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► To cite this version:

Noëlle Béno, Aurélie Loison, Angélique Villière, Yves Y. Le Fur, Thierry Thomas-Danguin. Probe key-odorants in wine through online GC/O recombination with olfactoscan. Macrowine 2018, May 2018, Zaragoza, Spain. 6 p. hal-02786021

HAL Id: hal-02786021

<https://hal.inrae.fr/hal-02786021>

Submitted on 4 Jun 2020

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P-110



PROBE KEY-ODORANTS IN WINE THROUGH ONLINE GC/O RECOMBINATION WITH OLFACTOSCAN

**Noëlle Béno, Aurélie Loison, Angélique Villière, Yves
Le Fur and Thierry Thomas-Danguin**



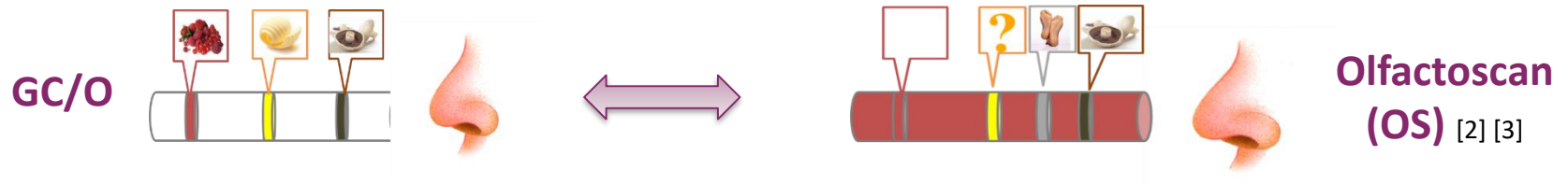
CONTEXT

The relationship between the chemical composition and the sensory perception of wine is still poorly understood and it is difficult to identify which flavour compounds drive the typicality of wines in complex mixture of odorants [1].

OBJECTIVE

Evaluate the impact of odorants from Pinot Noir (PN) and Cabernet Franc (CF) wines when added to the complex aroma of a middle range typicality wine.

