

# The search for disease in Australian almond orchards



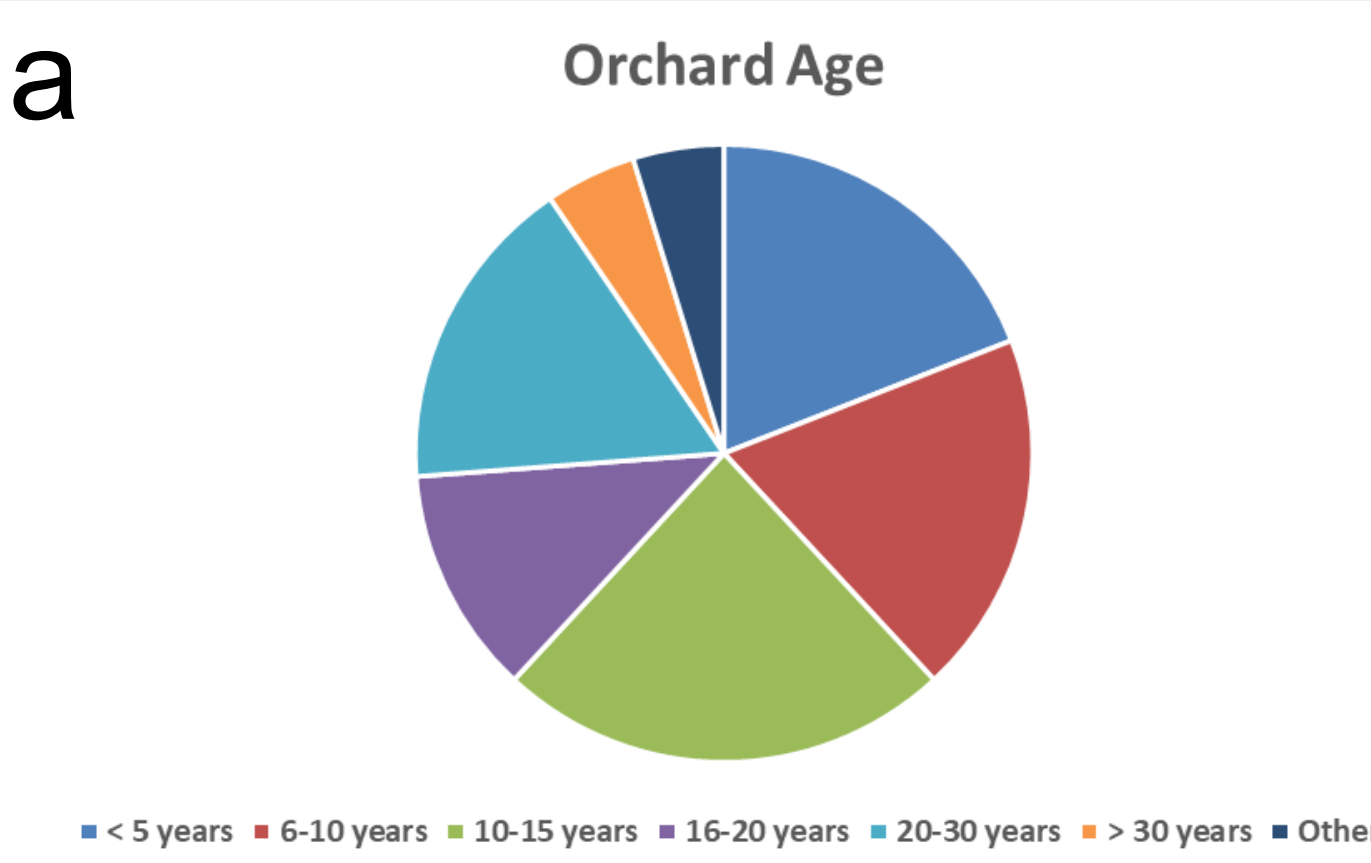
## AL16005 Almond Integrated Disease Management

