

HOW TO NAME ORGANISMS

Dr Peter Buchanan, Dr Robert Hoare and Rosa Henderson of Landcare Research NZ Ltd, describe the process of naming a new organism. They talk about when scientists are allowed to name an organism and what details need to be known about a new species.

Transcript

DR PETER BUCHANAN

Naming an organism is I guess one of the highlights of being a scientist really, because it's exciting to find something that's new. But before you get excited about it being new, you need to determine that it isn't anything that has been described before. We use literature, but increasingly now we are able to tap into the internet to compare it with all the things that are known that are very similar to it.

DR ROBERT HOARE

Usually when we discover a new species, it needs to be described in terms of its morphology, which is its overall shape and external and internal features and what its genetic affinities are. It's actually expensive to sequence its DNA, so usually you do that morphological study first.

DR PETER BUCHANAN

We must form a description, do illustrations of the organism, and we must publish it in a journal that is available internationally.

ROSA HENDERSON

It's quite fun but it's also quite hard. You have to follow rules. First of all you have to find if they will fit into a known genus, or if they don't, you find a new genus name. In scale insects, we often put 'coccus' on the end of a name because that is the Latin name for shell, so it relates to the sort of shell-like structure of the covers of scale insects. Recently, I've described two new genera from the mountains of New Zealand, and I chose to call one *Alpinococcus* for alpine, and *Montanococcus* for mountain, and one of those *Montanococcus* species I called after my husband because he helped me find it, so it's *Montanococcus graemei*.

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