

Kauri Fine Woody Debris: Invertebrate decomposers

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Globally, research has shown that saproxylic invertebrates play an important role in decomposing woody debris (WD), and thus nutrient cycling. However, there has been minimal research on invertebrate communities associated with WD in New Zealand. Due to the high level of endemism in New Zealand, findings from overseas may not be representative for New Zealand. Therefore this study aims to identify the invertebrates associated with kauri (*Agathis australis*) fine woody debris (FWD). Invertebrates were sampled in a kauri dominated native forest (Huapai) via the collection of dead fallen branches (<5 cm diameter, <1.5 m in length). The invertebrates were extracted using Tullgren funnels. Initial results indicated that there is considerable diversity in the invertebrate families present at each stage of decomposition. Further studies will examine species level invertebrate associations of intermediately decomposed wood (Stage 2). This research provides important information on the invertebrate community associated with kauri FWD decomposition. This is of particular interest since the volume of kauri WD is likely to increase substantially with the increasing spread of Kauri die-back (*Phytophthora* taxon *Agathis*).

