

Supporting Information

Animal pollination shapes fruits market features, seeds functional traits and modulates their chemistry.

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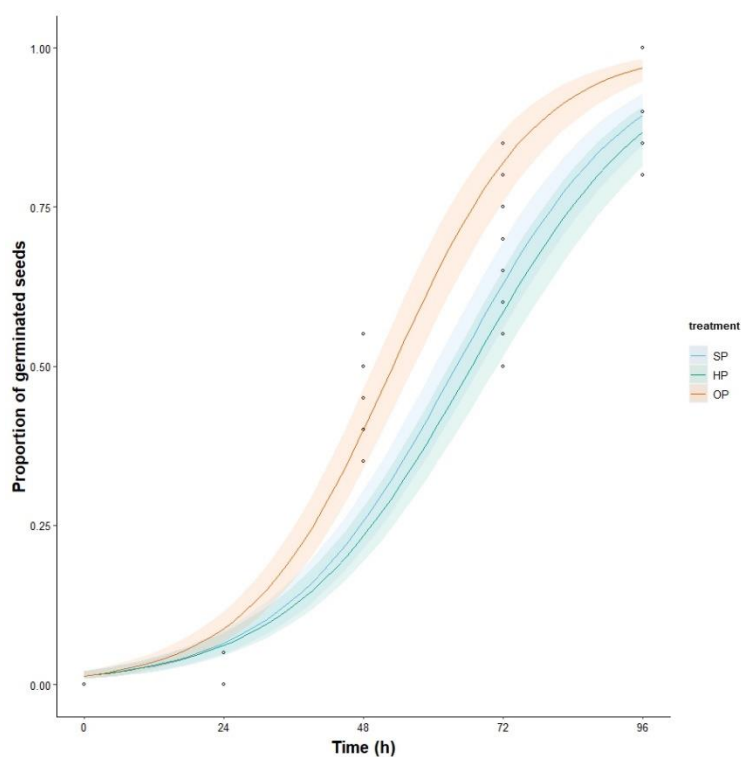


Figure S1. Proportion of germinated seeds along a 4-day experiment comparing the different pollination treatments ($N=60$). SP = Self Pollination, HP = Hand Pollination, OP = Open Pollination. Significant differences among treatments occur when the 95% confidence bands do not overlap.

