Over 1 million gallons processed

SMOKE TAINT REMOVAL

ConeTech's efforts to create a smoke taint removal process that could remove both free and bound compounds began in 2016. In 2018 after 2 years of research, a commercial solution was offered to winemakers throughout California.

Utilizing a combination of technologies and new methodology, ConeTech developed a process to remove smoke compounds while preserving over 95% of desirable flavor and aroma compounds.

Using expertise from outside the wine industry ConeTech identified an out-of-state sprits lab to create a standardized ConeTech panel used for testing smoke tainted wines.

In 2019 alone ConeTech successfully removed smoke taint compounds in over 1 million gallons of affected wine.

ConeTech's Proprietary Smoke Taint Removal processes was awarded the Winnovation award in 2019 for excellence in Wine Industry Innovation.

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ConeTech Smoke Taint Removal System and Data

About the Analytics

Key to ConeTech's breakthrough in removing smoke taint is an analytical rigor that previously was not standard for commercial application with smoke tainted wine. ConeTech utilizes analytic techniques, provided by an Illinois laboratory, specializing in chromatographic separation analysis . ConeTech selected 30 specific compounds and their glycosidically bound counterparts for analysis based on research findings and their relevance to smoke taint. All compounds were analyzed with extreme accuracy, to one tenth of a part per billion through the Illinois lab. Our proprietary analysis shows that both bound and free compounds are removed through ConeTech's process. Continued analytics over time indicate that wines processed with ConeTech's removal method have not seen the return of offending compounds.

About the Smoke Taint Removal System

ConeTech drew upon other industries for out-of-the-box solutions. These included the identification of a hyper-selective matrix with specific affinity for the offending compounds and a custom-designed chamber whose interior optimizes the wine's passage across the active elements in the matrix.

Analytical Results

Smoke Tainted Wine Analysis - 2018 Vintage Lake County						
Compound (sensory descriptor)	Free (ppb)			Bound (ppb)		
	Untreated	Treated	%	Untreated	Treated	%
4-methylguaiacol (tar, woody)	-	-	-	-	-	-
o-Cresol (coal, tar)	12.1	4.3	64.5	2.5	0.0	100
o-Guaiacol (ashy, phenolic)	23.7	13.1	44.7	20.0	9.7	51.5
Methyl p-Cresyl Ether (smoky, phenolic)	11.7	0.0	100	2.9	0.0	100
p-Cresol (medicinal, leather)	18.1	10.1	44.2	0.0	0.0	-
Phenol, 4-methoxy-3-methyl- (smoky, leather)	-	-	-	-	-	-
Syringol (woody, smoky)	46.2	0.0	100	38.4	0.0	100

- Analysis representative of a typical smoke tainted wine lot from the over 1 million gallons ConeTech has commercially processed to date.
- Compounds shown in data table are most commonly identified in smoke tainted wine.
- Continued analytics over time indicate that wines processed with ConeTech's removal method have not seen the return of offensive key volatile compounds.

Additional Information

Five Award Winning Innovations for the Wine Industry
WIN Advisor – Nov 14, 2019

ConeTech Builds on Core Expertise to Solve for the Increasing Problem of Smoke Taint in Wine
WIN Advisor – Nov 18, 2019

Santa Rosa lab pioneers way to remove smoke taint from wine
Press Democrat – July 25, 2019

Smoke Screen: As wine regions globally are impacted by wildfires and lingering smoke, scientists and industry labs are looking for ways to lessen the impact on grapes and finished wine.
Spirited - Feb 28, 2020

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