



EE-LV00145

## BALTIC CIDER

Knowledge-driven Baltic Cider Production and  
Branding for Growth and Competitiveness of SMEs.

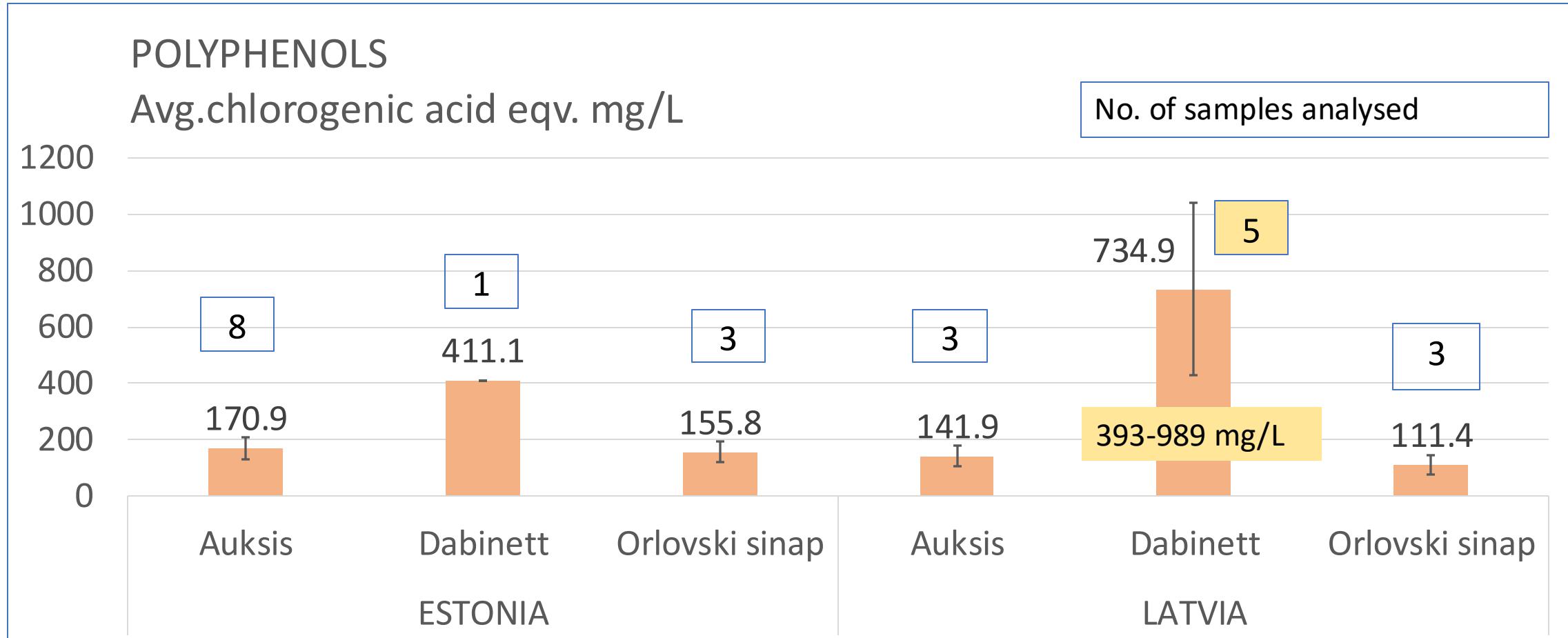
Polli Horticultural Research Centre  
Estonian University of Life Sciences



