8-17</b>  |
| <b>Assessment:</b>   | Vegetative growth, Bale Yield Protein                                   |
| Notes:               | Soil; chocolate loam, Climate; sub-tropical, Irrigation; traveling boom |

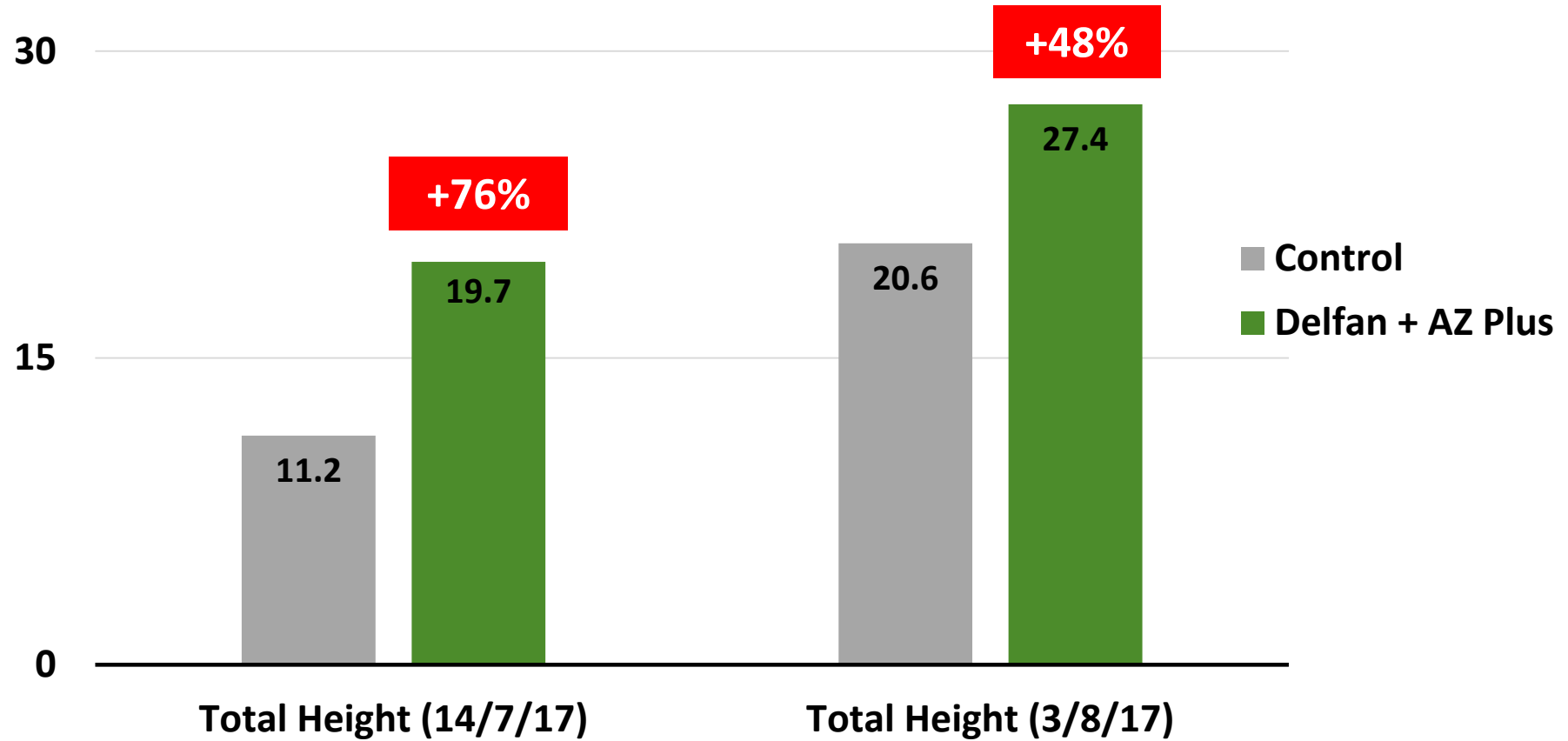
# Design



## Set-up and Application

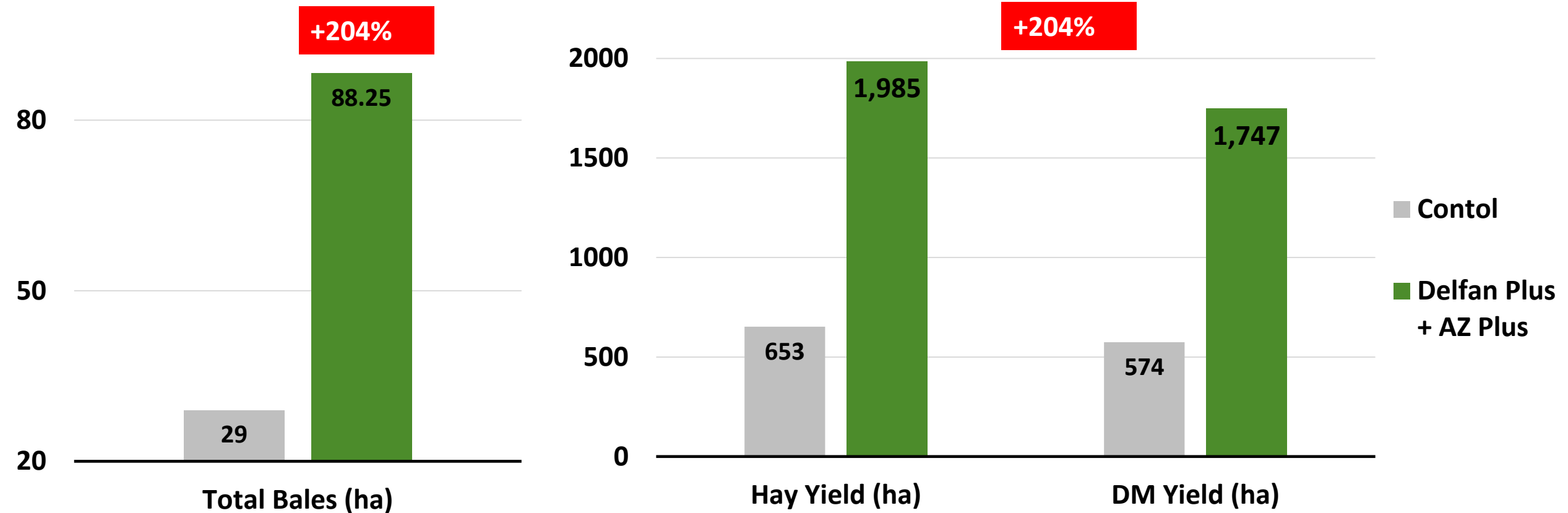
- Continuous Lucerne crop used for hay making for horse market
- Travelling Boom Irrigator
- Crop was cut, field dried and baled
- Delfan Plus & Tradecorp AZ Plus applied 7 days after baling, then there was rain shortly after so the farmer reapplied 5 days later the same treatment
- Aim: Delfan for rapid recovery after leaf removal, AZ Plus for micronutrients and Co Mo for leguminous crop

