# Alternative Finishing Strategies for Dairy Steers

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## Session 16: Improving the quality and sustainability of beef production

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# Introduction

- ~ 27% of Irish male dairy calves were exported in 2014

  (AIM, 2015)

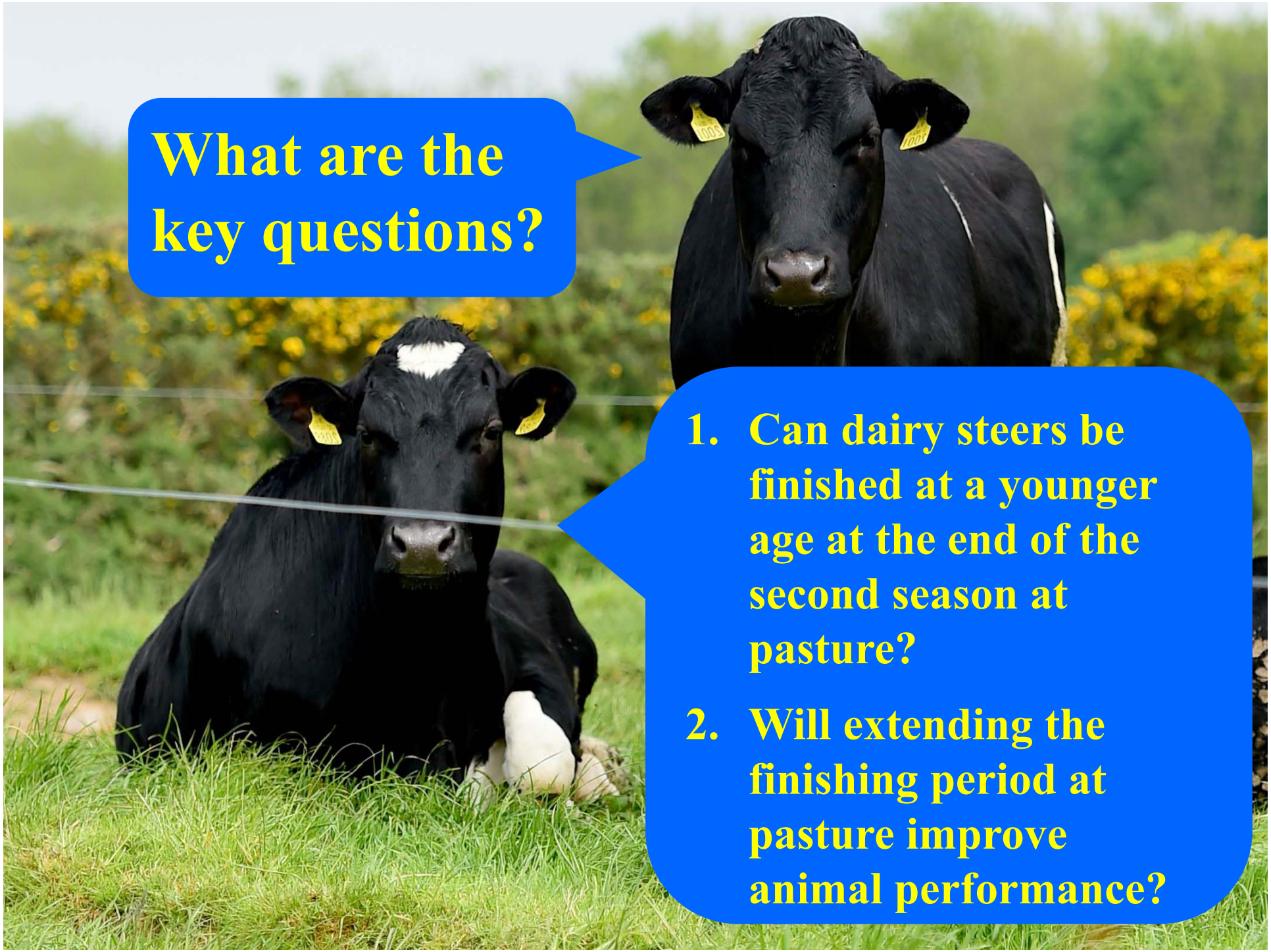
- Dairy steers finished at pasture were more profitable than steers finished indoors over the winter period

  (Ashfield et al., 2014)

- Grazed grass is the cheapest feed available to Irish farmers

  (Finneran et., 2010)

- Potential to reduce input costs and increase the proportion of grazed grass in the diet of dairy steers


What are the key questions?
1. Can dairy steers be finished at a younger age at the end of the second season at pasture?
2. Will extending the finishing period at pasture improve animal performance?

