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**Effect of different inclusion levels of defatted *Hermetia illucens* larvae meal on fillet quality of gilthead sea bream (*Sparus aurata*)**

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| **Table S1. List of descriptors for quantitative descriptive analysis.** | | | | | | | | |  |
| ***Descriptors and physical references produced for the benefit of panellers*** | | | | | | | | |  |
| **Aspect** |  |  |  |  |  |  |  |  |  |
| ***Colour*** | Visual estimate of the level of fullness of the white colour, from off-white to snow-white  (Min: off-white; MAX: snow-white) ¹ | | | | | | | |  |
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| ***Coagulated proteins*** Visual estimate of the level of presence on the fillet of sarcoplasmic coagulated proteins,  as a greyish-white layer  (Min: absence; MAX: coverage of the entire surface) | | | | | | | | |  |
| ***Visual flakiness*** | The ease with which the fish separates into "layers" (flakes), when stressed  (Min: swordfish; MAX: salmon) | | | | | | | |  |
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| **Smell** |  |  |  |  |  |  |  |  |  |
| ***Overall intensity*** | The overall strength of the aromatic substances perceived through the direct pathways (orthonasal) when opening the vessel containing the product  (Min: 0% reference orange juice; MAX: 100% of the same reference juice) | | | | | | | |  |
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| ***Briny*** | Aromatic substances perceived through the direct pathways characteristic of seawater | | | | | | |  |  |
|  | (Min: absence; MAX: intravalve liquid of mussel) | | | | |  |  |  |  |
| ***Boiled potato*** Aromatic substances perceived through the direct pathways associated with yellow potatoes boiled  without skin  (Min: absence; MAX: boiled yellow potato) | | | | | | | | |  |
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| ***Steamed fish.*** Aromatic substances perceived through the direct pathways associated with steam fish flesh cooked  (sea bass or *Dicentrarchus labrax*)  (Min: absence; Max: steamed reared sea bass fillet) | | | | | | | | |  |
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| ***Octopus*** | Aromatic substances perceived by the direct pathways associated with boiled octopus tentacles (*Octopus vulgaris*)  (Min: absence; Max: boiled octopus tentacle) | | | | | | | |  |
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| ***Boiled milk*** Aromatic substances perceived through the direct pathways associated with fresh whole milk heated up  to the boiling point  (Min: absence; Max: boiled milk) | | | | | | | | |  |
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| ***Boiled courgette*** | Aromatic substances perceived through the direct pathways associated with the core of boiled light green courgette  (Min: absence; Max: boiled courgette) | | | | | | | |  |
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| ***Earthy*** Aromatic substances perceived through the direct pathways associated with yellow potatoes boiled with  skin  (Min: absence; Max: boiled yellow potato with skin) | | | | | | | | |  |
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| ***Chicken breast*** | Aromatic substances perceived through the direct pathways associated with boiled chicken breast  (Min: absence; Max: boiled chicken breast) | | | | | | | |  |
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| **Basic tastes** |  |  |  |  |  |  |  |  |  |
| ***Salty*** | Taste on the tongue stimulated by sodium salts, in particular sodium chloride | | | | | | |  |  |
|  | (Min: absence; Max: 8.5 ml of stock solution (§) in 500 ml of water) | | | | | | |  |  |
| ***Sweet*** | Taste on the tongue stimulated by sugars and highly sweetening substances | | | | | | |  |  |
|  | (Min: absence; Max: 15 ml of stock solution in 500 ml of water) | | | | | |  |  |  |
| ***Acid*** | Taste on the tongue stimulated by organic acids, such as lactic acid and acetic acid | | | | | | | |  |
|  | (Min: absence; Max: 20 ml of stock solution in 500 ml of water) | | | | | |  |  |  |
| ***Bitter*** | Taste on the tongue stimulated by solutions of caffeine, quinine and other alkaloids | | | | | | | |  |
|  | (Min: absence; Max: 30 ml of stock solution in 500 ml of water) | | | | | |  |  |  |
| ***Umami*** | Taste on the tongue stimulated by monosodium glutamate (MSG) and some other nucleotides | | | | | | | |  |
|  | (Min: absence; Max: 4 ml of stock solution in 500 ml of water) | | | | | |  |  |  |
| **Mouth feeling** | |  |  |  |  |  |  |  |  |
