

Truffles and Mushrooms

(Consulting Ltd)

Ian Robert HALL

Titles of some public and confidential reports

Some confidential reports are not listed and the names of all clients have been withheld

June 2017

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- Hall, I.R. 2016 (September). Mycorrhizas, mushrooms, irrigation and reforestation. Confidential report to TAAAS and the Foreign Experts Bureau
- Hall, I.R. 2016 (November). Funding applied agricultural research a lesson from abroad. Confidential report to TAAAS and the Foreign Experts Bureau
- Hall, I.R. 2015 (November). Cultivation of edible mycorrhizal mushrooms in Xizang: 2015 update. Confidential report to TAAAS and the Foreign Experts Bureau
- Hall. I.R. 2014 (August). Cultivation of edible mycorrhizal mushrooms in Xizang . 85 p. Confidential report to TAAAS and the Foreign Experts Bureau
- Hall, I.R. 2013. Bianchetto truffle cultivation, *Tuber borchii* (revised edition). Dunedin, Truffles and Mushrooms (Consulting) Ltd. 26 p.
- Hall, I.R. 2013. Inoculation of plants with *Lactarius deliciosus* (revised edition). Dunedin, Truffles and Mushrooms (Consulting) Ltd. 17 p.
- Hall, I.R. 2013. Production of truffle-infected plants. Truffles and Mushrooms (Consultancy) Ltd. 34 p.
- Hall, I.R. 1988 2013. >350 reports on the potential for cultivating truffles and/or other edible mycorrhizal mushrooms in New Zealand or overseas locations.
- Hall, I.R. 1990 2013. New Zealand Truffle Association newsletters (1-13) or contributions to newsletters (14 \rightarrow).
- Hall, I.R. 2012. The suppression of plant diseases in the nursery and field using fungi and bacteria. Dunedin, Truffles and Mushrooms (Consulting) Ltd. 63 p.
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- Hall, I.R. 2010 (August). Cultivation of mycorrhizal mushrooms and ser sha in Tibet and Western China Confidential report to TAAAS and the Foreign Experts Bureau.
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- Hall, I.R.; Nelson, P. 2008. Truffle quality control standards. Dunedin, Truffles and Mushrooms (Consultancy) Ltd. 19 p.
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- Hall, I.R. 2007. Plant growth promoting rhizobacteria (PGPR) in agriculture, horticulture and forestry. Truffles and Mushrooms (Consultancy) Ltd.
- Hall, I.R. 2007. Edible ectomycorrhizal mushrooms, New Zealand and the international marketplace. Dunedin, Truffles and Mushrooms (Consultancy) Ltd. 61 p.
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- Hall, I.R. 1987-2006. Reports on the inspection of imported truffles. Dunedin, Truffles and Mushrooms (Consultancy) Ltd.
- Hall, I.R. 2006. Application for approval to import into containment edible ectomycorrhizal mushrooms. Dunedin, Truffles and Mushrooms (Consultancy) Ltd. 70 p.
- Hall, I.R. 2006. Edible ectomycorrhizal mushrooms on eucalypts. Dunedin, Truffles and Mushrooms (Consultancy) Ltd., 8 February 2006. 30 p.
- Hall, I.R. 2006. Transporting truffles. Dunedin, Truffles and Mushrooms (Consultancy) Ltd. 30 p.
- Hall, I.R. et al. 2005. Importation into New Zealand of specified fresh and frozen *Tuber* species (truffles) New Zealand Ministry of Agriculture and Fisheries Biosecurity authority (plants) standard, Pit-Imp-Tuber. 26 p.
- Hall, I.R. 2005. Host plants for truffles. Dunedin, Truffles and Mushrooms (Consultancy) Ltd. 23 p.
- Hall, I.R. 2005. Update on bianchetto (*Tuber borchil*) infected seedling production methodologies. Dunedin, Truffles and Mushrooms (Consultancy) Ltd. 10 p.
- Hall, I.R. 2005. Containment and transitional facility for edible mycorrhizal fungi containment and quarantine manual. Invermay Agricultural Centre, Crop and Food Research. Crop and Food Research Confidential Report No. 1316. 124 p.
- Hall, I.R. 2004. Specifications for a clean room, automated soil steamer, batch potting mix mixer and water treatment facility. Dunedin, Truffles and Mushrooms (Consultancy) Ltd. 35 p.
- Hall, I.R. 2004. Douglas fir in western Southland. Truffles and Mushrooms (Consultancy) Ltd. 3 p.
- Hall, I.R.; Hance-Halloy, M.L. 2004. Mycorrhizal infections on *Pinus radiata* and Douglas fir from Southland. Crop & Food Research Confidential Report No. 1066. 10 p.
- Hall, I.R. 2003. Potential for the cultivation of the Burgundy truffle in the United Kingdom. Crop & Food Research Confidential Report No. 987. 49 p.
- Hall, I.R. 2003. Potential for the cultivation of the Burgundy truffle in east England. Crop & Food Research Confidential Report No. 987. 50 p.
- Hall, I. R., Dixon, C. A., Bosselman, G., Wang, Y. 2003. Production of shoro (*Rhizopogon rubescens*) infected pine seedlings and results of field trials. Crop and Food Research Confidential Report No. 858 (ID: 6875)
- Hall, I. R., Wang, Y. 2003. Profitability of *Pinus radiata* plantations producing edible mycorrhizal mushrooms. Crop and Food Research Confidential Report No. 861 (ID: 6878)
- Hall, I., Wang, Y. 2003. Achievements July 2002 to June 2003 with edible mycorrhizal mushrooms on *Pinus radiata*. Crop and Food Research Confidential Report No. 878 (ID: 6925)
- Wang, Y., Hall, I. R. 2003. Production of matsutake (*Tricholoma matsutake*) infected pine seedlings and results of field trials. Crop and Food Research Confidential Report No. 880 (ID: 6927)
- Wang, Y., Hall, I. R., Zambonelli, A. 2003. Production of *Boletus edulis* infected plants. Crop and Food Research Confidential Report No. 879 (ID: 6926)
- Barclay, C.; Hall, I. 2003. Incidence of arbuscular mycorrhizas on redwoods. Crop and Food Research Confidential Report No. 881 (ID: 6928)
- Hall, I.R. 2003. Effect of soil sterilisation on the growth and mycorrhizal infection of onions. Crop & Food Research Confidential Report No. 1018. 12 p.
- Hall, I.R. 2002. Potential for the use of *Beauveria* spp. for the control of clover root weevil. Crop & Food Research Report. 23 p.
- Hall, I. R., Dixon, C. A., Parmenter, G. A., Martin, N., Hance-Halloy, M. L. 2002. Factors affecting fruiting of the Périgord black truffle: a comparison of productive and non-productive *Tuber melanosporum* truffières in New Zealand. Crop and Food Research Confidential Report No. 768 (ID: 6604)
- Hall, I.R.; Dixon, C.; Strong, G. 2002. Production of Périgord black truffle-infected plants. Crop and Food Research Confidential Report No. 904. 31 p.
- Hall, I.R.; Dixon, C. 2002. Production of Burgundy and bianchetto truffle-infected plants. Crop and Food Research confidential Report. New Zealand Institute for Crop and Food Research Limited, Christchurch. 5 p.
 Hall, I.R.; Dixon, C. 2000. Supplementary report on the production of Périgord black truffle-
 - Hall, I.R.; Dixon, C. 2000. Supplementary report on the production of Périgord black truffle-infected plants. Crop and Food Research. Confidential report. New Zealand Institute for Crop and Food Research Limited, Christchurch. 4 p.
- Hall, I.R.; Wang, Y. 2000. Cultivation of wood ear mushrooms and some factors relevant to investment in the cultivation of edible saprobic mushrooms in New Zealand. Confidential report, New Zealand Institute for Crop and Food Research Limited, Christchurch. 15 p.
- Hall, I.R.; Wang, Y.; Dixon, C. 1997-2000. Developing the technology for mass production of *Pinus radiata* and other plantation forest trees infected with edible ectomycorrhizal fungi. Technology for Business Growth quarterly reports. Confidential reports. New Zealand Institute for Crop and Food Research, Christchurch, New Zealand.

