

SAUVIGNON BLANC 2.0

Public Summary - June 2024

Summary of progress during this quarter

Despite the slow regeneration of Sauvignon Blanc plantlets, increased resourcing to plant production and efforts to optimise the growth conditions for the plantlets has enabled the Programme to reach its target of 6,000 new plantlets by the end of June 2024. These new vines will continue to grow in a climate-controlled indoor environment throughout the winter until they can be planted out in a new research vineyard this spring. The DNA of a subset of these plantlets has now been sequenced and compared with the genetic sequence of Sauvignon Blanc 'Mass Select', enabling researchers to identify the specific genetic changes in each plant. With the new growing season approaching, the research team will turn their attention to preparing vineyard space for the plants and developing tests to determine which of the new vines carry promising traits.

Key highlights and achievements

- This autumn, approximately 4,000 new Sauvignon Blanc clones were produced and successfully transferred to pots for winter growth within a climate-controlled indoor facility.
- Sixty of the new clones have been sequenced, and their genetic variations identified through comparison with the Sauvignon Blanc reference genome sequence.
- Based on a successful pilot study, BRI is importing a robotic scanner capable of testing mildew susceptibility in several hundred grapevine leaves per day. This will enable the large collection of new clones to be tested for differences in this important trait.
- Programme progress was presented to over 600 NZ wine industry attendees at three regional 'Grape Days' events. Attendees rated the session on grapevine genetics highly at each event.

Upcoming

- Install a new research vineyard in which the new clones will grow to maturity and undergo preliminary selection.
- Scale up the genetic characterisation of differences among the new clones.
- Develop protocols for trait-based selection in the vineyard.

- Train machine-learning algorithms to improve automated measurements of mildew sensitivity among the vines.

Investment

Investment period	Industry cash	Industry in-kind	MPI cash	Total investment
During this quarter	\$ 448,452	\$ 17,561	\$ 310,675	\$ 776,688
Programme to date	\$ 2,609,699	\$ 172,258	\$ 1,854,638	\$ 4,636,596