# Results - Total height



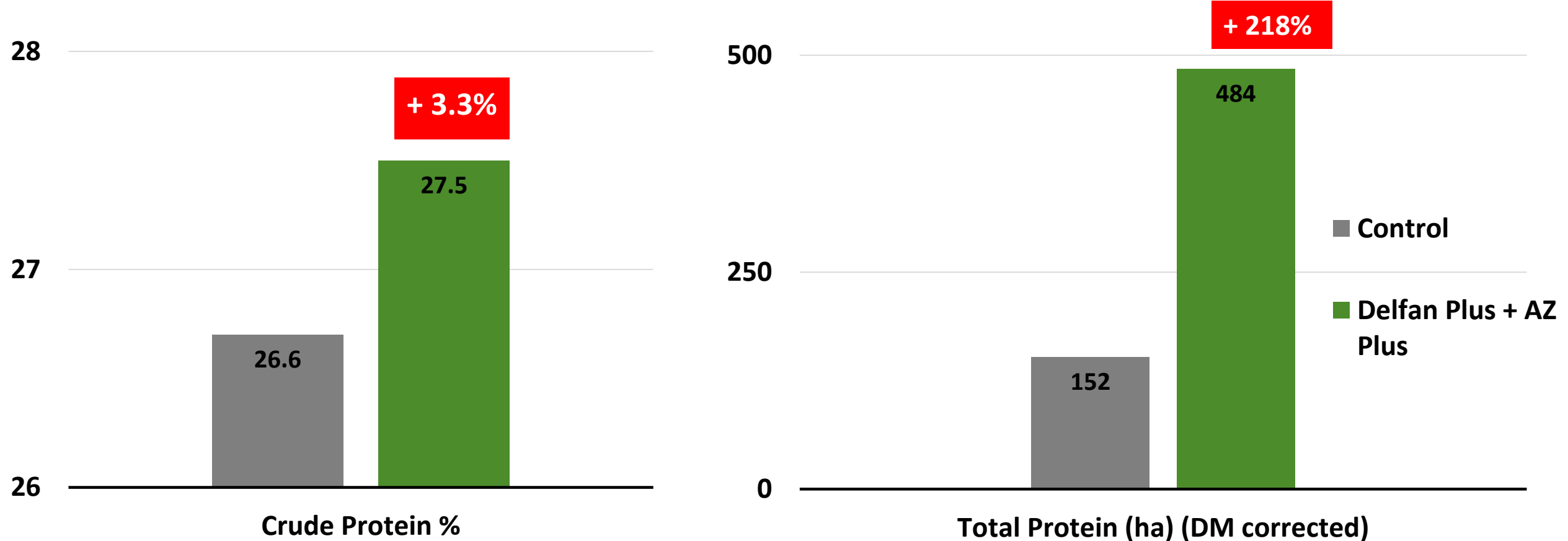
- Total Height 10 and 30 days after Treatment

# Results - Total