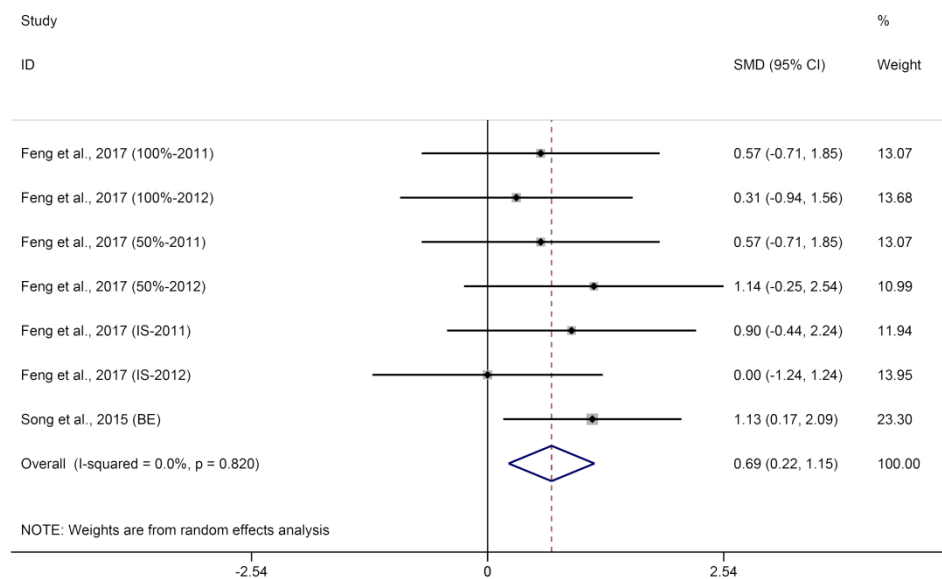
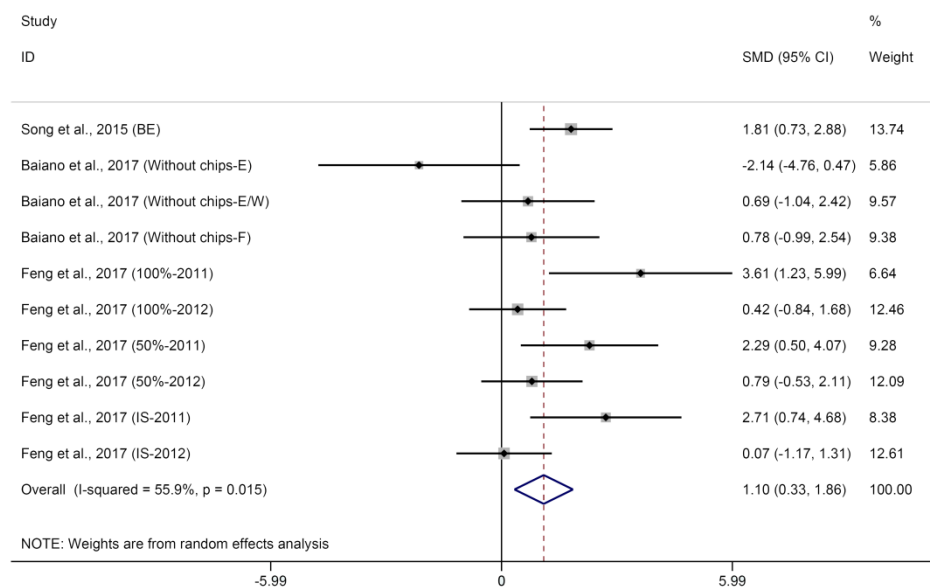


