

# Production Risk Management and Profitability

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# Production Risk

- Climatic uncertainty
  - Orchard cold damage
  - Hail
- Labour uncertainty
  - Cost
  - Absenteeism / Illness
  - Mass action / Demands
  - Skills
- Input cost uncertainty
  - Fuel
  - Growth regulators (eg. Sunny)
- Variability of production

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# Climatic uncertainty

- Orchard cold damage
  - Hass
    - Known to be very susceptible
    - Risk @ lower than 4°C
    - Usually present in more than 10% of crop in affected blocks
  - Maluma
    - Known to be affected in extremely rare cases
    - Have had minimal damage @ -4°C on Allesbeste
    - If affected, usually 1 or 2 fruit in block
- 2010
  - Hass C4 – 24.17% 1st grade
  - Maluma C3 – 58.71% 1st grade

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# Orchard cold damage

**Maluma @ -6°C**



**Hass**



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# Climatic uncertainty

- Hail
  - Massive hailstorm – end 2010
  - Maluma D1
    - 1st grade – 2.2%
    - 2nd grade – 17.2%
    - 3rd grade – 12.9%
    - Waste – 36.7%
  - Hass D3
    - Waste – 100%

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# Labour uncertainty

- Absenteeism / Illness
- Mass action / Demands / Intimidation
- Skills
- Cost
- Labour policy = highly politicized
- More labour intensive = More uncertainty = More risk

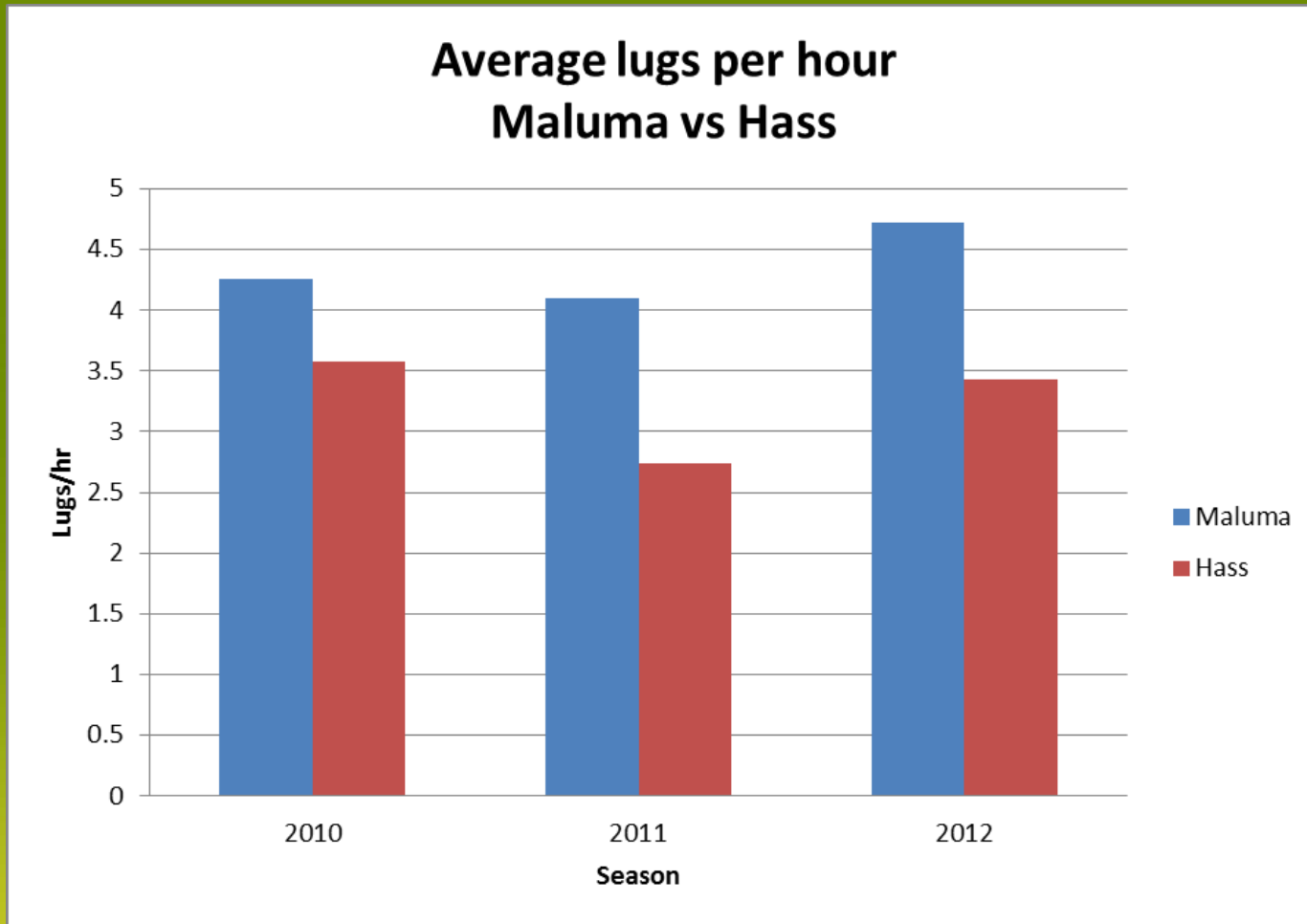
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# Labour uncertainty



