

What Almond Disease is that?

AL16005 Almond Integrated Disease Management.

During November 2018 and January/February 2019 we conducted industry-wide orchard disease surveys across Victoria, NSW, South Australia and Western Australia to identify the major diseases affecting Australian production systems. For several diseases, identification merely from visual symptoms can be misleading. Accurate diagnosis requires laboratory examination to determine the true causal agents. This poster gives examples of some symptoms with several possible causes: – gummy nuts, trunk and scaffold gumming, lower limb dieback, hull strikes.

Gum exuding from the fruit may be caused by bacterial spot, anthracnose, wounding by insects, response to physical damage. Can you tell these apart?



Anthracnose



Bacterial Spot



Not anthracnose or bacterial spot



Rhizopus

Not all hull strikes are hull rot. While the main pathogen is *Rhizopus stolonifer*, other fungi such as *Monilinia* sp. and *Aspergillus niger* could be involved.



Monilinia



Aspergillus



Gum developing on the trunk or scaffold may be indicative of *Phytophthora*, *Ceratocystis*, *Botryosphaeria* or Bacterial canker, all of which can infect through shaker or pruning wounds. Can you tell what each of these are? We can't, without further testing!



Dieback of lower limbs is very common. It has multiple causes - shading, canker diseases, water stress and severe hull rot infection, as well as lower limb dieback syndrome (LLD). The role of fungal pathogens in LLD is still under investigation.



Lower limb dieback syndrome



Lower limbs dying.