

# Is *Pinus radiata* invading the native vegetation in Central Chile? Demographic responses in a fragmented forest

Bustamante, Ramiro O.

Simonetti, Javier A.

Forest fragmentation facilitates the invasion of exotic species. This threat may be especially severe if forest fragments are surrounded by plantations of exotic species like *Pinus radiata*, an aggressive colonizer and shade-intolerant tree that has invaded successfully several native ecosystems of the southern hemisphere. In this study, we experimentally tested if the conditions of a successful seedling establishment *P. radiata* are fulfilled at the Coastal Maulino forest, an endemic fragmented forest of central Chile. Results demonstrated that seeds are dispersed into the native forests, however seedling establishment occurs only at the edges. We conclude that this exotic species is not invading native forests up to date. However, we suggest to conduct evaluations of seed rain and seedling establishment in the long term, in order to monitor the fate of this exotic species in fragmented native forest of Central Chile. © Springer 2005.