My attention was drawn to this traditional house by the sparkle of sunlight caught on its orange- and purple-coloured roof tiles when I visited the Forest Research Institute of Malaysia (FRIM) in Kepong.

I used to see these tiles, called atap singgora (singgora clay tiles), in my home state of Terengganu when I was a child. The morning sun had cast long shadows on the subject, as if calling for it to be painted, and I obliged.

According to a faded information board at the staircase, this traditional Terengganu Malay house originated from Pulau Rusia in Terengganu. When it was dismantled and brought to FRIM in 1987 to be reassembled, it was believed to be already over a century old. It was bought from the original owner for about RM1,500, according to another source.

Made of cengai mud (Neobalanocarpus heimeter), this house belonged to the Rumah Tiang Dua Belas category in which the main house is in its simplest form — with only two areas: the main house area (rumah ibu) and the verandah (serasi). The house still looked quite sturdy. I believe these tiles are still being made in some remote villages in Kelantan.

The posts of the house are secured using teakwood mortices, and the legs are each placed on a stone slab. The stone piers on which the high posts stand prevent dampness during rainy seasons. The space beneath the house allows further cooling of the structure. This area is often fully used for storage, sometimes to rear poultry, or even to air-dry clothes during rainy seasons.

I would have gone in to check it out had I not spotted a pack of wild dogs which sought refuge inside.

A friend of mine told me that this type of house is also known as Rumah Bujang Belanda, the Terengganu traditional Malay house in its simplest form — with only two areas: the main house area (rumah ibu) and the verandah (serasi). Connected by a small staircase.

Guests are usually received at the verandah, which also serves as a place to relax on a hot day or carry out chores such as making handicraft or teaching children to read during the day.

The Singgora clay roof tiles are made by using the foot, dried in the hot sun, and then fired in a kiln. The soft sheet of tile, like plasticine in texture, is then peeled off from the mould and arranged side-by-side on an open ground to be dried under the sun. Here, the hooked end is folded manually, using a small block of wood as a guide to ensure a uniform height. Once the tiles are sufficiently dried, they are then fired in a kiln, turning their colour from grey to orange-red.

The Singgora clay roof tiles are used to make the kampong or kampong bungalow. These were used in those times by many traditional architecture. They are porous and can absorb moisture and cool the house doors during the day.

Each tile is hooked onto the rafter and arranged side by side. Each ascending row of tiles sits on top of another on the lower rafter. Each piece is placed to overlap, top over bottom, so as to cover the gaps to prevent rainwater from seeping through. Singgora tiles are very brittle. Red-tailed birds had to be extremely careful of their steps when mounting these tiles on the rafters as they cannot hold the weight of a person. The Singgora tiles are also lighter and porous, and they absorb moisture during the night.

During the day, the moist tiles are able to keep the house cool. Usually, mites will grow on them and add to the cooling property of roofs using these tiles. Of course, for the occupants, the interior of such houses can sometimes be quite damp, especially during wet spells.

Like most traditional Malay houses in Terengganu and the east coast of the peninsula, the timber posts of this house stand on stone piers. The high posts keep pests like ants and snakes from entering the house and the structure free from flood waters. The space beneath the house allows further cooling of the structure. This area is often fully used for storage, sometimes to rear poultry, or even to air-dry clothes during rainy seasons.

The stone piers on which the posts stand prevent dampness from seeping into the wood. They also serve to deter termite attacks. In case of an attempted attack, the termite mud-tubes (trails left by the insect whenever traveling through exposed surfact) would have been spotted first before damage is done.

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