

## **The origin of New Zealand's life: can historical biogeographic research be regarded as scientific?**

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All biologists have at least a passing interest in the deep history of the life-form they study - where it belongs in the evolutionary scheme; and especially for those of us here in New Zealand, more than a passing interest in how it has come to be here on these islands of ours. The 'discipline' of Historical Biogeography thus draws on wide interests, yet is frequently fraught with controversy based on entrenched viewpoints and missing data. Can our interpretation of the origins of New Zealand's life be regarded as a verifiable scientific endeavour? Or is it simply a bunch of narratives - the best stories of the day? Are our stories progressive? These questions are at the heart of the recently re-issued book *Ghosts of Gondwana* which reviews ten years of recent research and discovery in this field. Research that is largely molecular phylogenetics and discoveries of new fossils. Selected case studies, especially of insects, will be discussed to highlight the fragility of our hypotheses and the role of empirical evidence in this field. For New Zealand biogeography, it has been the most exciting and progressive decade ever, enabling us to confirm some previous explanations (like the role of the ice ages) and reject others (like the Oligocene drowning) which could have far-reaching effects on our interpretation of the overall evolutionary story.

