

QUARTERLY REPORT: OCTOBER - DECEMBER 2014

EXECUTIVE SUMMARY

The SPATnz PGP Programme will develop methods for hatchery production of juvenile mussels (spat) in commercial quantities. It will also develop improved strains of mussel using conventional selective breeding strengthened by the application of modern genetic techniques.

In the October to December 2014 quarter the focus remained on the construction of a facility to enable research on scaling up hatchery spat production. During this period the hatchery building was essentially completed and the fitout of the aquaculture systems and equipment commenced.

The hatchery building has four main aquaculture areas:

- 1) a microalgal culture room that generates high quality food for the most sensitive early life stages of the mussel
- 2) a room with large (24000 L) tanks used for incubating embryos, and for larval rearing
- 3) a room with small conical tanks for rearing larvae in high densities with continuous water exchange
- 4) a settlement room where the larvae move when they are ready to stop swimming and settle onto rope

Algal culture commenced in December 2014 and mussel rearing trials are due to start in early 2015

24,000 L tanks for incubating mussel embryos and rearing larvae



Small conical tanks for rearing mussel larvae with continuous seawater flow



24,000 L tanks for incubating mussel embryos and rearing larvae



Small conical tanks for rearing mussel larvae with continuous seawater flow

