

Preparation protocol of sample A of pot-stewed lotus rhizomes

1. Preparation of soup stock

An appropriate amount (6–7 kg) of drinking water was put into a stainless steel pot and boiled. Then, one cleaned Sanhuang chicken, one half duck and a piece of pork femur bone (approximately a total of 2500 g meat) were added. The mixture was boiled with intense fire for 3–4 h with constant addition of water to maintain a constant volume of the soup. During the boiling, floating blood bubbles were removed, and 40 g fresh gingers and 40 g cooking wine were added to remove the fishy smell of the duck meat. Finally, the soup was passed through 80-mesh stainless steel filter to obtain the soup stock.

2. Preparation of caramel

A certain amount of white sugar was weighed and placed into the pot, followed by the addition of cooking oil (6.5% of the sugar in mass). The temperature of the induction cooker was set at 180°C, and the mixture of sugar and oil was constantly stirred to homogeneity. When the color of the mixture gradually turned into brownish red, the temperature of the cooker was adjusted to 130°C, and the mixture was continuously stir-fried until smoking and darkening of the color. Then, water of the same mass with the sugar was added and stirred to finally obtain the caramel.

3. Preparation of the soup for pot-stewing

The as-prepared soup stock was re-heated. The weight of the soup stock was calculated as 100%, and then 10% of composite seasoning (white sugar: salt: aginomoto: chicken extract = 15: 5: 3: 2), 1% of spice powder, 2.1% of fresh ginger, 1.4% of Sichuan pepper, 2.1% of pepper, 2% of Chinese liquor, and 5.7% of caramel were added. The soup was stewed for 1 h,

passed through 80-mesh stainless steel filter, boiled for 5 min and then allowed to cool down to room temperature.

The spice powder comprised 0.96% myrcia, 4.56% red gardenia, 4.40% clove, 7.48% radix angelicae, 3.39% murraya paniculata, 6.66% liquorice, 7.79% anise, 38.50% ginger, 6.82% *rhizoma kaempferiae*, 8.14% *amomum cardamomum* L., 5.80% amomum tsao-ko, 3.30% Xiangsha, 2.20% white pepper.

4. Pot-stewing of lotus rhizomes

Lotus rhizomes were cleaned and peeled. About 2 kg soup for pot-stewing was taken and added with 1 kg boiled water. Approximately 2000 g lotus rhizomes was weighed and put into the soup. The weight of the soup and lotus rhizomes was taken as 100%, and then 10% composite seasoning, 1% spice powder, 1.4% Sichuan pepper, 1% pepper, 2% Chinese liquor, and 1% Angel yeast extract were added. The mixture was heated with intense fire until boiling, and then allowed to stand for 3 h. Because the coloring was not uniform at this time, the lotus rhizomes were taken out to be sliced. The sliced lotus rhizomes were then put back to the soup to be heated until boiling and then allowed to stand for 0.5–1 h.

5. Package and sterilization

The as-prepared lotus rhizomes were vacuum packed, and put into boiled water for sterilization of 15 min.