

GSJ: Volume 10, Issue 5, May 2022, Online: ISSN 2320-9186
www.globalscientificjournal.com

unwanted enzyme activity, clump proteins, and evaporate some of the water in the fish body, so that the longevity of the fish can be increased.



Figure 2. Smoke Squid

The way of heat fumigation commonly used by the community is to burn wood, the result of burning will form smoke compounds that then stick to the water layer on the surface of the fish body so that a distinctive color and aroma are formed. Namun from the way of smoking used the resulting products are not good for health, this is due to the formation of compounds that are toxic polycyclic aromatic hydrocarbons (PAHs). This compound if consumed in large quantities will be toxic to the body.

Smoking using smoking cabinets and furnaces, there is still benzo (α) pyrene content, benzo(a)pyrene, has been identified as a PAH compound that has high carcinogenic properties, because it can form complexes with DNA permanently and cause mutations in genes (Elisabeth et al. 2000; Privately 2013). One type of alternative smoking that is often used is smoking using liquid smoke (liquid smoking)

Another method of smoking to obtain smoke cuttlefish is liquid smoking. Liquid smoking is a fumigation that utilizes liquids from the burning of materials such as wood, rice husks, coconut shells and other materials that are first purified by distillation before being used to soak fish. Liquid smoking has advantages including easy to apply, the process takes place quickly, gives distinctive characteristics to products such as color, aroma and taste and does not pollute the environment, toxic compounds are easy to control (Princess and Diana, 2015).

In the process of liquid smoking, the smell of smoke that will be produced in the smoking process is obtained without going through the smoking process, but through the addition of smoking agent liquid to the product. The raw material of cuttlefish is soaked in wood acid, which is obtained from the results of dried evaporation extracts of wood elements or from the results of extracts added to wood fragrance, which is almost the same as the aroma on smoking, after which the fish is dried and becomes the final product. The method of adding sucking material to cuttlefish, can be carried out through soaking, smearing or spraying.

Smoking the cuttlefish will cause the color of the cuttlefish to turn yellow-brown gold. This color is produced by the chemical reaction of phenols with oxygen from the air. The oxidation process will run quickly when the environment is acidic. The taste will also change in the cuttlefish smoked. Cita the taste and aroma of smoked cuttlefish is very specific, that is, the taste of delicious spiciness. The taste and aroma are produced by acidic compounds, phenols, aldehydes and other substances as a helper to be able to produce the taste.

Smoke Cuttlefish Processing Stage with liquid smoking method

The process of smoking cuttlefish with liquid smoke using the Mekarsari et al. (2016) method has been modified. The cuttlefish is weeded by pulling the cuttlefish head out of the body. The middle of the cuttlefish's body is shaken, then the inner abdomen is removed and washed with running water. The cuttlefish is then soaked in a 5% saline solution for 10 minutes, after which it is twisted for 20 minutes. The function of salting is to help facilitate washing, increase the taste of the product, help preservation, drying and cause the texture of cuttlefish meat to be more compact, followed by immersion in a liquid smoke solution with a concentration of 12% for 25 minutes. The next stage is done drying using the oven at a temperature of 100 °C for 3 hours.

CONCLUSION

Based on the literature study as described above obtained information that efforts to diversify processing of cuttlefish can be done by smoking. The smoking methods that can be done against cuttlefish are heat fumigation and liquid smoking. Liquid accosts are more recommended because smoke cuttlefish can be obtained that are

more hiegines and safe. The stages of the liquid fumigation process consist of preparation or weeding of cuttlefish, deepening cuttlefish in a saline solution, soaking cuttlefish in liquid smoke solution and finally drying

© GSJ

BIBLIOGRAPHY

- [AOAC] Association of Official Analytical Chemyst. 2005. Official Method of Analysis of The Association of Official Analytical of Chemist. Arlington, Virginia,USA: Association of Official Analytical Chemist, Inc.
- Budiarti IKD, Swastawati F, Rianingsih L. 2016. Pengaruh perbedaan lama perendaman dalam asap cair terhadap perubahan komposisi asam lemak dan kolesterol belut (*Monopterus albus*) asap. *Jurnal Pengolahan dan Bioteknologi Hasil Perikanan*. 5(1): 125-135.
- Hartati TS, Wahyuni IS, Awaluddin. 2004. Musim Penangkapan Ikan di Indonesia edisi cetakan 1. Jakarta: Balai Riset Perikanan Laut. p. 80-93.
- Hulalata, A., Daisy, M.M. dan Restuti, W.P., 2013. Studi pengolahan cumi-cumi (*Loligo sp.*) dihubungkan dengan kadar air dan tingkat kesukaan konsumen. *Jurnal Media Teknologi Hasil Perikanan* [online], 1 (2), 26-33.
- Hutomo HD, Swastawati F, Rianingsih L. 2015. Pengaruh konsentrasi asap cair terhadap kualitas dan kadar kolesterol belut (*Monopterus albus*) asap. *Jurnal Pengolahan dan Bioteknologi Hasil Perikanan*. 4(1): 7-14.
- Mekarsari TK, Swastawati F, Susanto E. 2016. Pengaruh perbedaan lama perendaman dalam asap cair tempurung kelapa terhadap profil lemak cumi-cumi (*Loligo indica*) asap. *Jurnal Pengolahan dan Bioteknologi Hasil Perikanan*. 5(2): 35-42
- Sin YW, Yau C, Chu KH. 2009. Morphological and Genetic Differentiation of Two Loliginid Squids, *Uroteuthis (Photololigo) Chinensis* and *Uroteuthis (Photololigo) Edulis* (Cephalopoda: Loliginidae), in Asia. *Journal of Experimental Marine Biology and Ecology*. 369: 22–30.
- Sulastris S. 2011. Karakteristik asam amino dan komponen bioaktif sotong (*Sepia recurvirosta*). [Skripsi]. Bogor (ID): Institut Pertanian Bogor

Swastawati F, Surti T, Agustini TW, Riyadi PH. 2013. Karakteristik ikan asap yang diolah dengan metode dan ikan yang berbeda. *Jurnal Aplikasi Teknologi Pangan*. 2(3): 126-132.

Wijaya M, Noor E, Irawadi TT, Pari G. 2008. Karakterisasi Komponen Kimia Asap Cair dan Pemanfaatannya sebagai Biopestisida. *Bionature*. 9: 34-40.

Widiastuti I, Herpandi, Ridho M, Arrahmi NY. 2019. Karakteristik Sotong (*Sepia recurvirostra*) Asap Yang Diolah Dengan Berbagai Konsentrasi Asap Cair . *JPHPI* 2019, Volume 22 Nomor 1

© GSJ