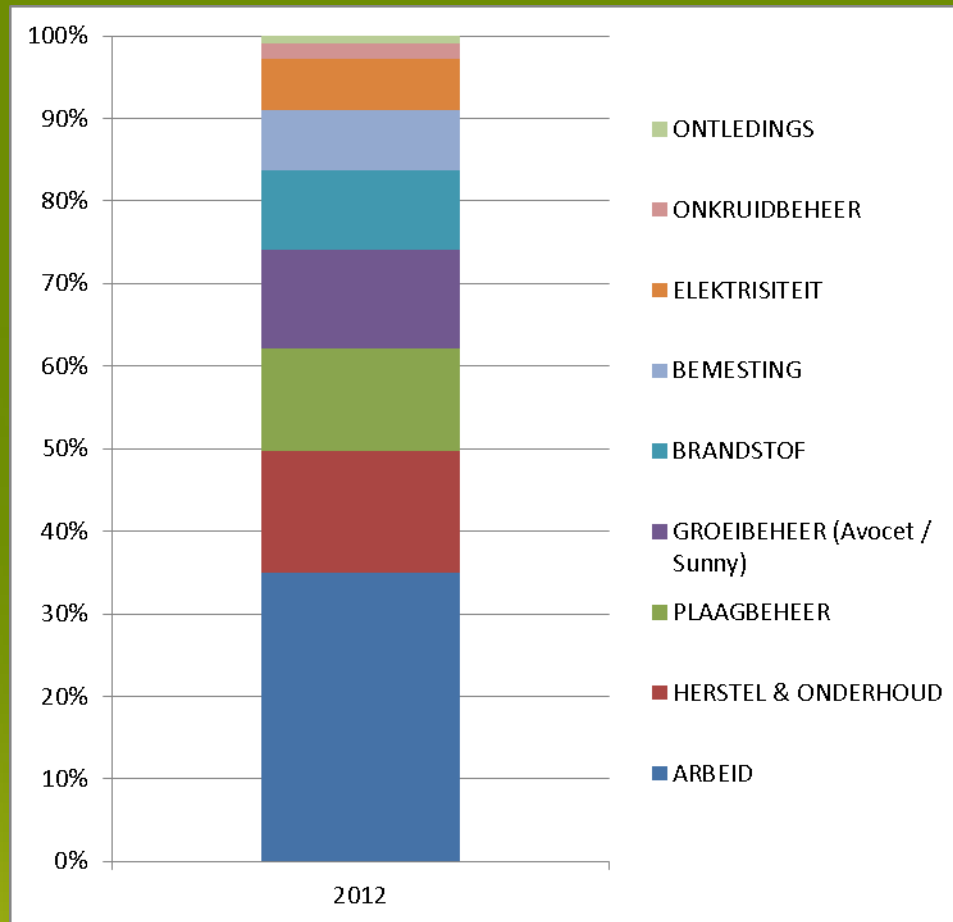
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# Input cost uncertainty



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# Input cost uncertainty

- Fuel
  - Price of fuel unpredictable and highly variable
  - Rising fuel price
  - Fuel needed for variety of tasks, eg.
    - Pruning - Hass is a vigorous grower and needs more pruning than the comparatively lazy grower, Maluma
    - Growth regulators - used on Hass, not necessary on Maluma

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# Input cost uncertainty

- Growth regulators (eg. Uniconazole/Sunny®)
  - Price uncertainty
    - R540 in July 2011
    - R635 in September 2012
  - 1 or 2 rounds of 0.01 liter per tree on Hass
    - R6.35 per tree per round (R635/liter)
    - Fuel
    - Maintenance (Wear and Tear)
    - Labour
  - No growth regulators needed on Maluma

