

Preserving the precious Tigers Milk mushroom

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Tiger Milk Mushroom. Credit: Tan / Flickr

A technique to preserve cells from the rare and popular Tigers Milk Mushroom for later use is published in the latest issue of *The Journal of*

Tropical Agriculture Science. The mushroom, *Lignosus rhinoceros*, is widely used by indigenous communities across Malaysia, but there are not enough to meet demand. The researchers adapted a process already used to preserve other fungi, and believe their method provides an easy and inexpensive option for long-term preservation of the desired cells.

The Tigers Milk Mushroom is important in communities in Malaysia who use it as a medicinal treatment for various ailments as well as to produce a tonic to maintain health. The desirable underground tuber can be spotted when a solitary mushroom grows above ground which makes the collection of the fungus difficult.

A technique that is successful in the cryopreservation of other underground funguses was adapted in this study to preserve and maintain the commercially potential *L. rhinoceros* strain in a viable state. Lai Wei Hong and colleagues at the Agro-Biotechnology Institute at the Malaysian Agricultural Research and Development Institute tested various sucrose concentrations and exposure time while deep freezing – or cryopreserving – the vegetative cells.

Of particular interest was the ability to thaw the cells without damage occurring. The team were able to perfect a method that is suitable to cryopreserve the *L. rhinoceros* with 100% regeneration and without the solutions infecting the [cells](#). They hope that their work will be used to preserve and maintain the precious Tigers Milk Mushroom for medicinal use.

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