


INTRODUCTION

**Water peach or *Prunus persica***


The peach has a white or yellow flesh, free or adherent stone, with a more or less rounded shape and hairy skin (**Figure 1**).



**Figure 1.** Water peach. Own source information (Melocotón - Hogarmania)

**Nectarine o *Prunus persica* var. *nucipersica***


A variety of peaches with juicy yellow flesh, round shape and bright red skin without the presence of villi (**Figure 2**).



**Figure 2.** Nectarine. Own source information (Nectarine extra - Delamasia)

**Flat peach o *Prunus persica* var. *platycarpa***

Characterised for a flattened shape, white pulpe, and a skin with the presence or absence of villi (**Figure 3**).



**Figure 3.** Flat peach. Own source information (Paraguayo - El correo)

OBJECTIVES

- To design and artificial peach flavor, based on evidence on its CoV composition.
- To study the CoVs that are equally found in the different varieties, making a thorough study of which components are the main ones of the species itself.
- To analyze the aromatic and the olfactory notes of each of the components which will be of great relevance because it will provide us with information to give the final proposal of the peach aroma.

CONCLUSION

Once this bibliographic research process has been carried out, an extraction can be made of the most relevant components that should be in the proposal for the formulation of the peach aroma. The components that stand out the most are 19 VoC (pink marks).

REFERENCES

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• Nectarina Extra - DELAMASIA. (n.d.). Retrieved 15 January 2023, from <https://www.delamasia.com/producto/nectarina-extra/>

RESULT AND DISCUSSION

**Table 1.** Description of the volatile organic components present in peach, nectarine and flat peach varieties, taking into account the olfactory note, potency and recommended dilution.

Volatile organic components in peach, nectarine, and flat peach						
VoC	Peach	Nectarine	Flat peach	Olfactory note	Power	Recommended dilution
Alkanes						
D-limonene	5,6,10	5,9	5,8	Sour, orange, and sweet	Medium	10.00%
Alcohols						
Benzyl alcohol	2,4,5,6,9,10	2,5,9	8,9	Floral, rose, phenolic, and balsamic.	Medium	10.00%
Z - 3- Hexenol	1,2,3,9	2,9	9	Vegetable, grass, oil, and green.	High	10.00%
Eugenol	2,9	2,9	7,9	Sweet, spicy, clove, and woody.	Medium	10.00%
Hexanol	2,3,4,5,7,9	2,5,9	9	Oil, tasty, alcohol, sweet, and green.	Medium	10.00%
Linalool	2,4,5,7,9,10	2,5,9	9	Floral, rose forest, sweet, woody, blueberry, and green.	Medium	100.00%
Trans - 2 - Hexenol	2,3,9	9	9	Tasty, green, and banana.	High	10.00%
α- Terpineol	1,4,8,9,10	9	8,9	Terpene, sour, woody, floral, and piney.	Medium	10.00%
Aldehydes						
2 - Hexenal	2,4,5,6,7,9,10	2,5,9	7,8,9	Sweet, almond, savoury, apple, and plum.	Very high	0.10%
E - 2 - Hexenal	1,2,3,4,5,6,7,9,10	2,5,9	8,9	Green and nature.	Very high	0.10%
Benzaldehyde	1,2,3,4,5,6,7,9,10	1,2,5	1,7,8	Strong, bitter almond, sweet, and cherry.	High	10.00%
Nonanal	2,9,10,5	2,9,5	8,9	Aldehyde, wax, rose, fresh, lily root, and orange peel.	High	10.00%
Pentanal	3,5,7	5	8	Fermented, tasty, nutty, and berry.	High	1.00%
Ketones						
β - ionone	2,7,9,10	ND	8,9	Floral, woody, sweet, tropical berry, and beeswax.	Medium	10.00%
β - Damascenone	2,9,10	ND	8,9	Fruity, sweet, raspberry, natural, and grape.	High	10.00%
Esters						
Hexyl acetate	1,2,3,4,7,9	1,2,9	7,8,9	Fruity, sweet, fresh, apple, and pear.	Medium	10.00%
Ethyl acetate	1,3,5,6	5	7,8	Tasty, sweet, green, and weedy.	High	10.00%
Z – 3 - Hexenyl acetate	2,3,4,6,9	2,3,9	8,9	Fruity, fresh, grass, apple, and banana.	High	10.00%
E – 2 - Hexenyl acetate	2,3,4,6,9	2,9	8,9	Sweet, wood, green, apple skin, banana skin, wax, and apple.	Medium	10.00%
γ-Hexalactone	1,2,4,5,6,7,9,10	2,5,9	9	Sweet, grass, tobacco, and coconut.	Medium	10.00%
γ-Octalactone	1,2,4,5,6,7,9,10	1,5	1,8,9	Sweet, dairy, milky, creamy, and fat.	Medium	10.00%
γ-Decalactone	1,4,5,7,9,10	1,5,9	8,9	Oil, coconut, butter, sweet, and peach.	Medium	10.00%
δ-Decalactone	2,4,9,10	9	8,9	Sweet, oily, tasty coconut, peach, and milky.	Medium	10.00%
γ-Nonalactone	2,4,9	ND	9	Sweet, creamy, waxy, coconut, butter, and oil.	Medium	10.00%
γ-Dodecalactone	2,5,7,9	2,5,9	9	Bold, sweet, fruity, metallic, and peach.	Medium	10.00%

[1] (Bianchi et al., 2017), [2] (Eduardo et al., 2010), [3] (Leng et al., 2021), [4] (Aubert & Milhet, 2007), [5] (Mihaylova et al., 2022), [6] (NARAIN et al., 1990), [7] (Sun et al., 2022), [8] (Wang et al., 2020), [9] (Wanpeng et al., 2017), [10] (Xin et al., 2018)