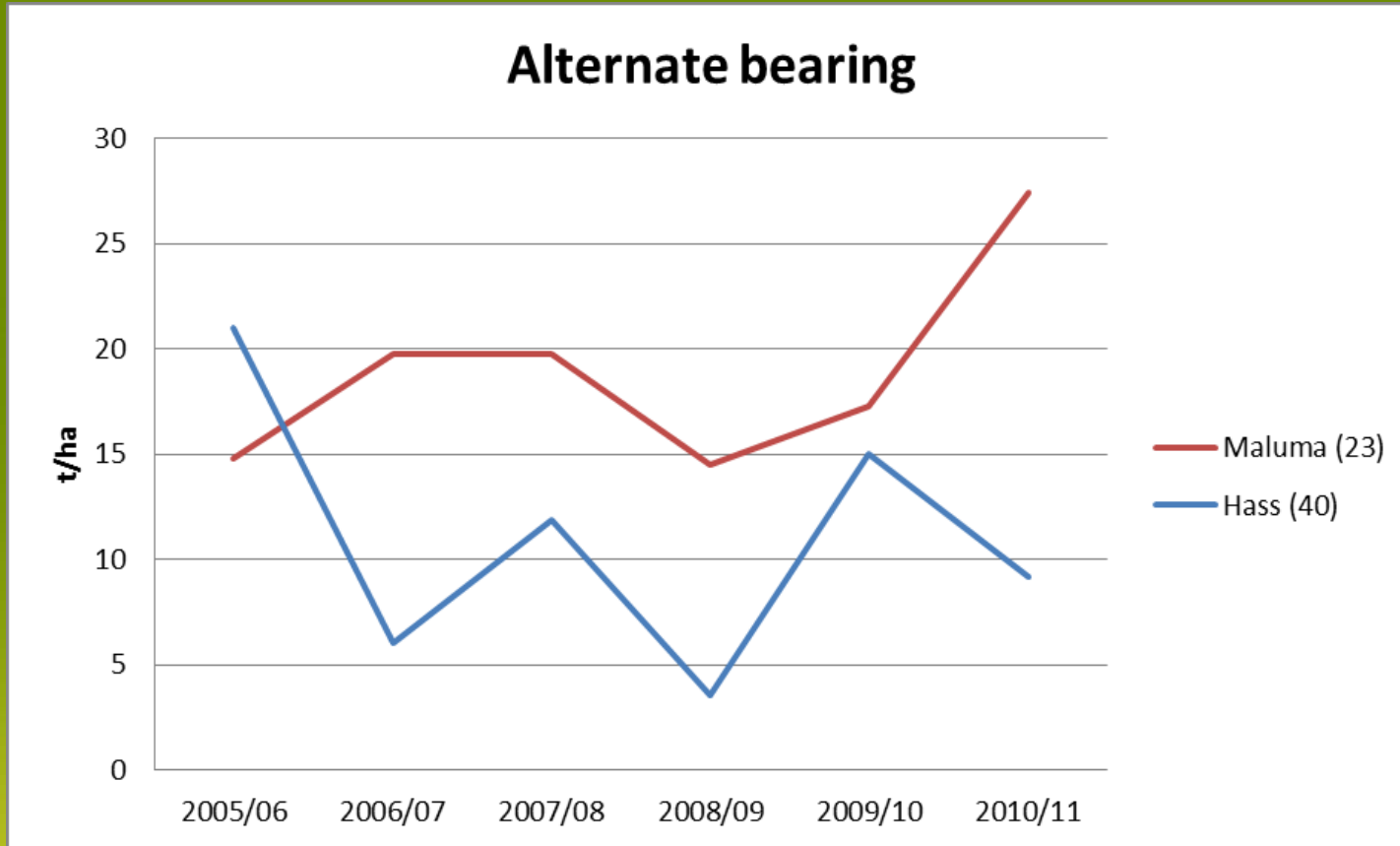
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# Variability of production



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# Profitability

- Effects of...
  - Count distribution
  - Competition in Hass market
  - Quality issues

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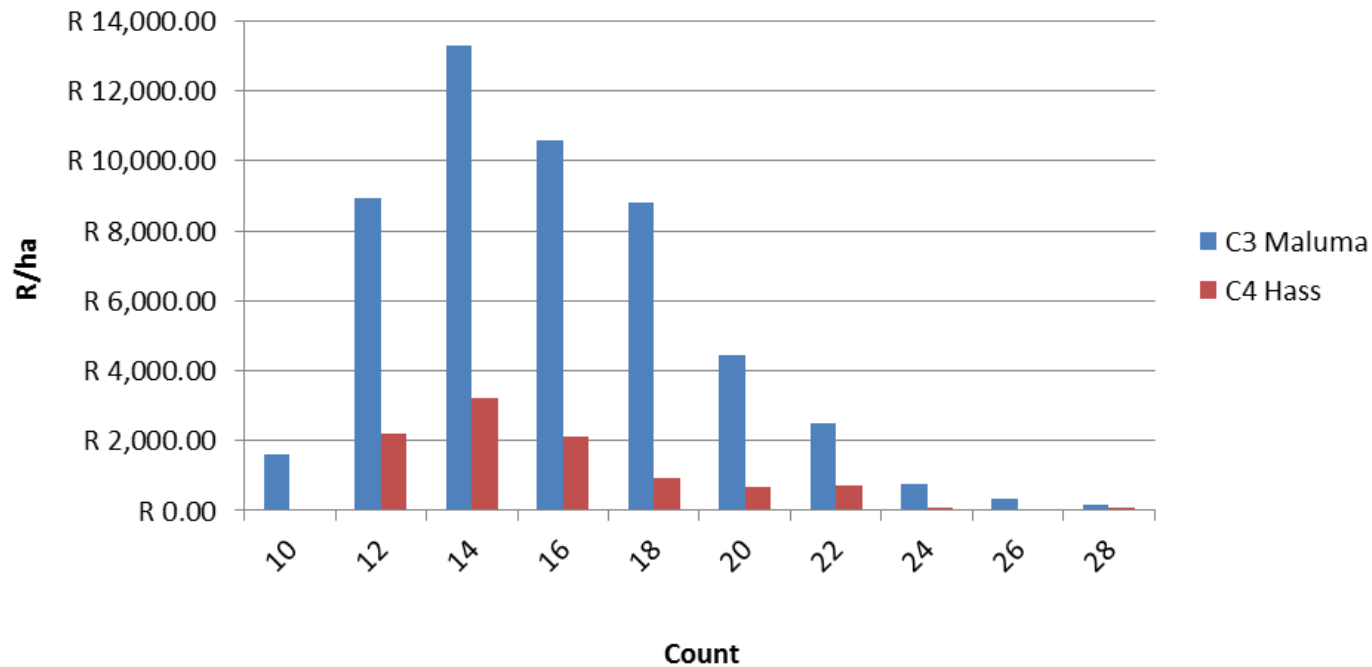
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# Count distribution