Estonian University  
of Life Sciences

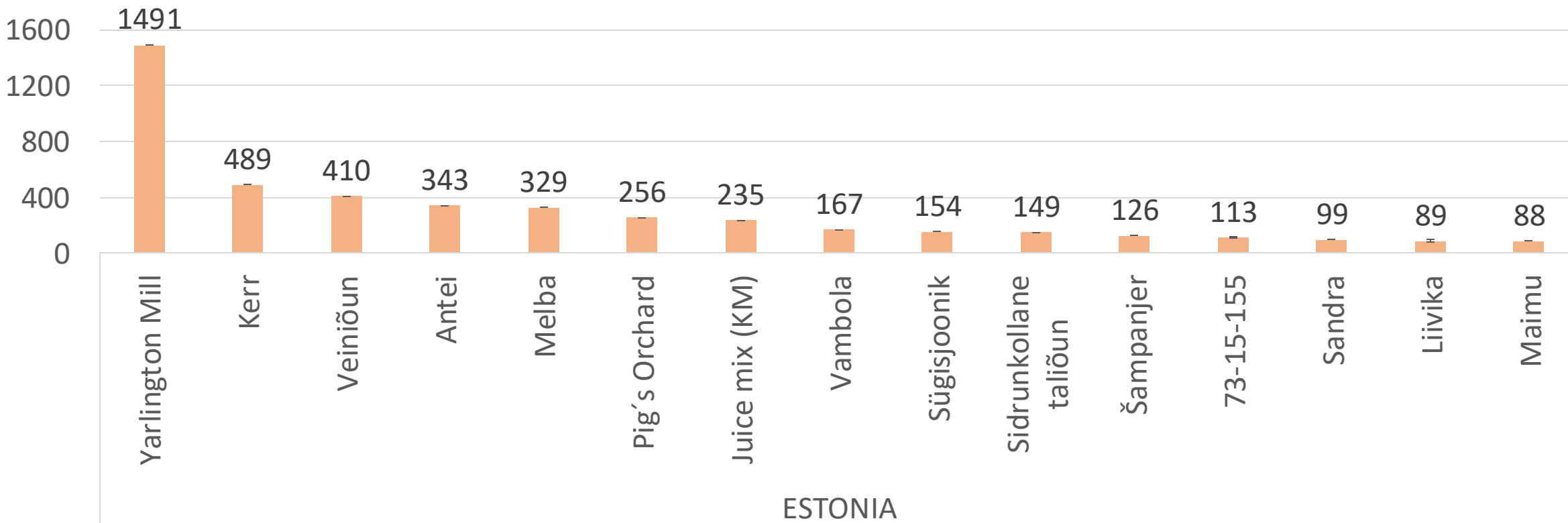
09.09.2025

# Variability of polyphenols



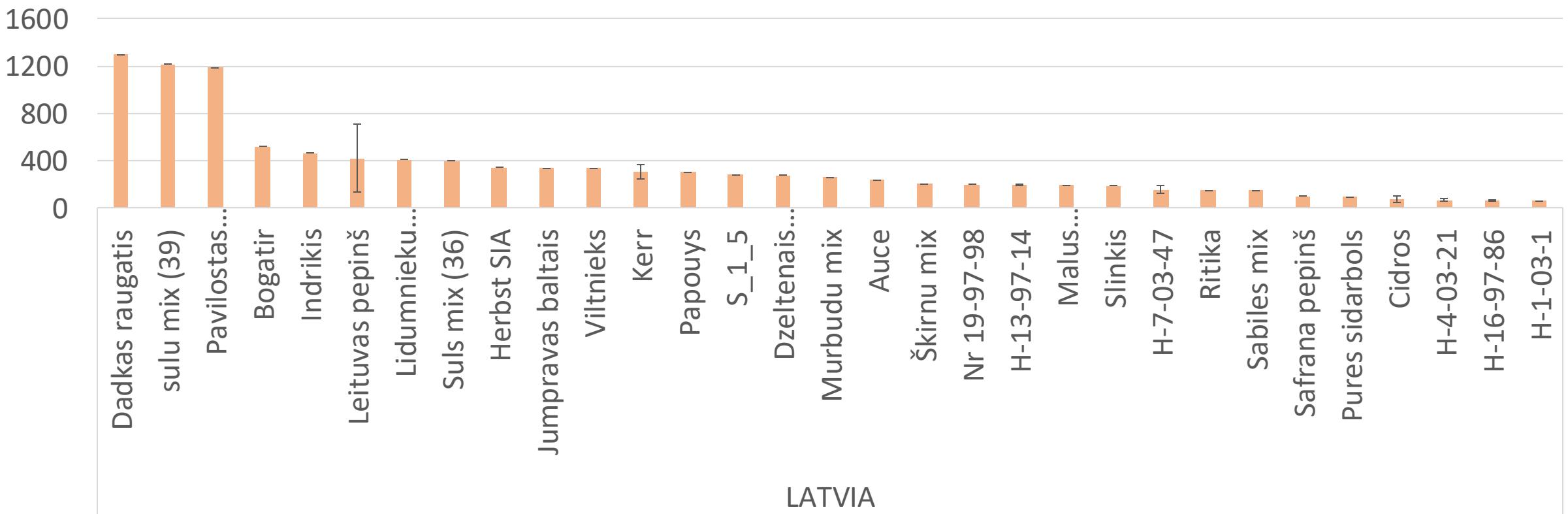