# Materials and Methods

- 45 Spring born Holstein-Friesian calves

- Pasture grazed for the 1st season
- Housed over the winter

- Returned to pasture for a 2nd season on 19 March

At pasture supplemented with 5 kg DM of concentrate for 110 days (21L)

At pasture supplemented with 5 kg DM of concentrate for 60 days (21S)

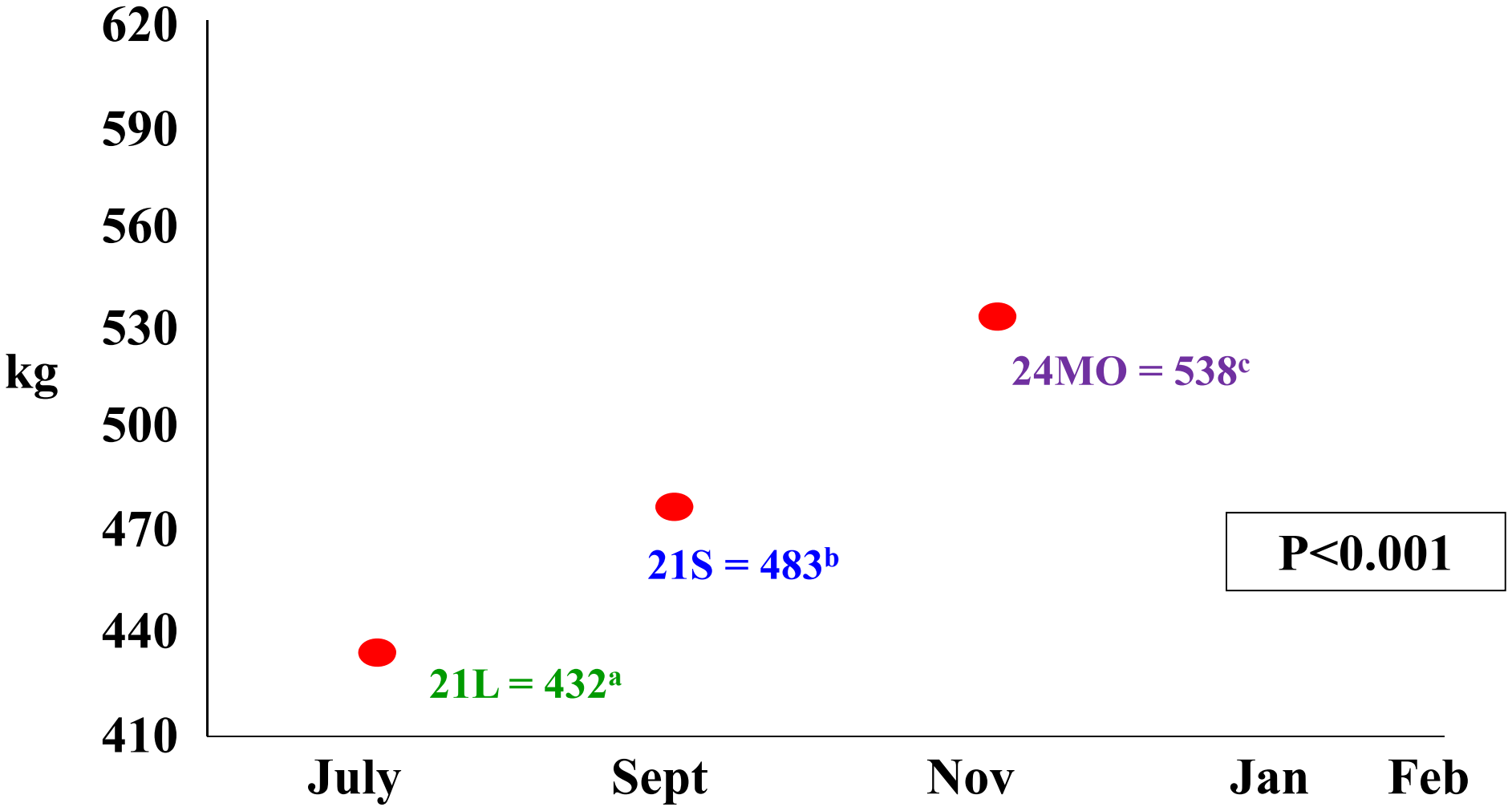
Indoors on grass silage plus 5 kg DM of concentrate over the winter period (24MO)

