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## Rhizobium strains go underground

A collection of *Rhizobium* plant root bacterial strains from Murdoch University is the latest genetic 'asset' being stored deep underground in the Svalbard Global Seed Vault in Norway for future generations.



Credit: ScienceImage

Murdoch University Professor John Howieson says the preservation of the *Rhizobium* strains – which form nodules on the roots of legume plants to fix available nitrogen from the air – will be critical to the success of future agriculture.

Professor Howieson says his research group at Murdoch 'has the most important collection of nodule bacteria in the world'.

'The world is now starting to understand how in a sustainable context, in a climate change context and in a carbon footprint context, nitrogen fixation from *Rhizobium* and legumes is something everyone wants to get into their agricultural systems.'

Professor Howieson and his team have been collecting *Rhizobium* strains from natural rangelands and uncropped lands globally over the past 25 years. Currently he is involved in a project funded by the Bill & Melinda Gates Foundation to apply nitrogen fixation to smallholder agricultural practice in Africa.

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