

Thiol levels in young 2016 fresh and fruity Chenin blanc wines



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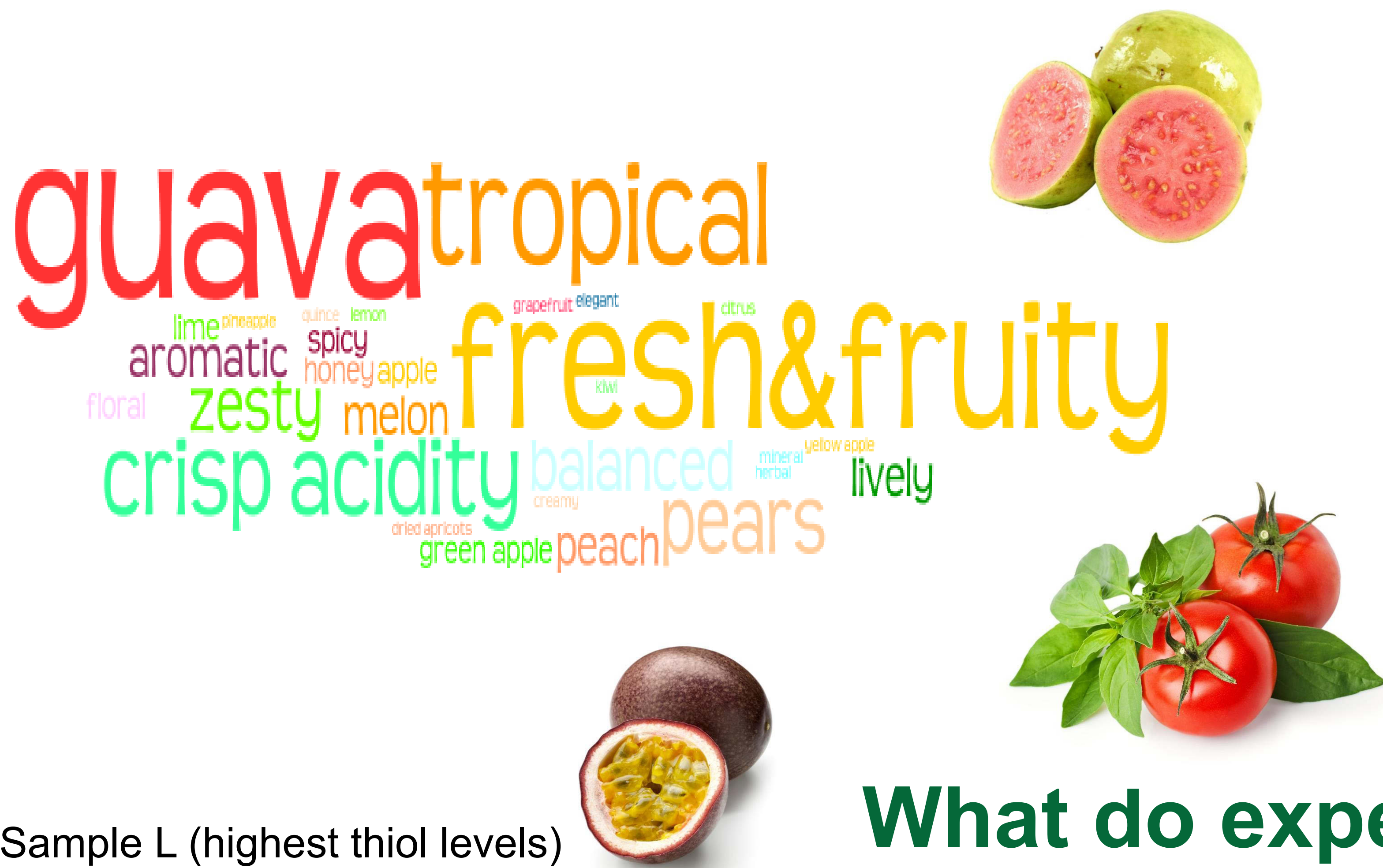
Background

Thiols associated with positive aroma aspects (3MH and 3MHA) are compounds susceptible to degradation especially by oxidation. This means that (1) very young wines contain a higher amount of these compounds, that decreases with time; (2) the aroma attributes associated with these compounds will be at their highest in very young wines.

