

CHESTNUTS AUSTRALIA INC



BLIGHT UPDATE

- ❖ Agreement by CCEPP and NMG to undertake a 2018 Spring Survey
- ❖ CAI worked with Agriculture Victoria to develop the survey document
- ❖ CAI organized growers to assist with the survey
- ❖ Training session for 20 growers on the 10th October 2018
- ❖ Survey commenced on the 11th October and concluded in early November

SURVEILLANCE

- ▶ Industry volunteers will enhance surveillance staff numbers sufficiently to enable a longer examination period per host tree.
- ▶ Surveillance will target all chestnut properties within 1km of previous detections.
- ▶ Every host tree in a 5km radius of a location with high incidence will be examined.
- ▶ An extra year of surveillance will provide additional evidence for property freedom.

RESULTS

- ▶ **The expectation:**

“A combination of low incidence of disease (estimated at 1:1,000), potential for infected trees and low likelihood of detection (estimated at 50%) indicates that examination of 2,000 trees should reveal at least one infection. Under this plan nearly 17,000 trees will be inspected. Consequently, there is a high probability that 8 to 9 infected trees will be detected if diseased trees are expressing symptoms.”

- ▶ **The result**

ONE infected tree in 14,933 trees inspected across 72 properties.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Area
IP1	Inf 81	Inf 7	A or C	A or C	A or C	A or C	A or C	Clear	Clear			Eurobin
IP2	Inf 122	A or C	A or C	A or C	A or C	A or C	Clear	Clear	Clear			Ovens
IP3	Inf 189	A or C	A or C	A or C	A or C	A or C	Clear	Clear	Clear			Ovens
IP4	Inf 189	A or C	A or C	A or C	A or C	A or C	Clear	Clear	Clear			Porpunkah
IP5	Inf 1	A or C	A or C	A or C	A or C	A or C	Clear	Clear	Clear			Ovens
IP6	Inf 12	A or C	A or C	A or C	A or C	A or C	Clear	Clear	Clear			Wandilo Growlers Ck
IP7	Inf 40	A or C	A or C	A or C	A or C	A or C	Clear	Clear	Clear			Ovens
IP8	Inf 2	A or C	A or C	A or C	A or C	A or C	Clear	Clear	Clear			Wandiligong
IP9	Inf 9	A or C	A or C	A or C	A or C	A or C	Clear	Clear	Clear			Ovens
IP10	Inf 1, 7	A or C	A or C	A or C	A or C	A or C	Clear	Clear	Clear			Morses Ck Rd
IP11	A or C	A or C	Inf 1	A	Inf 1	A or C	A or C	Inf 2				Morses Ck Rd
IP12	A or C	A or C	A or C	A	Inf 1	A or C	A or C	A or C	A or C	A or C	Clear	Myrtleford
IP13	A or C	A or C	A or C	A	Inf 1	A or C	A or C	A or C	A of C	A or C	Clear	Morses Ck Rd
IP14	Clear	Clear	Clear	Clear	Clear	A	Inf 1	A or C	A or C			Eurobin
IP15	Clear	Clear	Clear	Clear	Clear	Clear	A	Inf 2	Trees destroyed		Clear	Eurobin
IP16	Clear	Clear	Clear	Clear	Clear	Clear	A	Inf 3				Ovens

IP17 - 2018

▶ IP17

- ▶ One infected tree - dead - removed - destroyed
- ▶ Three other dead trees - removed - destroyed
- ▶ One live tree - 50 metres from other trees - will be destroyed in the autumn by CAI
- ▶ AFTER THAT IP17 will be clear of chestnut trees.

BLIGHT UPDATE

- ▶ Blight is still contained to the original outbreak areas and the existing IP's have very strong linkages to the original heavily infected orchards;
- ▶ There are no heavily infected orchards left and it is highly unlikely we will ever find large numbers of multiple active cankers in an orchard again;
- ▶ It is also therefore highly unlikely that blight will ever be spread organically again;

BLIGHT UPDATE

- ▶ The risk of blight being spread by manual pathways is very low given the high biosecurity awareness in the industry over the last 8 years.
- ▶ That there is no credible scientific evidence to change the current 2-year latency period for chestnut blight
- ▶ Given the high classification of the organism *Cryphonectria parasitica* that all parties agree that eradication of the disease within Australia is still the ultimate objective.

GOING FORWARD

- ▶ Maintain the eradication program with a modified response plan through to December 2019 as part of the shared responsibility.
- ▶ Maintenance of the current quarantine and restriction areas through to December 2019.
- ▶ Ongoing program of inspection of trees particularly around IP11, IP15, IP16 and IP17 and the removal of any infected trees.

GOING FORWARD

- ▶ Removal of infected trees to be undertaken/managed by the Lead Agency under an agreed and acceptable programme designed and managed by the Lead Agency/Lead Industry and be cost shared under an agreed system.
- ▶ 2019 Spring surveillance under a slightly modified program based around the 2018 concept utilising the industry/lead agency partnership.
- ▶ Release of IP's 12, 13 and 14 based on the two years plus freedom.
- ▶ Acceptance that IP15 and IP17 while they are maintained in the 2019 survey are free of chestnut trees.

GOING FORWARD

- ▶ Community engagement and involvement program

“Establishment of a program to educate and encourage private landowners to undertake a program of inspection, reporting and removal of feral or unwanted and/or poorly maintained chestnut trees. (Potentially funded through another environment-based funding program.)”

- ▶ That any single infected trees on commercial chestnut orchards not be covered by Owner Reimbursement Costs.
- ▶ Chestnuts Australia Inc to be able to access the industry EPPRD Levy to assist with the employment of a biosecurity/surveillance person. (Support from other parties to fund the position particularly in the first year to be considered.)

GOING FORWARD

- ▶ Implementation of a research project to consider chestnut blight latent period

*“Given the uncertainty of the latent period and the unique position we have in Australia where we have not had a high inoculum source for at least five years, we are in an extremely valuable and unique position to conduct research to help clarify the latency period of *C. parasitica*.*

*Recent research in Africa on *Chrysoporthe* (Mausse-Sitoe et al., 2016) nicely demonstrated the endophytic ability of the fungus by collecting healthy branches from *Myrtaceae* trees, allowing those to gradually dry to stimulate sporulation. The authors found 39% of healthy trees were infected with *Chryphonectriaceae*.*

*If we conservatively estimate that only 1% of chestnut trees in Australia are colonised by endophytic *C. parasitica*, a sample of 1000 trees should yield 10 positive chestnut blight samples*

GOING FORWARD

- ▶ Implementation of a research project to validate LAMP as an identification tool.
CAI have held discussions with Brendan Rodoni and Jacky Edwards, AgVic) and they believe that undertaking such work on Chestnut blight is feasible.
- ▶ Implementation of a research project to test the use of technology to undertake of methods of surveillance.
- ▶ Trial work on potential chemical controls:
Chestnuts Australia Inc has discussed the concept of in vitro chemical testing with the senior SARDI pathologist, Dr Barbara Hall. The possibility is that SARDI could discuss and work with Agriculture Victoria on such initial assessments.

THANK YOU