

# Skin versus seed tannin development of red grape varieties in Ontario from véraison to harvest

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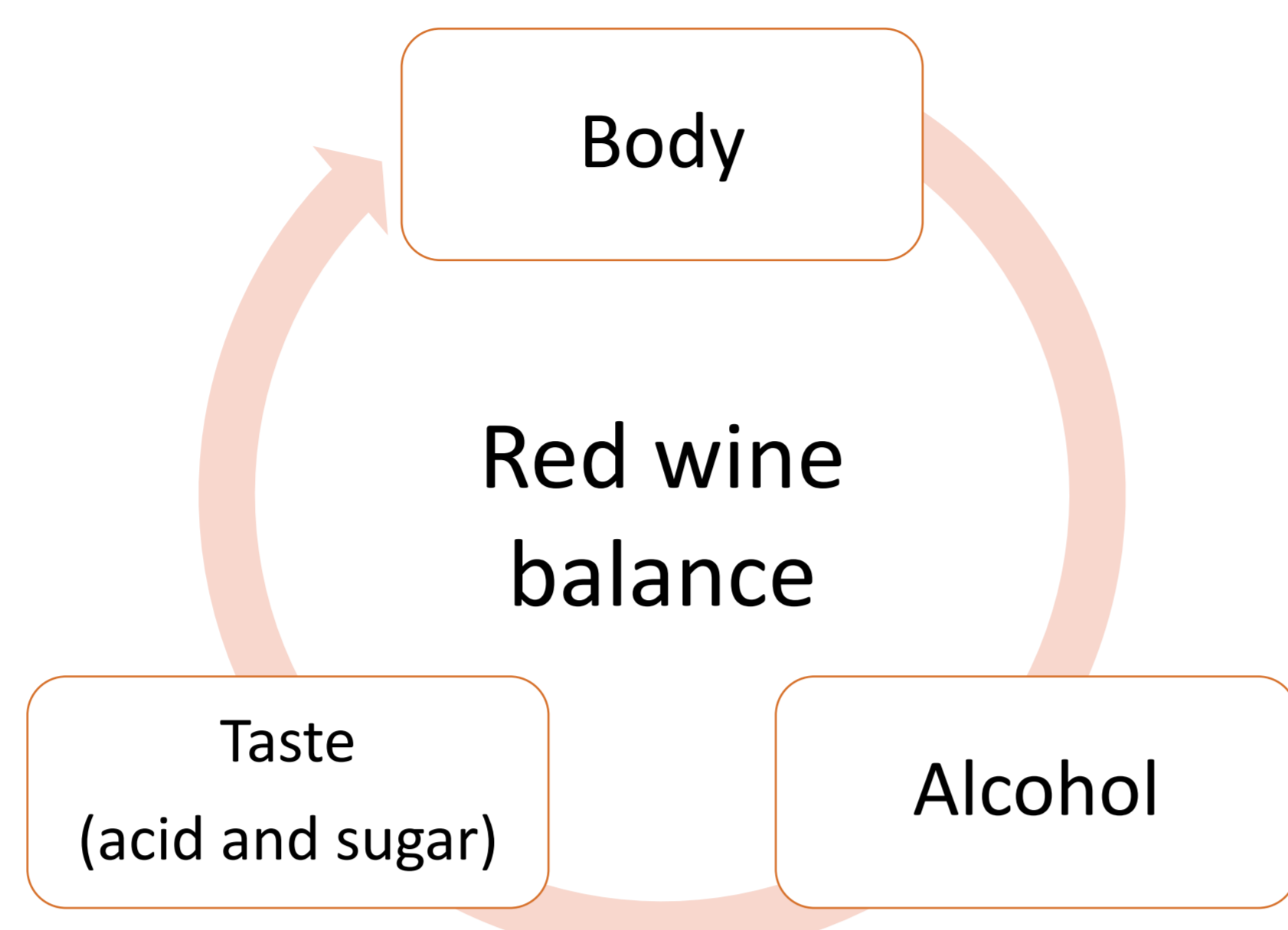
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## CONTEXT TO THE TANNIN ALERT PROGRAM

- In cool climate winemaking regions, it can be difficult for grapes to achieve phenolic maturity;
- Unripe tannins and phenolic compounds are not desirable and lead to reduced color and green tannin characters;
- In red wine, balance depends on taste (including sugars and acids), alcohol, and body to which tannin contribute;
- Several winemaking decisions depends on phenolic ripeness;
- At harvest, winemakers need to make decision to optimize wine balance, but must rely on previous experience since tannin information is rarely available.