- Burge, G.K.; Douglas, J.A.; Hall, I.R.; Morgan, E.R.; Douglas, M.H.; Smallfield, B.M.; Halloy, S.R.P. 2000. New crops for Taranaki. Crop and Food Research Confidential Report 246. 63 p.
- Stringer, A.; Wang, Y.; Hall, I.R. 2000. Cultivation of New Zealand isolates of *Trametes versicolor*. Confidential report, New Zealand Institute for Crop and Food Research Limited, Christchurch. 17 p.
- Hall, I.R.; Wang, Y. 2000. Cultivation of wood ear mushrooms and some factors relevant to investment in the cultivation of edible saprobic mushrooms in New Zealand. New Zealand Institute for Crop & Food Research Limited, Christchurch. 15 p.
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- Hall, I.R. 1999. *Phomopsis* canker in chestnuts. Confidential report, New Zealand Institute for Crop & Food Research Limited, Christchurch. 5 p.
- Hall, I.R.; Buchanan, P.; Wang, Y.; Cole, A.L.J. 1998. Edible and poisonous mushrooms: an introduction. New Zealand Institute for Crop & Food Research Limited, Christchurch, New Zealand. 189 p.
- Hall, I.R. 1998. Some factors that may be important for fruiting by *Tuber melanosporum*. Confidential report, New Zealand Institute for Crop and Food Research Limited, Christchurch. 7 p.
- Hall, I.R. 1998. Some management practices used in the cultivation of enokitake, oyster mushroom and shiitake. Confidential report, New Zealand Institute for Crop and Food Research Limited, Christchurch. 34 p.
- Hall, I.R.; Bosselman, G. 1997-98. Technology for production of mycorrhizal infected Douglas fir raised in greenhouses. Technology for Business Growth quarterly reports 1997 1998. New Zealand Institute for Crop and Food Research, Christchurch, New Zealand.
- Hall, I.R.; Wang, Y. 1998. Some factors relevant to investing in the cultivation of edible saprobic mushrooms in New Zealand. New Zealand Institute for Crop and Food Research Limited confidential report, Christchurch, New Zealand. 30 p.
- Hall, I.R.; Wang, Y. 1998. Some management practices used in the cultivation of enokitake, oyster mushroom and shiitake. New Zealand Institute for Crop and Food Research Limited confidential report, Christchurch, New Zealand. 28 p.
- Hall, I.R.; Wang, Y. 1998. Control of fungus gnats (sciarid flies) on shiitake-inoculated solid timber logs. New Zealand Institute for Crop and Food Research Limited confidential report, Christchurch, New Zealand. 24 p.
- Hall, I.R.; Wang, Y. 1998. Cultivation of shiitake, enokitake, phoenix mushroom and wood ears. New Zealand Institute for Crop and Food Research Limited confidential report, Christchurch, New Zealand. 14 p.
- Wang, Y.; Hall, I.R. 1998. Production of *Boletus edulis*-infected plants. Confidential report, New Zealand Institute for Crop and Food Research. Christchurch. July 1998. 11 p.
- Wang, Y.; Hall, I.R. 1998. Production of *Tricholoma matsutake*-infected plants. Confidential report, New Zealand Institute for Crop and Food Research. Christchurch. July 1998. 12 p.
- Hall, I.R. 1997. Enokitake production in Taichung, Taiwan. Occasional publication, New Zealand Institute for Crop and Food Research Limited. 11 p.
- Hall, I.R.; Bosselman, G.; Hamilton, J. 1995. Stunting and chlorosis of Douglas fir. CropSeed Confidential Report No. 184. Crop and Food Research, Christchurch. 38 p.
- Hall, I.R.; Zambonelli, A. 1994. The potential for establishing *Tuber magnatum* plantations in New Zealand. Foodinfo confidential report no. 61. New Zealand Institute for Crop and Food Research Limited, Christchurch, New Zealand. 40 p.
- Hall, I.R. 1993. Black truffle cultivation in France and the USA. Overseas Travel Report No. 53. Crop and Food Research, Christchurch. 22 p.

