



# Saffron milk cap (*Lactarius deliciosus*)<sup>©</sup>

The saffron milk cap mushroom (*Lactarius deliciosus*) has been eaten in Europe since Roman times and is still greatly appreciated in Europe, and in particular Portugal and Spain, for its mild, slightly bitter flavour. It has made the accidental journey to Australia probably on the roots of imported trees and is found in pine forests throughout the southeastern part of the country where it is collected for the restaurant and gourmet trade. It is easily recognised by the saffron-coloured sap it bleeds when damaged, the concentric rings of carrot-coloured blotches on the surface of the cap, and its tendency to turn green with age or after being handled. Grade 1 saffron milk cap typically wholesales for NZ\$40 and A\$40/kg whereas in Spain top quality mushrooms can retail for €50/kg.



Sometimes the saffron milk cap is confused with a lookalike mushroom called *Lactarius deterrimus*. This is less palatable and a disappointment when it finds its way into a meal. There are also some poisonous lookalikes such as the woolly milk cap (*Lactarius torminosus*). A few have also mistaken poisonous brown roll rims (*Paxillus involutus*) for saffron milk caps.

Because the saffron milk cap grows in a mycorrhizal association with pines and spruce it can only be cultivated in plantations established with specially inoculated trees. These mycorrhizal trees can be planted and managed exactly as a

normal pine plantation but yields can be much higher if special management practices are followed such as irrigation during dry summers. The profitability of the plantation can be further boosted if the mushrooms are harvested and transported to the market properly.

The first New Zealand saffron milk cap infected trees were planted in August 2000 and mushrooms were produced after only 18 months. The first commercial crop was sold in 2003 by Hannes and Theres Krummenacher near Nelson. In 2009 this plantation averaged 6 kg per tree and the total mushrooms produced so far produced per tree far exceeds the value of a 30 year old well pruned radiata pine (about NZ\$100). The saffron milk cap has fruited from Gisborne to just north of Dunedin but it should also grow in Southland.



It is known that bacteria and other soil microorganisms can be beneficial to the relationship a mycorrhizal fungus has with its host plant. The methods that Edible Forest Fungi New Zealand Limited uses to produce its plants takes this into account. We expect 95% of our plants to be infected by the inoculant fungus.



For technical information on the saffron milk cap contact Ian Hall, P.O. Box 268, Dunedin 9054, New Zealand, telephone +64-3-454 3574, +64-27-226 1844, [truffle2@ihug.co.nz](mailto:truffle2@ihug.co.nz), [www.trufflesandmushrooms.co.nz](http://www.trufflesandmushrooms.co.nz) A booklet is available.

For information on the availability and prices of saffron milk cap and other trees mycorrhized with edible mycorrhizal mushrooms please contact Kevin Fearn, Edible Forest Fungi New Zealand Limited, P.O. Box 384, Oamaru 9444, New Zealand, telephone +64-3-431 3627, +64-27-450 4605, [www.elfnz.co.nz](http://www.elfnz.co.nz), [kevin@oregonnurseries.co.nz](mailto:kevin@oregonnurseries.co.nz)