## CONTEXT TO THE TANNIN ALERT PROGRAM

TanninAlert is a program developed at the Cool Climate Oenology and Viticulture Institute (CCOVI) aimed at...

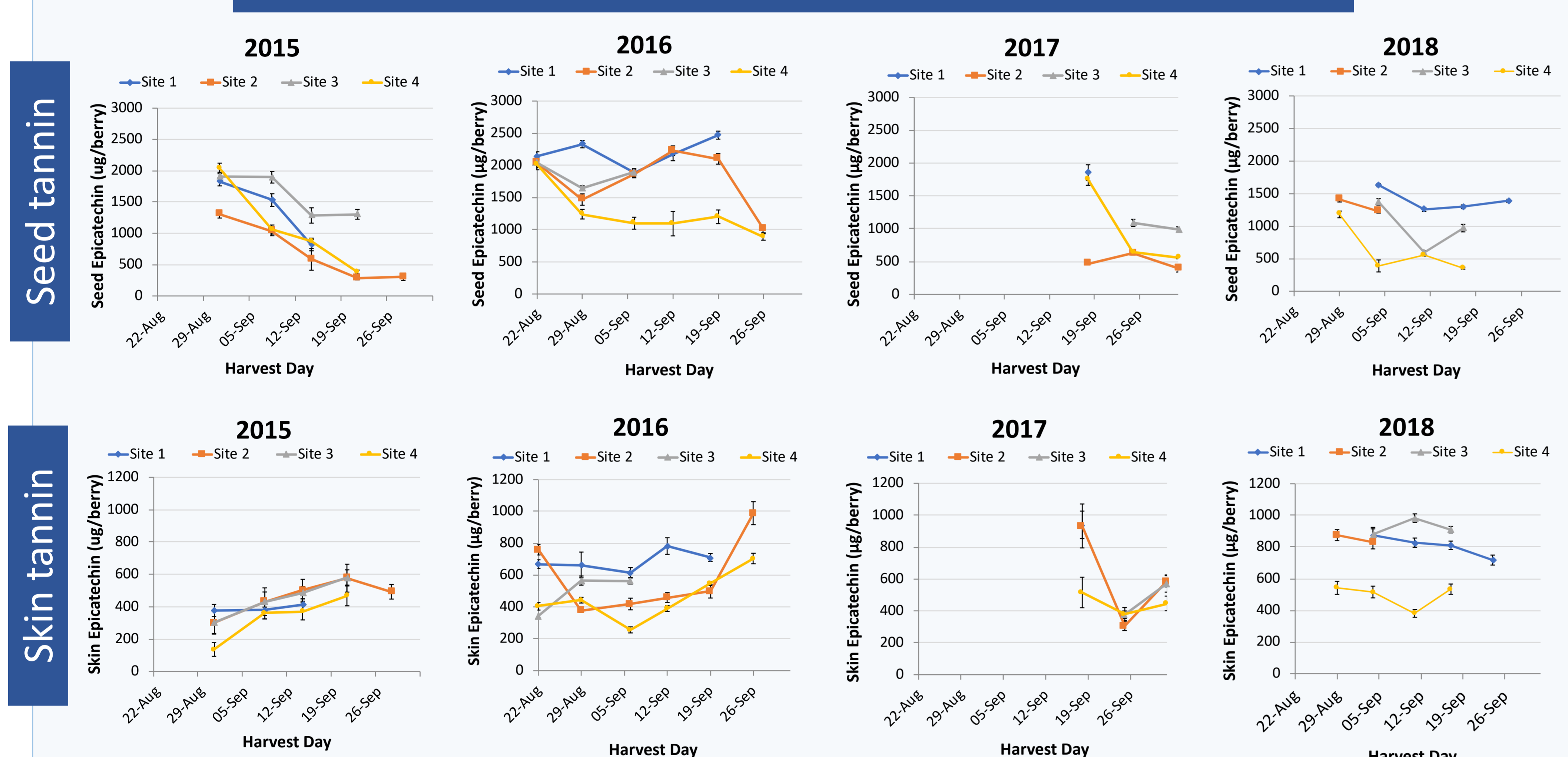
- Providing winemakers with skin and seed tannin concentrations at harvest to assist with the management of tannins in the winery
- Developing a database for future benchmarking and grouping of tannin concentration in popular red grape varieties

