Sensory profiles of microvinificated Danish wines (i): Cultivar characteristics

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Abstract

Batches of 10-20 kg grapes from 18 different cultivars were collected and vinificated at Copenhagen University. The microvinification was performed in small glass fermentation vessels of 5 L-10L size. Grapes for white wine were cold macerated for 6 hours at 10°C. After pressing, the juice was cleared by sedimentation at 3°C until next day. Yeast was added to the clear juice and fermentation performed at 19°C. Red wines were skinfermented for 4 days at 25°C. After pressing fermentation was finished at 19°C and followed by malolactic fermentation for 3-4 weeks. All wines were cold stabilized at 3°C for 3-4 weeks and racked twice. No filtering was performed. An expert panel at LWG in (Veitshöchheim) Germany made a sensorial profiling of the wines. Smell, taste and harmony was graded on a scale from 0-5 and the average score was calculated as a ‘General Quality’ score. Furthermore, additional white and red wine specific flavour attributes were included in the evaluation. Both, white and red wines, revealed aromatic light fresh style wines. The white wines were dominated by flowery, fruity and Muscat aromas whereas the red ones presented cherry and different berry aromas but also negative scores like green taste and high acidity levels. These negative scores were mainly related to a lacking level of ripening in some cultivars since 2010 was one of the coldest years in the last 25 years. The profiled cultivars were mostly newer tolerant interspecific early ripening cultivars suitable for growing in a cool climate. Wines from these have only been characterised to a limited degree. Even though we fermented small batches we could successfully manage a small scale wine production and provide the possibility to compare different grape varieties with respect to their flavour potential for the production of quality wines in the cool climate of Denmark.