

# Tree species regeneration in a mid-elevation, temperate rain forest in Isla de Chiloé, Chile

Armesto, J. J.

Fuentes, E. R.

The regeneration of canopy and subcanopy species in a mid-elevation, primary rain forest in the Coastal Range of Isla de Chiloé (42°30'S), in the cold-temperate region of Chile, was studied by comparing seedling and sapling abundances under the forest canopy, and within 36 tree-fall gaps. The forest was dominated by *Amomyrtus luma* and *Laurelia philippiana* (33 and 32% of the main canopy individuals), and two subcanopy species (*Myrceugenia ovata*, and *Myrceugenia planipes*) were also important. Uncommon species in the canopy were *Drimys winteri*, *Amomyrtus meli*, and *Raphithamnus spinosus*. Tree-fall gaps were created generally by the fall of several trees, and the main canopy species were the principal gap-makers. Gap sizes varied between 28 and 972 m<sup>2</sup>, with a mean of 197 m<sup>2</sup>. Seedling and sapling abundances indicate that the dominant species are capable of regenerating below the canopy, but they also germinate and show enhanced growth within small light gaps. For one of the common subcanopy