

## Oil Content and Quality

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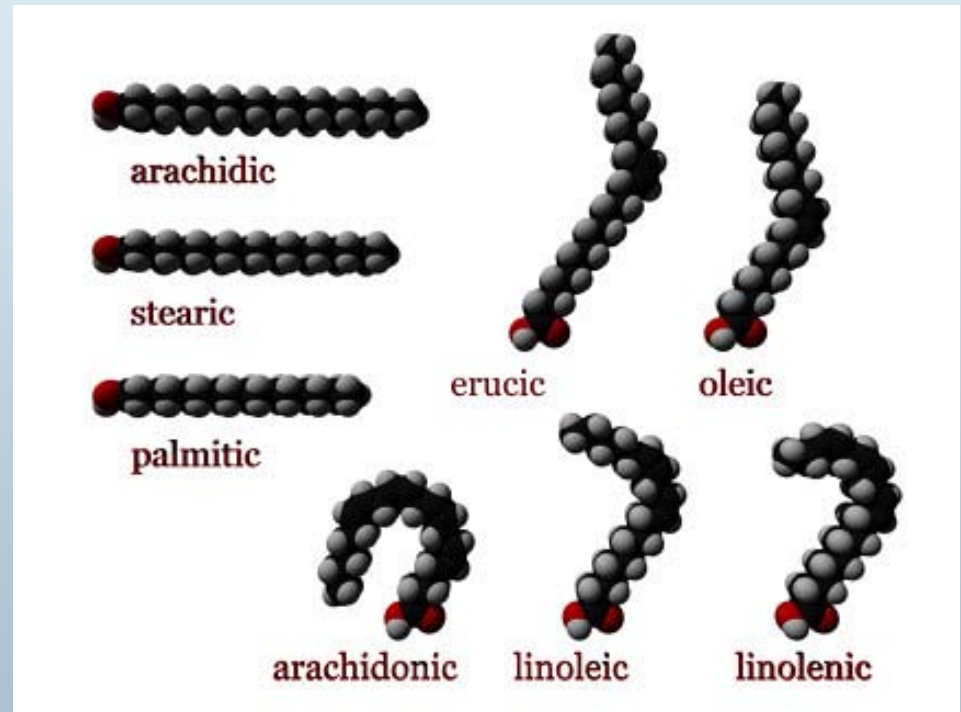
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**and R. Karow**