# Effects of Basal Defoliation on Wine Aromas: A Meta-Analysis

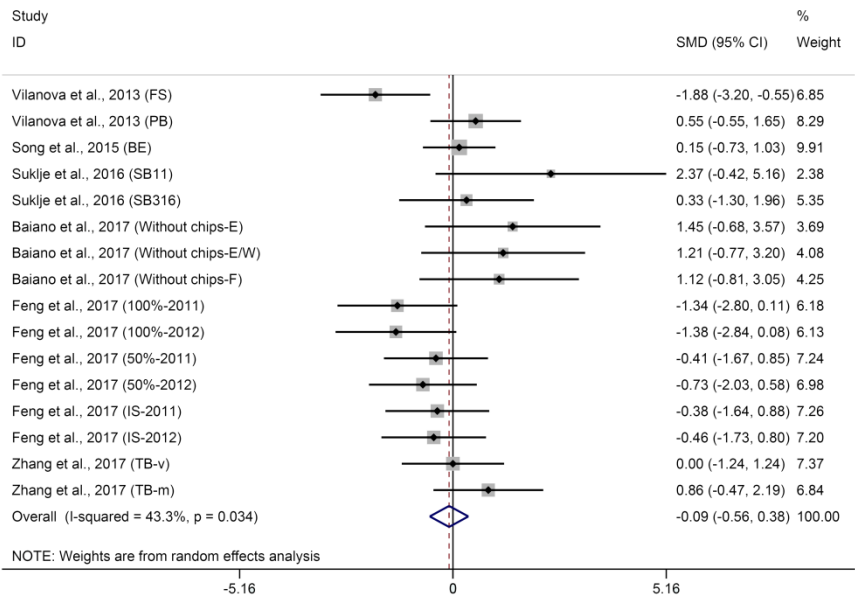
## Supplementary Materials:



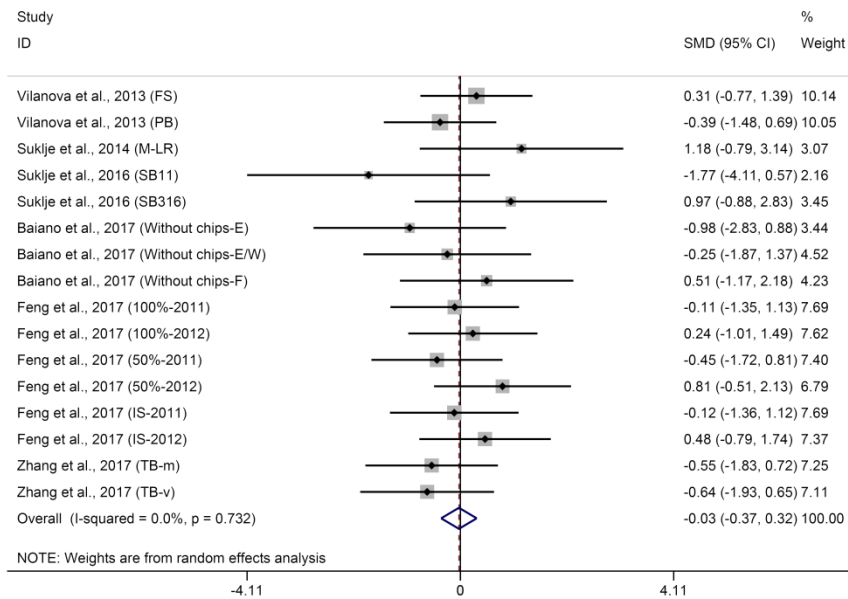
**Figure S1.** Meta-analysis for the effects of basal defoliation on  $\beta$ -ionone in wine.



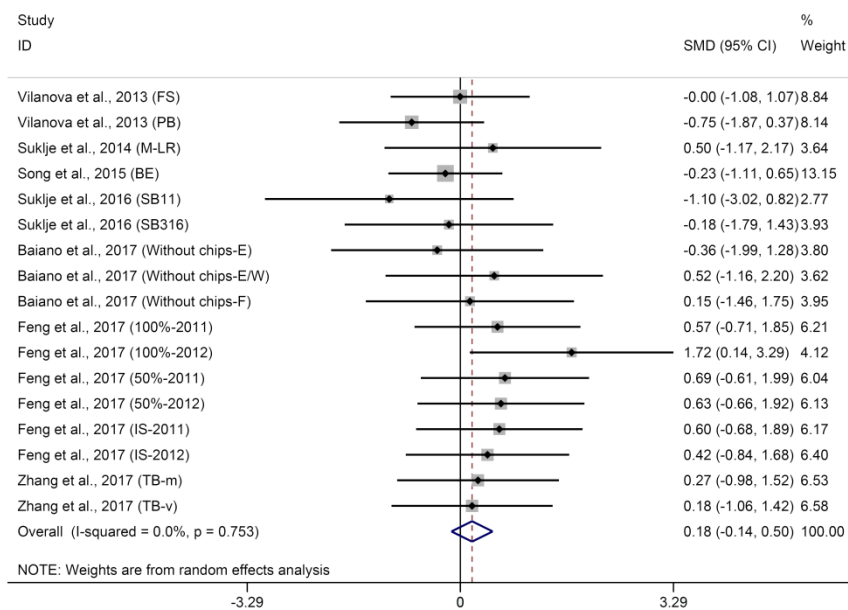
**Figure S2.** Meta-analysis for the effects of basal defoliation on geraniol in wine.