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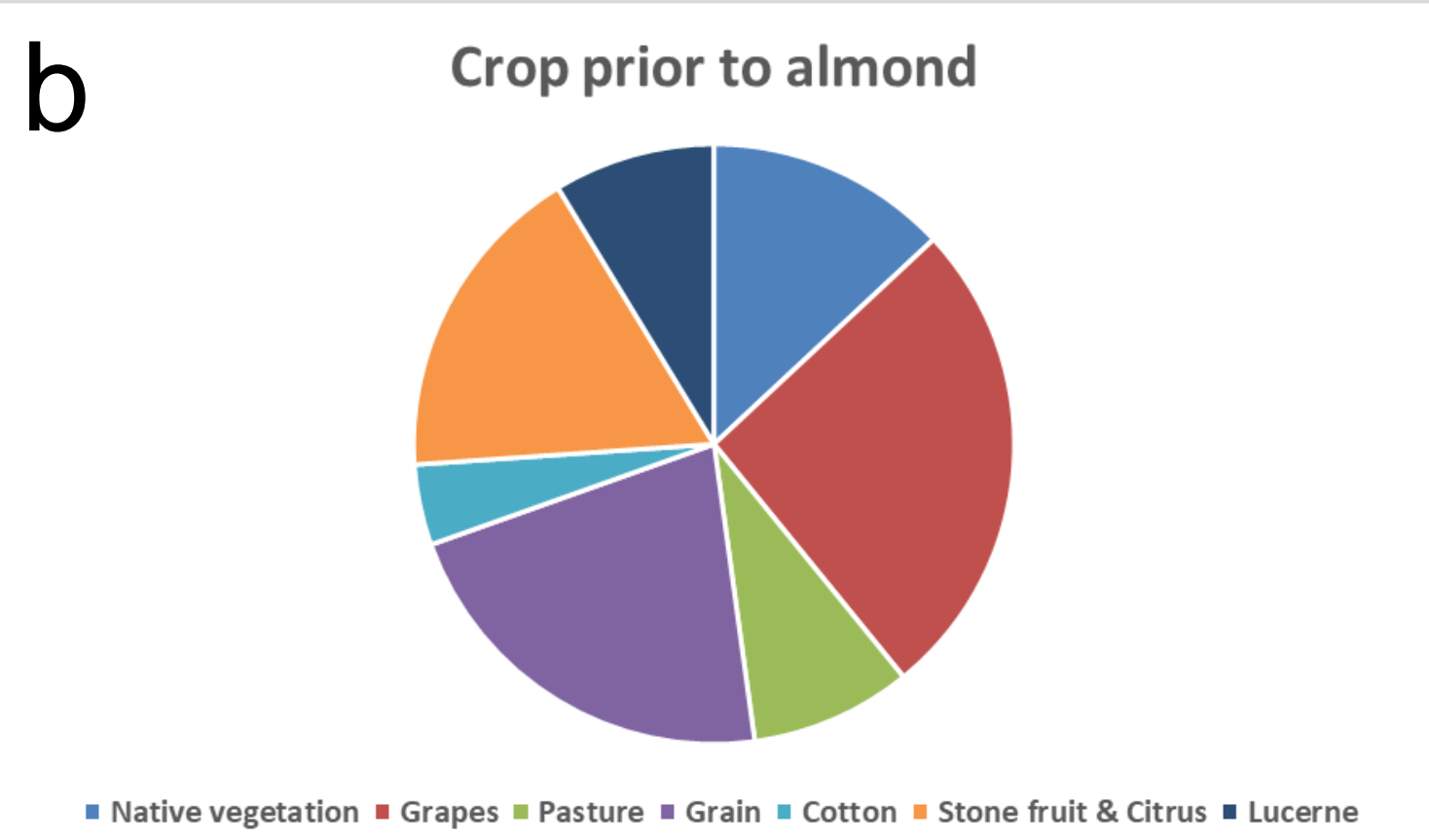
During the 2018-19 growing season surveys have been conducted throughout the almond producing regions. Initially an online survey was distributed to obtain background information on orchard profiles, grower practices and perceptions of their disease issues. The responses were used to assist us carrying out disease surveys in orchards to determine the prevalence of major almond diseases. The data presented below is from the Victorian, NSW and WA surveys.