STRATEGY

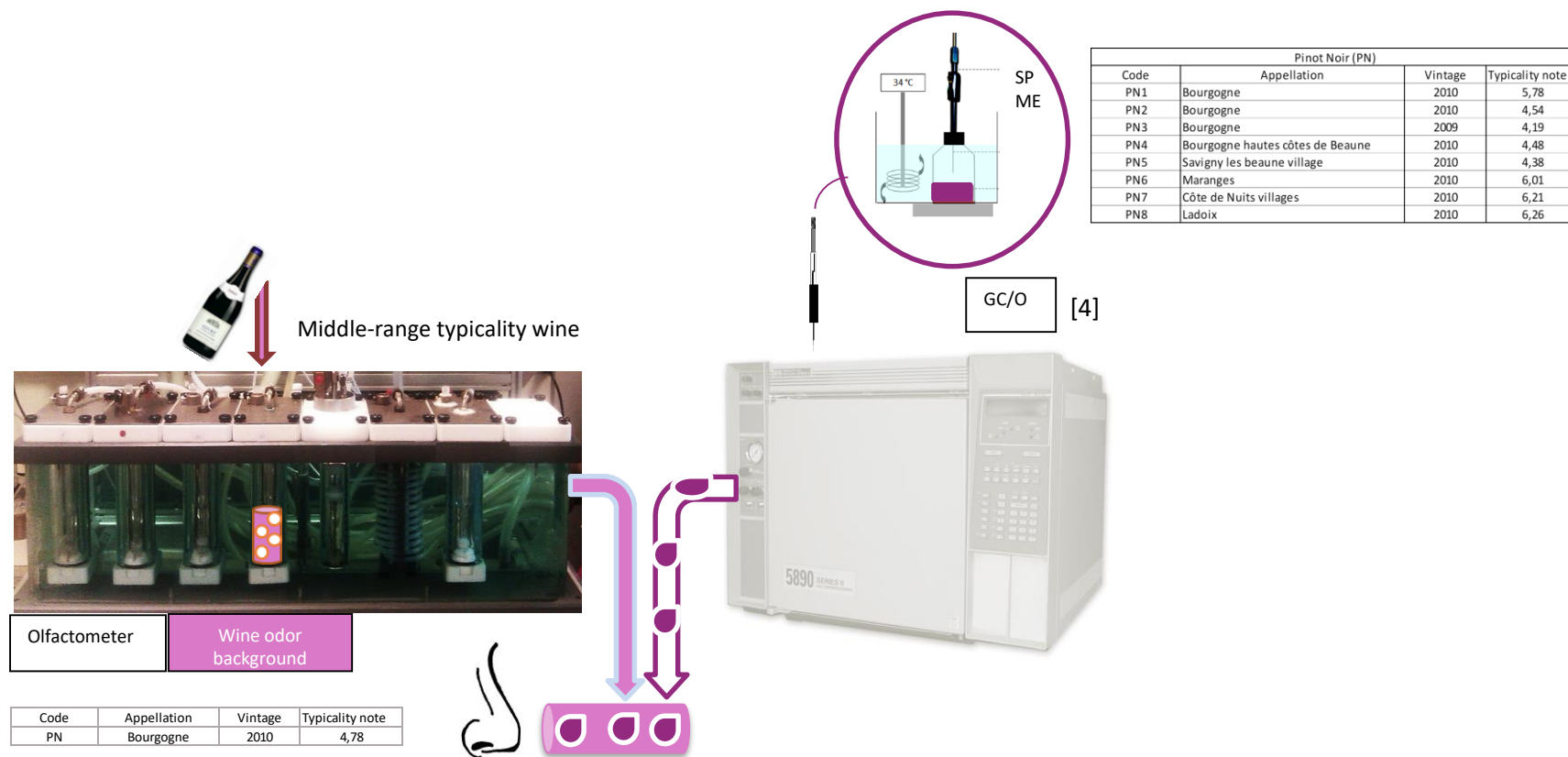


[1] Polaskova, P., 2008

[2] Burseg, K., 2009

[3] Thomsen, M., 2017

MATERIAL AND METHOD: GC/O VERSUS OLFACTOSCAN



[4] Villiere, A., 2012

RESULTS : GC/O VERSUS OLFACTOSCAN

Wines	LRI 1061	LRI 1082	LRI 1216	LRI 1255	LRI 1309	LRI 1450	LRI 1746	LRI 2112
PN1	-87,5	50	-100	100	-12,5	-75	-37,5	62,5
PN2	-100	62,5	-100	56,25	6,25	-100	12,5	0
PN3	-100	0	-100	56,25	-12,5	-100	0	0
PN4	-100	18,75	-100	62,5	-6,25	-87,5	-18,75	0
PN5	-100	31,25	-81,25	31,25	6,25	-100	-25	0
PN6	-62,5	0	-100	43,75	43,75	-100	-12,5	0
PN7	-100	0	-100	50	25	-100	-12,5	0
PN8	-100	0	-100	31,25	25	-87,5	-12,5	18,75

[5]



3-methyl 1 butanol

Not considered
in GC/O



[5] Villiere, A., 2018

CONCLUSION



The results showed that the odorants that influenced the middle range typicality wine odour did not fully superpose with those identified as key-odour compounds in a classical GC/O approach.



Odour masking and synergy effects were observed owing to the Olfactoscan technique and new potential keys-odorants were revealed, but they can't be directly linked to wine Typicality.



the Olfactoscan technique is efficient to probe key-odorants once embedded in an aromatic buffer and confirm the critical influence of perceptual interactions in the perception of wine aroma.





P-110

MACROWINE 2018

28th-31st MAY
ZARAGOZA

Thank you for your attention
and see you tomorrow
at the poster session
for further discussions

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