

Tea tree honey variation is the bees knees

Paul Bibby

Most of us are familiar with the medicinal properties of honey – assuming, of course, it hasn't been diluted with water by some greedy multinational food company.

But researchers from Southern Cross University have discovered a new form of the naturally-occurring sweetener that has the potential to make both humans and bees noticeably healthier.

The new honey variation comes from bees that have foraged on tea trees, giving it unusually high anti-oxidant and anti-microbial qualities that leave generic honeys in the shade.

Dr David Rudd from the university's School of Environment, Science and Engineering conducted the research at a tea tree plantation in the Bungawalbyn Valley, south-west of Evans Head.

During the research trials, tea tree was provided to the honeybees as a diet supplement and they were also allowed to naturally forage in the old growth tea tree plantations.

'We found bees foraging on Melaleuca trees produced a honey that combines immediate anti-oxidant activity and a significant sustained anti-microbial activity even in young honey, without having to wait for the honey to mature,' Dr Rudd said.

He said the tea tree foraging not only benefited honey-eating humans but the bees themselves, owing to the generation of a bioactive monoterpene.

'A diet of Melaleuca trees is slightly different to what bees usually feed on so we wanted to conduct gut microbe analysis in case there were any problems for the bees,' Dr Rudd said.

'But we found the slight changes in the gut suggested the bees could handle tea tree really well and it actually gave the bees a slightly higher immune function, making them more resistant to bacterial infections and viral infections without affecting the gut metabolic function'

'So tea tree within the diet actually acted as a probiotic for metabolism, increasing beneficial immune defensive bacteria while maintaining nectar metabolism bacteria within the honeybees' gut.'

When it came to the all-important question of taste, Dr Rudd said the tea-tree infused honey had: 'a fresher lighter aspect to the taste, similar to the freshness you have in tea-tree cough lollies'.

While still in its trial phase, the research is being developed in conjunction with Northern NSW producer Meluka Honey, meaning there's every chance it will appear on local shelves sooner rather than later.



Bees at the tea tree plantation in the Bungawalbyn Valley. Supplied