## POLYPHENOLS

Avg.chlorogenic acid eqv. mg/L



## POLYPHENOLS

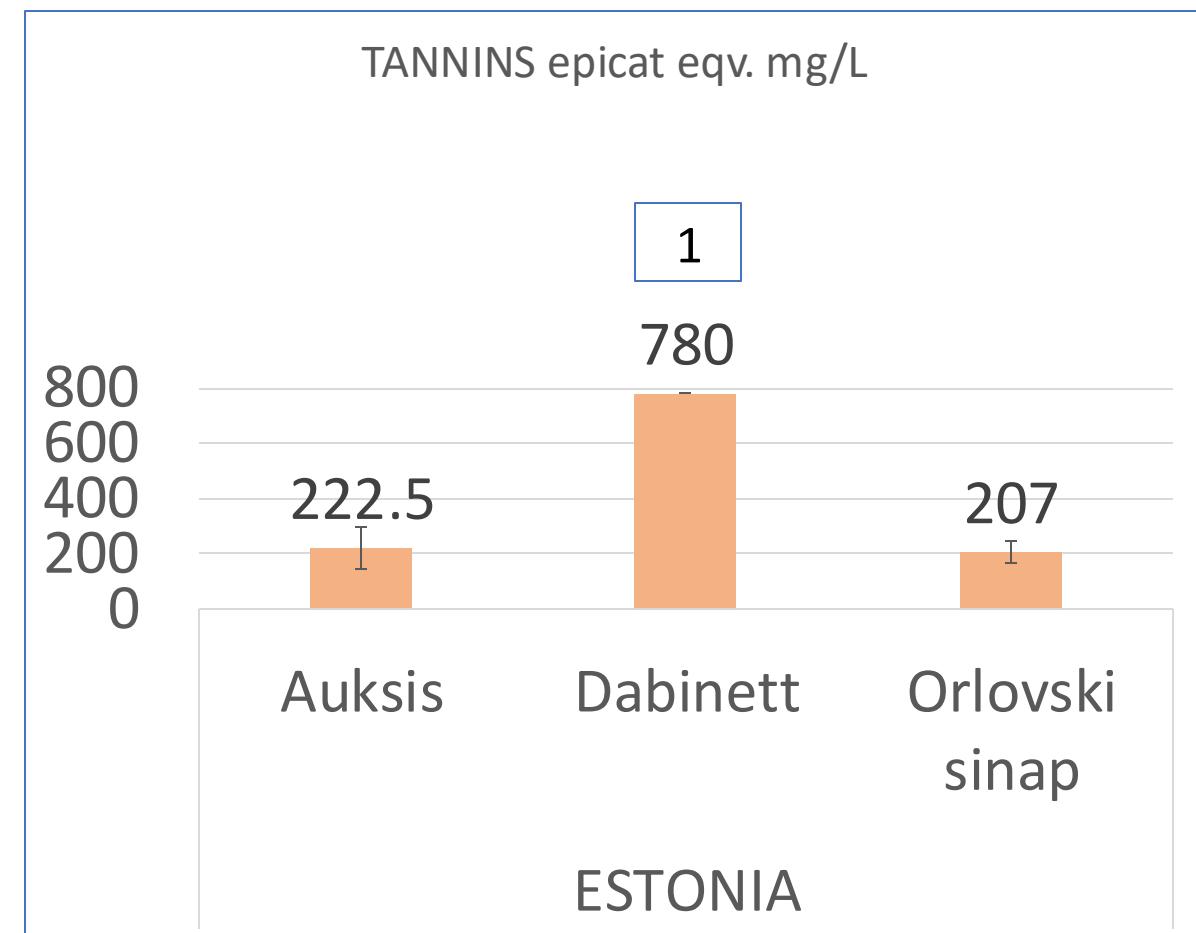
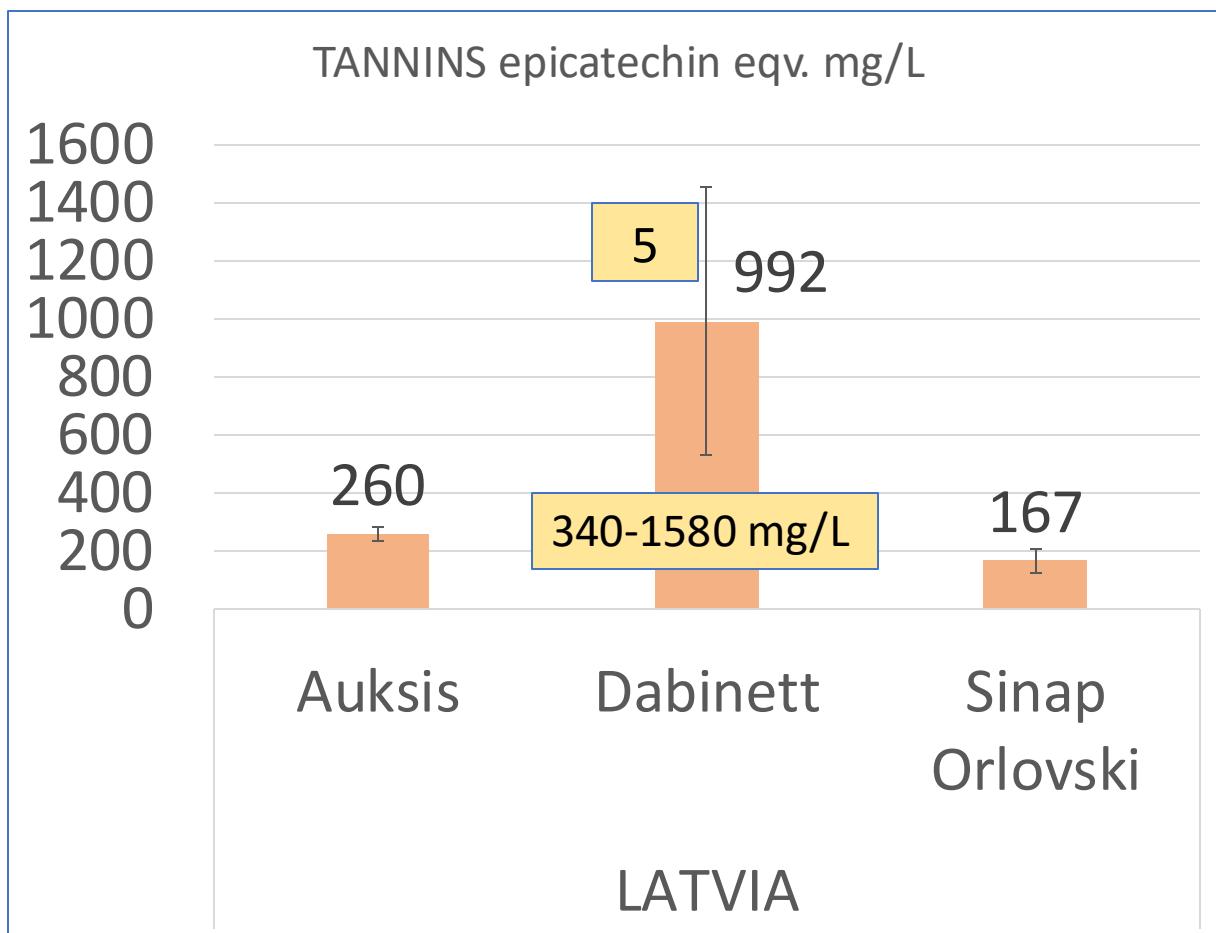
### Avg.chlorogenic acid eqv. mg/L



