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2012). The smell of this weak smoke seems to be quite liked by consumers who are characterized by the acceptance of se'i products outside the NTT area. The smell of smoke that is not strong is associated with a fumigation time that is not long, which is about one hour (Djando and Belyleto, 2018). In addition, it has also been tried with liquid smoke and heating for about 1 hour (Supit et al., 2017; Saubaki, 2020).

Another character of se'i meat is its color which varies from brown to red. The brown color comes from the browning process during heating and smoking, while red wana is obtained from saltpeter which can be used as a preservative. Because saltpeter substances are considered unsafe chemicals, the use of natural dyes such as angkak (Saturday and Suyatni, 2015), rosela flowers, and teak leaves (Sipahelut and Kale, 2018).

The fishing resources captured from fish groups whose production continues to increase in the East Nusa Tenggara Region are tuna. The East Nusa Tenggara region that holds a lot of tuna is Sikka regency. Tuna production in 2019 in Sikka Regency was 1,930.5 tons with a value of Rp86.87 billion. Tuna in East Nusa Tenggara is in addition to being sold fresh is also obtained into se'i fish. This article aims to review se'i fish products from mainly in terms of the manufacturing process.

Se'i Fish

Se'i fish is a smoked fish typical of East Nusa Tenggara (NTT). This se'i fish is a diversification of processing from smoking. Common types of fish that are processed into se'i fish are tuna. The reason tuna fish is chosen to be processed into se'i is because the meat is red like beef and pork. The testur is more commpak than other types of fish and tuna production in NTT is quite a lot.

Tuna se'i meat is an elongated cut meat that has undergone a process of grinding and smoking with a certain temperature and length of time. The process of kuring (salting) is carried out before the meat is smoked. Based on the conditions in the field, I am done with dry kuring and using kitchen salt (NaCl) and saltpeter, namely sodium nitrate (NaNO3).

Tuna

Tuna is an economically important fish in the world fisheries trade and belongs to the pelagic fish group. The effectiveness of actions in controlling the quality of tuna fish is strongly supported by knowledge of its biology. Tuna can live in colder water and survive in diverse conditions. Tuna meat is pink to dark red. Because tuna muscle contains more myoglobin than lame fish (Nurjanah, 2011). Tuna has a habit of migrating throughout its life. The habit of tuna to migrate is supported by the metabolic system of tuna fish that can regulate the amount of heat in the body to achieve effective biological conditions (FAO, 2010 in Nurjanah. 2011) Tuna fish are divided into several types, namely: yellowfin tuna (Thunnus albacares), albakor tuna (Thunnus alalunga), large-eyed tuna (Thunnus obesus), and bluefin tuna (Thunnus macovii).

Tuna that belongs to the scombridar family has an upright, elongated and fusiform body with two separate dorsal fins that have one hard ja-ja ri on its first ja ru-radius and a crescent-shaped kandal strip Sitip ventral is smaller or the same as the pectoral fin, and is located jutting out to the back and base of the pectoral fin. All scombroids have finlers behind the dorsal fin and anal fin, as well as a pair of caudal peduncle keels in the center of the base of the tail, This fish has four curves / gill slangal on each side and the gill filament hardens as Gill ruys (FAO, 2010 in Nurjanah, 2011). Bailey et al. (2012) said that there are several types of tuna in Indonesian waters including yellowfin tuna (Thunnus albacares), large eye tuna (Thunnus obesus) and skipjack fish (Katsuwonus pelamis)..

According to Saanin (1984), tuna based on its taxonomy can be classified as follows:

Phylum : Chordata
Subfilum : Vertebrate
Class : Teleostei
Subclass : Actinopterygii
Order : Perciformes
Suborder : Scombridei
Family : Scombridae
Genus : Thunnus
Species : Thunnus sp

Tuna is a type of fish with a high protein content, ranging from

22.6 - 26.2 g / 100 g of meat and low fat ranging from 0.2 - 2.7 g / 100 g of meat, calcium minerals, phosphorus, iron and sodium, vitamin A (retinol), and B vitamins (thiamin, riboflavon, and niacin). The edible share of tuna ranges from 50% - 60%. The protein content of tuna white meat is higher than that of red meat. Inversely proportional to the fat content of the white meat tuna is lower than the red meat.