In this poster, we present data from Pinot noir, Cabernet franc, and Cabernet sauvignon from the 2015-2018 harvests, and from Gamay, Merlot, and Syrah from the 2017-2018 harvests demonstrating the difference between varieties, vineyard site and vintage.

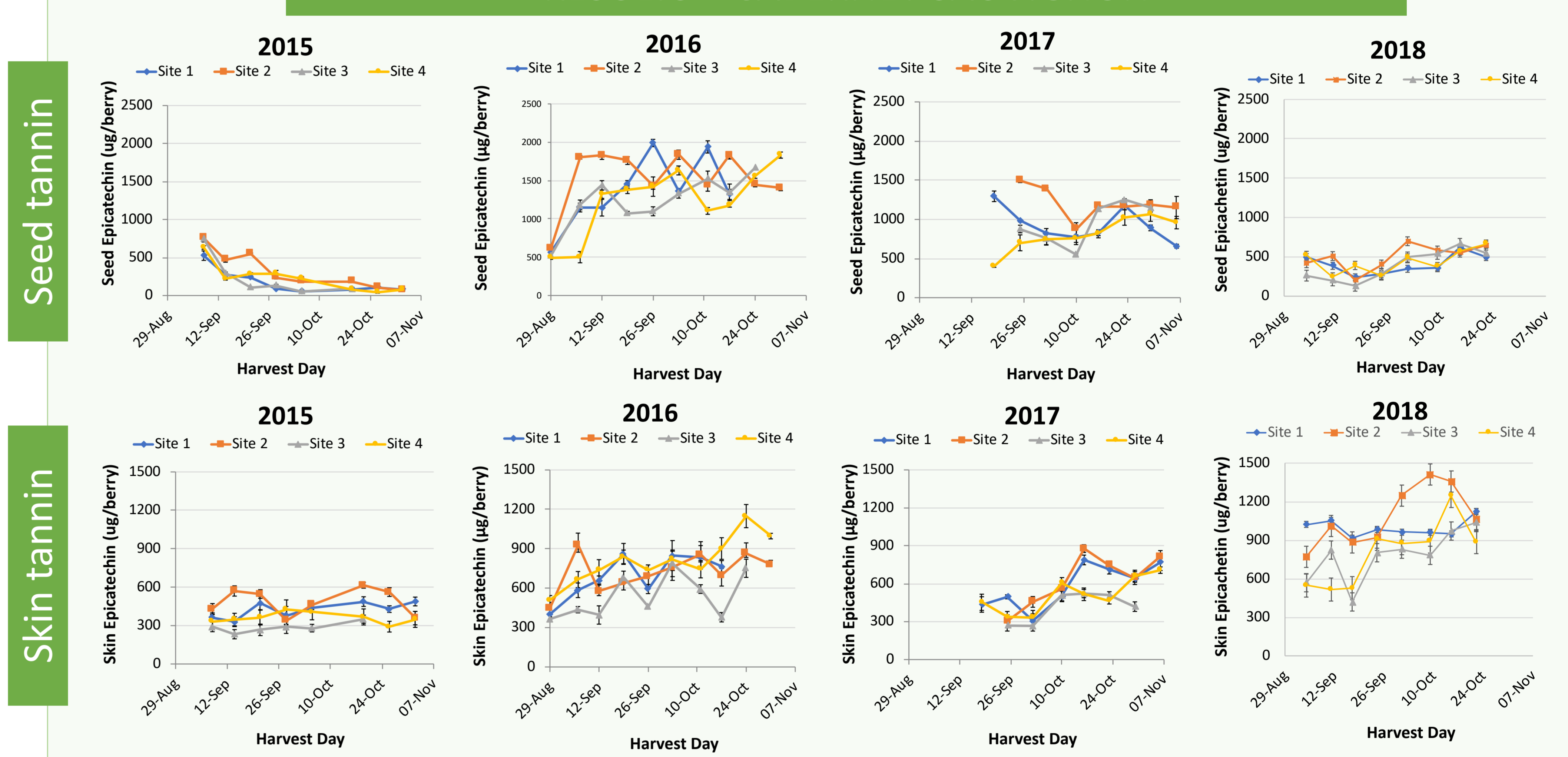
## METHODS

- For each variety, berries were sampled from multiple sites over several years;
- Sampling occurred weekly from véraison to harvest;
- Skins and seeds were separated to quantify tannin separately with the methyl cellulose precipitation assay.