## 2010 R/ha Count Summary 1st and 2nd Grades



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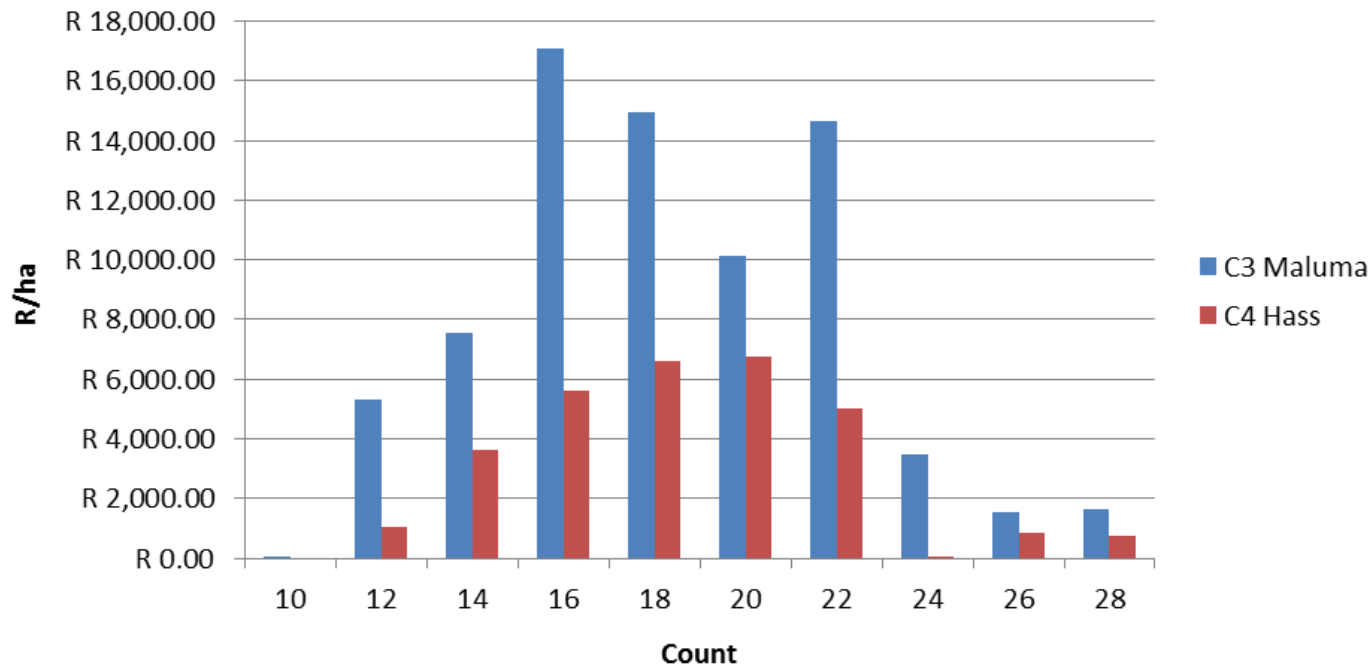


