Medicinal Uses of Fungi by New Zealand Maori People

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Māori are the indigenous people of New Zealand, arriving about a thousand years ago from Polynesia and developing a tribal society based on natural resources of the forest, the sea, and fresh water. In the absence of written language prior to European colonization, transfer of knowledge by the Māori was oral. Early European explorers and ethnographers documented many significant features of Māori traditional knowledge. Much detail of their knowledge relating to fungi, however, appears to have been lost through disruption of oral transmission from elders to the young. This is indicated, for example, by the lack of known correlation between many of the 183 Māori names for different species of fungi and Latin binomials and lack of knowledge of the use of most species.

Fungi were not recognized as a natural grouping by Māori, and only recently has the word for *Armillaria* spp. ("harore") been selected as the most appropriate generic term in Māori for all fungi. Consumption of mushrooms was the main use of fungi by Māori although mushrooms were not considered a prize food. Other uses included tinder and fire carrying (*Laetiporus portentosus*), a source of charcoal as pigment for "ta moko"—tatoo (*Cordyceps robertsii*), and as an environmental indicator (*Armillaria* spp. and mushrooms in general).

A recent attempt to collate Māori knowledge about fungi included a survey of published reports as well as interviews with Māori elders and younger Māori. Documented medicinal uses appear to be limited to six fungal species, and only one of these

was known to interviewees. Detailed information is often lacking about preparation and application of the mushrooms and the definitive symptom(s) that were treated:

- Agrocybe parasitica (tawaka) for treatment of fever, and given to expectant mothers (purpose unclear) and for those poisoned by toxic plants (Corynocarpus laevigatus, karaka, and Coriaria arborea, tutu).
- *Auricularia cornea* (hakeke) for those poisoned by toxic plants (karaka and tutu).
- Calvatia spp. (pukurau) as an anaesthetic, to staunch bleeding, and as pain relief following scalding.
- Cordyceps robertsii (awheto) for asthma.
- *Laetiporus portentosus* (putawa) as a wound protector, to soften and ease a difficult labor.
- *Usnea* sp. (lichen) skin treatment.

There is an urgent need to encourage documentation of indigenous knowledge of fungi from other nations to avoid potential loss of this knowledge. From a New Zealand perspective, further understanding of uses of fungi by other South Pacific peoples could indicate additional species that might have been used for medicinal purposes by Māori.