# Variability of tannins

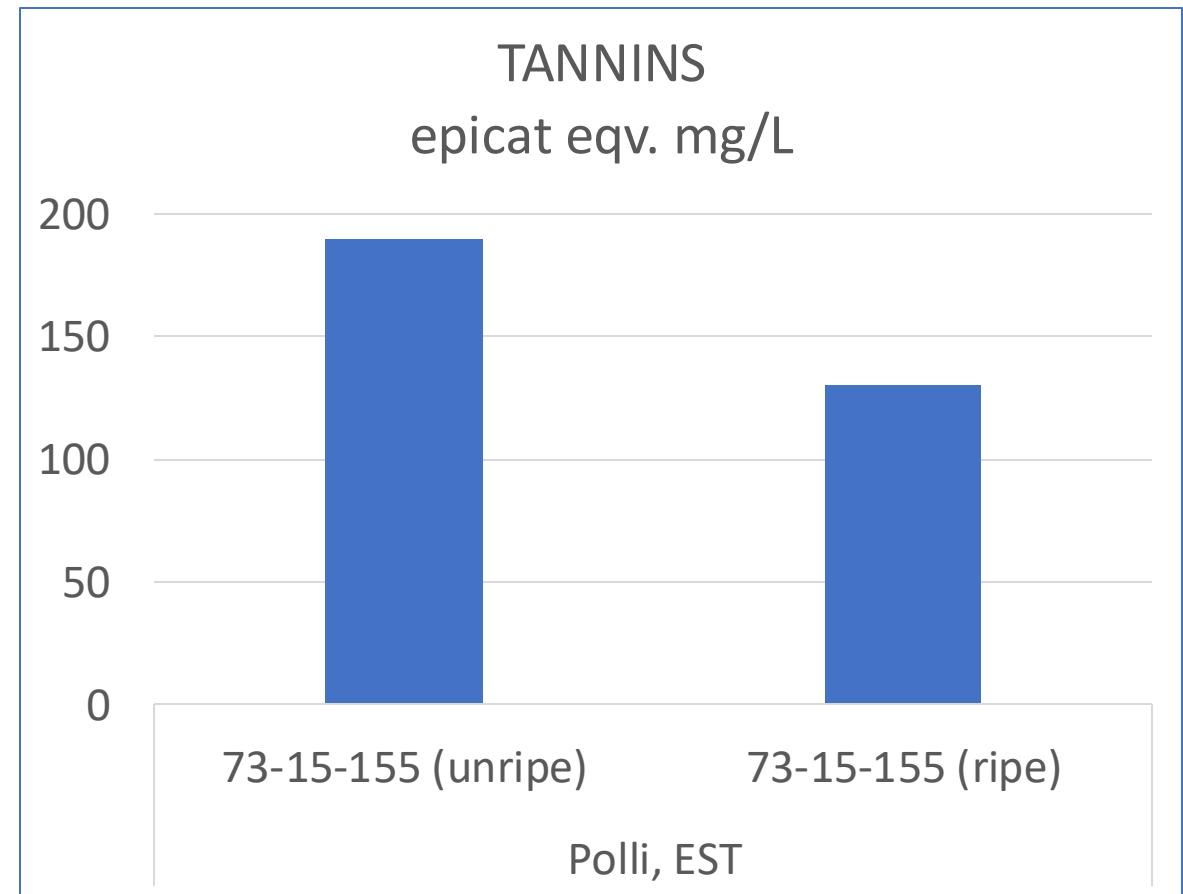
## Comparison of 3 common Apple cultivars