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# Count distribution

## 2011 R/ha Count Summary 1st and 2nd Grades



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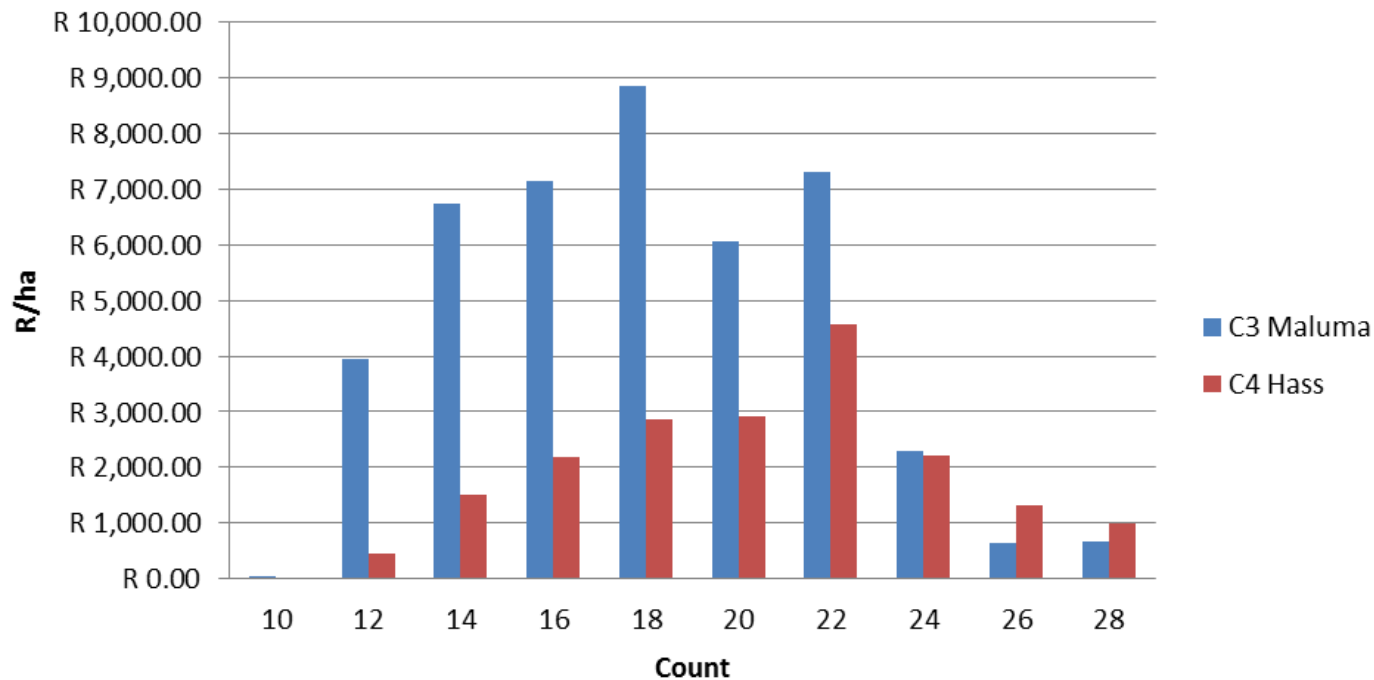


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# Count distribution

## 2012 R/ha Count Summary 1st and 2nd Grades



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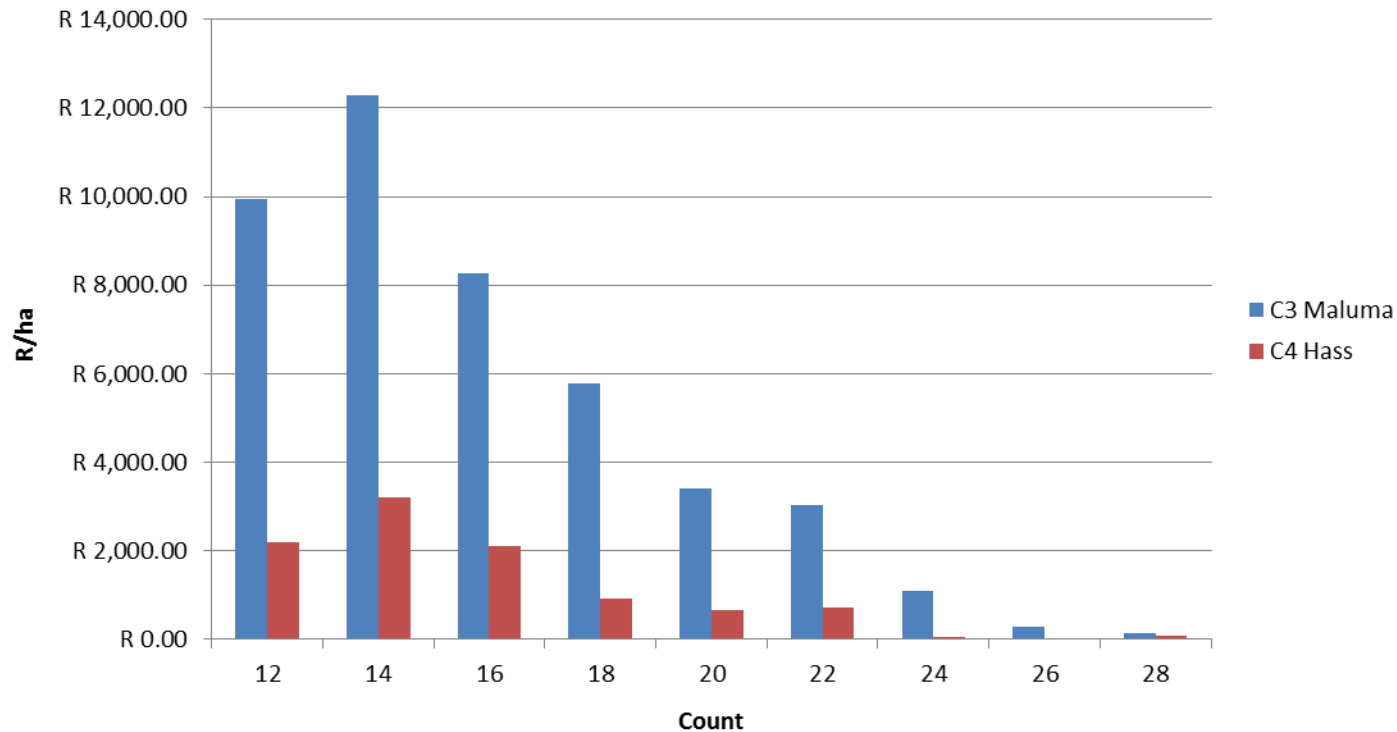


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# Competition in Hass market