# Materials and Methods

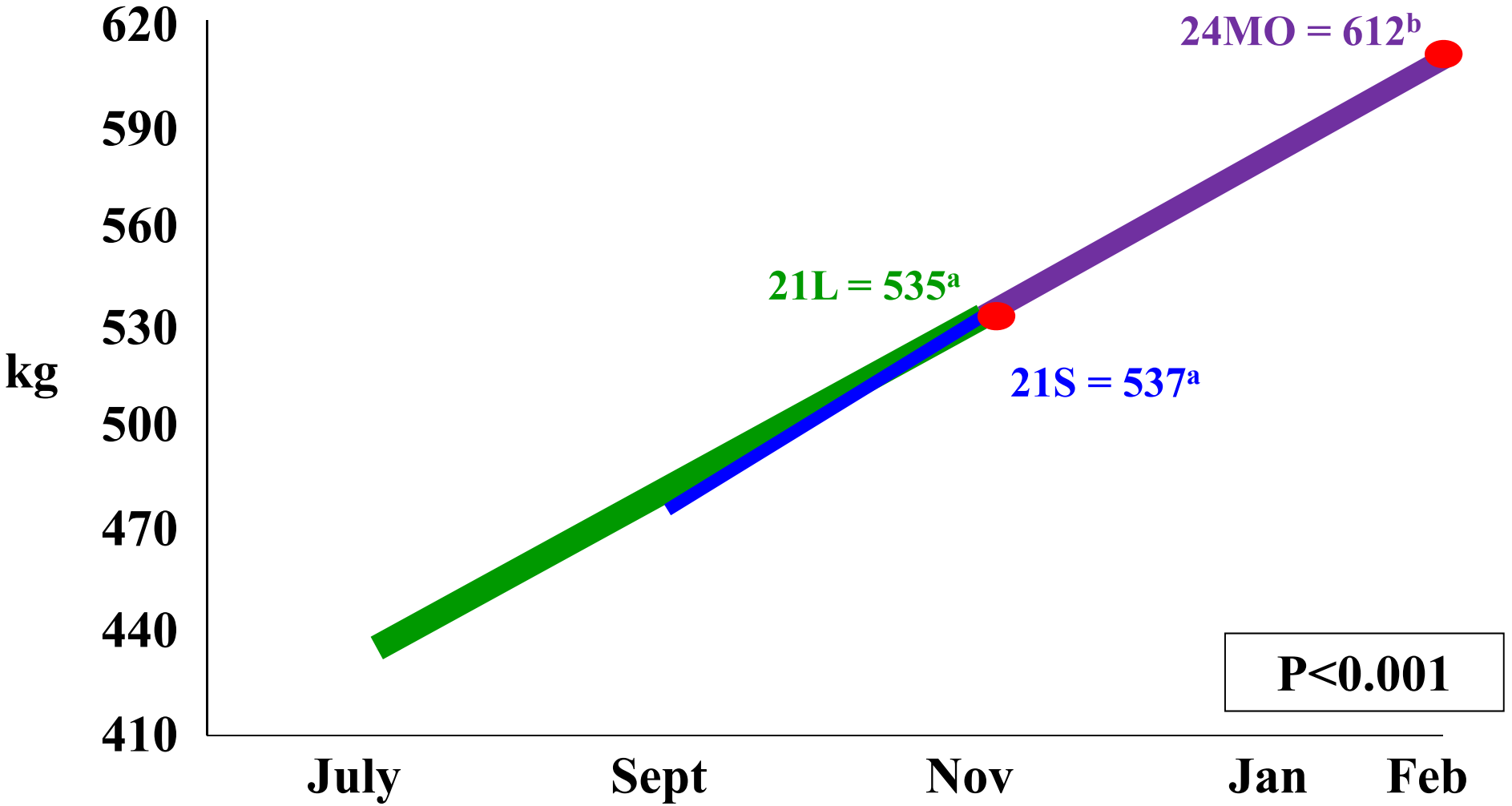
- Rotationally grazed during the 2nd season at pasture
  - 21L = 118 days
  - 21S = 173 days
  - 24MO = 235 days
- 21S and 21L were adapted to 5 kg DM of concentrates at pasture over a 10 day period
- 24MO were adapted to a grass silage and concentrate diet over a 10 day period
- Cattle weighed fortnightly
- Statistical analysis
  - Fixed effect: Finishing strategy
  - Tukey adjustment included in the model