| ***Metallic*** | The sensation of a mouth stimulated, for example, by a metal coin, as well as natural canned tuna, canned tomato juice, etc. | | | | | | | |  |
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|  | (Min: absence; Max: 0.25 g of ferrous sulphate in 250 g of pulp) | | | | | |  |  |  |
| ***Astringent*** The sensation on the tongue or mucous membranes of the oral cavity described as dry or mouth  puckering and associated with tannins or alum (unripe fruits, strong tea)  (Min: absence; Max: 1.5 g of tannic acid in 250 g of pulp) | | | | | | | | |  |
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| **Aroma** |  |  |  |  |  |  |  |  |  |
| ***Overall intensity*** The overall strength of the aromatic substances perceived through the back of the nose when opening  the vessel containing the product  (Min: 0% juice; Max: 100% juice) | | | | | | | | |  |
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| ***Chicken breast*** | Aromatic substances perceived by the retronasal passages associated with boiled chicken breast  (Min: absence; Max: boiled chicken breast) | | | | | | | |  |
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| ***Boiled potato*** Aromatic substances perceived by the retronasal passages associated with yellow potatoes boiled  without skin  (Min: absence; Max: boiled potato) | | | | | | | | |  |
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| ***Steamed salmon*** | Aromatic substances perceived by the retronasal pathways associated with | | | | | | | |  |
|  | steamed salmon (*Salmo salar*) | | |  |  |  |  |  |  |
|  | (Min: absence; Max: steamed salmon) | | | |  |  |  |  |  |
| ***Earthy*** Aromatic substances perceived by the retronasal pathways associated with yellow potatoes boiled with  skin  (Min: absence; Max: boiled yellow potato with skin) | | | | | | | | |  |
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| ***Boiled courgette*** | Aromatic substances perceived by the retronasal pathways associated with the core of boiled light  green courgette  (Min: absence; Max: boiled courgette) | | | | | | | |  |
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| ***Octopus*** | Aromatic substances perceived through the retronasal pathways associated with boiled octopus tentacles (Octopus vulgaris)  (Min: absence; Max: boiled octopus tentacle) | | | | | | | |  |
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| **Texture2** |  |  |  |  |  |  |  |  |  |
| ***Hardness*** | Mechanical textural attribute that refers to the strength needed to reach a certain deformation of, or penetration into, a product. In the oral cavity it is perceived by compressing a tiny amount of flesh  (approx 12 x 20 mm) between the molars  (Min: halibut; Max: swordfish) | | | | | | | |  |
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| ***Chewiness*** | Mechanical textural attribute that refers to the cohesiveness of the food and the chewing count needed to prepare the standard bite for swallowing  (Min: halibut; Max: swordfish) | | | | | | | |  |
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| ***Fibrousness*** Geometric textural attribute that refers to the perception, in food, of fibers elongated and oriented in the  same direction. To appreciate this trait, it is suggested manipulate with the tougue the standard bite  against the hard palate  (Min: halibut; Max: swordfish) | | | | | | | | |  |
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| ***Moisture perception.*** Surface textural attribute that describes the perception of water absorbed or released by the product.  To appreciate it, "work" the standard bite by squeezing it with the tongue against the hard palate.  Min: swordfish; Max: halibut) | | | | | | | | |  |
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| ***Greasiness*** Surface textural attribute that expresses the perception of the quantity of fat present in a product.  Evaluate the lipid film left by the standard bite on the mouth surfaces  (Min: halibut; Max: mackerel) | | | | | | | | |  |
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| List of descriptors for appearance, odors, and basic taste developed by a 10-member trained sensory panel for sea bream Quantitative Descriptive Analysis.  (§) Stock solution = "mother" solution of each basic taste, with different concentration depending on the relevant taste.  1 10-cm unstructured line scale was adopted, anchoreted respectively at 0 and 10.0 cm from the beginning of the scale itself (Stone *et al.,* 1980)  2 Attributes referred to a “Standard bite size” (1.5×1.5 cm) natural thickness of the product, up to 1.5 cm. | | | | | | | | | |