**Figure S3.** Meta-analysis for the effects of basal defoliation on hexyl acetate in wine.

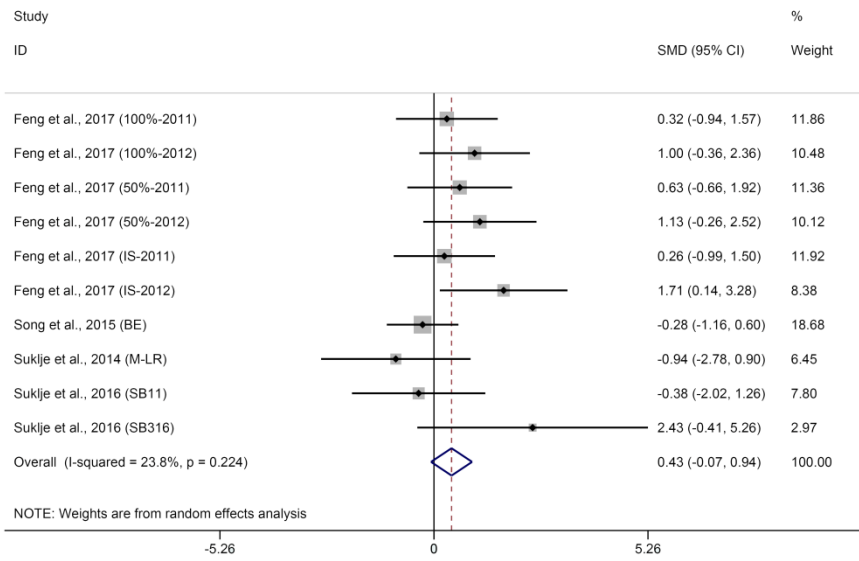


(a)

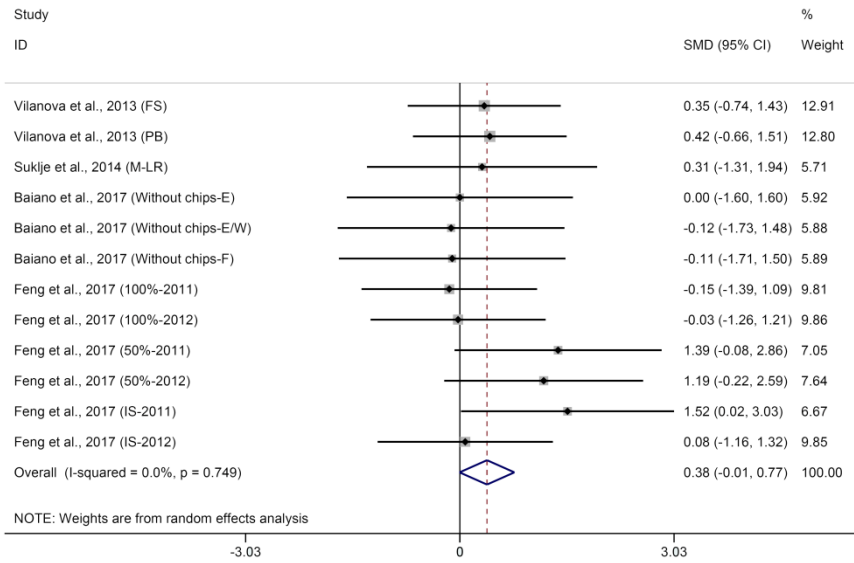


(b)