## 2010 Maluma with Hass prices vs Hass 1st and 2nd Grades



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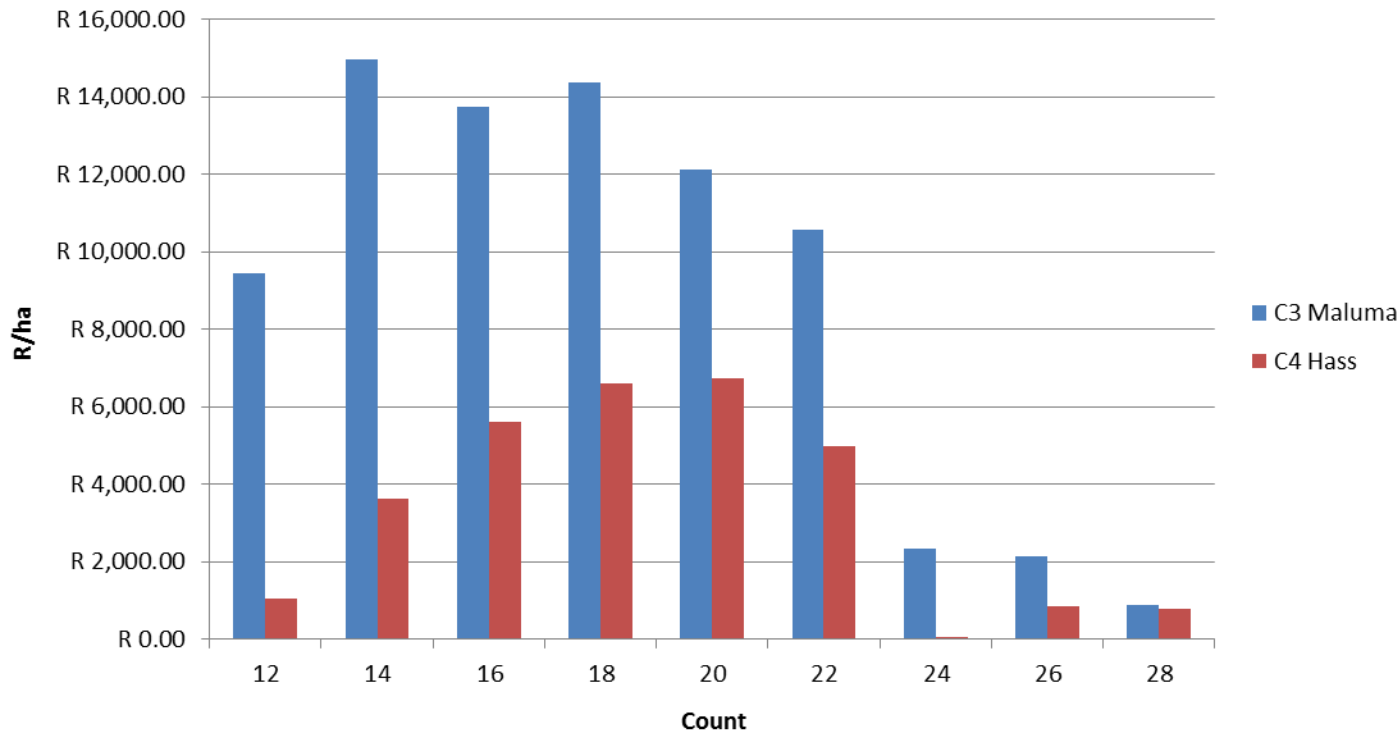


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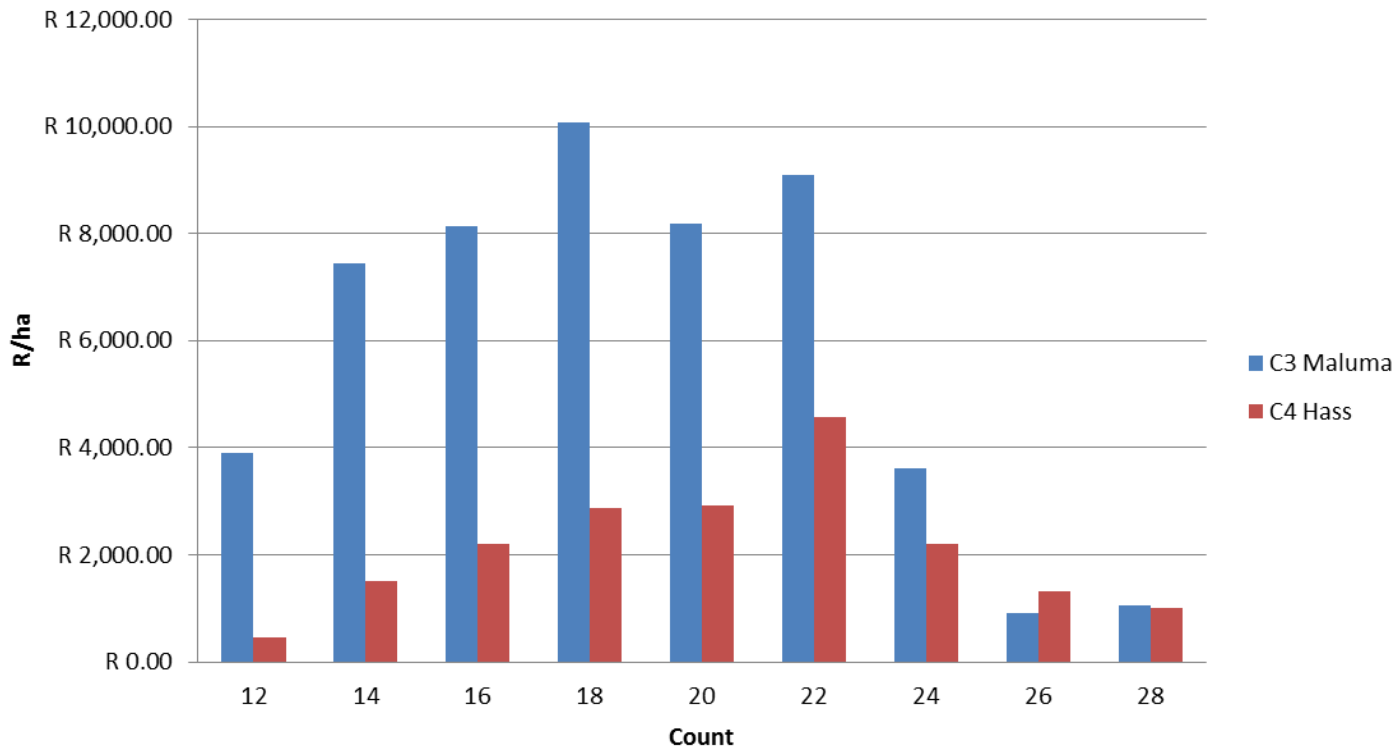