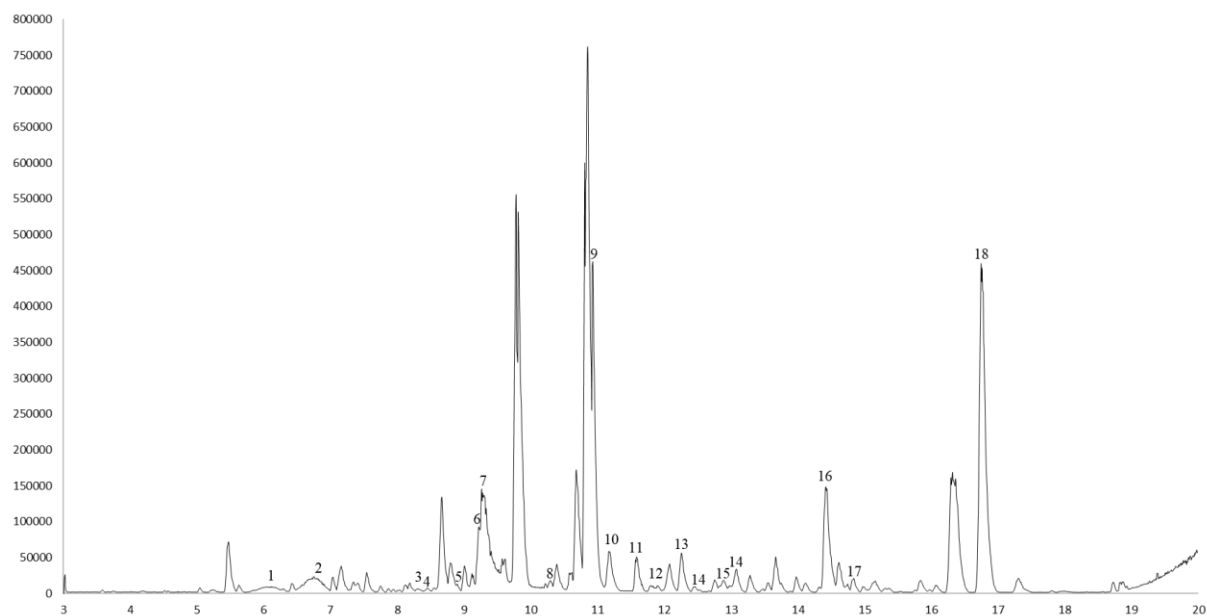


Figure S2. Base peak chromatogram of the fullscan trace in negative ionization mode of *F.vesca* extract. The numbers refer to the features significantly discriminant among pollination treatments.

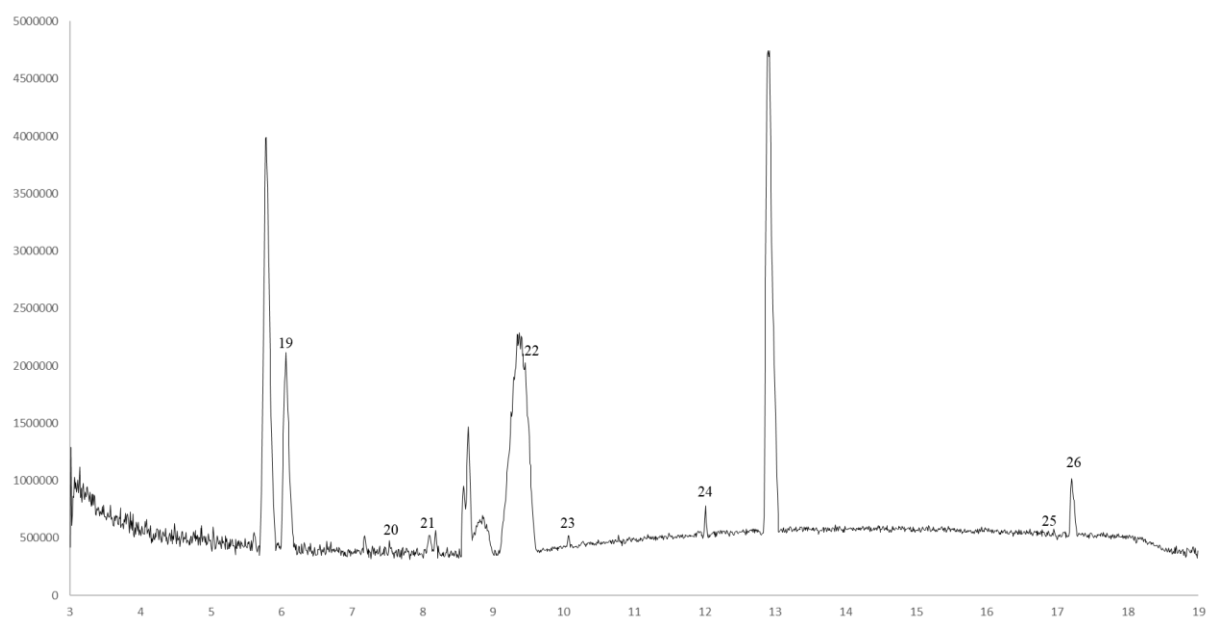


Figure S3. Base peak chromatogram of the fullscan trace in positive ionization mode of *F.vesca* extract. The numbers refer to the features significantly discriminant among pollination treatments.