No. of samples analysed

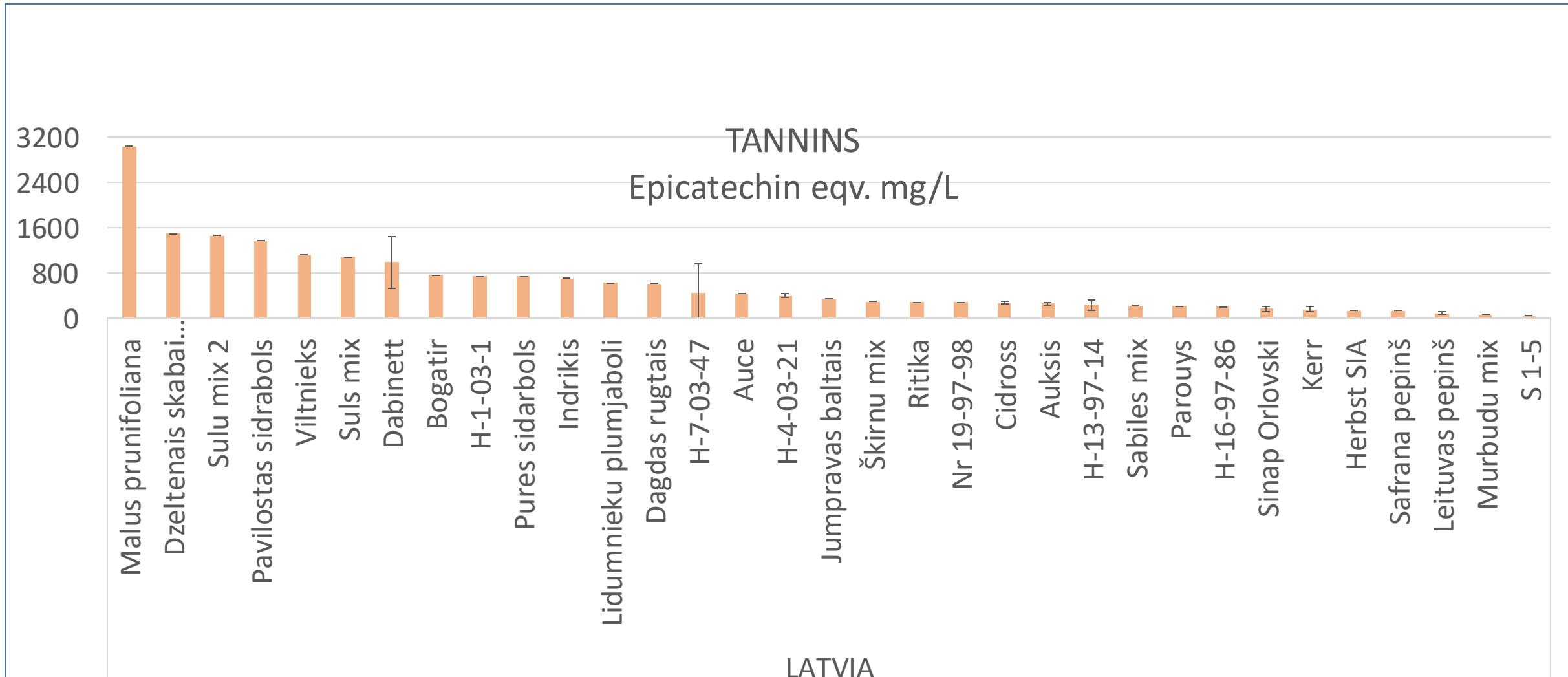


# Variability of tannins

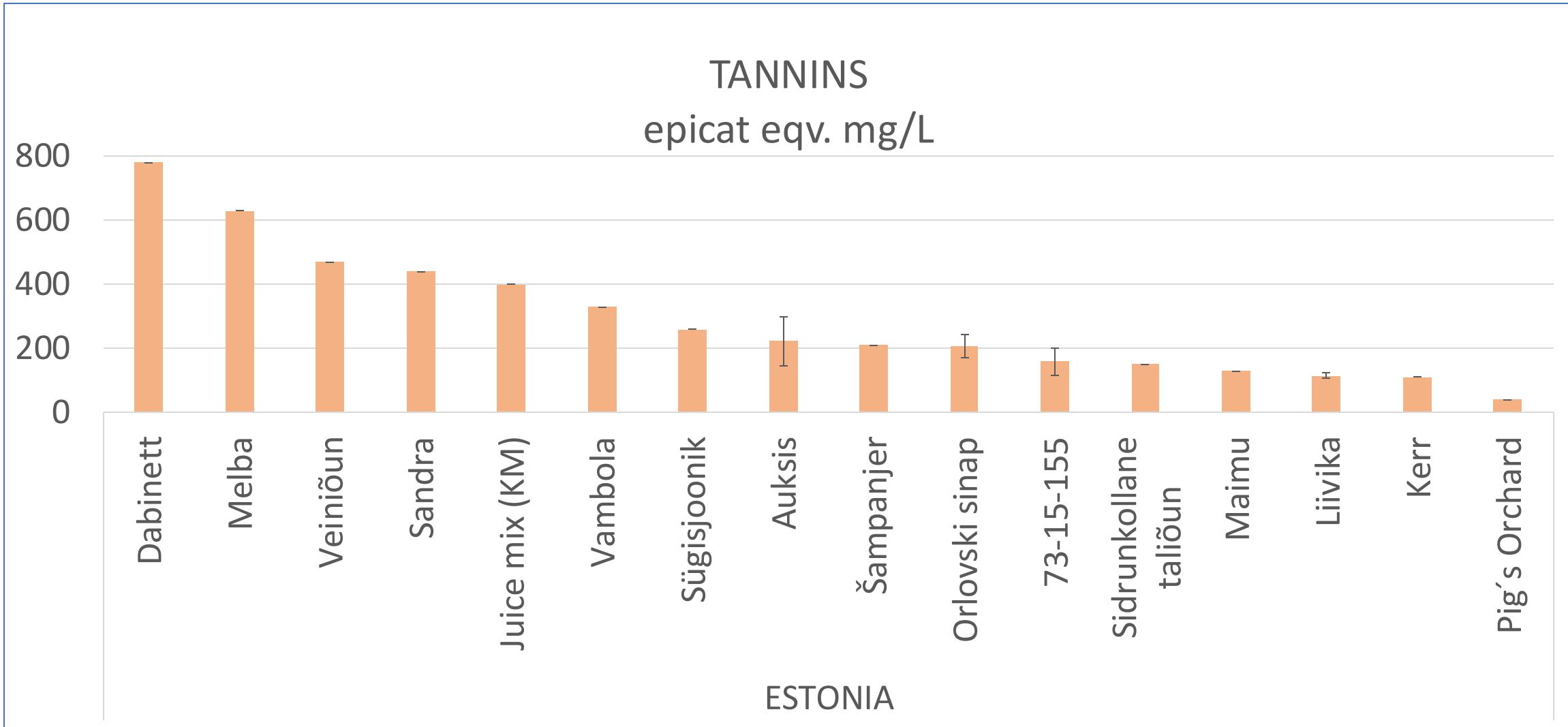
- Unripe apples have more polyphenols, tannins and acids, and less sugars