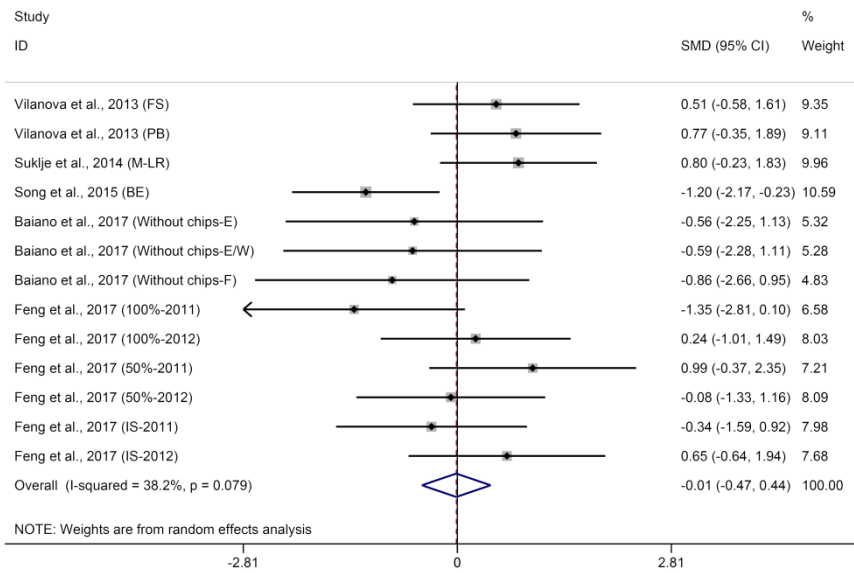
**Figure S4.** Meta-analysis for the effects of basal defoliation on (a) isobutanol and (b) isoamyl alcohol in wine.



**Figure S5.** Meta-analysis for the effects of basal defoliation on isobutyl acetate in wine.

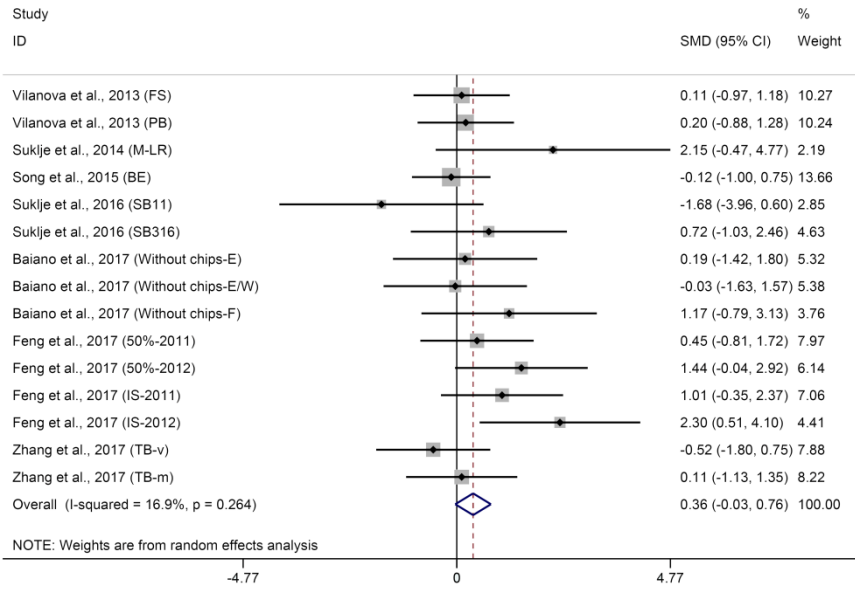


(a)

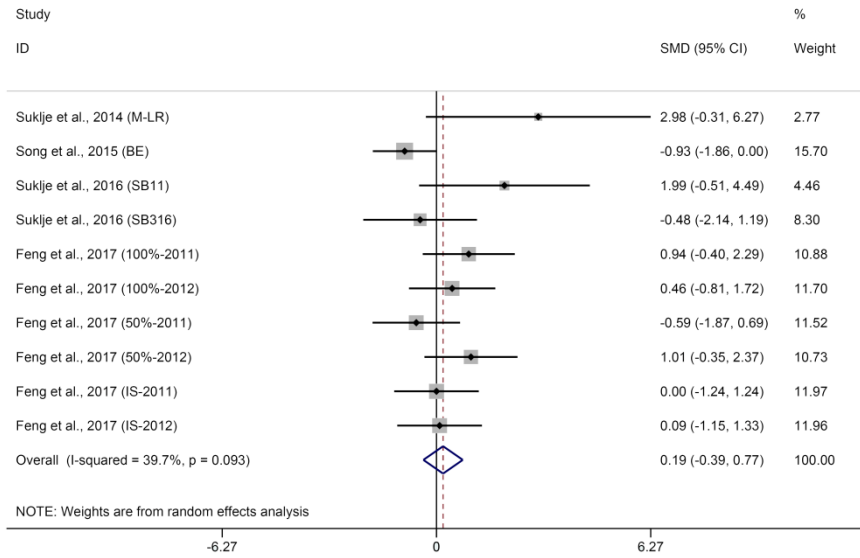


(b)

