

TRADITIONAL CHARCOAL PRODUCTION AT KUALA SEPETANG



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Charcoal factory in Kuala Sepetang



Kiln is sealed, leaving a small opening for burning fire wood



Felled mangrove trees are transported by boat



Light and black charcoal

Inside each igloo-shaped kiln, approximately 1,500 logs are arranged in a vertical position on clay blocks which create gaps for heat to circulate. Once it is filled up, the kiln is sealed, leaving a small opening for the burning of fire wood. Stripped barks and felled undersize trees are also used to smoke the logs inside kiln to extract water. The heating or smoking process is done in two stages under different temperatures and time durations. Stage 1: 80-85 degrees Celsius for 10 days. Stage 2: 220-230 degrees Celsius for 14 days.

After the second stage, the logs are left for 8 days to cool naturally. In total, it takes 32 days to produce one batch of charcoal. The finished product is a fine grade, light and black charcoal. Mr. Chuah says 30-35 tons of logs will produce only 10 tons of fine charcoal. The remaining weight is that of water which is vaporised. The vaporised water is released through vent holes and condensed to make a balm which is said to be effective for repelling mosquitoes.

The kiln is made of clay bricks and plastered with clay instead of cement because clay has superior heat retaining property. Each kiln is 7m high, with a base diameter of about 9m. According to Mr. Chuah, all the kilns were destroyed when the Japanese lost the war. However, some locals who worked in the factories managed to gain sufficient skills to rebuild the kilns.

It was a stroke of good luck that during my visit, one kiln had been emptied and was awaiting the next batch of logs. I stepped inside the kiln which was lighted by a small electric bulb. To my surprise, the air inside was relatively fresh, probably due to the purifying effect of charcoal. The interior wall was spotlessly clean too despite the smoking of 1,500 logs. It was really quite amazing.

After exploring the factory for 2 hours, I left with a great sense of satisfaction. This simple production process has survived for over 7 decades to continue producing charcoal for domestic and foreign consumption. There is no doubt in my mind that charcoal production in Kuala Sepetang is a production heritage of the nation. ■

One of the early industries started during the Second War and which has survived till today is charcoal production at Khay Hor Holdings Sdn Bhd in Kuala Sepetang. Located 15km from Taiping, the factory produces the finest charcoal commonly known as black gold.

Founded by Chuah Khay Hor, the factory is operated today by Chuah Kow Aun. When a friend told me about the factory, I was intrigued and decided to make Kuala Sepetang my next destination.

On 2 November, 2018, I exited the North-South Highway at the Taiping toll gate and turned into a narrow trunk road leading to the charcoal factory. When I arrived, I saw a group of visitors listening attentively as Mr. Chuah explained the charcoal making process. I rushed over to join the crowd.

The factory is a traditional wooden structure with a zinc roof. Inside are dozens of large kilns. According to Mr. Chuah, producing charcoal from mangrove trees (*Rhizophora apiculata*) was introduced during the Japanese Occupation (1941-1945) by Mitsui Sumitomo.

The factory was built here because of its strategic location near Kapal Changkol River and the Matang mangrove forest. Mangrove trees are abundantly available and are easily transported by boat during high tide. Unlike inland trees of a similar size, the mangrove tree is heavy, so it is not economical to be transported over land. Normally, 30-year-old trees are selected and felled. To sustain the forest, replanting is mandatory for every tree harvested.

First, the trees are transported by boat to the factory where the bark is stripped and the trees cut into logs of uniform dimensions, 1.6m long and 5-7cm in diameter. Each log weighs about 20kg.