Bales, Hay Yield, DM Yield



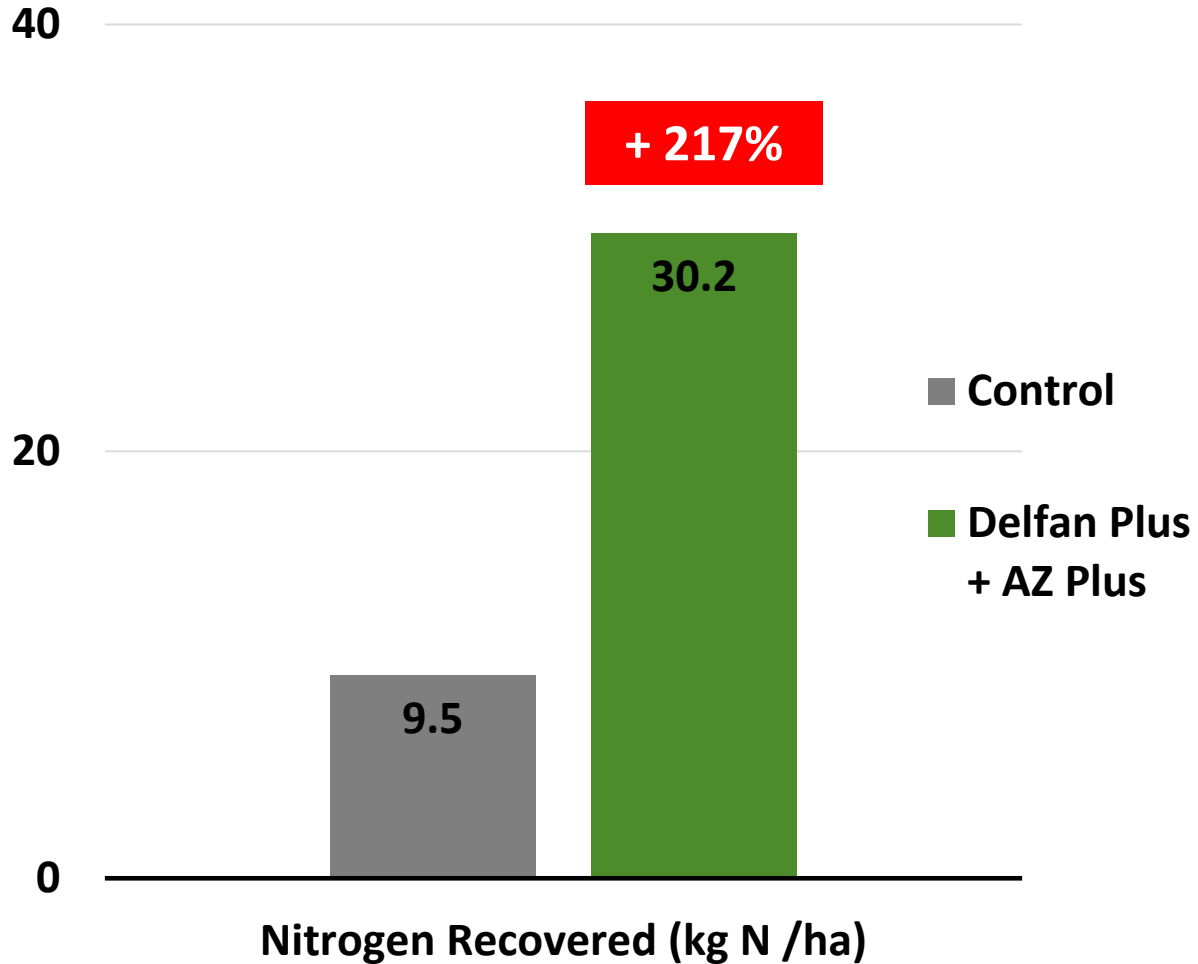
- Hay Yield was increased from 652 to 1985 kg /ha and increase of 204%