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# Competition in Hass market

2012 Maluma with Hass prices vs Hass  
1st and 2nd Grades



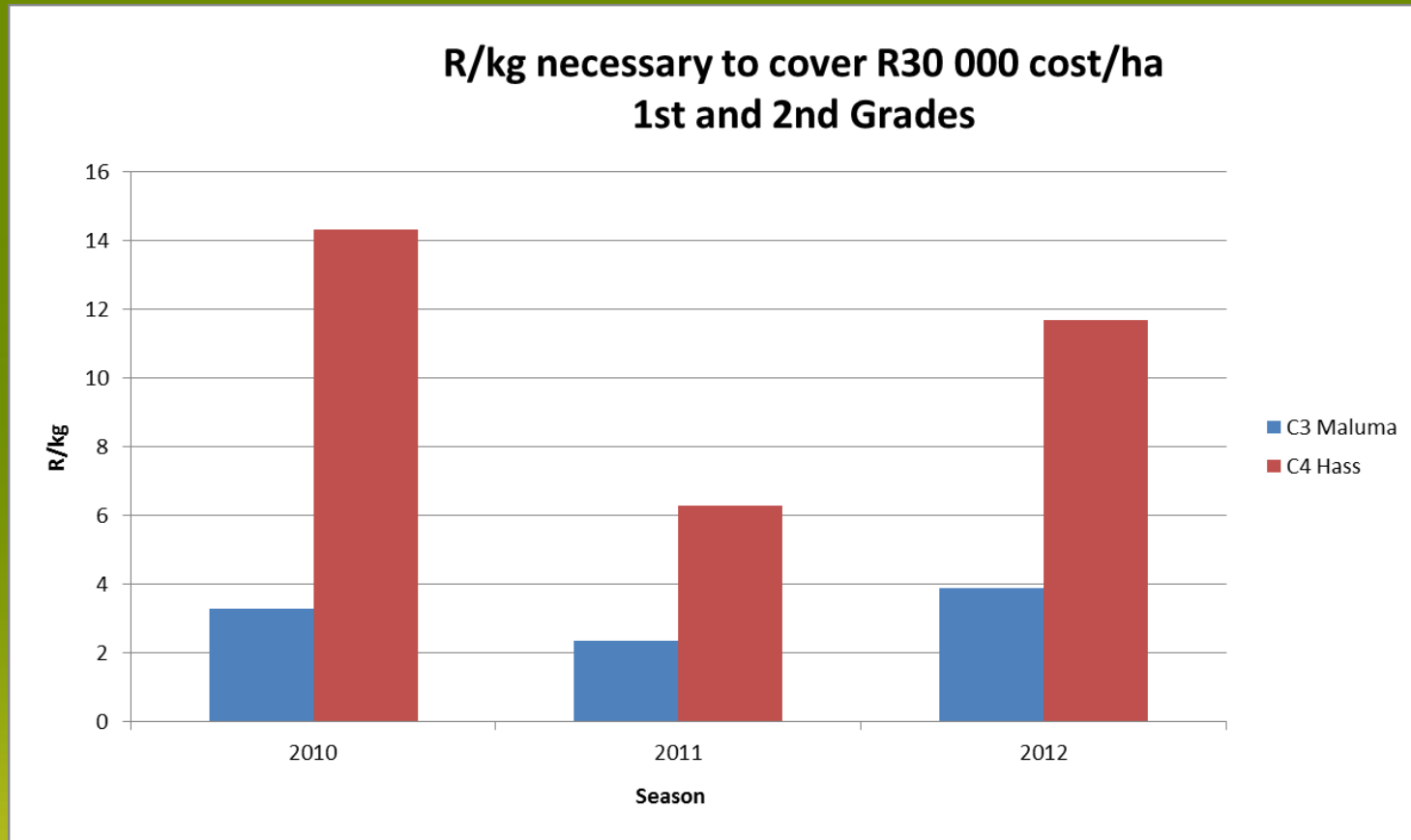
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# Quality issues