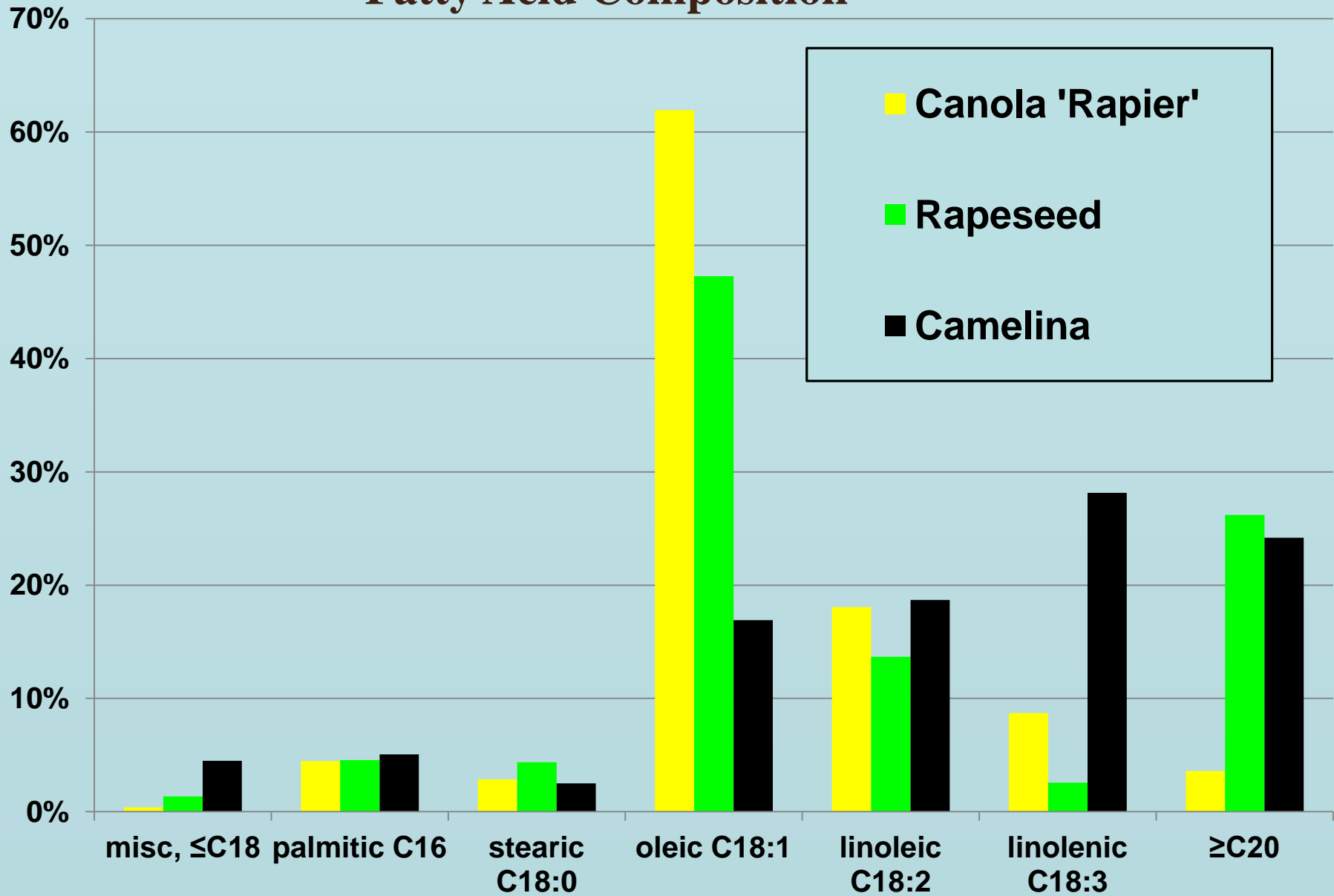


## Oil Crushing and Analysis

- Determine oil and oilseed meal yield
  - % weight basis
- Determine oil composition
  - Identify important fatty acids