Young Chenin blanc wines (2016) were analysed for thiols (GC-MS at Vinlab, Stellenbosch) and evaluated sensorially by a panel of 15 experts using CATA.

What do consumers see?

Analysis of information given on back labels and tasting notes showed general attributes associated with fresh and fruity Chenin blanc wines.



What does thiol analysis show?

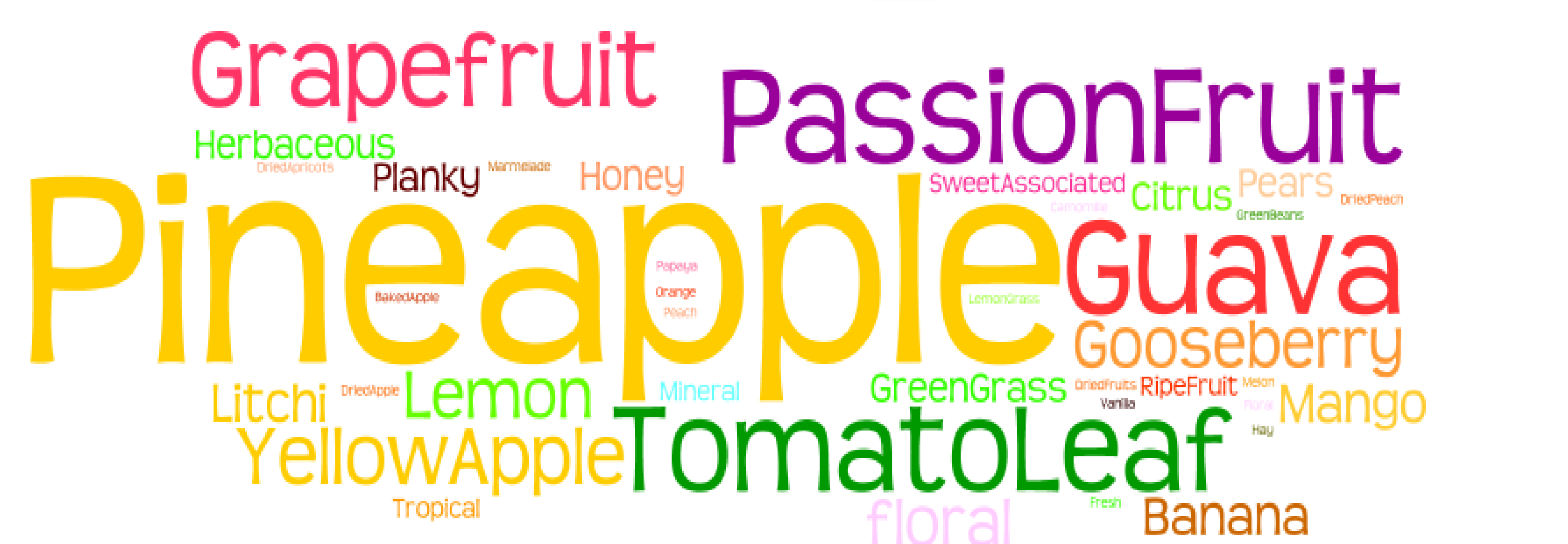
3MH varied between 189-1649 ng/L (average 664 ng/L) and 3MHA between 26-936 ng/L (average 288 ng/L). The values are especially high for 3MHA, which is more prone to degradation than 3MH.

Sample ID	3MH (ng/L)	3MHA (ng/L)	ratio
A	480	307	1.6
B	399	125	3.2
C	225	58	3.9
D	776	493	1.6
E	367	135	2.7
F	808	171	4.7
G	1389	576	2.4
H	580	241	2.4
I	1286	472	2.7
J	552	294	1.9
K	590	329	1.8
L	1649	936	1.8
M	189	26	7.3
N	766	247	3.1
O	767	208	3.7

What do experts say?

- Some of the more prominent attributes are associated with thiols (guava, grapefruit, passion fruit, tomato leaf) *but* they are present regardless of the level of measured thiols.
- The overall attributes for the wines are very similar to the attributes for the wines with highest and lowest thiol levels. Even in very low concentrations, thiols can strongly influence wine aroma

Sample L (highest thiol levels)



Sample M (lowest thiol levels)