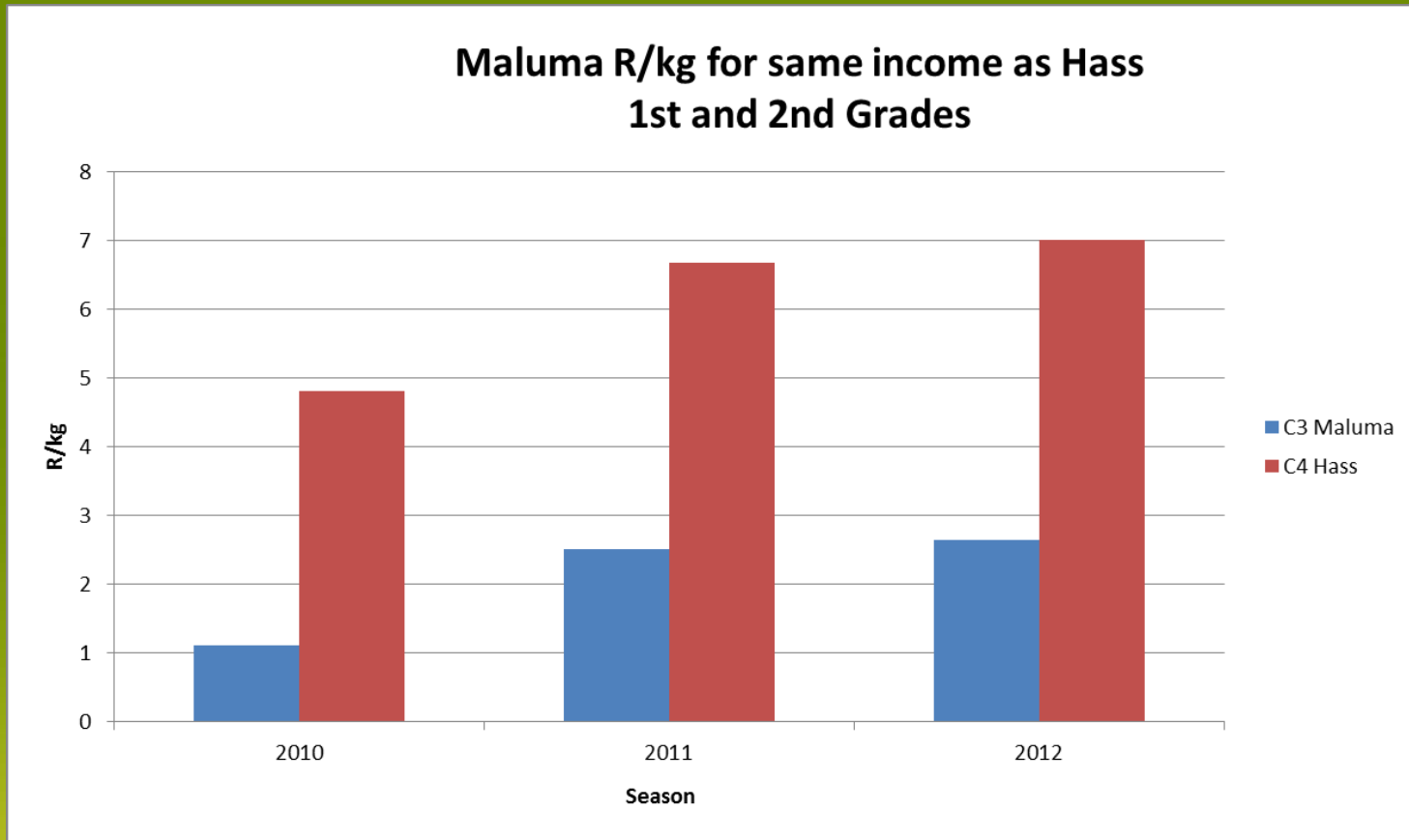
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# Quality issues



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# Conclusion

- Maluma can help to reduce risk in terms of
  - Climatic factors (orchard cold damage, hail)
  - Labour
  - Input costs
  - Production uncertainty
- Despite Maluma's perceived unfavourable count distribution it still outperforms Hass significantly on a R/ha basis.
- Maluma outperforms Hass in the Hass market on Hass prices, count for count. Therefore, Maluma does not have to be early to be profitable.

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# Conclusion

- Even if Maluma had more quality problems leading to increased rejections, it could still fetch a significantly lower price than Hass to cover costs or to make the same money.
- When comparing Maluma to Hass it is clear that Maluma's significantly increased production tonnage acts as a huge buffer which could easily absorb any market related issues that might arise.
- Maluma can therefore help the farmer to reduce risk while increasing production and profitability.

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Thank you!  
Baie dankie!

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