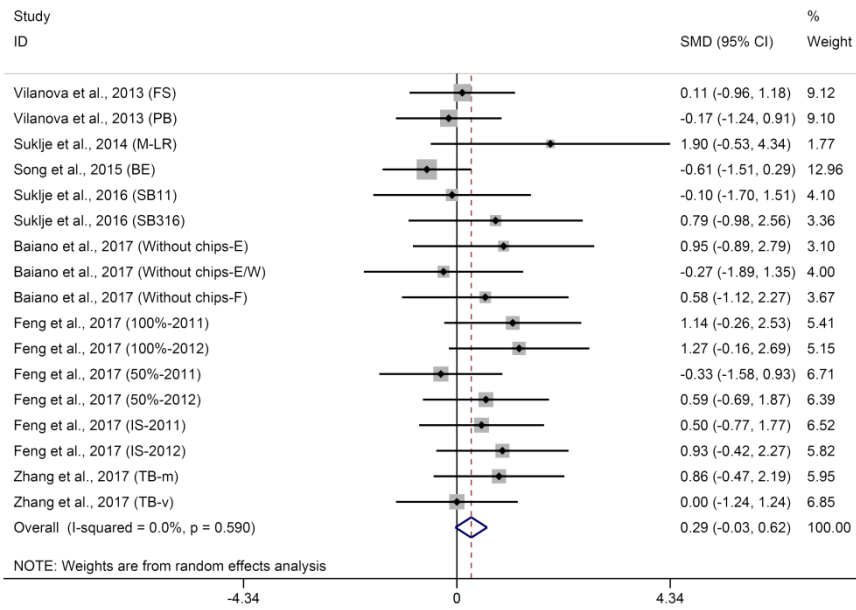
**Figure S6.** Meta-analysis for the effects of basal defoliation on (a) hexanoic acid and (b) octanoic acid in wine.



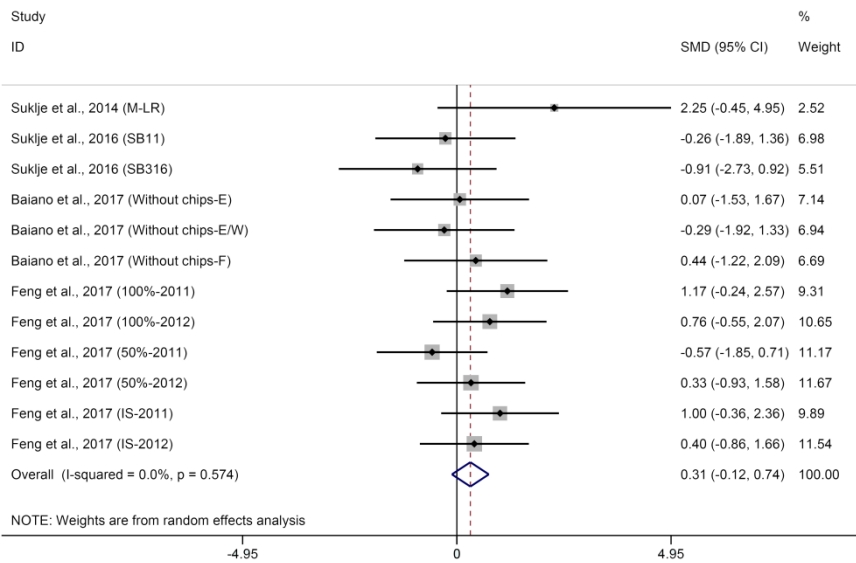
(a)