One of the main objectives for analyzing tannins in beverages is the estimation of perceived astringency for the consumer.

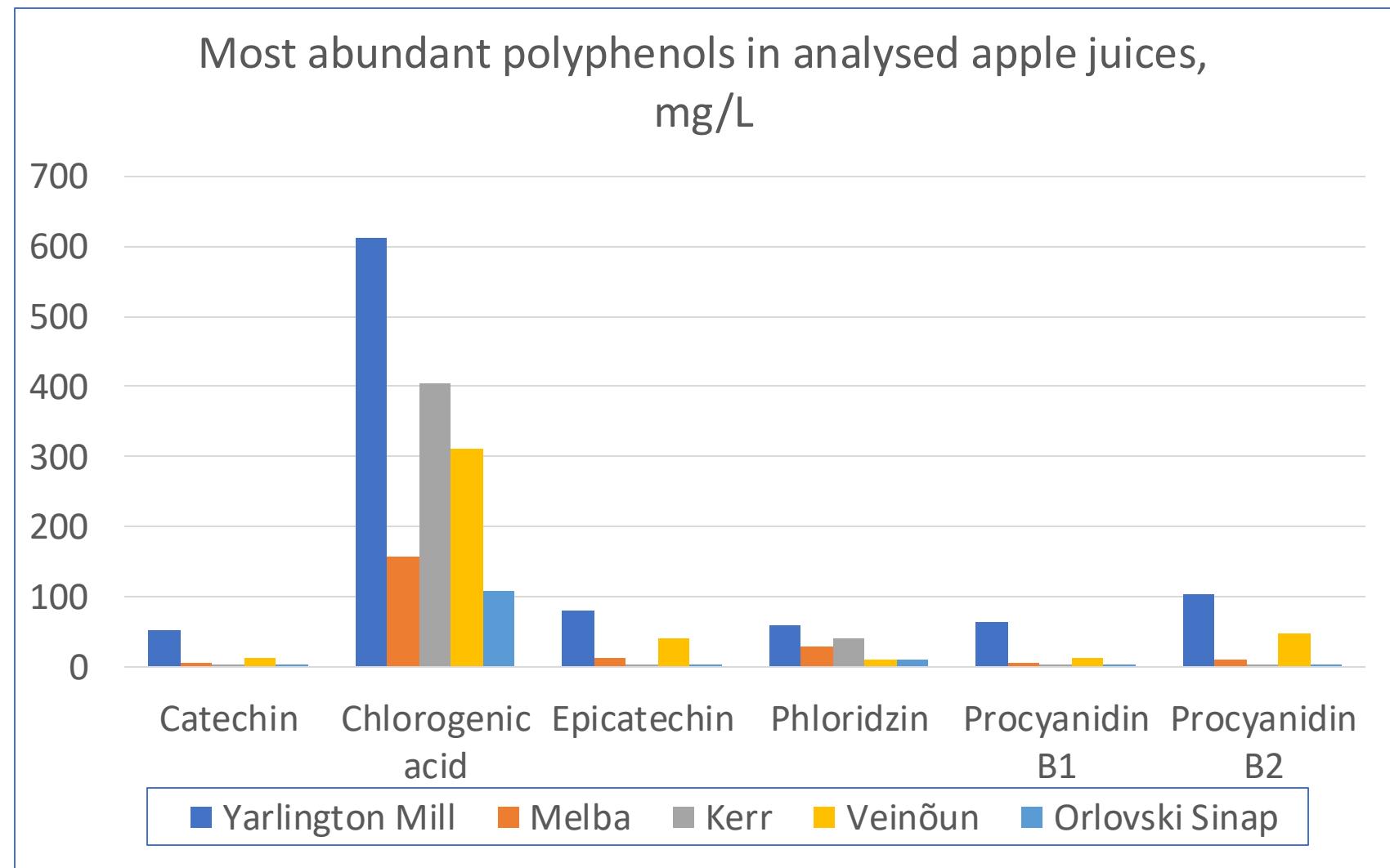


(MCP) assay is performed under conditions that essentially salt-out all tannin material independent of the chemical composition, which was demonstrated to correlate with perceived astringency

