

Saffron milk cap (*Lactarius deliciosus*)[©]

The saffron milk cap mushroom (*Lactarius deliciosus*) has been eaten in Europe since Roman times and is still greatly appreciated around the Mediterranean, particularly Spain, Portugal, Germany and elsewhere, for its fruity aroma and a “crisp flesh with nutty, earthy, and woody flavours”. It made the accidental journey to Australia probably on the roots of imported trees by early European settlers 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 salmon-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\$30 and A\$40/kg whereas in exclusive shops in Europe prices can be higher.



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 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 and removing low branches. The profitability of the plantation can be further boosted if the mushrooms are harvested and transported to the market correctly. Woven baskets with the mushrooms upside down (left) are used by a wild mushroom collectors near Melbourne.

The first New Zealand saffron milk cap mycorrhized trees were planted in August 2000 and mushrooms were produced in coastal North Otago after only 18 months. The first commercial crop was sold in 2003 by Hannes and Theres Kruppenacher near Nelson (Neudorf Mushrooms). In 2009 this plantation averaged 6 kg per tree and the total mushrooms produced per tree since planting far exceeds the value of the timber produced by a 30 year old well pruned radiata pine. The saffron milk cap has fruited on the hills around Gisborne to just north of Dunedin, but should also grow in many other areas including Southland.

Truffles and Mushrooms (Consulting) Limited produce pines solely mycorrhized with the saffron milk cap. The photograph at the foot of the page was taken 10 months after inoculation and is of the bottom of the containers the plants are grown in. On the left are the characteristic orange mycorrhizas of the saffron milk cap growing out of the pots, and in the middle and right are small precocious fruiting bodies.

A booklet on the saffron milk cap can be downloaded from this webpage. For further information on the saffron milk cap contact Dr Ian Hall, truffle@trufflesandmushrooms.co.nz, telephone +64-27-2261844, P.O. Box 268, Dunedin 9054, New Zealand. Plants are only available directly from us. For help establishing a saffron milk cap grove please contact Bart Acres bart.acres@gmail.com, telephone 021-148 8815.

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