

A man of the forests

Coimbatore-based Kannan Warriar gets Indian Council of Forestry Research and Education's National Award of Excellence



Ageless A grove in Alappuzha; (below) Warriar • SPECIAL ARRANGEMENT

by K JESHI

"The breakdown of the joint family system spelt doom for Kerala's sacred groves," says Kannan CS Warriar, PhD.

An award-winning scientist at the Institute of Forest Genetics and Tree Breeding, Coimbatore, Warriar was recently conferred the National Award of excellence for outstanding research in forestry, including conservation of endangered sacred groves in the Alappuzha district of Kerala.

Sacred groves, also called *kavu* in Malayalam, are remnants of natural forests, seen on the premises of Hindu ancestral homes (*tharavaad*). A portion of the land is assigned to house serpent god or Bhagavathi, Yakshi or Ayyappan.

"At the sacred groves in Alappuzha, there are many as 600 diverse species of plants in less than one square kilometre area. At the Silent Valley National Park, spread across 90 square kilometres, around 900 species of flowering plants alone have been reported. That is the biodiversity potential of the groves," adds Warriar.

The groves are treasure houses of rare species, and medicinal and economically important plants. Felling trees from these lands is considered taboo. "The groves are looked after by joint families who fear the wrath of the resident god. Emergence of nuclear families led to construction of new houses in place of ancestral homes, leading to their destruction," he says.

"The ponds in groves are a mini watershed, support an ecosystem, and recharge the water table. Wells in the surrounding areas never dry up."

In India, there are over a lakh sacred groves across different states. "They go by different names like *koyil kaadu* in Tamil, *orans* in Rajasthan, *dev-ara kaadu* in Karnataka, and *sernas* in Madhya Pradesh. In Himachal Pradesh, people dust their clothes off when they cross the groves to ensure that they leave everything behind. Such religious beliefs strengthen protection measures. Just like

the way we protect monuments like the Taj and charismatic animals like the tiger, we have to protect ancient sacred groves. They are a gene pool of critically endangered plant species."

Wider work

The award also recognises his research on *Casuarina* (savukku) trees.

Warriar has released three productive salt-tolerant clones of the *casuarina* tree, that are suitable for sodic soils for the first time in the country. The research is significant as over 6.73 million hectares of salt-affected lands exist in India.

"India is the largest planter of *casuarina* in the world. The tree pulp goes into the paper-making industry. *Casuarina*

stems find use as fabrication material in scaffolding work, and are also used to safeguard banana plantations from wind. We came up with clones after 20 years of research," he explains.

He is also working on clones of crook-free *poovarasu* (portia) trees. "It is referred to as the poor man's teak: a big boon to the farmer."

Warriar has given over 100 lectures on environment. He holds international webinars on sacred groves. "Dr C Kuhlmann, director of Institute of Forest Genetics and Tree Breeding, mentored my research. Some have destroyed the trees for money. In some places, only the idols were left behind. But, an old woman, Devaki Amma in Kayamkulam converted acres of her land into a man-made forest," he says. "There is hope."

 The ponds in groves recharge the water table

