

CANNING OF CRAB MEAT

Aim: To study canning of crab meat (Dry pack)

Introduction: The crabmeat is a valuable material for canning. In Japan the large king crab is fished almost solely for producing canned food, and a large portion of the canned crab is exported to U.S.

Crabmeat is considered as delicacy, canned crabmeat often develops blue discoloration during heat processing and storage. The blue discoloration is due to the formation of copper Sulphide, copper present in the claw of crab and sulphide produced from the meat during heat processing. Therefore, a method of preventing blue discoloration consists in thorough bleeding of the meat so that the level of copper in the crab is reduced below the critical level at which it can cause discoloration. Maintaining adequate acidity in the brine (2%) with 0.1% citric acid use of chelating agents like EDTA (0.5%) use of a parchment lining in the can etc. are other preventive measures.

Another method of preventing the appearance of the blue meat of the canned crabmeat by low temperature and fractional heating of the carcasses from which carapace had been removed. According to this method, the coagulating temperature of blood protein of crab is from 69⁰C to 70⁰C, and that of meat protein of crab is from 59⁰C to 60⁰C, the meat coagulates, but the uncoagulated blood will run out. After removing the meat from the carapace in a half-heated condition, the blood will run out leaving the meat alone. When the meat from which the blood has been removed is boiled for a few minutes and packed in can as the usual manner, the blue meat did not appear in the finished product.

From the thermal processing point of view, the following crabs have much importance.

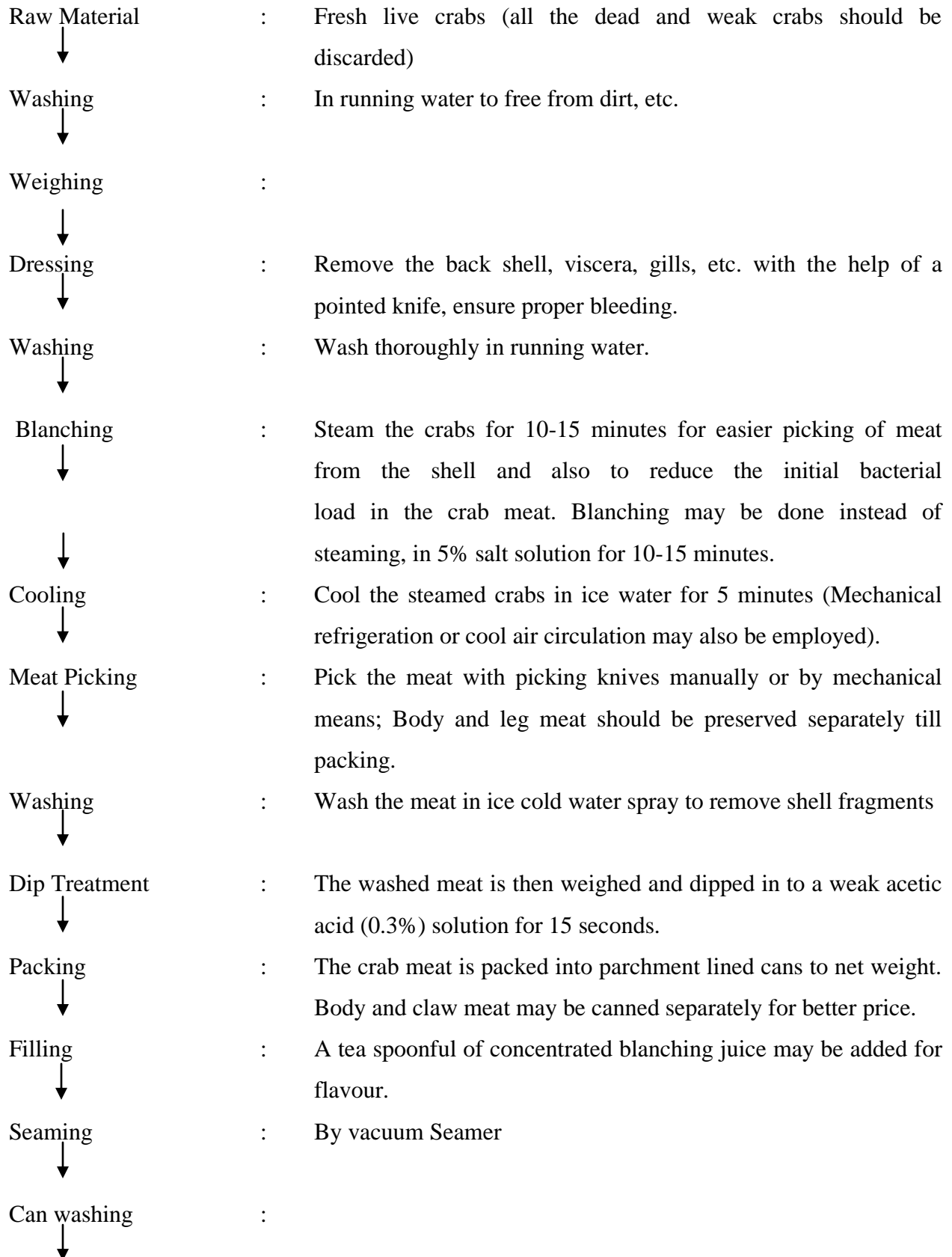
- 1) *Portunus pelagicus*
- 2) *P. Sanguinolentus*
- 3) *Scylla Serrata*
- 4) *S. Tranquebarica*
- 5) *Charybdis Crucitata*