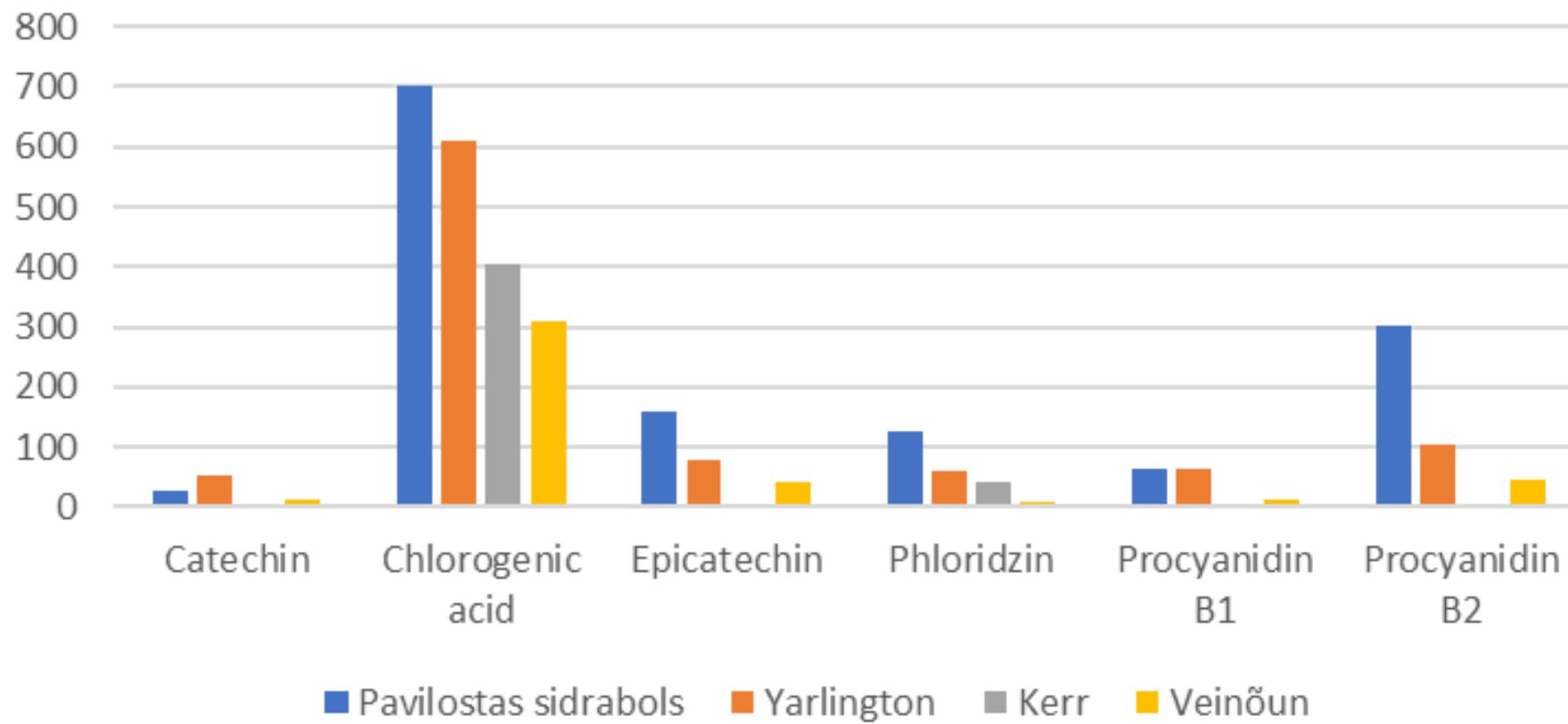


# Polyphenols profile

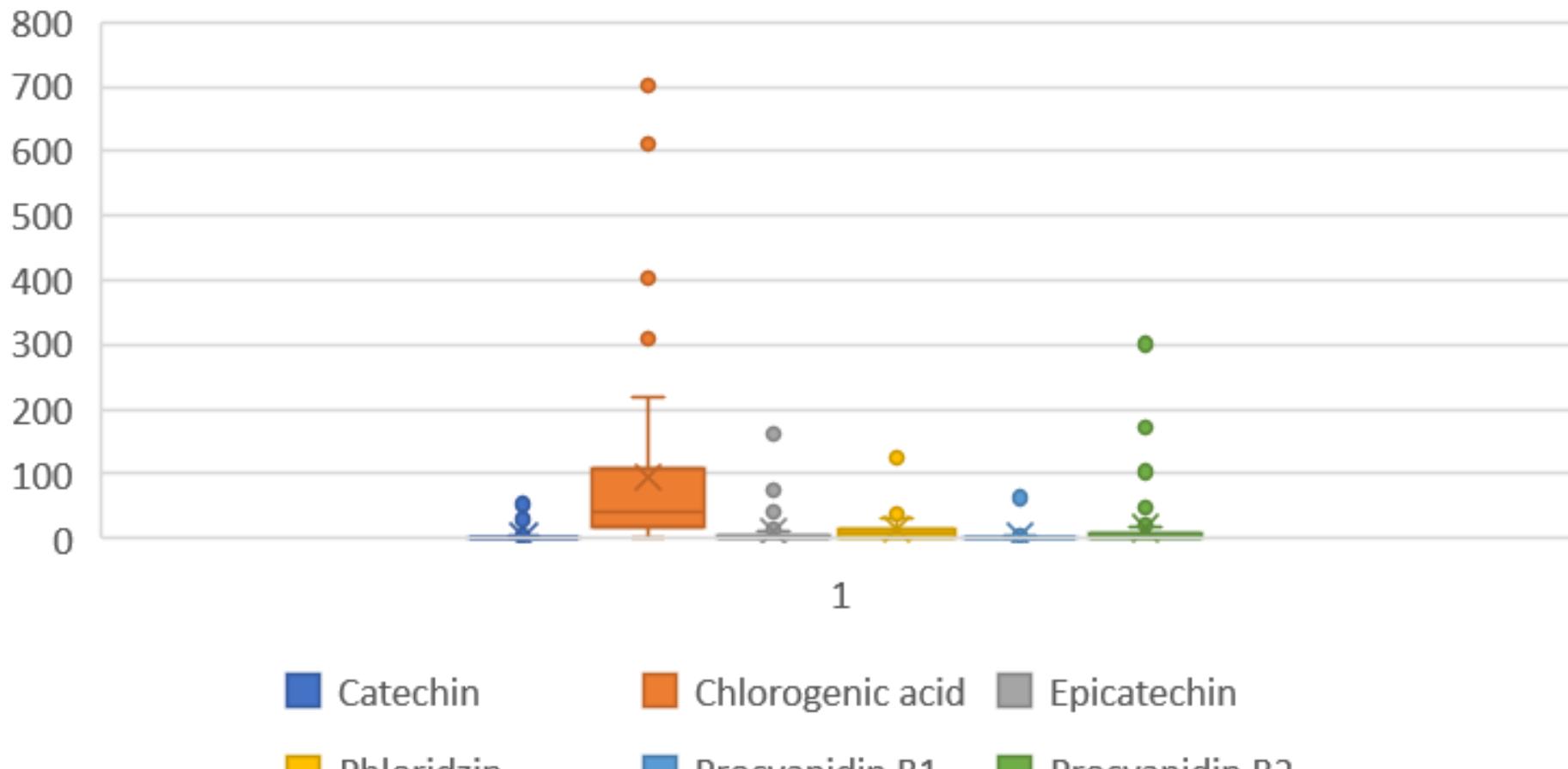
- Chlorogenic acid
- Epicatechin
- Catechin
- Phloridzin
- Procyanidin B1
- Procyanidin B2



## Polyphenols in analysed apple juice samples mg/L



## Variability of