

FORESTRY

New treatment specifications for eucalyptus poles on the cards

A study is currently underway to determine whether existing treatment specifications for poles produced from eucalyptus trees need to be updated. The study, being conducted by Stellenbosch University and funded by the South African Wood Preservers Association (SAWPA), was prompted by the increasing number of pest- and disease-resistant eucalyptus hybrids that have been planted in commercial plantations in South Africa over the past 15 to 20 years.

Concerns had been raised that existing minimum standards for the treatment of these poles were no longer effective, said Bertus Coetzee, managing director of Dolphin Bay Chemicals (DBC). The company manufactures and markets concentrated chromated copper arsenate (CCA) used as a preservative for eucalyptus poles.

According to SAWPA, eucalyptus poles were used for a variety of functions, including in the building and construction industry, the agricultural and fencing industries, and as utility poles in electricity distribution infrastructure.

According to DBC, the poles were not only used in SA, but elsewhere in Africa especially as large electrification projects were being rolled out across the continent.

“Large numbers of treated eucalyptus poles are being used in these projects across Africa, and incorrectly treated poles would be a huge waste of money. If the research finds that treatment specifications for poles from modern eucalyptus hybrids need to be updated, this will not only be done in SA, but the research will be shared

POLES ARE BEING USED IN LARGE PROJECTS ACROSS AFRICA

Coetzee explained that the research followed questions raised about the new hybrids' varying sapwood ratios. The sapwood ratio is the proportion of the total volume of the tree that consists of the soft, outer layers which contain living cells that could absorb chemical preservatives. A tree's heartwood is the denser inner portion in which the cells have died and cannot absorb chemical preservatives.

“It is important for [eucalyptus pole] treaters to know the [sapwood to heartwood] ratio so that they are able to calculate the optimal strength of the CCA solution. Incorrectly treated eucalyptus poles will not have a full lifespan and this could undermine the reputation of our industry,” Coetzee said.

with other African countries as well,” Coetzee said.

SAWPA executive director, Bruce Breedt, said the life expectancy of treated timber depended on a variety of factors, including its ability to receive and retain preservative applications.

“In general, the life expectancy [of treated timber] is said to be 20 to 25 years and longer, which could be anything past 50 to 60 years dependent on these variables,” Breedt said.

Coetzee said it was anticipated that preliminary results from the study would become available in early 2017.

The study would, however, continue indefinitely as newer hybrids, and possibly new pole treatment products, became available. – *Lloyd Phillips*