# Results

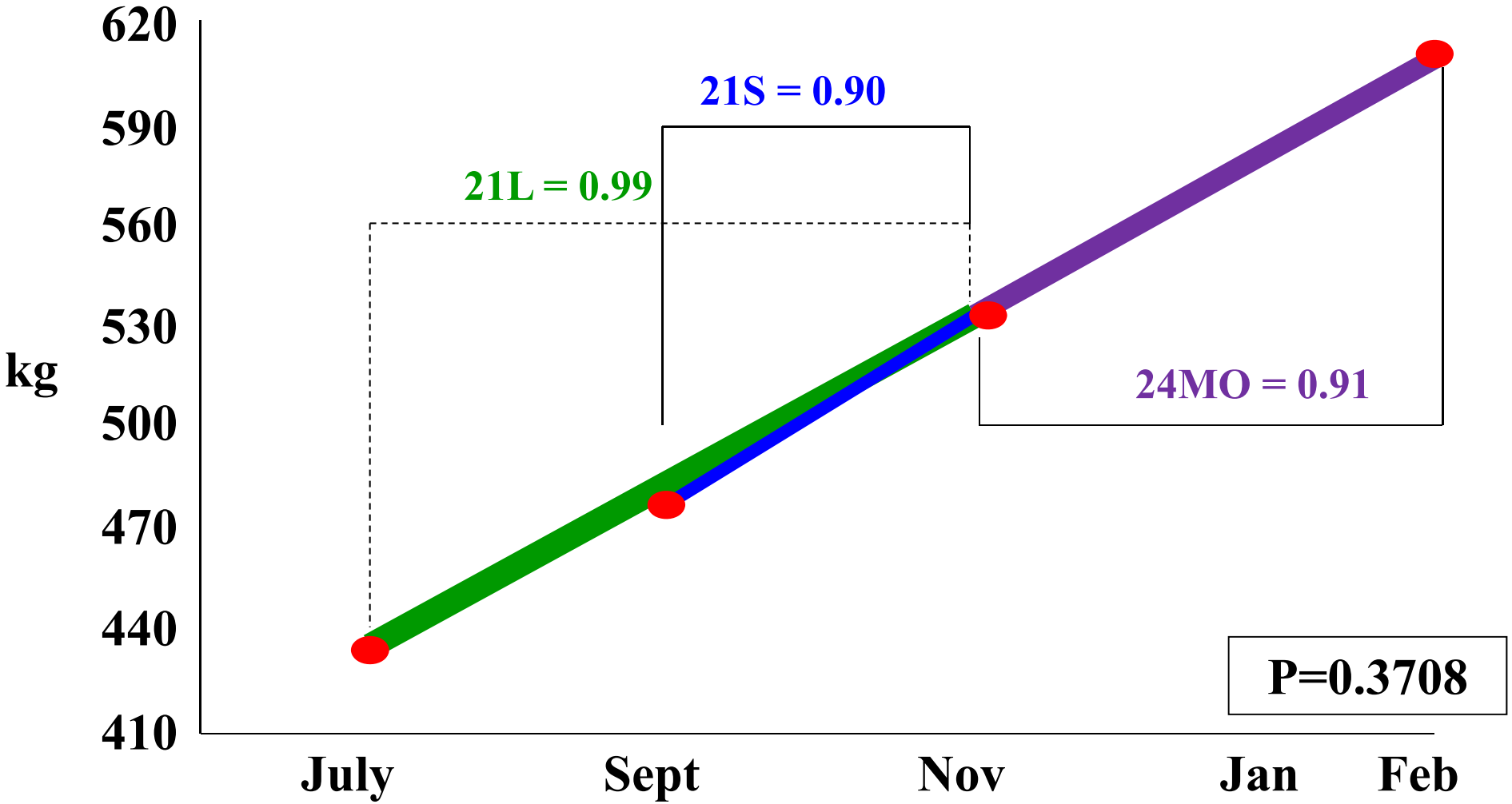
# Live weight at the start of finishing (kg)



