

Professor Amanda Black

*Tūhoe, Whakatōhea,
Te Whānau-ā-Apanui*

*“I like
using my skills
and qualifications
to understand
what’s happening
and solve
problems.”*

Biochemist

Studies soil health and the control of bacteria that damage plants

Amanda with kauri seedlings. Photo: Noted



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New Zealand Association of Science Educators

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What Amanda studies

Kauri dieback, and other diseases carried by water that damage native trees.

Amanda found that the water mould causing kauri dieback grows well in pasture and pine forest soils, which means that it spreads easily.

Bioprotection Aotearoa

Amanda is the director of this research group, which is hosted by Lincoln University, and involves collaboration between seven universities and four Crown research institutes. The group's research crosses different science disciplines, using a holistic, systems-level approach to protect productive and natural landscapes from pathogens, pests, and weeds in a warming climate.

Using sewage sludge to improve metal levels in soils

“It looks like playdough with lots of hair – it’s really disgusting!” Amanda found that spreading the sludge did not improve the soil’s amount of metals useful to plants.

Improving the quality of soils

Amanda found that adding copper to soils reduces the emission of nitrous oxide, a greenhouse gas that traps the sun’s energy and helps cause climate change.

See her complete profile from May 2019 - Scroll down to
<https://nzase.org.nz/resources/?resource=scientist-profiles>