

Fig. 6. Organoleptic Color Chart of 'Pedetan' Lemuru

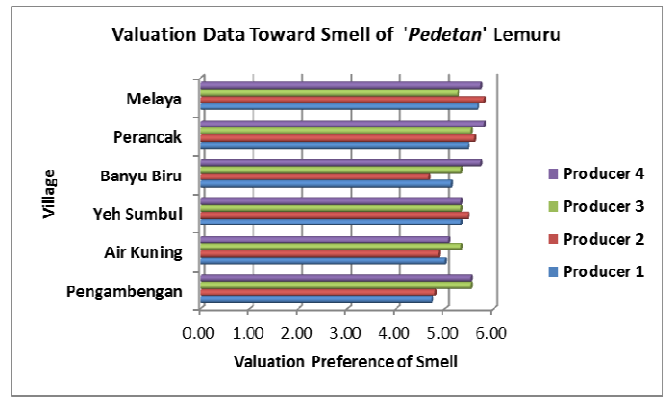


Fig. 7. Organoleptic Smell Chart of 'Pedetan' Lemuru

G. Valuation toward the Smell of 'Pedetan'

From Table 9 and Fig. 7 could be inferred that the highest organoleptic valuation toward smell was gained by 'pedetans' which were produced by the processing group from Melaya village, which was 5.62, and then the lowest value was from Pengambangan village, that was 5.05, in which the average of organoleptic valuation toward smell was 5.32. Different smells of 'pedetans' that were produced by each processing group, were also influenced by different spices and seasonings which were used by each group while processing them. Processing could influence the smell of product, in which each raw ingredient or processed product would have its own smell or flavor composition as an effect from the chemical constituents of the raw ingredient or the processing process that caused such chemical reaction [11]. Volatile aromatic compounds could arise from the result of enzymatic reaction, autooxidation of fats, thermal reaction process, result of microbial activity, and environment around the product [12].

TABLE IX
TABULATION OF VALUATION DATA TOWARD SMELL OF 'PEDETAN'

Sample Villages	Producer 1	Producer 2	Producer 3	Producer 4	Average
Pengambangan	4.73	4.80	5.53	5.53	5.05
Air Kuning	5.00	4.87	5.33	5.07	5.07
Yeh Sumbul	5.33	5.47	5.33	5.33	5.37
Banyu Biru	5.13	4.67	5.33	5.73	5.22
Perancak	5.47	5.60	5.53	5.80	5.60
Melaya	5.67	5.80	5.27	5.73	5.62
Average					5.32

H. Valuation toward the Taste of 'Pedetan'

Based on Table 10 and Fig. 8 could be seen that the highest organoleptic valuation toward taste was gained by 'pedetans' which were produced by the processing group from Melaya village, that was 5.55, whereas the lowest one was from Pengambangan village, which was 4.82. Then the average of organoleptic valuation toward taste was 5.29. As explanation above that spices and seasoning involved importantly to the color and smell of the product, they also absolutely did toward taste, in which each processing group used various spices and seasoning to arise various tastes. Addition of spices and seasoning in processing fishes could increase the taste of the fishes and also preserve or extend shelf life of the products. Salt and sugar particularly could reduce the water contents besides as flavorings [5].

TABLE X
TABULATION OF VALUATION DATA TOWARD TASTE OF 'PEDETAN'

Sample Villages	Producer 1	Producer 2	Producer 3	Producer 4	Average
Pengambangan	4.40	5.13	4.47	5.27	4.82
Air Kuning	5.40	5.27	5.33	5.13	5.28
Yeh Sumbul	5.13	5.20	5.40	5.33	5.27
Banyu Biru	5.33	5.47	5.33	5.53	5.42
Perancak	5.40	5.33	5.33	5.53	5.40
Melaya	5.60	5.53	5.53	5.53	5.55
Average					5.29

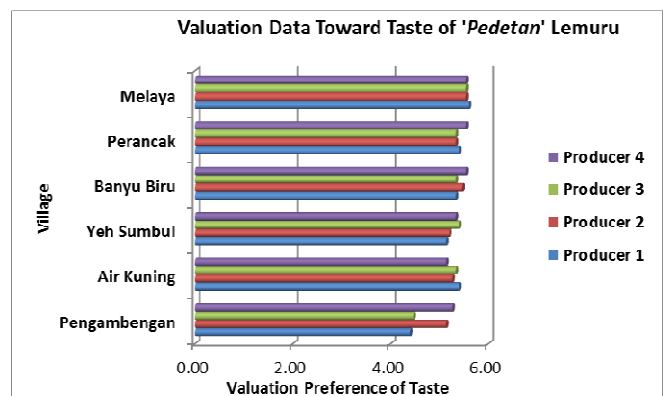


Fig. 8. Organoleptic Taste Chart of 'Pedetan' Lemuru

I. Valuation toward the Texture of 'Pedetan'

From table 11 and Fig. 9 could be inferred that the highest organoleptic valuation toward texture was attained by 'pedetans' that were produced by Banyu Biru village, which was 5.27, whereas the lowest result was from Pengambangan village. The average of organoleptic valuation toward texture was 5.04. Texture of fish could be influenced by several factors, such as composition of ingredients also processing and environment factors. In this case, the texture of 'pedetan' was influenced very much by the water contents of the raw ingredients. The lower the water contents of the ingredients, the harder texture of 'pedetan' would be got. Drying process and temperature while drying the product were also influencing the final texture. Then the environment factor, particularly the storage environment was also involving in creating the final texture. A humid environment with low temperature would change the texture into slightly moister.