## Results – Crude Protein



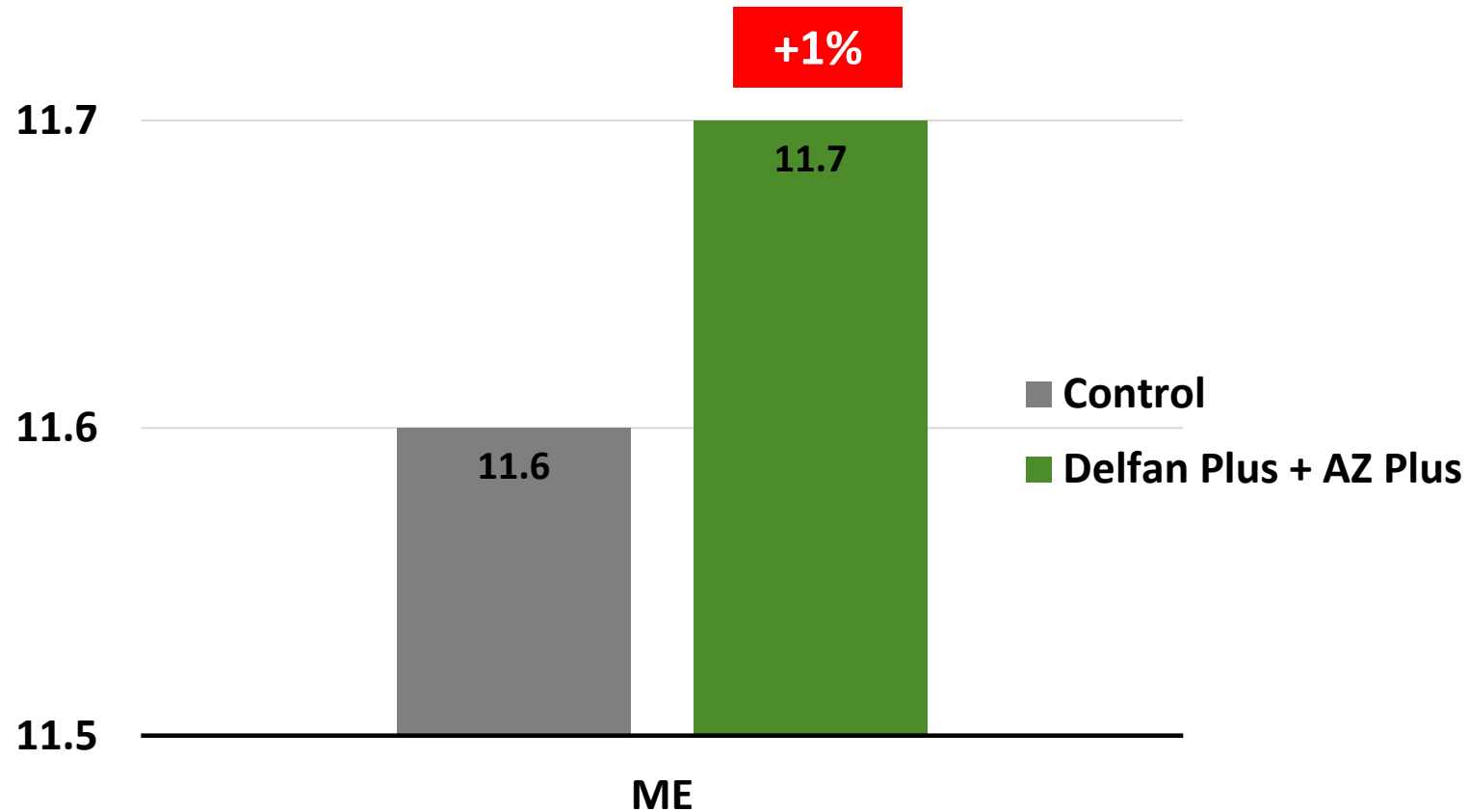
- Crude protein is increased in the Delfan Plus + AZ Plus indicating no Protein Dilution despite the vastly increased yield