Figure1. Tuna
(Source: https://www.google.com/search?q=ikan+tuna.png&source=lnms&tbm=isch&sa=X&ved=2ahUKEwjdxNDJv-33AhX-IbcAHbPDDcoQ_AUoAXoECAEQAw&biw=1366&bih=600&dpr=1#imgrc=gIVavNSmXHFT7M)

The water content in tuna meat is 71.73%, this value is lower than the tuna meat studied by Wahyuni (2011) which is 74.00%, but higher than the results of wellyalina (2013) 56.43%. Tuna meat contains an ash content of 1.48%. The results of wahyuni (2011) and Wellyalina (2013) showed lower results, namely 1.3% and 1.01%. The fat content in the meat portion of tuna fish is, eggs, skin and swimming bubbles are 0.51%, 0.63%, 9.17% and 1.64%. Tuna meat contains a fat content of 0.51%.

Fogging

Various ways of preserving fish have traditionally been done today with the aim of reducing the water content in the fish's body, so that it cannot provide opportunities for bacteria (microbes) to live and develop (Berhimpon et al. 2002). The durability of foodstuffs has a close relationship with water content. Fishery products are one of the foodstuffs that are easily damaged because they have a high water content. To improve the quality of fishery products, fish preservation efforts are needed, both modernly and traditionally.

Traditional fish processing is generally based on reducing the moisture content of products that can

inhibit the growth of microorganisms. This process can inhibit the number and activity of microorganisms, so thata product shelf life can be extended. Fish smoking is one way to process and at the same time preserve fish using a combination of heating and the addition of natural chemical compounds derived from wood smoke. Compounds in the smoke will stick to the fish and dissolve in the body of the fish so as to produce a distinctive aroma and taste and golden brown color.

Smoking can also protect against nutrient damage directly, and microbiological damage due to bactericidal smoke (Tejasari 2005). Chemical processes in the material that occur during smoking will change the quality of cork fish after smoking. lkan that has been smoked should be kept in a dry and tightly sealed place. Damage that often occurs in smoked fish is the occurrence of mold growth or mold because the fungus can grow on foods with low water content. The growth of fungi in smoked fish can cause odor changes to runcid and changes in texture.

Products that produce heat fumigation are generally preferred by consumers but have low durability. Storage is one way to inhibit the decline in the quality of smoked fish. Storage at room temperature is a good and useful way to slow down decay. Taking this into account, the use of packaging and storage of room temperature is one of the efforts to improve the durability and quality of the product.

Se'I Tuna Fish Processing Stages

The ingredients used for tuna se'i fish consist of fresh teak leaves, water, tuna, salt, brown sugar, garlic, onions, pepper and coriander. The stages of making se'i tuna are as follows:

- Teak leaves are mashed with a blender added water in a ratio of 1: 3. The teak leaf solution is then filtered using a filter cloth. The teak leaf extract solution is boiled to boil and let stand for 24 hours and filtered again.
- The next stage of seasoning preparation. Garlic, onions, pepper

and coriander and brown sugar are mixed and mashed.

- The next stage of tuna preparation. Fresh tuna fish is weeded, profiled and discarded skin, tuna fillets are cut in slab shape or finger shape or other shapes according to the consumer's wishes.
- The next stage is the mixing of teak leaf solution with fine seasoning, as well as soaking the filet pieces into a solution of seasoning mixture with teak leaf extract. Soaking is carried out for 24 hours.
- After soaking, the fish is twisted and placed on a smoking rack for suction for about 45-60 minutes (until the meat is cooked and the fish is reddish-brown). The fish is ready to be packed with plastic and diseal.

Figure 2. Se'i Tuna
(Source: https://www.tokopedia.com/seisapidantunatermanu/daging-se-i-ikan-tuna)

Conclusion

The stages of making Se'i tuna based on library studies are as follows: The first stage of preparing ingredients is the manufacture of teak leaf extract, seasoning smoothing, tunafilement. The second stage of soaking tuna fillets on a mixture solution of teak leaf extract and seasoning. The third stage of fumigation.

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