

Ventilation system stamps out damp

By CHRIS SCHULZ

Researchers at Massey University's Albany campus have discovered a new way to cure damp houses during winter.

Lecturers and students have tested a new ventilation system — called a domestic trickle ventilator — in damp houses in the Manawatu and Wanganui area.

Massey University Institute of Technology and Engineering senior lecturer Robyn Phipps, lecturer Mane Fleming and honours student Hayden Kennedy discovered the system increased air circulation, and reduced humidity and mould in 15 houses over eight weeks last winter.

A small fan takes air from the warmer and drier roof space area of a house and filters it into the living areas. It partially pressurises the house, forcing out damp air.

Ms Phipps says up to 15 per cent of the population is allergic to moulds, so there are huge benefits in reducing dampness in houses.

"The study participants said they felt better living in their houses after the ventilator was installed," she says.

Occupants experienced fewer headaches and less sneezing and eye irritation.

Ms Fleming says fungi counts increase during winter because of the condensation and dampness.

"Winter's lower air temperatures make the water condense on cold surfaces such as windows, uninsulated walls and ceilings, where it causes problems," she says.

Ms Fleming says

houses can have up to 70 litres of water per day in the inside air during winter. Causes include breathing, baths and showers, unflued gas heaters and clothes driers.

Houses with inadequate sealing between the ground and the floor can also have mould problems.

The researchers say they are now going to do an expanded study which takes into account house building and insulation.