PÔLE TECHNIQUE RÉGIONAL INTERSUD
Vignes et vins du bassin Languedoc-Roussillon
6 Place des Jacobins – BP 221, 11100 Narbonne
☎ +33 4 68 90 13 21 | +33 6 31 99 54 86

Ressources bibliographiques « Goûts de fumée »

➢ Articles scientifiques et internationaux

Zoom – « Les molécules et marqueurs du goûts de fumée »

Alcazar-Magana, A.; Yang, R.; Qian, M.C.; Qian, Y.L. (2025). Discrimination of Smoke-Exposed Pinot Noir Wines by Volatile Phenols and Volatile Phenol-Glycosides Molecules, 30(13), 2719.

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Krstic, M.P.; Johnson, D.L.; Herderich, M.J. (2015). Review of smoke taint in wine: smoke-derived volatile phenols and their glycosidic metabolites in grapes and vines as biomarkers for smoke exposure and their role in the sensory perception of smoke taint. Aust. J. Grape Wine Res. 21(S1): 537-553.

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Parker, M., Osidacz, P., Baldock, G. A., Hayasaka, Y., Black, C. A., Pardon, K. H., Jeffery, D. W., Geue, J. P., Herderich, M. J., Francis, I. L. (2012). Contribution of several volatile phenols and their glycoconjugates to smoke-related sensory properties of red wine. J. Agric. Food. Chem. 60: 2629-2637.

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Parker, M.; Jiang, W.; Siebert, T.E.; Herderich, M.J. (2024). Smoky characters in wine: Distinctive flavor or taint? J. Agric. Food Chem. 72(17): 9581-9586.

Rochfort, S.; Reddy, P.; Fernanado, K.; Liu, Z.; Ezernieks, V.; Spangenberg, G. (2024). Detection of biomarkers for characterizing smoke-taint in grapes. Food Chemistry, vol. 23, 101665

Shi, T.; Ristic, R.; Wilkinson, K.L.; Tian, B. (2023). Impact of smoke from wheat, oat, and clover stubble burning on Cabernet Sauvignon grapes and wine. Aust. J. Grape Wine Res. 2023: 6693220.

Szeto, C.; Ristic, R.; Capone, D.; Puglisi, C.; Pagay, V.; Culbert, J.; Jiang, W.; Herderich, M.; Tuke, J.; Wilkinson, K. (2020). Uptake and Glycosylation of Smoke-Derived Volatile Phenols by Cabernet Sauvignon Grapes and Their Subsequent Fate during Winemaking. Molecules, 25(16), 3720.

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Zoom – « Stades phénologiques et contamination »

Culbert, J.A.; Jiang, W.; Ristic, R.; Puglisi, C.J.; Nixon, E.C.; Shi, H.; Wilkinson, K.L. (2021). Glycosylation of Volatile Phenols in Grapes following Pre-Harvest (On-Vine) vs. Post-Harvest (Off-Vine) Exposure to Smoke. Molecules, 26, 5277

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Zoom – « Les méthodes de détection et de quantification des marqueurs»

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Zoom – « Libération des molécules de goût de fumée à la vinification, lors du vieillissement ou à la dégustation »

Kennison, K.R.; Gibberd, M.R.; Pollnitz, A.P.; Wilkinson, K.L. (2008). Smoke-Derived Taint in Wine: the release of Smoke-Derived volatile phenols during fermentation of Merlot Juice following Grapevine Exposure to Smoke. Journal of Agricultural and Food Chemistry, 56(16): 7379-83

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Zoom – « Commercialisation & consommateurs »

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6 Place des Jacobins – BP 221, 11100 Narbonne
☎ +33 4 68 90 13 21 | +33 6 31 99 54 86

Zoom – « Mesures correctives au chai »

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Thème – « Articles de synthèse et vision globale »

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Wilkinson, K.L.; Ristic, R. (2020). Comparing the chemical and sensory consequences of grapevine smoke exposure in grapes and wine from different cultivars and different wine regions in Australia. Communication scientifique à XIIIth International Terroir Congress, 17-18 november 2020, Adelaide, Australia.

Ressources bibliographiques « Goûts de fumée »

➢ Accès libre sur internet et plaquettes techniques

https://ives-technicalreviews.eu/article/view/4846 : Une revue des techniques d'atténuation des défauts liés à la fumée dans la production du vin

https://www.researchgate.net/publication/277393091_Shortterm_physiological_effects_of_smoke_on_grapevine_leaves

Bottle Aging of Smoke-Affected Wines: Changes in Smoke Flavor and Chemical Composition: https://pubmed.ncbi.nlm.nih.gov/39772565/

Exploring Variation in Grape and Wine Volatile Phenol Glycoconjugates to Improve Evaluation of Smoke Taint Risk: https://www.ajevonline.org/content/75/1/0750013

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Projet européen 2025 FIREWINE :

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☎ +33 4 68 90 13 21 | +33 6 31 99 54 86 ✉ mcorbel@languedoc-wines.com