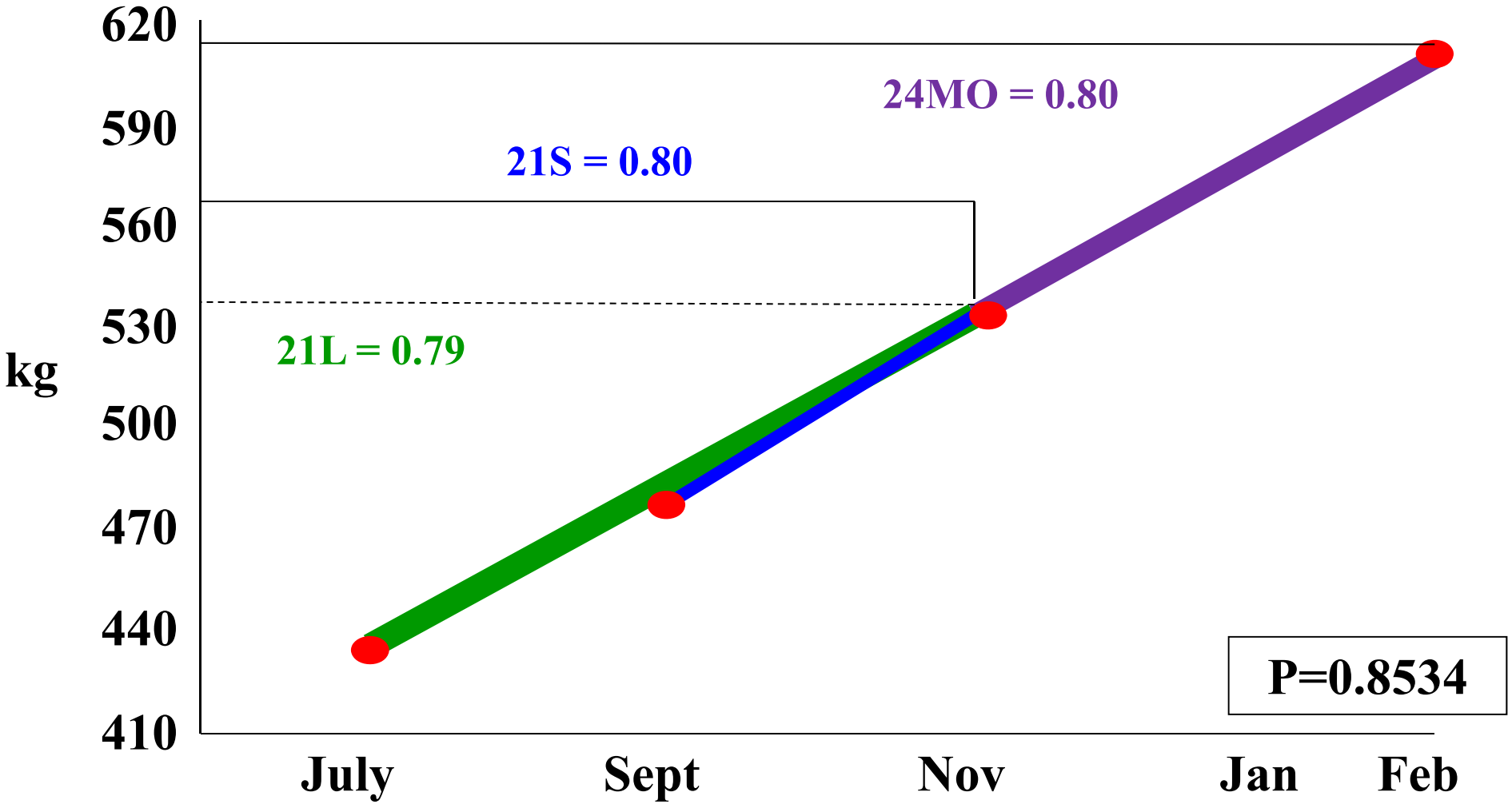
# Live weight at slaughter (kg)