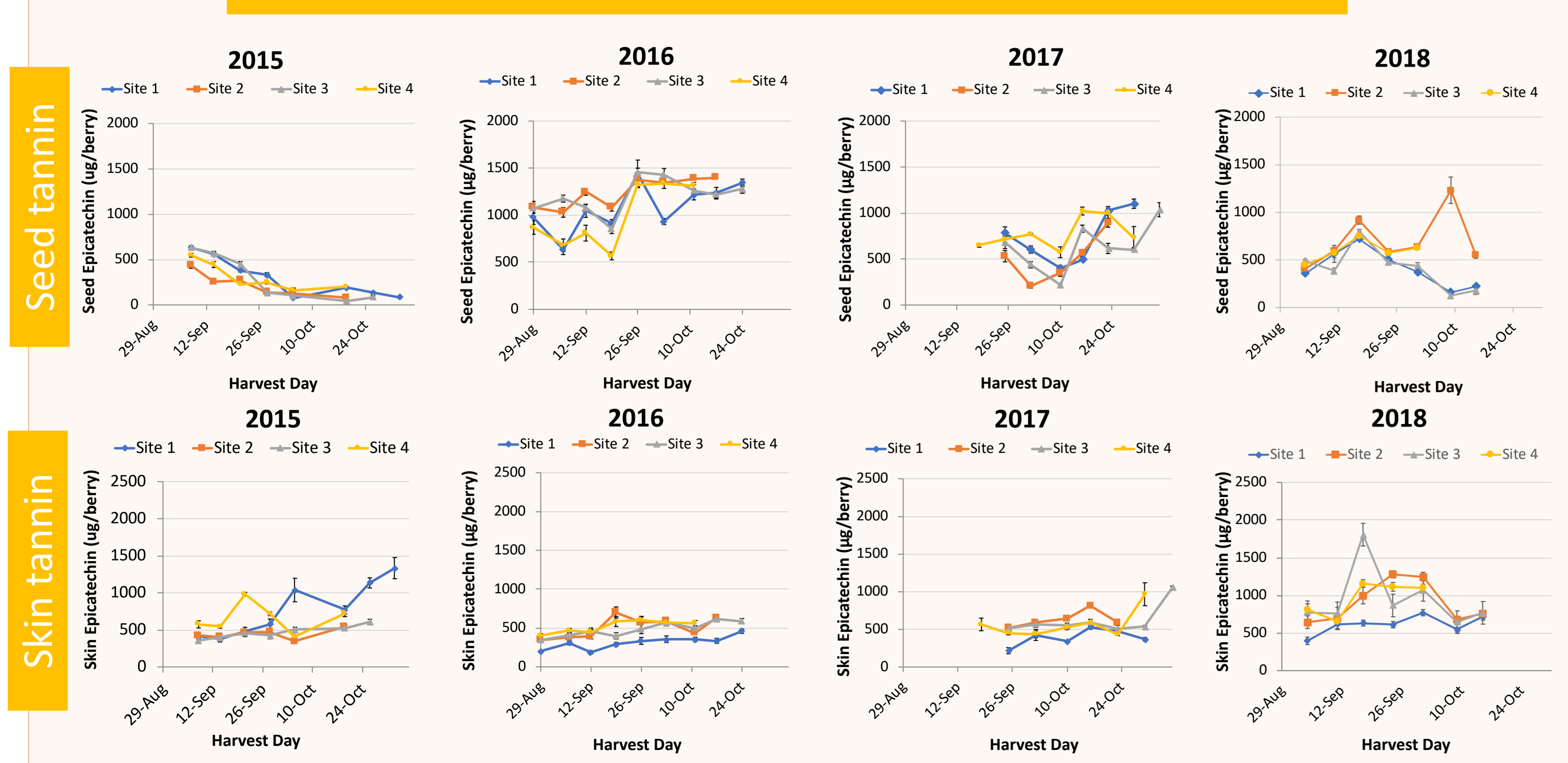
## RESULTS – PINOT NOIR



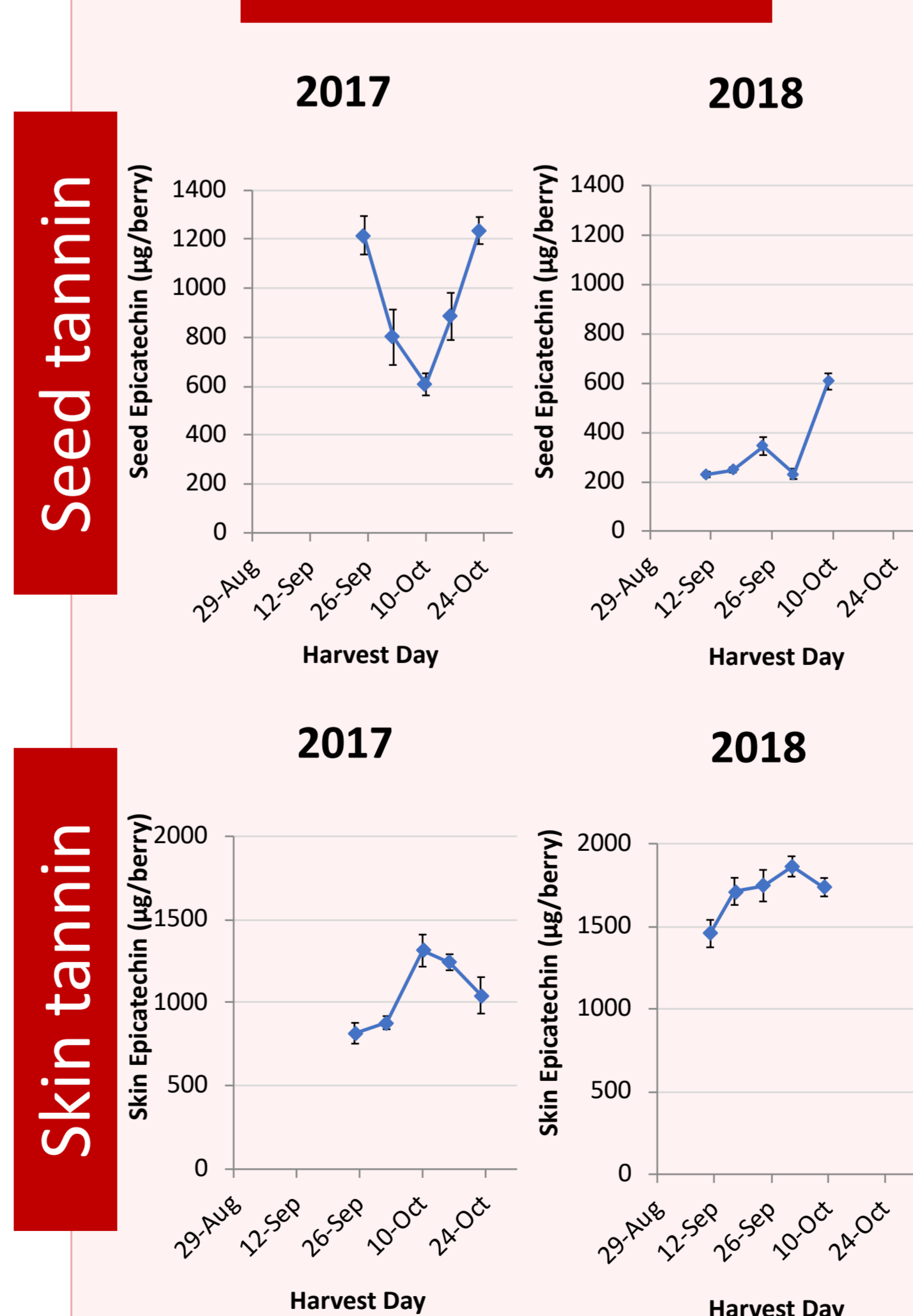
## RESULTS – CABERNET SAUVIGNON



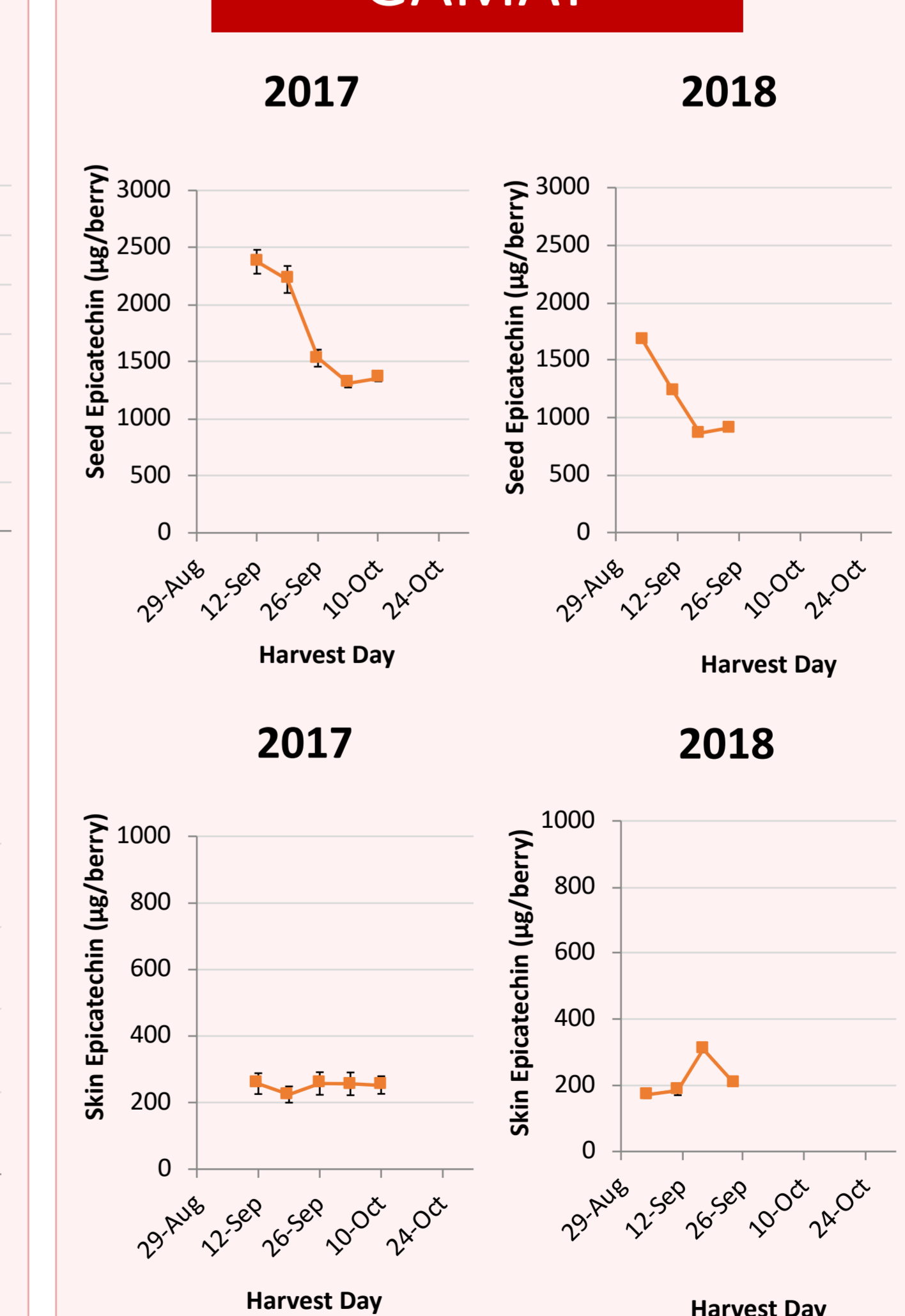