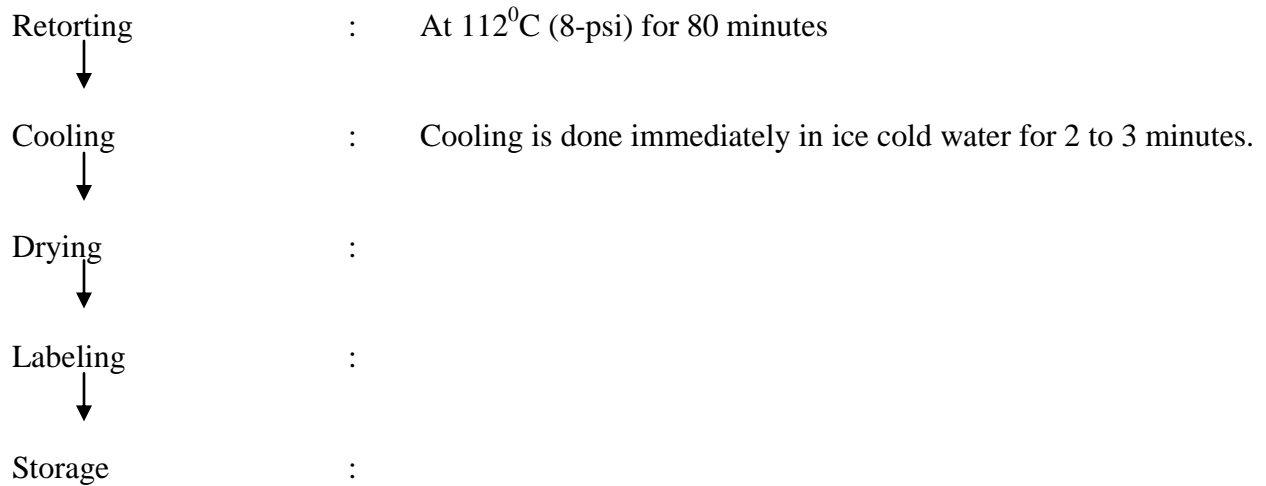
Product Code : CBN
Can Used : 8-Oz. can, S-R lacquered.
Std. Net Weight : 210 grams

Materials and Equipments:

Live Crabs, salt, ice, meat picking knives, cans, citric acid, parchment paper, trays, tubs, can seaming machine, retorts, etc.

Procedure:





Observations:

- Weight of raw material :
- Weight of dressed crab :
- Weight of raw material after blanching :
- Weight of picked crab meat :
- Number of cans packed :
- Number of persons involved & hours worked :
- Size of can used :

Calculations:

Calculate the dressing yield, blanching loss, picked meat yield, canning yield, yield rate and efficiency.

Note:

- 1) Over cooking results on grayish colouration of meat
- 2) Dipping of crabmeat in chelating agent reduces bluish discoloration