

by Jagath Gunawardana

The Ratambilla or Rathmilla is the only one of the five rare mangrove species found in Sri Lanka that is confined to the wet zone. All the plants that grow naturally are confined to a few islands in the Maadu-Ganga estuary. Of these, the largest concentration and the largest and the oldest trees are found in an island called Ovilana and the land is at an area within this island known as Pathamulla.

A visit was made last year to ascertain the status of this plant in this place and a more comprehensive survey was made recently to co-incide with the flowering season of this tree. It was also an opportunity to study the changes that happened since our last visit and to try and find answers to some of the questions that sprang in our minds about this species and the habitat and also to seek ways to help protect the species and the habitats.

The Rathambilla (*Lumnitzera littorea*) is not endemic to Sri Lanka but is nevertheless a rare and endangered species that needs to be

protected. This species has a discontinuous distribution in Asia as it is not found in any of the neighbouring countries. This is more so why we should protect their remaining populations and habitats. It is also referred to as Rath-milla, and although the text books give it another name, Rath-Beriya, this name is not used in the localities where it is found at present, probably due to disuse. This seems probable since the closely similar and related *Lumnitzera racemosa* is called Beriya and Sudu-Beriya in these same areas. These two species belong to the family Combretaceae, to which the popular medicinal plants, such as, Aralu and Bulu belong. The Ratambilla is a medium-sized tree that grows to a height of up to 15 meters. The dark, almost black bark is deeply fissured, exposing the lighter inner bark. The dark green leaves are fleshy and have a rounded tip, giving them an obovate shape and have inconspicuous veins and the short stalk and the stem are dull red in colour. The leaves are borne at the ends of the slender stems and are about 5 to 8 cm. (2 to 3 inches) long and about 2 cm. (0.8 inches) wide.

The small flowers are borne in small inflorescences at the ends of the branches. The flower receptacle is about 5 to 10 cm. (2 to 4 inches) in length and green, while the small petals and the long stamens are a dark, bright red (vermillion) and are very conspicuous, both because they are at the ends of branches and also because the red colour is the complementary (opposite) of green. The cylindrical fruit is about 4 cm. in length and has a single small seed in it. This tree flowers from April to June but the flowering may extend up to early July in some years, as it was in 2008. During the early stages of their flowering season, the smaller branches of the trees are covered with flowers. We were able to identify one of the pollinators of this species, which is the Small Flowerpecker, incidentally the smallest bird found in Sri Lanka. A number of them were seen



Charlotte de Soysa



Ratambilla fruit



Ratambilla flower

Revisiting the last refuge of the endangered Ratambilla

actively seeking nectar from the flowers and some had the yellow pollen on their faces. These trees bear clumps of very small knee-roots (pneumatophores), so named because they bend down after growing up from the ground and are used to get Oxygen to the roots.

The closely related *Lumnitzera racemosa* has similar shaped

leaves and flowers and knee roots. This species grows as a small shrub of up to 4 meters in height and the leaves are a lighter green with the stems not showing any red colouration. The flowers are borne along the leaf axils of the branches, as opposed to the terminal inflores-

cences of the other. The flowers, though similar in shape and size are white, which is the best identification feature. This species is quite common in many mangrove habitats including Maadu-Ganga.

The Ratambilla is mostly known from the few trees that border several islands of the Maadu-Ganga estuary. Except for those found in Pathamulla in Ovilana, the rest are small and are still shrubs. According to "A guide to the Mangrove Flora of Sri Lanka" by Professors Mangala de Silva and Padma K. de Silva, this plant is also found in the Bentota River, about seven miles from the mouth of the Bentota River. This is the only place where this plant has been known to have been recorded except from the Maadu Ganga area. However, we were unable to locate this nor were able to get any information about it from the species, and may not be existing there at present. The land in Pathamulla is unique in having this tree as the dominant species. These trees are all confined to a small extent of private land that is periodically inundated by brackish water. There are numerous small holes made by crabs in the wet, soggy and dark grey soil. The small crabs that inhabit these holes are seen to carry all the leaves that fall on the ground to their holes. It was a bit uncertain why there were no new plants of this species in either this land or the vicinity, as there are large numbers of fruits after flowering that harbour well developed seeds. It maybe that they do not germinate or that the seedlings fail to grow. A more probable reason might be that all the fruits and tender plants are being used by the hoards of crabs as food and are not allowed to germinate or grow up even if the seeds produce seedlings.

The land where the last refuge of the Ratambilla is, is owned by Mrs. Lillian Charlotte de Soysa, a lady who has been particularly keen to preserve these trees and is unhappy to even allow visitors to come into the land. We were fortunate to meet her and discuss the issues at length with her. This widowed mother of seven children is over 80 years of age, is frail and sickly, living alone frugally in a half-built house nearby, all the children having married and moved away. It was refreshing to see her determination despite all odds. She was apprehensive that this valuable tree would be destroyed after her demise.

The precarious situation is evident from an incident last September when a person cut some branches to make outriggers for canoes, as this wood is hard and durable. Although it was promptly reported to the police, no action has been taken. The culprit was apprehended only after the direct intervention of the Minister of Environment and Natural Resources, Patali Champika Ranawaka on a request made by me. The case against this accused is still pending in courts.

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Elephant's ancestor 'not much bigger than a rabbit'

The oldest ancestors of modern-day elephants were little bigger than a rabbit according to a new discovery by fossil hunters.

A 60 million-year-old skull dug up in Morocco has been identified as the earliest form of what is now the earth's largest land mammal.

This creature was trunkless, measured less than 2ft (50 cm) from tip to tail and weighed just 9 to 11lbs (4 to 5kg), scientists revealed this week.

The mini-jumbo had front incisors which jutted out of its mouth to form the forerunner of the modern tusks.

Called *Eritherium azzouorum*, it would not have looked much like today's jungle giant yet it was definitely a forerunner of the familiar animal.

As only the skull remains, it is hard for the French-based team behind the find to accurately say what the rest of it would have looked like.

Analysis of the teeth in the skull proved it was related, however distant, to the modern elephant. It is 10 million years older than other elephant ancestor fossils discovered.

But it is an important find because it shows that a new family of modern mammals began to develop a lot sooner after the death of



Elephant: A 60 million-year-old skull dug up in Morocco has been identified as the earliest form of what is now the earth's largest land mammal.

dinosaurs than previously thought.

Dinosaurs died out around 65 million years ago and the *Eritherium* began to evolve - along with some primates and rodents - just five million years later.

They would not have stood a chance trying to develop at the same time as dinosaurs because they would not have been able to successfully compete for food, it is thought.

So when the big beasts had gone, smaller and more adaptable mammals evolved and have grown since then.

It is the forerunner of elephants with trunks which can be directly traced by through mammoths and other ancestors to around 33.7 million years ago, said the researchers.

The team from the National Museum of Natural History in Paris says their discovery, around 60 miles east of Casablanca, is significant, particularly the jutting teeth.

Lead researcher Emmanuel Gheerbrant said: "This is some kind of precursor of the tusk of the more modern elephant."

He said it "was probably no more than 50 centimetres, tip to tail - something like a very large rabbit, size-wise".

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