# Results - Nitrogen Recovery & Use Efficiency



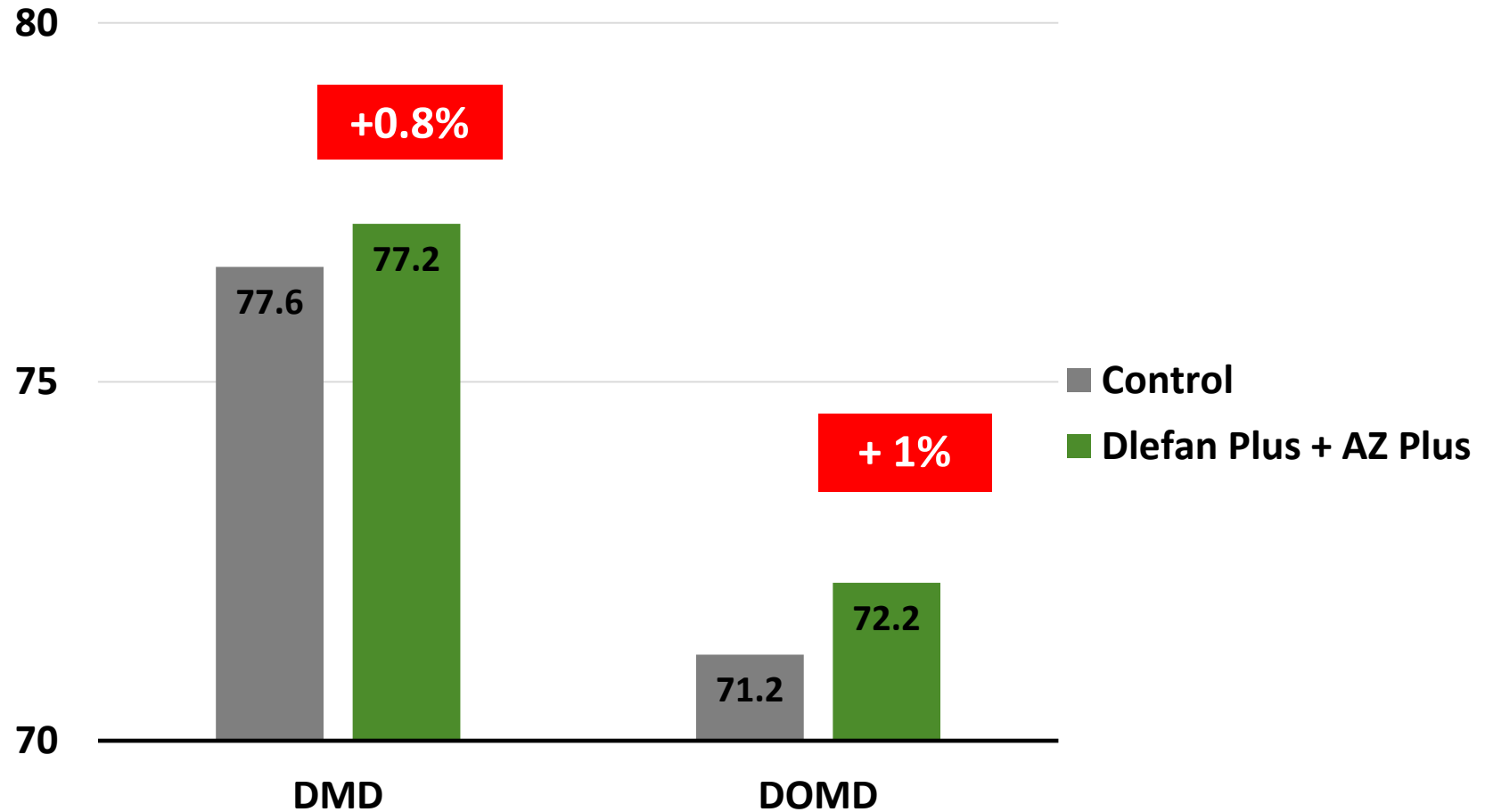
- Nitrogen recovered in the crop was increased 217%
- This is most likely due to enhanced N fixing efficiency from the Mo and Co in AZ Plus
- Also the incorporation of the N in the L- $\alpha$  Amino Acids in Delfan Plus resulted into earlier and more vigorous growth
- Greater recovery of Nitrogen if it is not due to nodulation indicates greater Nitrogen recovery and use efficiency (NUE)
- This will result in less risk of Nitrate pollution of Waterways and Reef using the Tradecorp Program