### Grower census

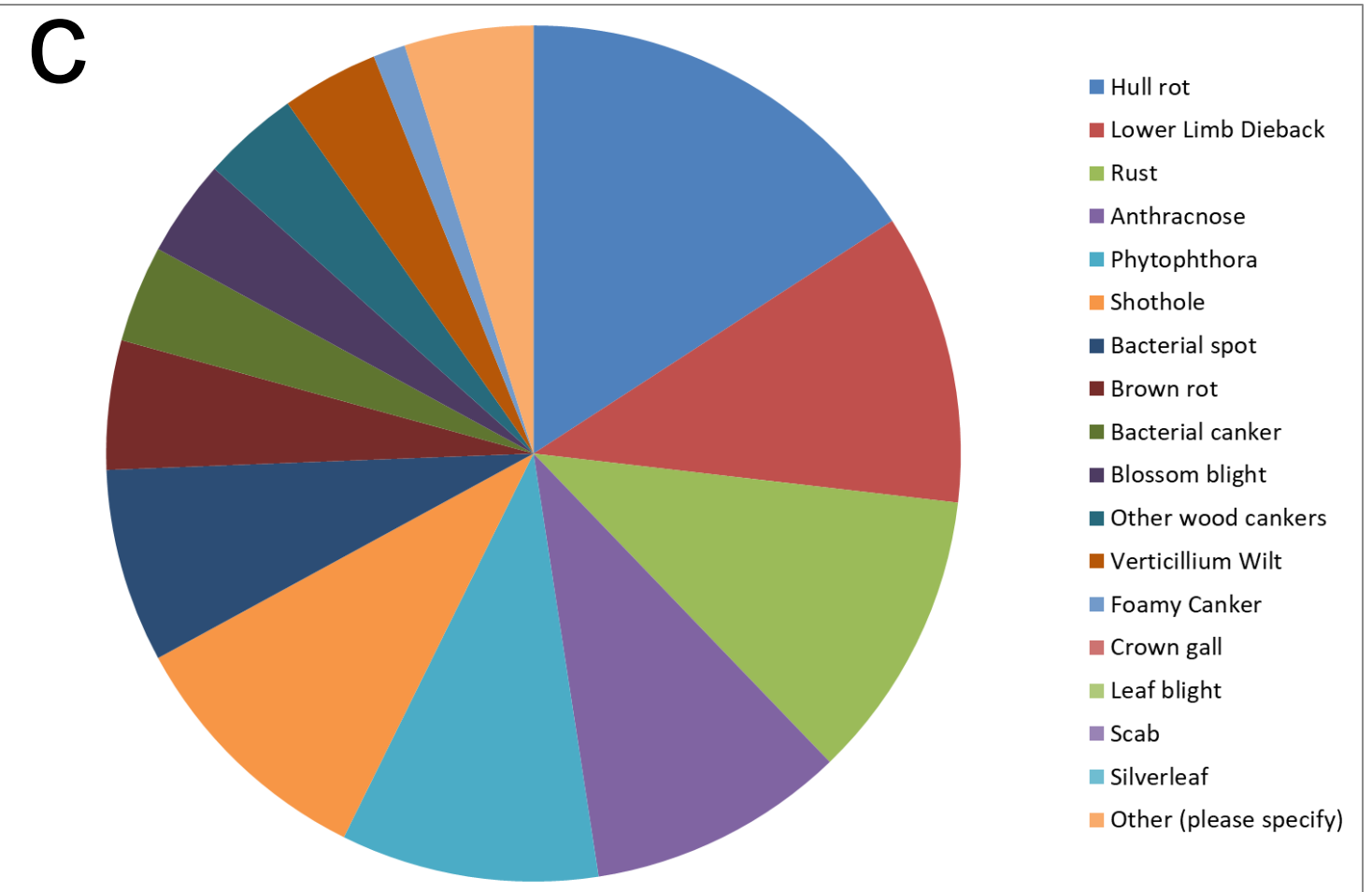
- A questionnaire was developed and distributed via Survey Monkey to all growers registered with the Almond Board of Australia to capture grower perceptions of their disease issues.
- Response to the census covered 6922 ha of almond orchards across the major growing regions, with 62% being plantings less than 15 years old (a).
- Nemaguard is the most popular rootstock and Nonpareil the major cultivar.
- Grapes, grain, stone fruit and citrus were the most common crops prior to planting almonds (b).
- The most commonly reported diseases were hull rot and lower limb dieback (c).
- Irrigation was predominantly by drippers (64%) then by sprinklers (28%).
- Orchard drainage was rated as excellent (50%), fair (35%) and poor (7%).
- The predominant soil type was sandy loam (71%).