TABLE XI
TABULATION OF VALUATION DATA TOWARD TEXTURE OF 'PEDETAN'

Sample Villages	Producer 1	Producer 2	Producer 3	Producer 4	Average
Pengambangan	4.37	4.47	4.53	4.53	4.37
Air Kuning	5.23	5.20	5.33	5.40	5.23
Yeh Sumbul	5.23	5.00	5.47	5.40	5.23
Banyu Biru	5.27	5.20	5.33	5.33	5.27
Perancak	5.02	5.27	4.87	5.27	5.02
Melaya	5.12	5.13	4.67	5.53	5.12
Average					5.04

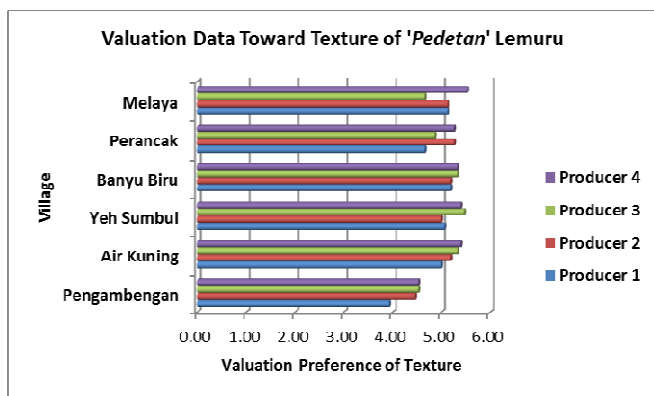


Fig. 9. Organoleptic Texture Chart of 'Pedetan' Lemuru

J. Valuation toward the Overall Acceptance of 'Pedetan'

According to Table 12 and Fig.10 could be seen that the highest organoleptic valuation toward overall acceptance was attained by 'pedetans' which were produced by the processing group from Melaya village, that was 5.43 (rather like-like) and the lowest was from Yeh Sumbul village. The average of organoleptic valuation toward overall acceptance was 5.20 (rather like-like). The overall acceptance toward 'pedetans' lemuru which were produced by the 6 villages as the producers of 'pedetans', was rather like-like evenly. This

overall acceptance was the combination of valuations toward color, smell, taste, and texture.

TABLE XII
TABULATION OF VALUATION DATA TOWARD OVERALL ACCEPTANCE OF 'PEDETAN'

Sample Villages	Producer 1	Producer 2	Producer 3	Producer 4	Average
Pengambangan	5.00	5.33	4.67	5.27	5.07
Air Kuning	5.60	5.40	5.47	5.07	5.38
Yeh Sumbul	4.80	5.20	5.13	5.00	5.03
Banyu Biru	5.20	5.07	5.07	5.13	5.12
Perancak	5.33	4.93	5.13	5.33	5.18
Melaya	5.40	5.20	5.40	5.73	5.43
Average					5.20

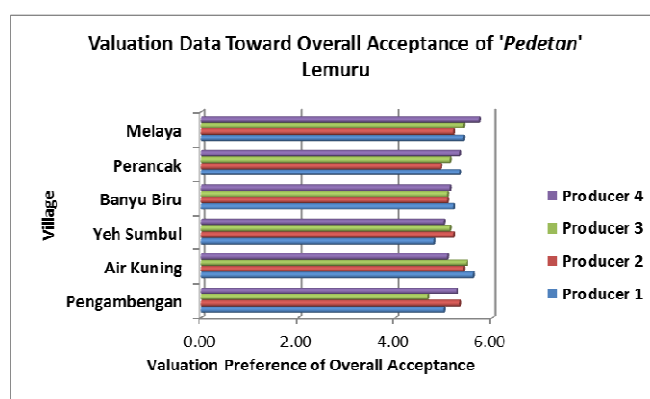


Fig. 10. Organoleptic Overall Acceptance Chart of 'Pedetan' Lemuru

IV. CONCLUSION AND SUGGESTION

The best 'Pedetans' lemuru among the 6 villages (producers) were the 'pedetans' which were produced by Melaya village with water contents 15.398%, protein contents 55.5704%, fat contents 1.2361%, ash contents 8.5731%, and total microbial count 11.76 10³, also based on organoleptic valuations, the product was preferred by panelists. The traditional food 'Pedetan', especially which made from lemuru, could diversify food products for fulfilling food consumption and also national food security.

Trainings are needed for providing better processing technology by concerning to sanitation and hygiene, in order to improve the quality and safety of 'pedetan' lemuru. Researches should be continued in term of the use of packaging materials in attempting to extend the shelf life and guarantee the food safety of 'pedetan' lemuru.

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