## **New unit boosts** *venison research*

How venison looks and eats is very important to consumers. But until now, deer have been bought from farmers on the basis of their size, shape and fat cover.

Meat colour and tenderness might finally get a look in when Dr Joanne Stevenson-Barry, who recently returned to Invermay after six years' study in the United States, completes her research at AgResearch Invermay's new venison research facility.

People who buy meat in supermarkets judge its quality mainly on colour. Good colour spells fresh meat.

However, venison is less stable in colour and so has a shorter shelf-life than other meats like beef and lamb. Dr Stevenson-Barry's research will focus on ways of slowing the browning process — research that will probably take several years.

She will also be investigating the relationship between pH levels and tenderness

Deer scientist Dr Ken
Drew says meat with a low
pH level — between 5.5 and
5.6 — is tender and has
good keeping values, but
meat with intermediate (5.86.0) or high (above 6.0) levels is either tough or quickly loses col-

our and quality.

High pH is caused by stress, from any of several factors — poor nutrition, transport, pre-slaughter varding.

Invermay has been measuring pH levels in commercial plants, using a simple probe, and, in the not-too-distant future



Dr Joanne Stevenson-Barry

plants could add this process to their chains.

"The industry should look at screening out those carcases with poor pH values. They are possibly only 5 per cent of the total, but they can damage the reputation of the other 95 per cent," says Dr Drew.

Carcases with unacceptable levels would have to be sidelined, but Dr Drew says boning techniques could bring high pH meat to a more tender state.

One obvious beneficiary of screening for pH would be Cervena, which is promoted, among other things, on its tenderness.