Orchard age of grower census respondents



Percentage of responses for crop prior to almond



Almond diseases that respondents have



Hull rot was considered the most important disease

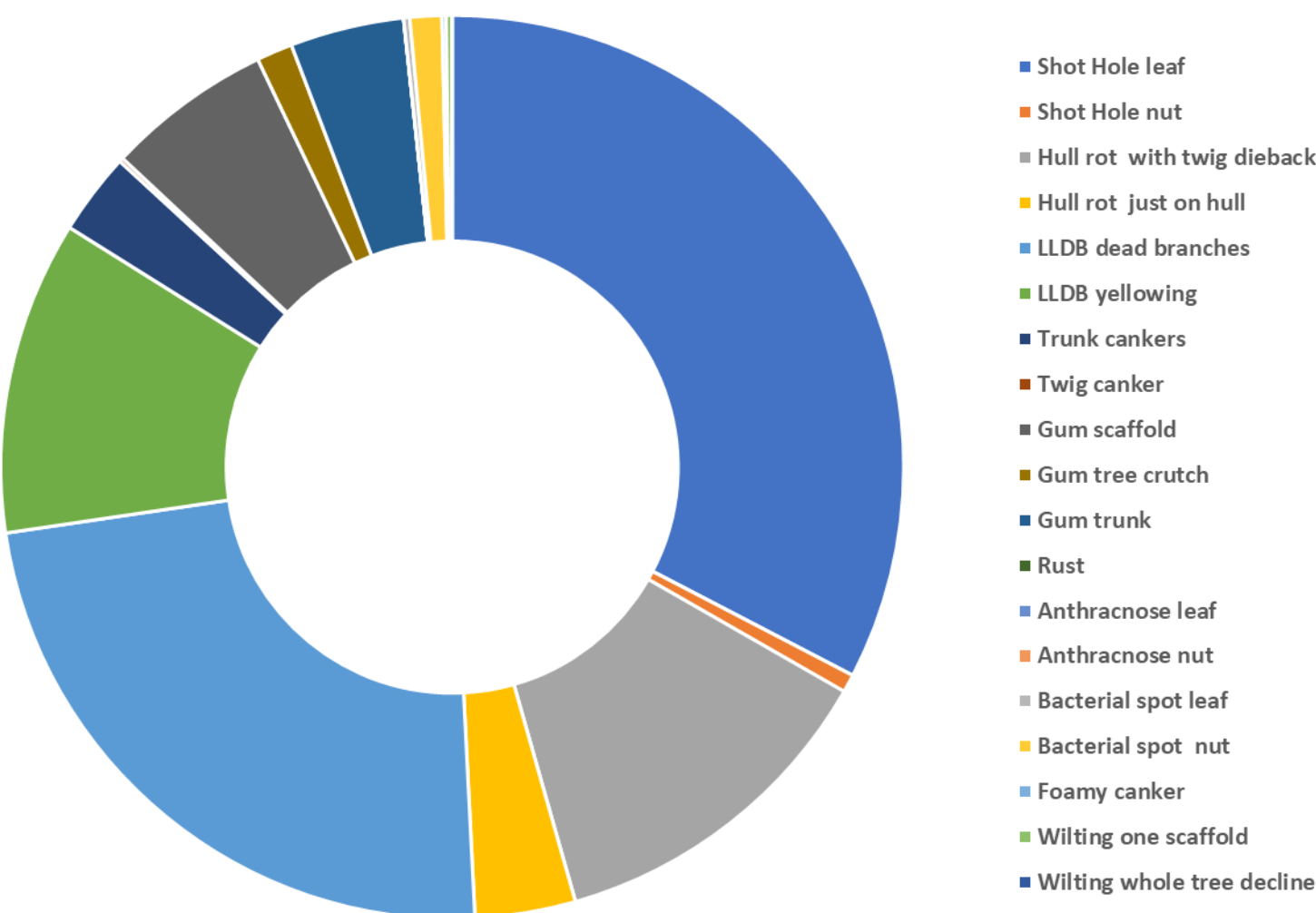


Lower limb dieback 2<sup>nd</sup> most important disease

### Disease survey

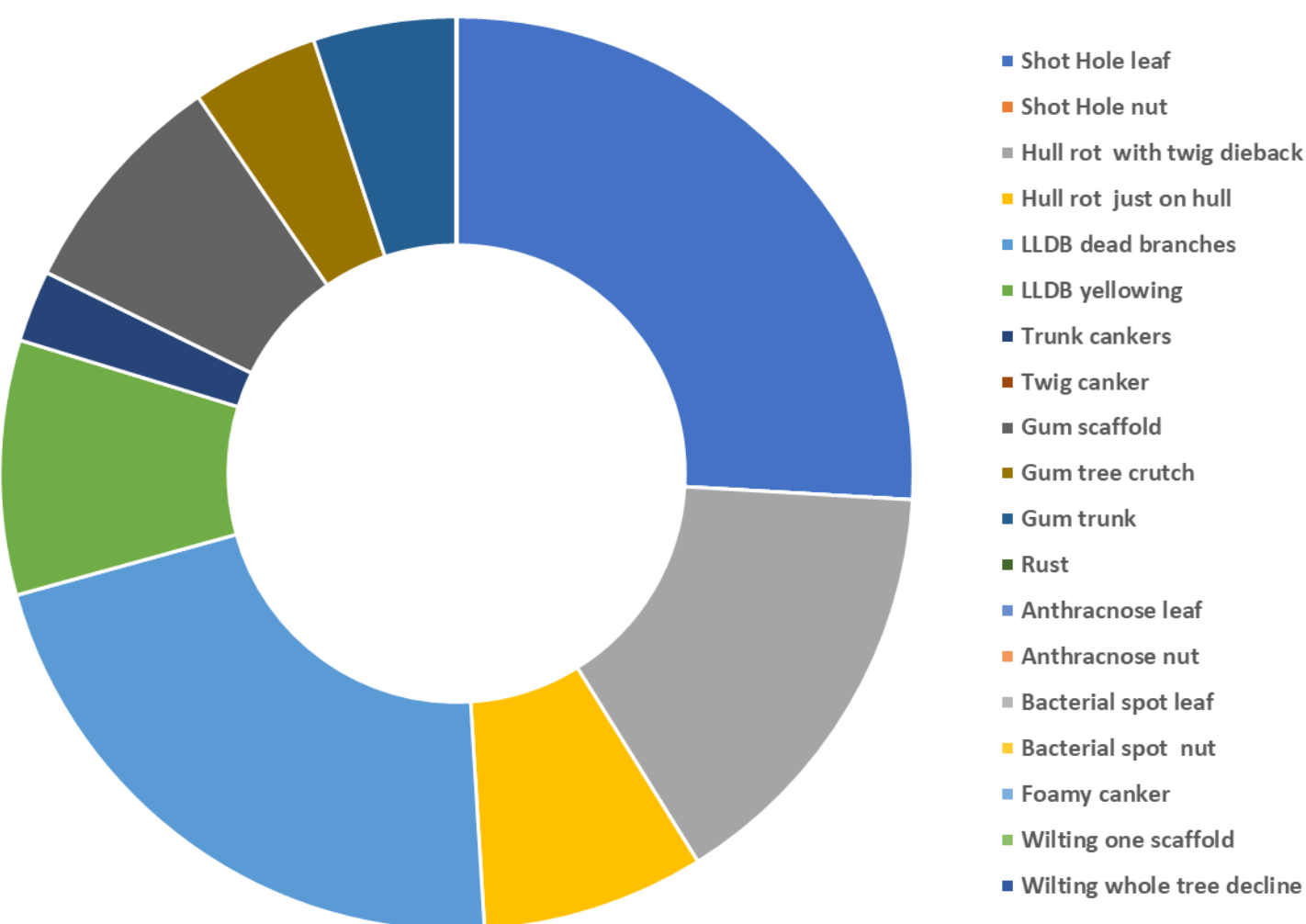
- These surveys began in November 2018 with visual assessment of foliar and trunk diseases.
- A second visual assessment was done in January/February 2019 for hull rot strikes and infected hulls.
- The survey consisted of NP (45%), Carmel (27%), Monterey (6%) and other varieties (4%) (Independence, Peerless, Fritz and Wood colony).
- Across Victoria, NSW and WA, a total of 744 trees were assessed. This represented 76 blocks across 15 orchards.

