

Supplementary Materials

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Table S1. List of odorants identified in swine barn PM (1979-Present).

Odorants	References ¹											
	i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii
Aldehydes												
(<i>E</i>)-2-decenal							*				*	
(<i>E</i>)-2-heptenal							*				*	
(<i>E</i>)-2-hexenal		*					*				*	
(<i>E</i>)-2-nonenal	*						*				*	
(<i>E</i>)-2-octenal							*				*	
(<i>E,E</i>)-2,4-decadienal	*	*									*	
(<i>E,E</i>)-2,4-nonadienal		*					*	*			*	
(<i>E,Z</i>)-2,6-nonadienal											*	
(<i>Z</i>)-4-heptenal	*											
2-butanal		*										
2-butyl-2-octenal							*					
2-heptenal		*										
2-methyl-2-pentenal											*	
2-methylbutanal												*
2-methylpropanal							*					
2-methyl-2-propenal												*
2-pentanal		*										
2-undecenal											*	
2,4-heptadienal	*	*										
2,4-nonadienal	*						*					
3-methylbutanal							*	*				*
benzaldehyde		*					*				*	*
butanal		*						*				
decanal		*				*	*				*	
heptanal	*					*	*	*			*	*
hexanal	*	*				*	*	*			*	*
nonanal	*					*	*	*			*	
octanal						*	*	*			*	
pentanal		*					*	*				*
trans-4,5-epoxy-(<i>E</i>)-2-decenal											*	
vanillin	*										*	
Ketones												
1-(1-cyclohexen-1-yl) ethanon								*				

1-octen-3-one	*	*									*	
2-heptanone							*					*
2-octanone		*					*					
2-nonanone							*					
2-butanone										*		
2-decanone							*					
2-methyl-5-isopropenyl-2-cyclohexanone							*					
2-nonadecanone							*					
2,3-butanedione								*		*		
3-hydroxybutanone											*	
3-octanone							*					
3-octen-2-one							*	*				
4-heptanone							*	*				
5-methyl-3-heptanone							*					
5-pentylloxolan-2-one	*											
6-methyl-2-heptanone								*				
γ -hexalactone								*				
acetone		*					*	*				
butanone		*										
pentanone		*										
Alcohols												
1-heptanol							*				*	
1-hexadecanol							*					
1-hexanol							*	*			*	*
1-nonanol												*
1-octanol							*	*			*	
1-octen-3-ol							*					
1-pentanol							*				*	
2-butoxyethanol								*				
2-ethyl-1-hexanol							*	*			*	
2-furanmethanol											*	
2-heptadecanol							*					
2-methyl-1-butanal												*
ethanol											*	
nonanol							*					
phenylmethanol								*			*	
Acids												
2,2-dimethyl-propanoic acid											*	
2-butenic acid												*
2-ethylhexanoic acid											*	
2-methylpropanoic acid			*		*		*	*		*	*	

3-methylbutanoic acid			*		*					*	*	*
4-methylpentanoic acid							*	*			*	
9-hexadecenoic acid							*					
9-octadecenoic acid							*					
9,12-octadecenoic acid							*					
acetic acid		*	*		*		*	*		*	*	*
benzoic acid		*					*				*	
butanoic acid		*	*		*		*	*		*	*	*
decanoic acid		*									*	
dodecanoic acid	*	*									*	
heptanoic acid		*			*			*		*	*	
hexadecanoic acid							*					
hexanoic acid		*			*			*		*	*	*
nonanoic acid		*			*						*	
octadecenoic acid							*					
octanoic acid		*			*						*	
pentanoic acid		*	*		*		*	*		*	*	*
phenylacetic acid	*	*									*	
phenylpropanoic acid	*	*									*	
propanoic acid		*	*		*		*	*		*	*	*
tetradecanoic acid		*										
tridecanoic acid		*									*	
undecanoic acid		*									*	
Phenols												
guaiacol											*	
2,6-di- <i>tert</i> -butyl-4-ethylphenol								*				
4-ethylphenol	*						*	*		*	*	
<i>m</i> -cresol											*	
<i>m</i> -ethylphenol							*					
<i>o</i> -cresol											*	
<i>o</i> -ethylphenol							*					
<i>p</i> -cresol	*	*	*		*		*	*		*	*	*
<i>p</i> -ethylphenol			*									
phenol			*		*		*	*		*	*	*
<i>p</i> -vinylguaiacol											*	
Esters												
2-ethylhexyl butyrate							*					
2-ethylhexyl acetate							*					
dibutyl phthalate							*					
diethyl phthalate							*					
diisobutyl phthalate							*					

hexylacetate												*
methyl butyrate							*					*
ethers												
2-methylfuran							*					
2-pentylfuran	*						*	*			*	
diethyl ether							*					
Hydrocarbons												
1-methyl-2-isopropylbenzene							*					
1-methyl-4-isopropylbenzene							*					
1,1-dichloro-1-fluoroethane								*				
2,6,10,14-tetramethyl-hexadecane							*					
dodecane							*	*				
eicosane							*					
heptadecane							*					
heptane							*	*				
hexadecane							*					
hexamethylcyclotrisiloxane							*					
nonadecane							*					
octadecane							*					
octamethylcyclotetrasiloxane							*					
octane						*						
pentane								*				
pentadecane							*					
styrene								*				
tetradecane							*					
tridecane							*					
limonene							*					*
Nitrogen-containing compounds												
2'-aminoacetophenone								*				
2-methyl-1H-pyrrole							*					
2-methylpyrimidine												*
2-piperidinone								*				
2,5-dimethylpyrazine												*
3-pentanamin								*				
4-methyl indole							*					
5-acethyl-2-methylpyridine								*				
acetamide								*				
ammonia (NH ₃)				*					*			
benzothiazole							*					
indole			*		*		*	*		*	*	*
N,N-dimethyl-formamide								*				

<i>o</i> -aminoacetophenone											*	
skatole	*		*		*		*	*		*	*	*
trimethylamine								*				*
Sulfur-containing compounds												
dimethyl disulfide							*			*		*
dimethyl sulfide												*
dimethyl sulfone								*				
dimethyl trisulfide										*		
hydrogen sulfide (H ₂ S)						*		*				
methanethiol								*				
Others												
emthylene chloride							*					

Note:

¹ i: Hammond et al. [1]; ii: Hammond et al. [2]; iii: Hartung et al. [3]; iv: Donham et al. [4]; v: Oehrl et al. [5]; vi: Das et al. [6]; vii: Razote et al. [7]; viii: Cai et al. [8]; ix: Lee and Zhang [9]; x: Andersen et al. [10]; xi: Yang et al. [11]; xii: Walgraeve et al. [12].

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