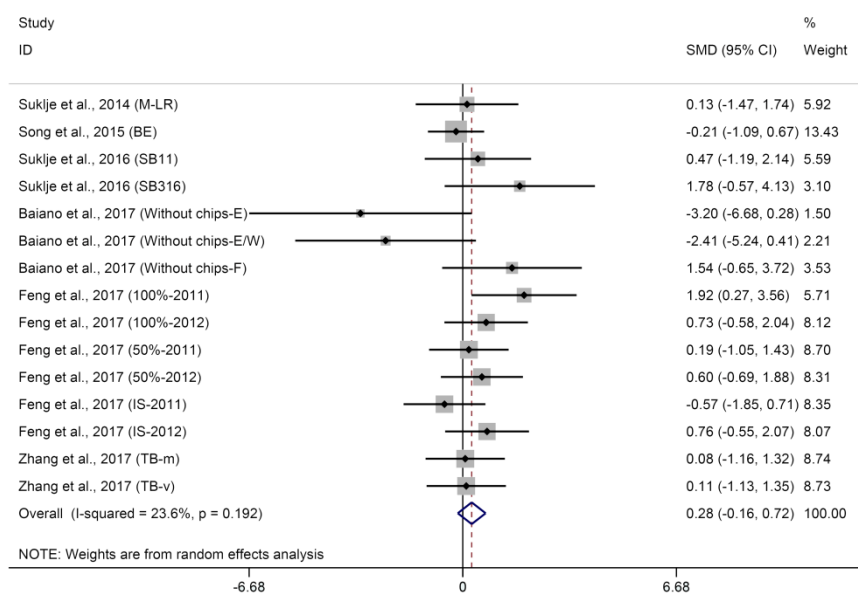
(b)



(c)



(d)



(e)

**Figure S7.** Meta-analysis for the effects of basal defoliation on (a) ethyl butyrate, (b) ethyl isobutyrate, (c) ethyl hexanoate, (d) ethyl isovalerate and (e) ethyl decanoate in wine.



**Table S1.** Characteristics of the nine studies included in the meta-analysis.

<b>Author, publication year</b>	<b>Treatment ID</b>	<b>Replicates</b>	<b>Grape variety</b>	<b>MDf<sup>1</sup></b>	<b>BM<sup>2</sup></b>	<b>DT<sup>3</sup></b>	<b>DS<sup>4</sup></b>
Kwasniewski et al., 2010	2days PBS	2	Riesling	ns	low	pre-veraison	75%
	33days PBS	2	Riesling	ns	low	pre-veraison	75%
	68days PBS	2	Riesling	ns	low	pre-veraison	75%
Vilanova et al., 2012	PB	10	Tempranillo	higher	moderate	pre-veraison	100%
	FS	10	Tempranillo	higher	moderate	pre-veraison	100%
Suklje et al., 2014	M-LR	3	Sauvignon Blanc	higher	moderate	pre-veraison	100%
Song et al., 2015	BS	10	Pinot Noir	higher	moderate	veraison	100%
Sivilotti., 2016	BF	3	Merlot	ns	low	pre-veraison	75%
	AF	3	Merlot	ns	low	pre-veraison	75%
Suklje et al., 2016	SB11	3	Sauvignon Blanc	higher	low	pre-veraison	100%
	SB316	3	Sauvignon Blanc	ns	low	pre-veraison	100%
Baiano et al., 2017	Without chips-E	3	Nero di Troia	ns	low	veraison	75%
	Without chips-E/W	3	Nero di Troia	ns	low	veraison	75%
	Without chips-F	3	Nero di Troia	higher	low	veraison	100%
Feng et al., 2017	100%-2011	5	Pinot Noir	ns	low	pre-veraison	100%
	50%-2011	5	Pinot Noir	ns	low	pre-veraison	50%
	IS-2011	5	Pinot Noir	ns	low	pre-veraison	100%

	100%-2012	5	Pinot Noir	ns	high	pre-veraison	100%
	50%-2012	5	Pinot Noir	ns	high	pre-veraison	50%
	IS-2013	5	Pinot Noir	ns	high	pre-veraison	100%
Zhang et al., 2017	TB-v	5	Shiraz	ns	moderate	veraison	75%
	TB-m	5	Shiraz	ns	low	post-veraison	75%

<sup>1</sup> difference of berry maturity between control and defoliation treatment; <sup>2</sup> berry maturity level; <sup>3</sup> timing of basal defoliation; <sup>4</sup> severity of basal defoliation.