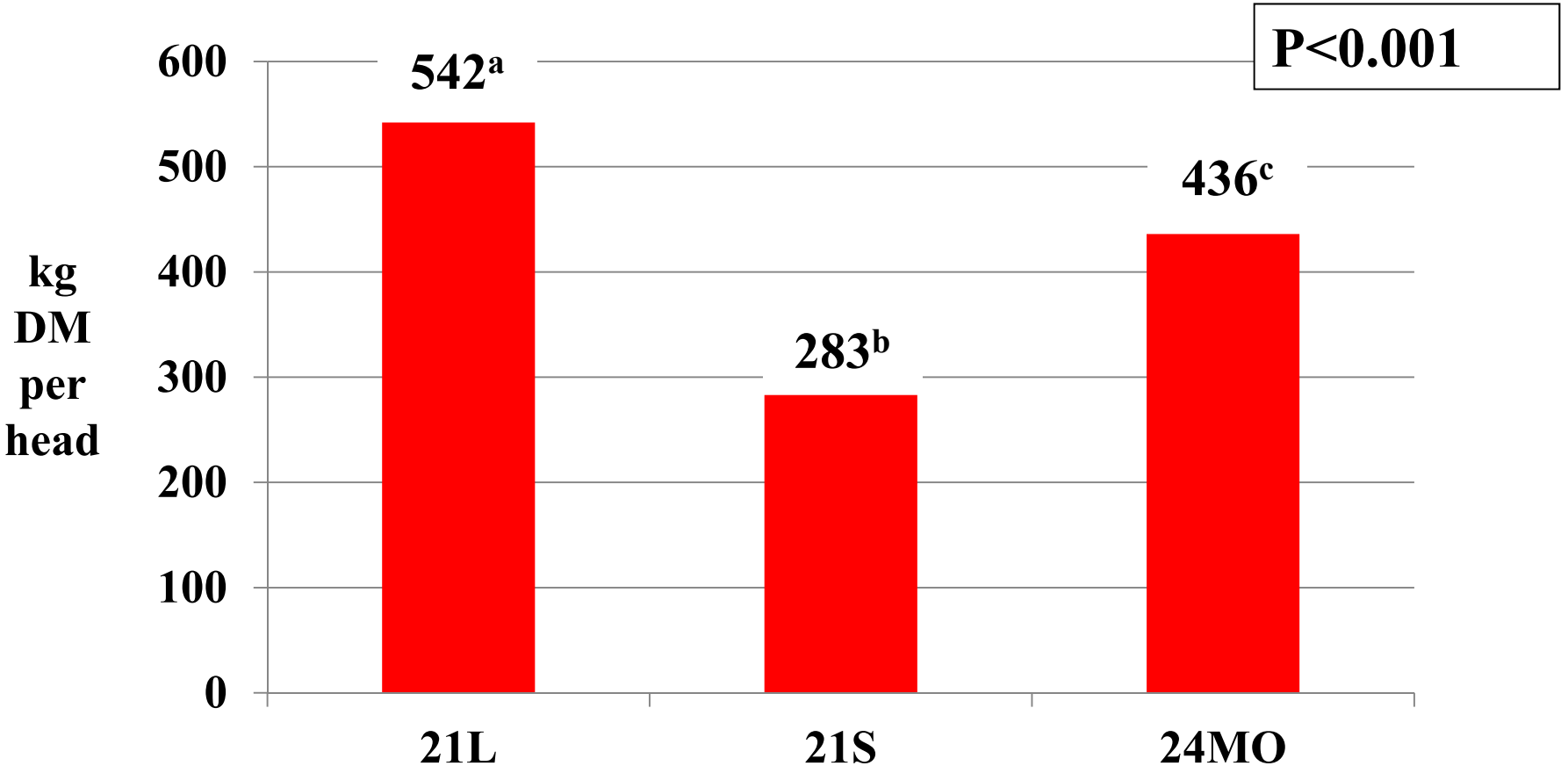
# Average daily gain – Finishing (kg/day)



# Average daily gain – Lifetime (kg/day)



# Total concentrate DMI



# Carcass performance

| | Finishing strategies | | | | |
|---|---|---|---|---|---|
| | 21L | 21S | 24MO | SEM | P-value |
| Carcass weight (kg) | 276[a] | 275[a] | 308[b] | 6.0 | <0.001 |
| Kill out proportion (g/kg) | 514[a] | 513[ab] | 502[b] | 3.8 | 0.0606 |

# Conclusion

- **Extending the finishing period for dairy steers at pasture did not enhance animal or carcass performance**

  **+48% (259 kg DM) Concentrate DMI**

- **24MO consumed 35% more concentrate than 21S**

  **+11% (33 kg) carcass weight**

  **+33% ('3=' vs. '2=') carcass fat score**

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# Thank you for your attention

# Questions?

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