## RESULTS – CABERNET FRANC



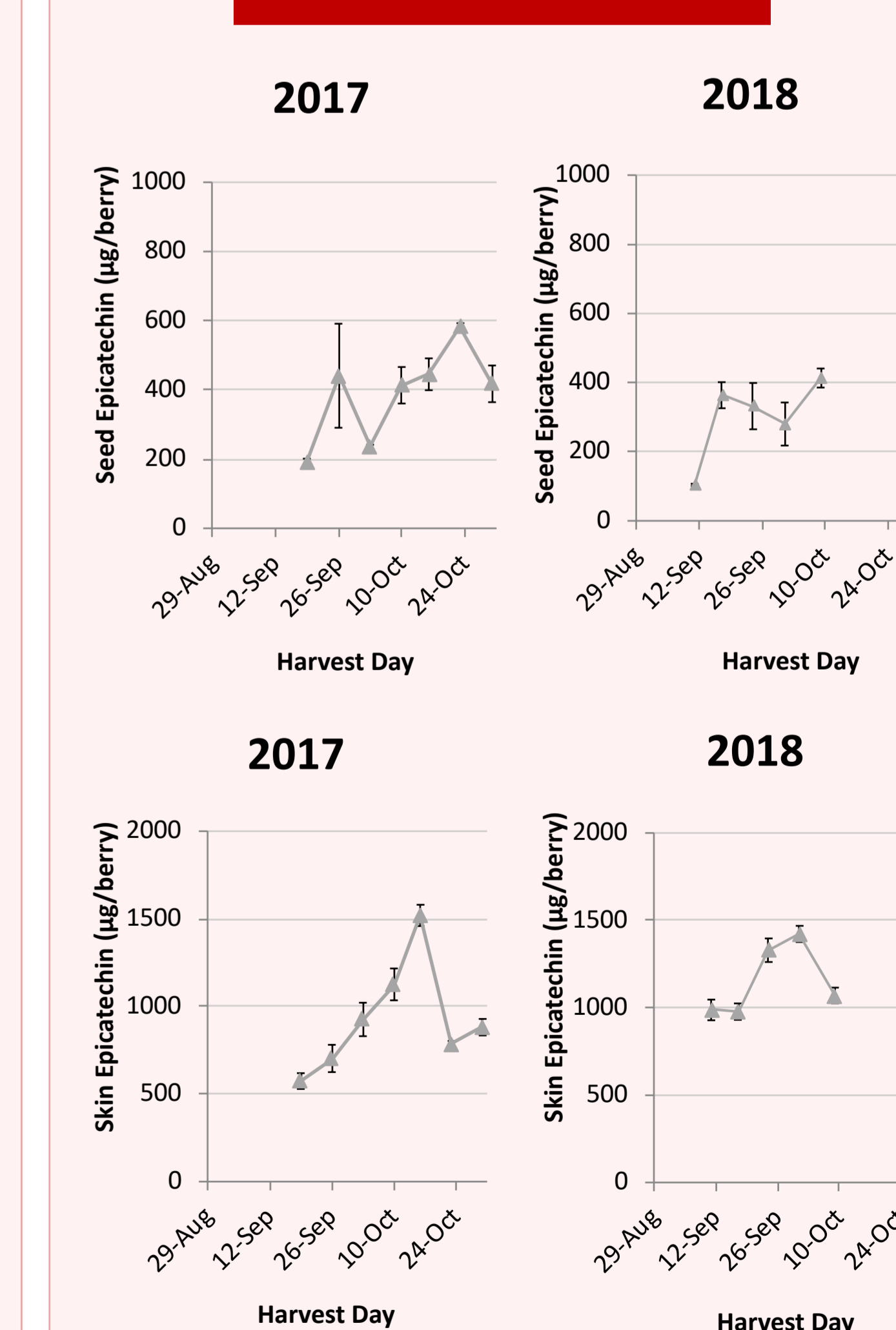
## SYRAH



## GAMAY



## MERLOT



## CONCLUSIONS

- Skin and seed tannin are highly variable amongst variety, site and vintage
- Annual TanninAlert updates will provide information to industry personnel that vary from year-to-year in order to optimize winemaking techniques

- TanninAlert is a comprehensive database that will provide winemakers with information on tannin content
- Combined with further research, this database bring recommendations to optimize winemaking techniques and enhance wine quality