## Results – Est. Metabolisable Energy



- ME was similar between Tradecorp and the Control indicating no dilution of feed value despite the vastly increased Yield in the Tradecorp treatment

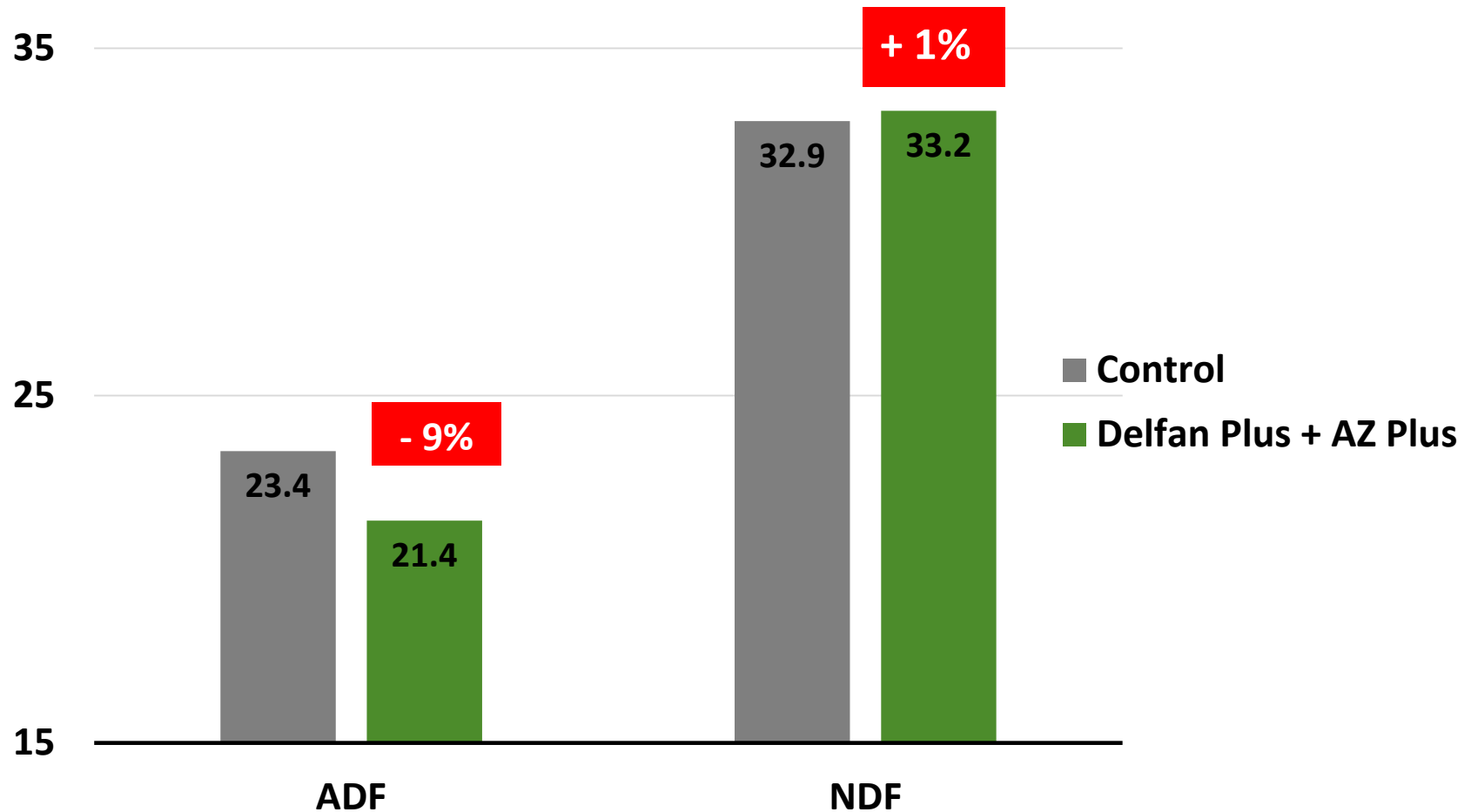
# Results- DMD and DOMD



- DMD / DOMD was similar between Tradecorp and the Control indicating no reduction in digestibility despite the vastly increased Yield in the Tradecorp treatment



# Results – Acid Detergent Fibre and Neutral Detergent Fibre



- AD Fibre is reduced and NDF unchanged in the Tradecorp treatment indicating there is less fibre and livestock will likely consume more contributing to greater daily weight gain in fattening animals

# Conclusion

- Delfan plus + Tradecorp AZ Plus increased Lucerne Hay Yield by 204% from 29 to 85 Bales /ha
- Crude Protein levels increased by 3.3% from 26.6% to 27.5%
- Nitrogen recovery increased 217% indicating less chance of Water and Reef pollution
- Delfan Plus + AZ Plus increase bottom line by an average of \$448 /ha after input costs
  - (Average bale = \$10 off farm)
- ROI 1:3.13

3L Delfan Plus & 2 kg Tradecorp AZ Plus applied  
after baling increased Yield 204% and generated an  
ROI of \$3.13 for every \$1 invested



# Adjust this slide and enter all the parameters

| <b>Crude Protein</b> | <b>Acid Detergent Fibre</b> | <b>Neutral Detergent Fibre</b> | <b>Dry Matter Digestibility</b> | <b>Dry Organic Matter Digestibility</b> | <b>Metabolisable Energy</b> |
|----------------------|-----------------------------|--------------------------------|---------------------------------|---|-----------------------------|
| <b>CP</b>            | <b>ADF</b>                  | <b>NDF</b>                     | <b>DMD</b>                      | <b>DOMD</b>                             | <b>ME</b>                   |

|                  |      |      |      |      |      |      |
|------------------|------|------|------|------|------|------|
| <b>Control</b>   | 26.7 | 23.4 | 32.9 | 76.6 | 71.7 | 11.6 |
| <b>Tradecorp</b> | 27.5 | 21.4 | 33.2 | 77.2 | 72.2 | 11.7 |