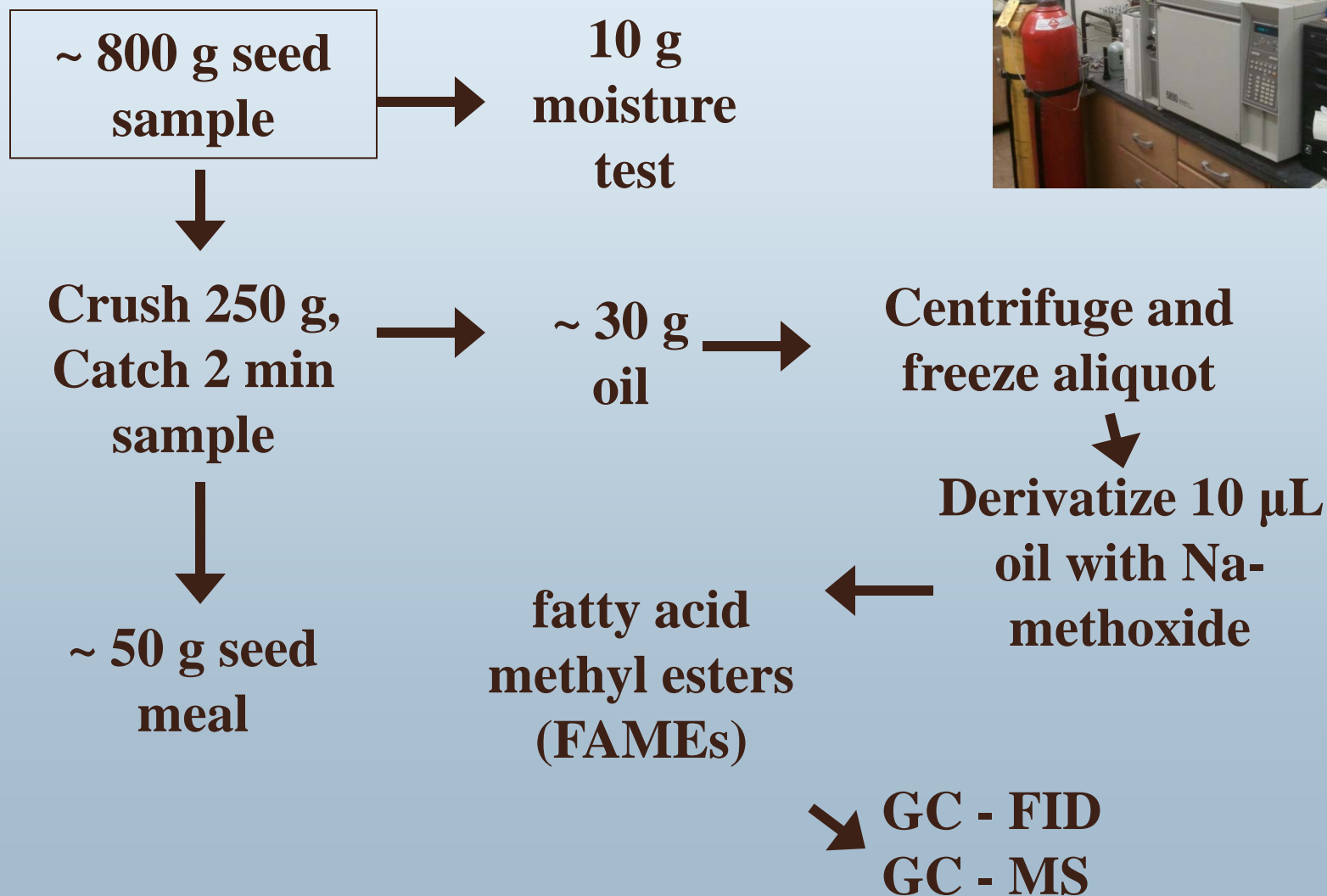
# Fatty Acid Composition



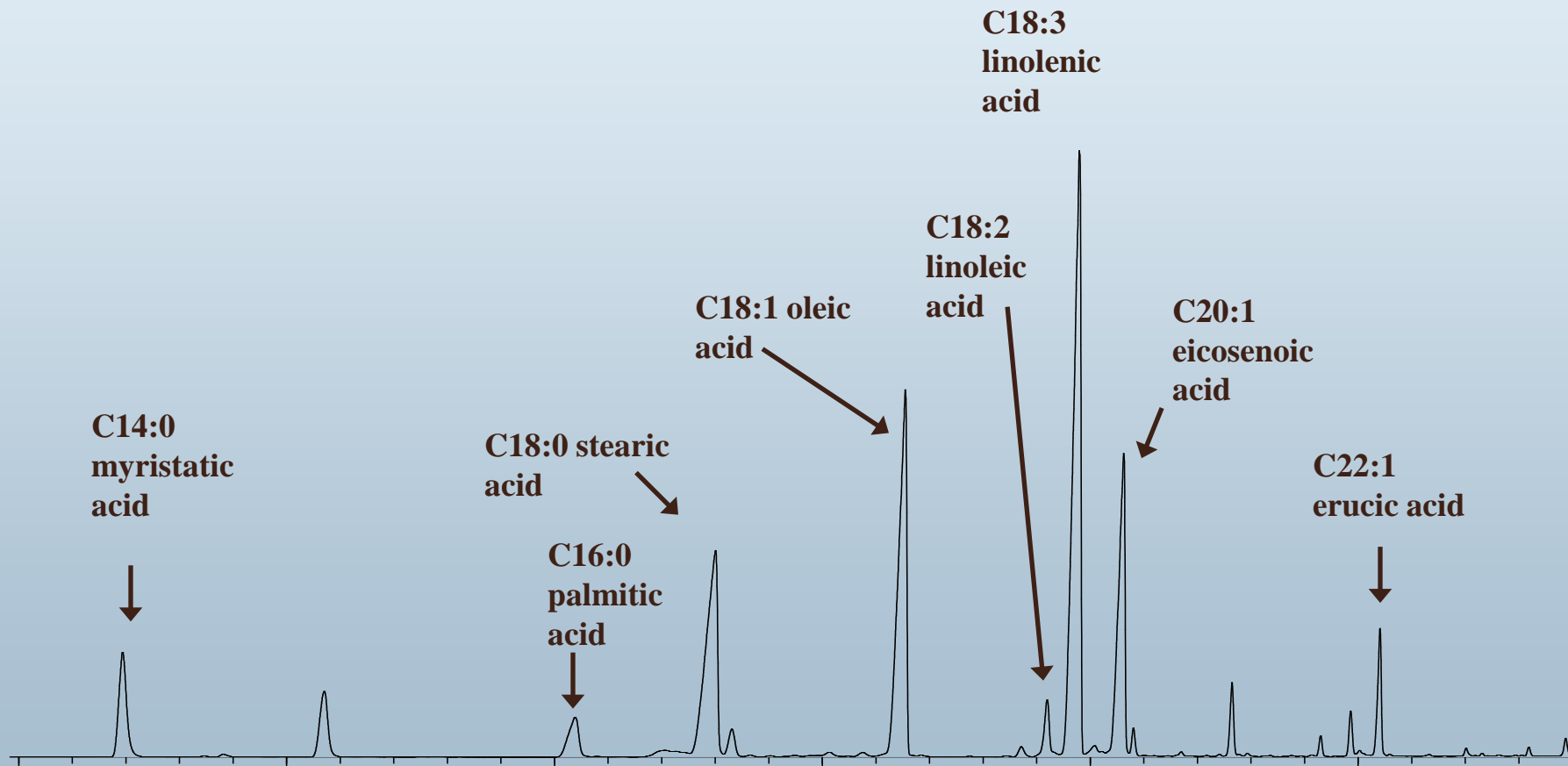
