## CUTTING CARBON WITH SPEKBOOM

wine news

THE WINE BOTTLE CORK-MAKING company Columbit Corks SA has launched a landmark initiative to help reduce their wine clients' carbon footprint, which will use indigenous spekboom.

A leafy succulent, native to arid areas of the Cape, spekboom thicket's ability to store carbon puts it in the same league as some forests. The plants will be given, free of charge, to wineries and producers who buy cork closures from Columbit.

The company has also set up a spekboom nursery in Wellington at Africa's largest vine nursery, Lelienfontein. Support will be provided by spekboom specialists the Research Restoration Group of Rhodes University (R3G).

"High forests sequester between 70t/ha and 460t/ha of biomass carbon and between 4,5%/ha and 16%/ha of soil carbon," explained Dr Christo Marais of the Department of Water Affairs and Forestry, which is working with Columbit. "Normally semi-arid and arid systems sequester between 1t/ha

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and 4t/ha and 0,2%/ha and 1,5%/ha in the soil. The thicket is categorised as semi arid, but sequesters 80t/ha and 90t/ha of biomass carbon and 6,9%/ha and 9,2%/ha of soil carbon."

Dr Marais said trials in the Eastern Cape have shown that restoring 1ha of degraded thicket with spekboom, could increase carbon sequestration by nearly 100t/ha over 45 years.

The main reason for spekboom's success is its ability to switch from normal photosynthesis to nocturnal growth, while conditions are dry and hot.

Dr Marais warned that spekboom isn't a panacea for carbon sequestration. "Planting a few spekboom in rows on each farm isn't going to offset the wine industry's carbon emissions," he said. "Taking out fynbos and replacing it with spekboom is also not going to solve the problem."

The opportunity for offsetting the industry's footprint lies in degraded landscapes. Bridget Davidtsz, Columbit's marketing manager, said the commercial implications of benefits to the environment need to be considered. "The industry knows how selective international markets are becoming," Bridget said. "Environmental restoration can help open the highly-educated markets of the north." – Sonja Burger |fw



Philip du Toit and Bridget Davidtsz of Columbit in the new spekboom nursery. COURTESY ERICA MELES PUBLIC RELATIONS