

Effect of pressing method on the sensory quality of organic apple juice

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Introduction

There is a need for alternative, gentle processing methods that can be used for processing of organic food products. The pressing methods used for organic apple juice include the slow rack-and-frame press and the faster water press or belt press. The aim was to evaluate the influence of these three pressing methods on the sensory quality of cloudy organic apple juice produced from two apple cultivars.



Materials and Methods

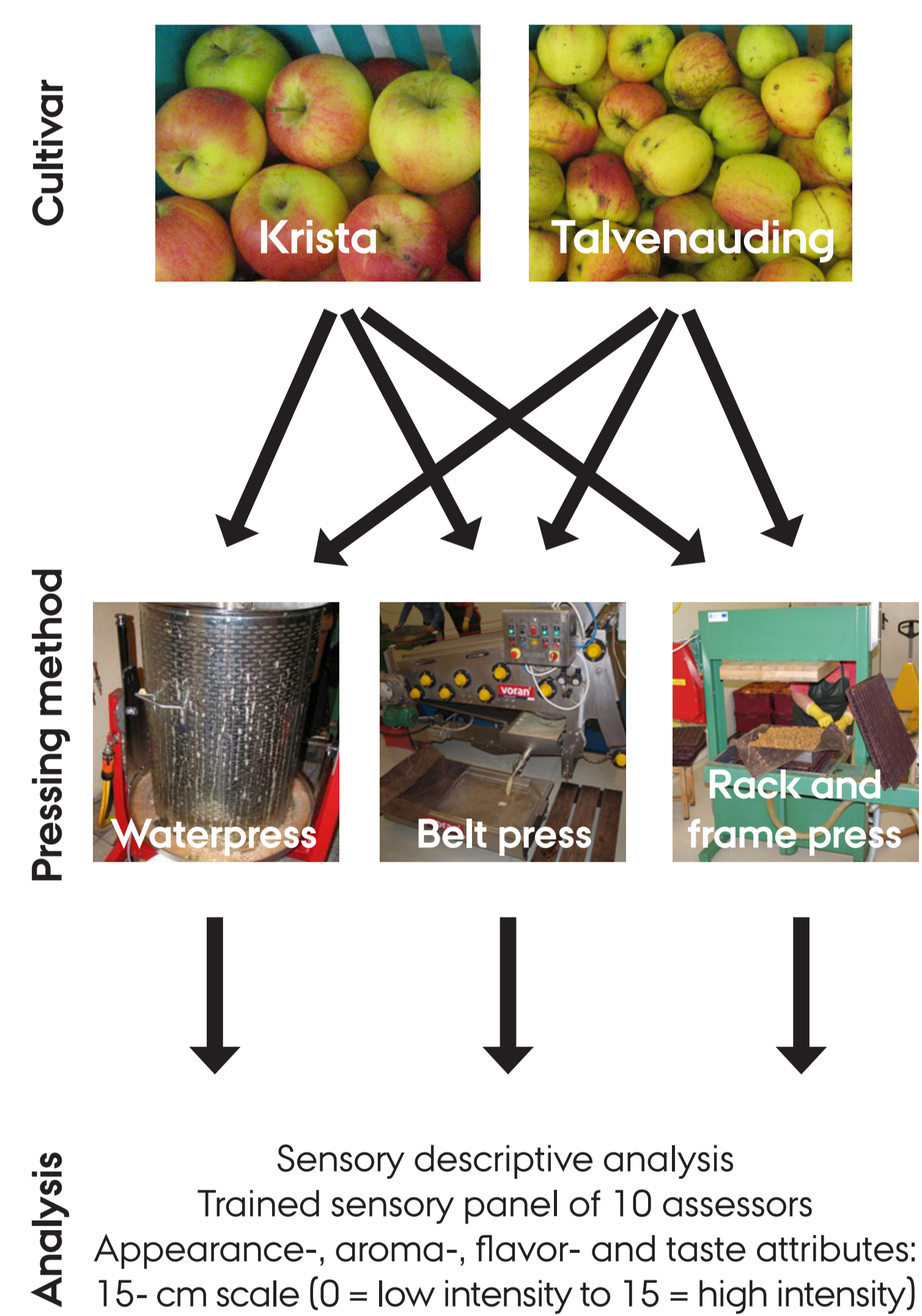


Figure 1. Study design.