CAUTION  
NOTABLE WATER  
DO NOT DRINK



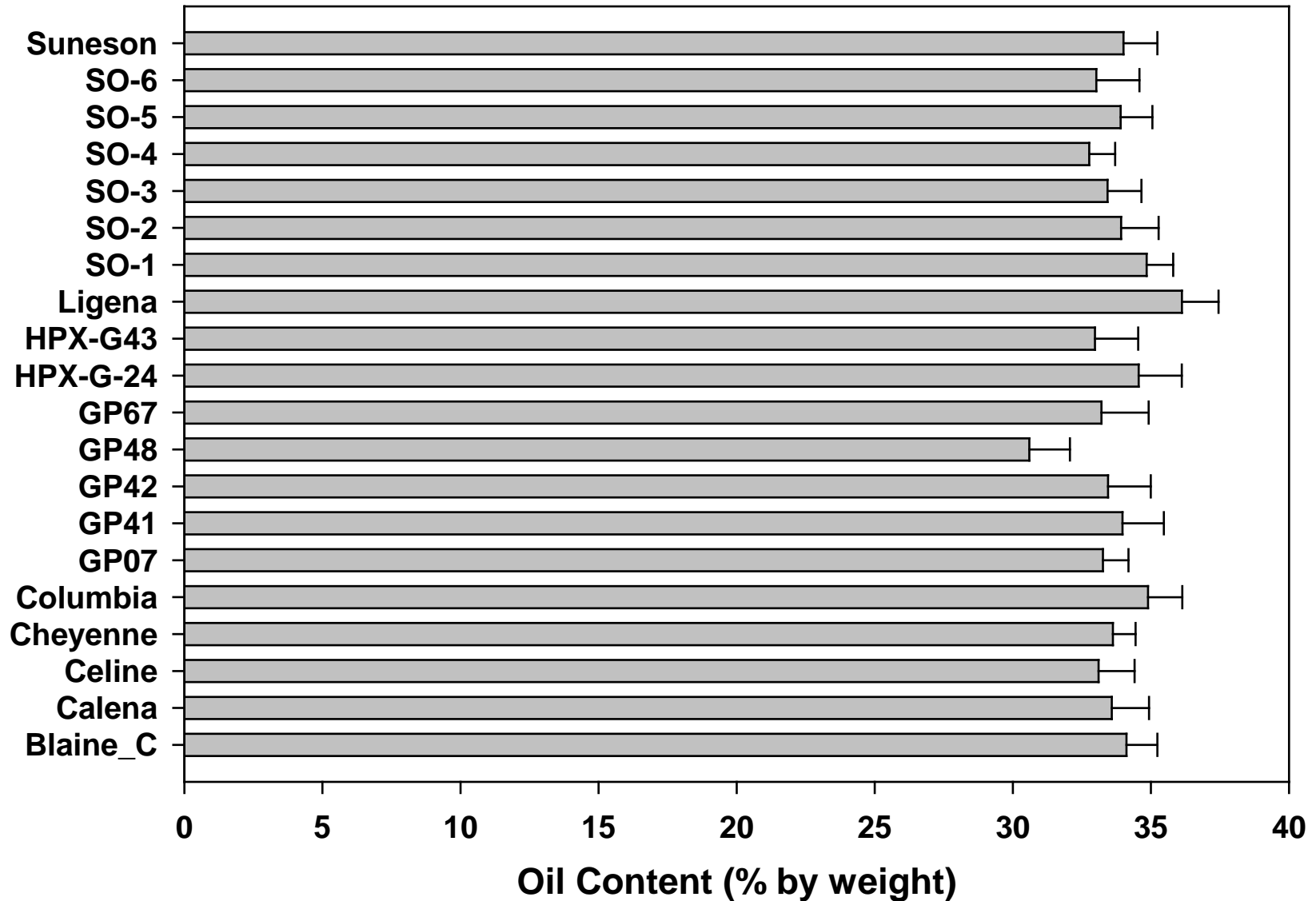
## Oil analysis Procedures:



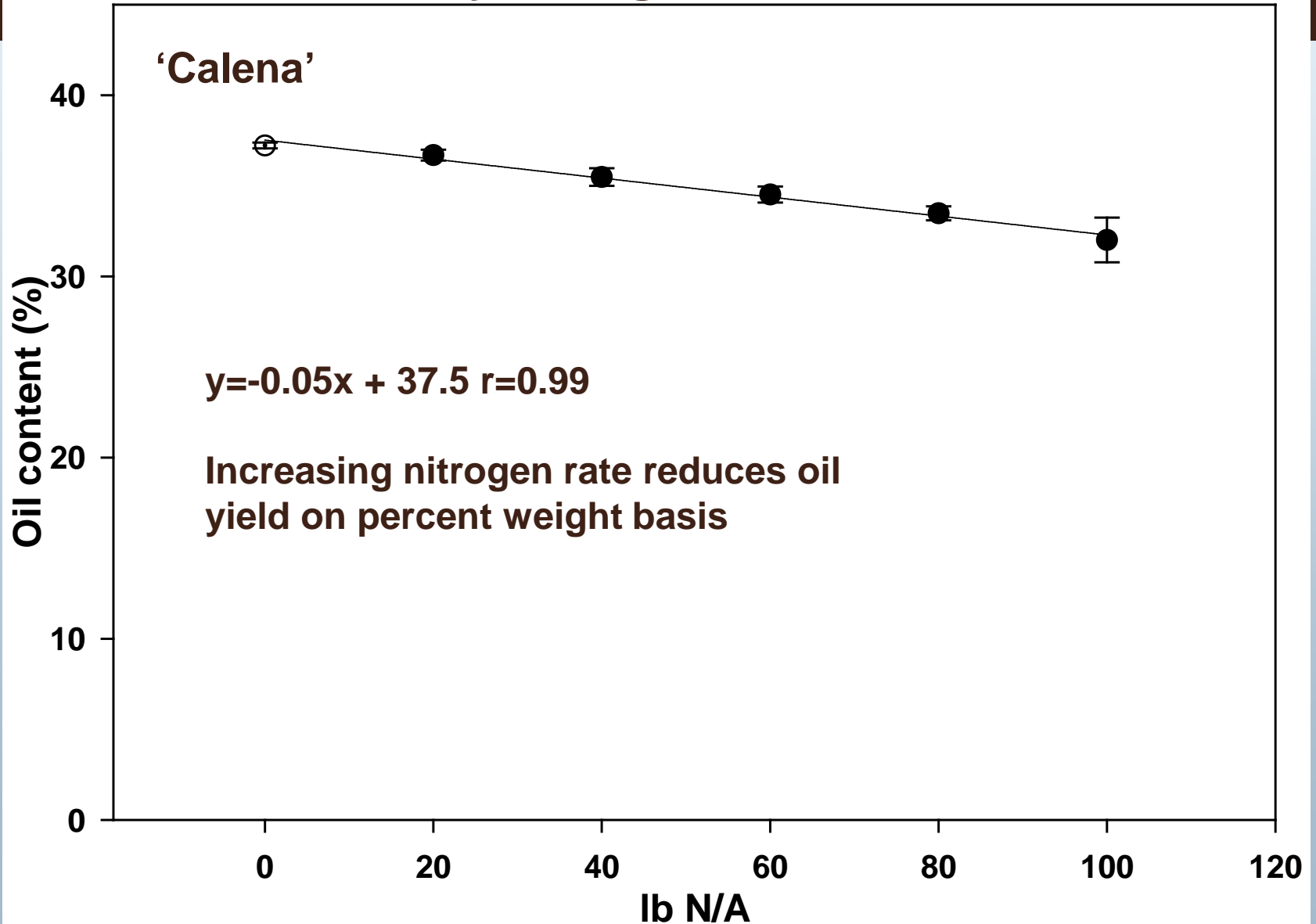
## GC – FID



## Oil Content by Variety, Pullman, 2010

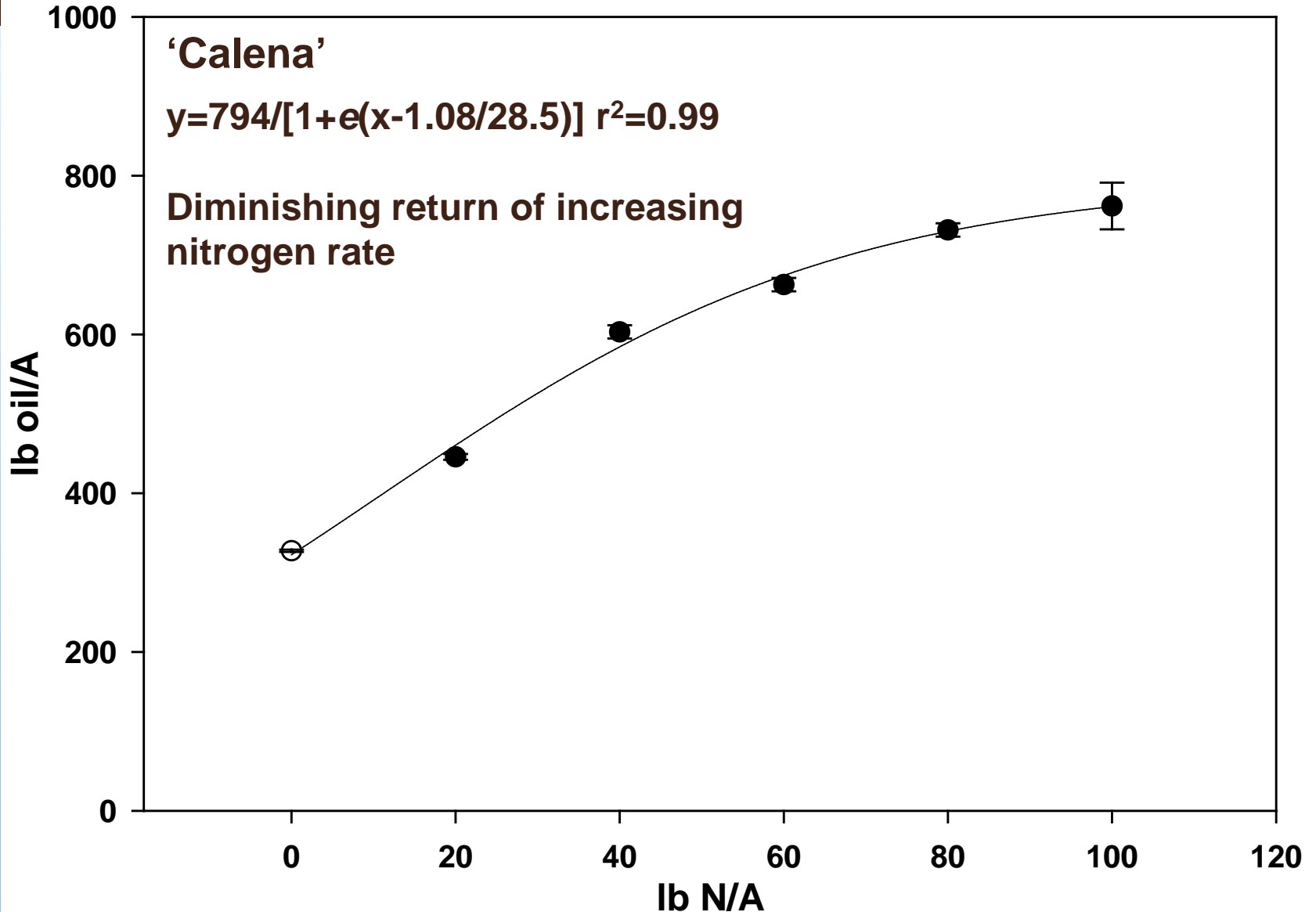


## Oil Content by Nitrogen Rate, Pullman, 2010