- Hall, I.R.; Lyon, A.J.E.; Wang, Y. 1993. *Boletus edulis* Potential for its cultivation. Crop and Food Confidential report No. 47. Crop and Food Research, Christchurch, New Zealand. 42 p.
- Hall, I.R.; Wang, Y.; Buchanan, P.K.; Douglas, J.A. 1993. Edible fungi in New Zealand: current research and future potential. Confidential report, New Zealand Institute for Crop and Food Research Limited, Christchurch. 27 p.
- Wang, Y., Hall, I.R.; Wong, P.L. 1993. Production of matsutake in New Zealand. Invermay Agricultural Centre, New Zealand Institute for Crop and Food Research Limited. 96 p.
- Hall, I.R. 1992. Cultivation of edible fungi in New Zealand. Invermay Agricultural Centre, Ministry of Agriculture and Fisheries. 26 p.
- Foster, A.E.; Hall, I.R. 1988. Effects of Bonzi on a range of horticultural plants. Mosgiel, Invermay Agricultural Centre, Ministry of Agriculture and Fisheries.
- Jarvis, P.; Warren, I.; Hall, I.R. 1988. Investment in truffière development. Confidential report, Ministry of Agriculture and Fisheries South Region, Mosgiel. 24 p.
- Hall, I.R. 1987. Black truffles. Invermay Agricultural Centre Technical Report. Ministry of Agriculture and Fisheries. 4 p.