Conclusion

The pressing methods resulted in different sensory profiles of organic apple juice produced from two different cultivars. The pressing methods had a larger influence on the different sensory profiles, compared to differences between the two apple cultivars. These results can be used by organic apple producers to produce apple juice with distinct sensory qualities.



Results and discussion

The pressing methods resulted in different sensory profiles of apple juice from the two cultivars (Figure 2). Belt pressing of both cultivars resulted in a non-golden coloured, sour and astringent apple juice with high intensity of cooked apple aroma compared to the other two pressing methods. Rack- and especially water-press resulted in a sweet apple juice with high intensity of apple aroma and - flavour compared to belt pressing (Figures 2 and 3).

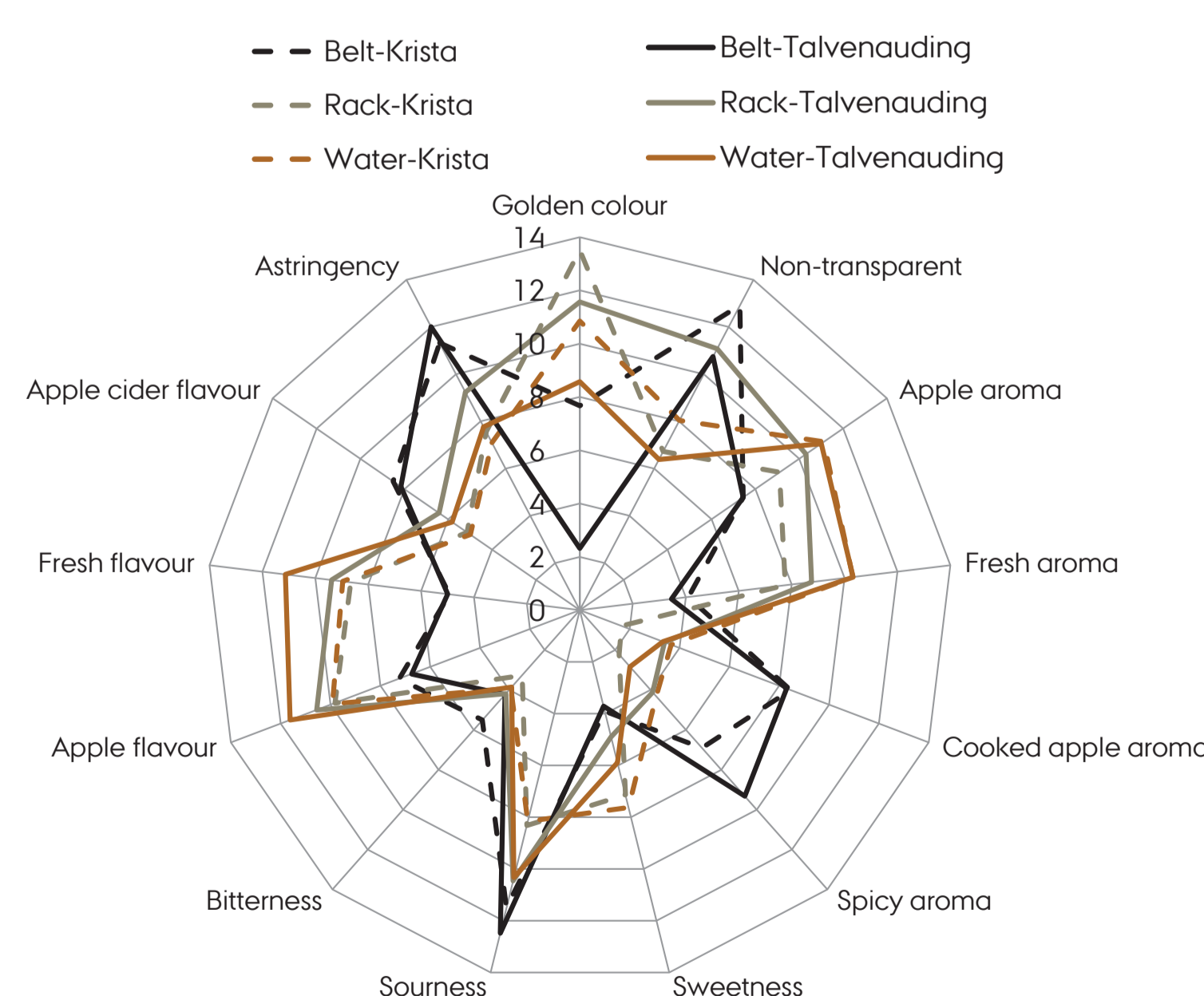


Figure 2. Sensory profile of Krista and Talvenauding using belt-, rack- and water-pressing.