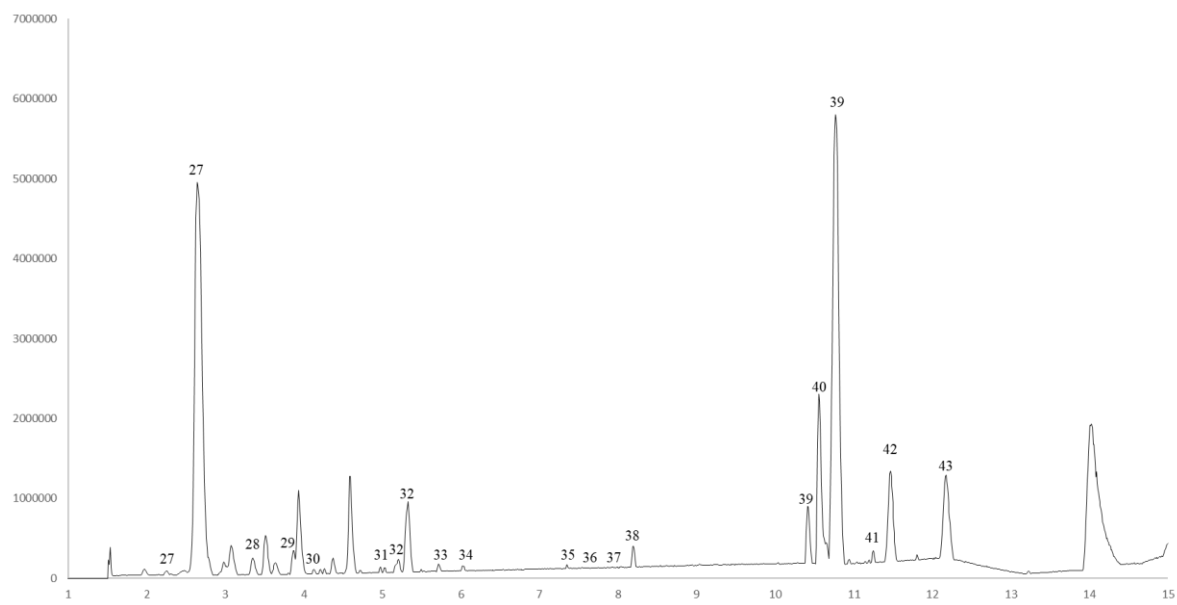


Figure S4. Base peak chromatogram of the fullscan trace in negative ionization mode of *V. unguiculata* seeds extract. The numbers refer to the features significantly discriminant among pollination treatments.

Table S1. Details about the variables analyzed through regression approaches based on Generalized Linear Models (GLMs)

Species	Variable analyzed	Unit of measurement	Statistical distribution adopted in GLM
<i>Fragaria vesca</i>	Number of fertilized achenes	-	Poisson distribution
<i>Fragaria vesca</i>	TSS, TA	%	Binomial distribution
<i>Fragaria vesca</i>	pH	-	Gaussian distribution
<i>Fragaria vesca</i>	TSS:TAA	-	Gaussian distribution
<i>Fragaria vesca</i>	TPC, TFC, TEAC	mg / mg	Binomial (or alternatively quasibinomial/ beta) distribution, depending on the overdispersion parameter
<i>Vigna unguiculata</i>	Number of seeds per pod	-	Poisson distribution
<i>Vigna unguiculata</i>	Proportion of aborted seeds per pod	-	Binomial distribution
<i>Vigna unguiculata</i>	TSC, TPC	%	Binomial distribution

Table S2. Total phytochemical content (expressed as % w/w) of strawberries originating from the different pollination treatments. Values are reported as mean $\pm$ SEM. Means identified by a common letter are not significantly different ($p > 0.05$). TPC = Total Phenol Content, TFC = Total Flavonoid Content, TEAC = Trolox Equivalent Antioxidant Capacity. SP = Self Pollination, HP = Hand Pollination, OP = Open Pollination.

	TPC (%)	TFC (%)	TEAC (%)
SP	2.324 $\pm$ 0.092 ^a	0.823 $\pm$ 0.031 ^a	4.835 $\pm$ 0.444 ^a
HP	2.444 $\pm$ 0.053 ^a	0.843 $\pm$ 0.016 ^a	4.772 $\pm$ 0.225 ^a
OP	1.947 $\pm$ 0.054 ^b	0.678 $\pm$ 0.015 ^b	3.817 $\pm$ 0.372 ^a