Victoria	
Number of orchards	11
Total area of orchards in survey	6322
Area surveyed	548
Number of blocks	53
Number of observations	568



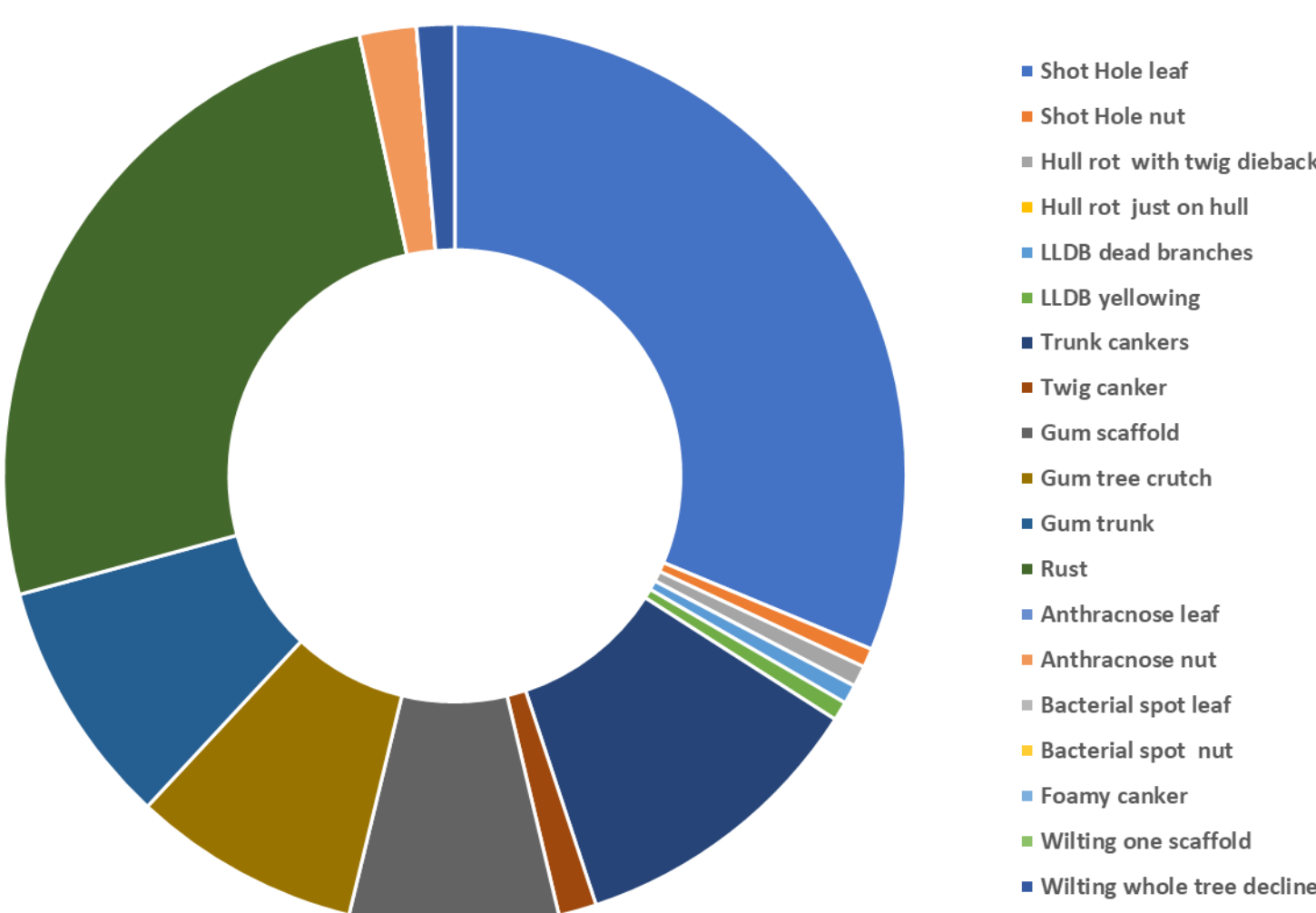
Prevalence of diseases across Victoria

NSW	
Number of orchards	3
Total area of orchards in survey	1600
Area surveyed	118
Number of blocks	17
Number of observations	123



Prevalence of diseases across NSW

WA	
Number of orchards	1
Total area of orchards in survey	800
Area surveyed	97
Number of blocks	6
Number of observations	53



Prevalence of diseases across WA

#### Acknowledgements

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Jobs,  
Precincts  
and Regions



This project has been funded by Hort Innovation using the almond research and development levy and funds from the Australian Government. For more information on the fund and strategic levy investment visit [horticulture.com.au](http://horticulture.com.au)