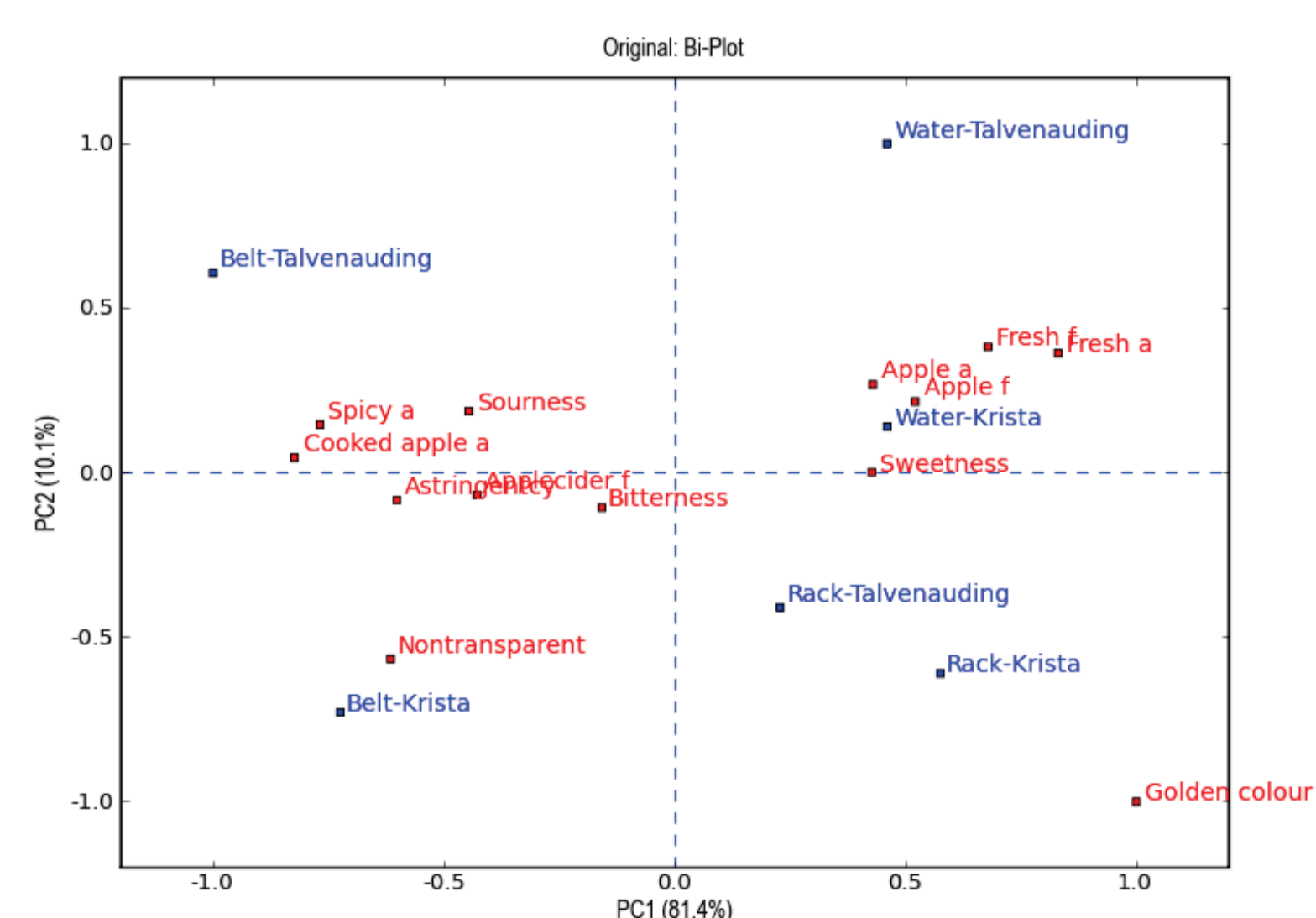


Figure 3. PCA bi-plot of sensory data for Krista and Talvenauding using belt-, rack- and water-pressing.

