

## NEW BACTERIUM DISCOVERED BY FABI RESEARCH TEAM NAMED AFTER KIRSTENBOSCH



On 7 July Anthony Hitchcock, Nursery, Living Collections and Threatened Species Manager at Kirstenbosch National Botanical Garden, hosted a function where Prof. Fanus Venter (Department of Science and Technology-National Research Foundation Centre of Excellence in Tree Health Biotechnology / Department of Microbiology and Plant Pathology) handed over a copy of a publication in which a new bacterial species was named after the gardens. The curator of the gardens, Philip le Roux, received the publication on behalf of Kirstenbosch. The function was held at the Garden office (the old Crampton Herbarium Building) and was attended by various SANBI staff members stationed at the gardens as well as researchers from the Universities of Cape Town and the Western Cape, who also study bacterial legume interactions.

At the function Prof. Venter mentioned that several *Burkholderia* species are known to nodulate indigenous legumes from the Cape Floristic Region (CFR) and that Kirstenbosch is the institution best representing the CFR diversity. The research team therefore named the

first of the *Burkholderia* species (recently renamed as *Paraburkholderia*) they described from this region, *Burkholderia kirstenboschensis*. This was done in honour of the work done at the gardens to preserve the biodiversity of the CFR.



Five of the isolates representing this new species were collected from *Virgilia oroboides* growing in Kirstenbosch. These bacteria live in a mutualistic relationship with certain legumes and are responsible for providing the plant with fixed nitrogen obtained from the atmosphere. It is believed to be the first bacterium and second organism to be named after the gardens. The publication, with Prof. Emma Steenkamp as first author, was the combined effort of several CTHB students and staff as well as Francina Phalane, their collaborator at the Agricultural Research Council.

The article was published in the December 2015 issues of the journal *Systematic and Applied Microbiology*:

Steenkamp ET, van Zyl E, Beukes CW, Avontuur J, Chan W-Y, Palmer M, Mthombeni LS, Phalane FL, Sereme TK, Venter SN. (2015) ***Burkholderia kirstenboschensis* sp. nov. nodulates papilionoid legumes indigenous to South Africa.** *Systematic and Applied Microbiology* **38**(8):545-554. 10.1016/j.syapm.2015.09.003