FILE NOTE

Subject: **Assessment of Tarawera site 2017 Cypress Hybrid trial**

Date: **27 October 2023**

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INTRODUCTION

In 2017 four trials were planted to evaluate potential new cypress hybrids derived from crosses made in 2012. The new hybrids were deployed as untested clones, along with 30 tested hybrid clones for a previous round of crossing in 2005. 3 of the trials (Pipiwai, Kaingaroa and Tarawera had small partial assessments in 2020/2021 which identified some clones growing well, but with limited data there was a desire to return and complete full assessments and gain a more comprehensive dataset from which to select the best performers.

In early 2023 funding was secured by the Cypress Development Group to fully assess 1 site (Tarawera) and identify a group of well performing clones to be established as stoolbeds for bulking up for deployment and addition trials.

METHOD

The trial was assessed the week of 17 October 2023 by the Scion field crew and Vaughan Kearns from the Cypress Development Group using standard tree improvement traits. Traits assessed were as follows

Height in Meters - HT
Diameter at breast Height - DBH in mm
Stem Straightness STR 1 to 9, 1 crooked, 9 straight
Branching habit BR5 1 to 5, 1 fine branched, 5 heavy branched
Malformation MAL1 to 9, 1 multi-leadered, 9 no defects
Acceptability- ACC 0 not suitable for crop tree, 1 acceptable, 2 “Plus tree”
Cypress Canker CNK 0 none, 1 trace, 2 easy to see, 3 severe
Stigmena (leaf disease) STIG 0 none 1 trace 2 easy to see

Summary statistics

Number of trees planted was1,500 and trees assessed was 1,343.

	Average	Max	Min
Height(m)	4.97	8.5	1
DBH(mm)	74	203	10
Straightness	6.6		
Branching	1.9		

Malformation	8.2		
Acceptability	72%		
Canker	0.18		
Stigmena	0.79		

General Trial Impressions
Since last visit (2021) there has been a general increase in weeds, namely lupin, broom and blackberry which slowed down travel between trees (see picture below). More evidence of Canker and Stigmena infection was seen than previous visits. Timberlands has removed all of the Radiata regen from the trial.

Results

Using the data, The Cypress Development Group of the FFA will identify 12-15 candidates for future stoolbeds, and subsequent deployment and new trials. Once the selections are made, cutting material will be collected and sent to Southern Cypress for rooting.