major polyphenols in apple juice mg/L





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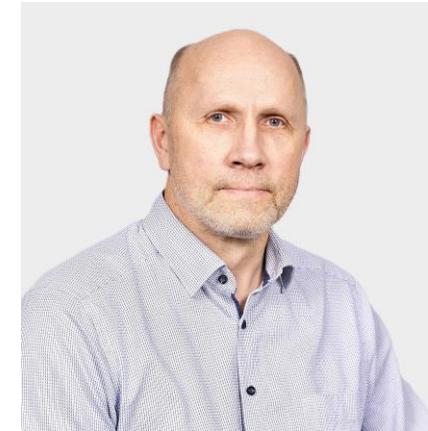
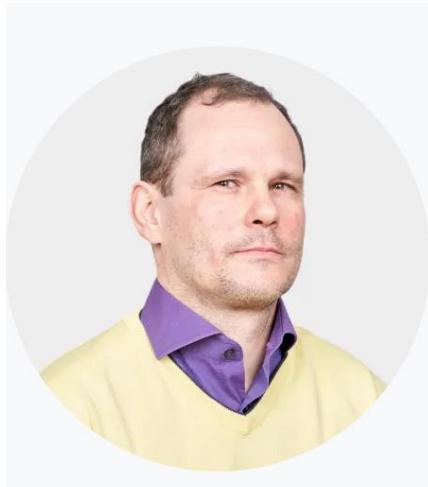
#maaylikool



#maaylikool



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Aitäh! Thank You!