**EFFECTS OF YEAST PRODUCT ADDITION AND FERMENTATION TEMPERATURE ON LIPID COMPOSITION AND SENSORY OF PINOT NOIR WINES**

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**BACKGROUND**

- Firm tissues of grapes and yeast are the major sources of lipids in wine. Variation of yeasts and grape varieties could impact the concentration and composition of wine lipids. Lipid metabolism is also affected by changes in fermentation temperature.
- The study aimed to examine changes in lipid compositions and sensory of Pinot noir wines in responses to differences in fermentation temperature and addition of yeast derivative products.

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**METHODS**

- **Figure 2.** Winemaking process and analyses conducted on the wine treatments.
  - Bligh & Dyer lipid extraction method was used to extract total lipids
  - Lipidomic approach was used to identify and analyze lipid composition
  - Descriptive analysis and CATA were used to evaluated the taste/mouthfeel characters of the wine samples.

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**RESULTS**

- Figure 3. Mean rating intensity of wine treatments in taste and mouthfeel attributes.
- Figure 4. Visual map from CATA. Data were analyzed using corresponding analysis. CATA terms are shown in blue and the wine treatments are in red.

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**CONCLUSIONS**

- Fermentation temperature and yeast product addition did not have significant effect on the wine total lipid content.
- The low lipid concentration in the wine treatments resulted in difference in sweetness in descriptive analysis.
- CATA data show variations in taste/mouthfeel terms associated with wines fermented at different temperature.
- Lipids may not have direct impacts on wine sensory but interactions between lipids and other wine components may alter wine sensory and quality.

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