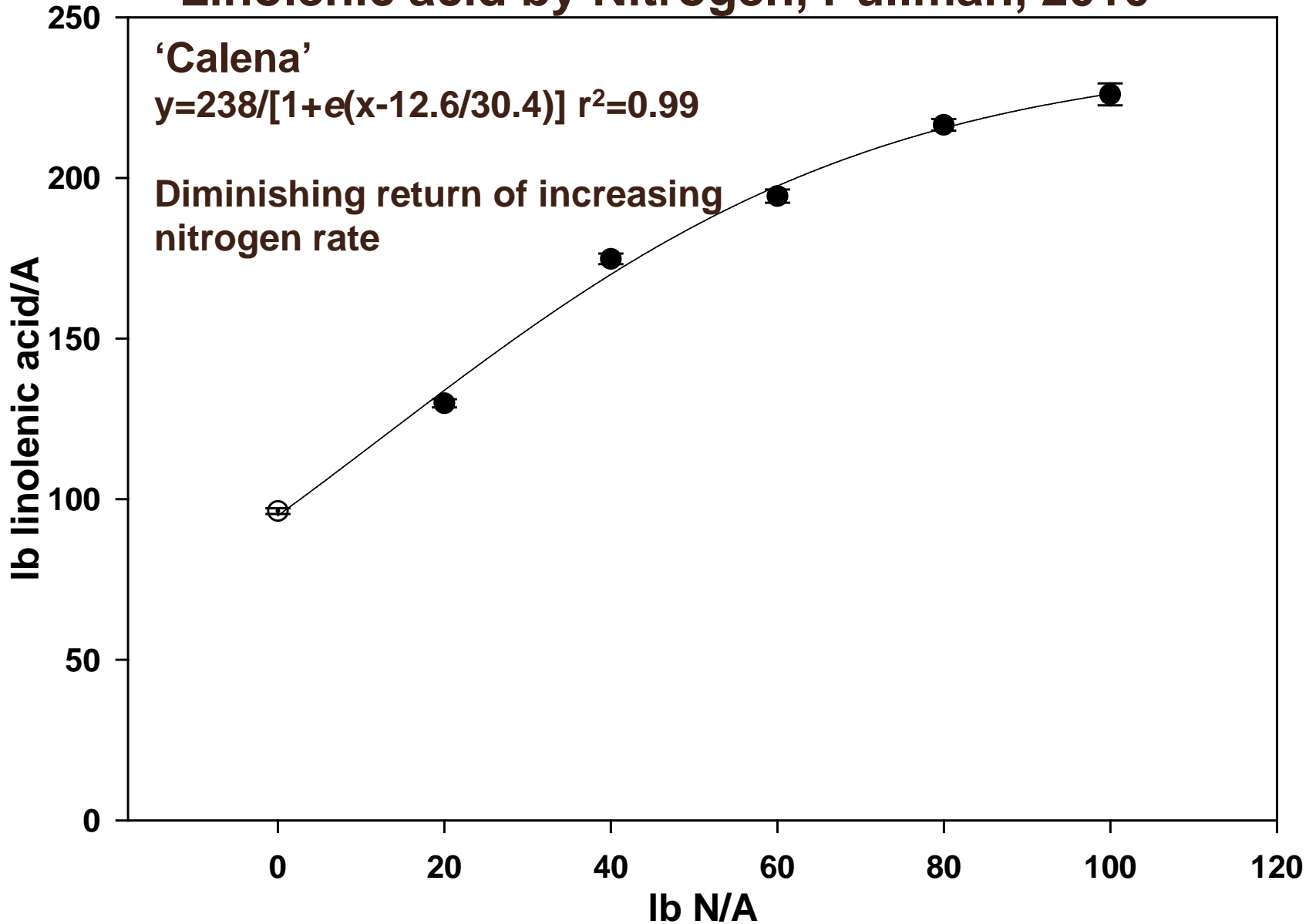




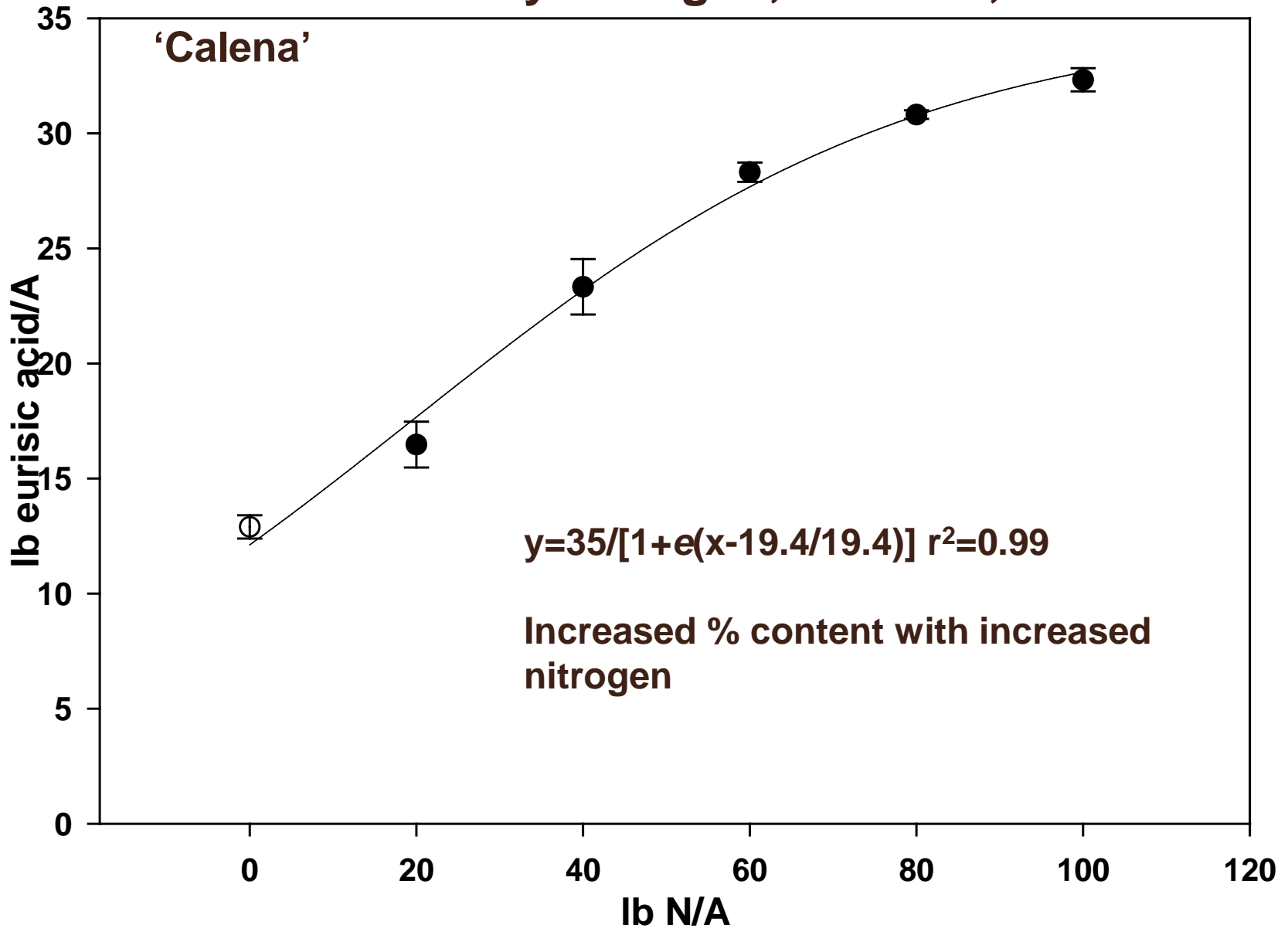
# Oil Content by Nitrogen Rate, Pullman, 2010



# Linolenic acid by Nitrogen, Pullman, 2010



# Eurismic acid by Nitrogen, Pullman, 2010



## Review

- Varieties do vary in oil production, but not by much.
- There is a diminishing return of nitrogen inputs:
  - Increase in seed yield and total oil yield
  - Decrease in percent oil content
- Sulphur inputs made no difference

## Acknowledgements

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- Nick Boydston



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