AWRI Australian Wine Research Institute

Fact Sheet
VITICULTURE

Grapevine Berry Inner Necrosis Virus (GINV)

Key messages

- Grapevine berry inner necrosis virus (GINV) has recently been detected in Australia, in table grape and rootstock varieties.
- There is currently no evidence of GINV in Australian wine grape varieties.
- GINV has been detected in wine grape varieties overseas.
- Management is based on good hygiene, control of GINV vectors (mites) and clean planting material, consistent with existing virus management practices.
- Do not panic. At this stage, monitoring and sensible risk management are the appropriate responses.

What is GINV?

Grapevine berry inner necrosis virus (GINV) is a grapevine-specific virus that can infect table grape, wine grape and rootstock varieties. There is no evidence that GINV causes vine death. GINV is not known to infect any other crops.

GINV was first described overseas in the 1980s and is established in parts of Asia. It has likely been present in Australia for some time and was recently detected through improved diagnostic testing.

Where has GINV been found in Australia?

To date, GINV has been detected in:

- Victoria
- Queensland
- South Australia

Australian detections have occurred in table grape and rootstock varieties, including vines showing no symptoms.

Does GINV affect wine grapes?

- In Australia, there is currently no evidence of infection in wine grape varieties.
- Overseas, GINV has been detected in some wine grape varieties and may cause foliage symptoms.

- The potential impact on vine yield, fruit quality or resultant wine sensory characteristics is not yet known.

What symptoms might be seen?

Not all infected vines show symptoms. Where symptoms occur, they can be variable and non-specific and may resemble nutritional disorders, other grapevine viruses, herbicide damage or damage to buds by grapevine rust mites (*Calepitrimerus vitis*) and grapevine bud mites (*Colomerus vitis*).

Possible vine symptoms include:

- Delayed or uneven budburst
- Leaf mottling, yellowing or mosaic patterns (Figure 1)
- Reduced vigour or restricted shoot growth (Figure 2)
- Shortened internodes or zigzag shoots
- Smaller leaves
- Internal necrosis of shoots (Figure 3)

Fruit symptoms (reported mainly in table grapes overseas) may include:

- Compact bunches
- Smaller berries
- Uneven ripening
- Internal browning of berries (sometimes without external symptoms)

How does GINV spread?

GINV spreads through:

- Infected propagation material
- Grafting using infected vine material
- Grapevine erineum mite or blister mite (*Colomerus vitis*)

There is no cure for GINV once a vine is infected.

The virus is not known to spread directly by machinery, on cutting implements or people, but may be carried in infectious mites that travel on plant material, equipment, tools, clothing or footwear. Infectious mites can also be dispersed within and between vineyards by wind. Good hygiene practices reduces this risk.

Figure 1. Leaf mottling, yellowing and mosaic patterns associated with GINV in table grape vine pre-flowering.

Figure 2 Reduced vigour and restricted shoot growth associated with GINV in table grape vine pre-flowering.

Figure 3. Internal necrosis of shoot associated with GINV in table grape vines at EL 17 – EL 29 (12-16 leaves separated).

What growers should do now

For wine grape growers, current recommendations are precautionary and consistent with good vineyard practice:

1. Maintain vineyard hygiene
   - Follow 'clean in, clean out' practices
   - Clean machinery, equipment, tools and footwear to remove all soil and plant material after working in blocks showing GINV-like symptoms
2. Use clean planting material
   - Source certified, virus-tested propagation material
   - Avoid sharing or exchanging propagation material that has not been tested for GINV
   - Keep records of vine material sources
3. Manage mite vectors
   - Monitor and manage mite populations using Integrated Pest Management (IPM) principles
   - Protect beneficial predatory mites by:
     - Avoiding disruptive sprays such as (emamectin, spinosad, mancozeb, pyrimethanil and high rates of sulfur), and
     - Supporting biodiversity with groundcovers like native grasses, clovers and flowering species to provide habitat
   - Only use chemical control if needed, and apply the right product at the correct timing for the target mite species, following label directions and AWRI Dog book guidelines
4. Monitor, don't overreact
   - Monitor vines for GINV-like symptoms throughout the season, especially around flowering
   - Tag and track suspect vines and watch for changes over time or spread to neighbouring vines
   - Do not rely on visual symptoms alone, laboratory testing (see below) can confirm GINV infection

What to do if you suspect vines may be infected by GINV

- Do not remove vines based on symptoms alone
- Photograph and record suspect vines
- Arrange laboratory testing as soon as possible through an accredited lab (see below)
- Test for a range of grapevine viruses, not just GINV
- Once GINV is confirmed, remove infected vines promptly, ensuring as much of the root system as possible is removed
- Monitor adjacent vines (on either side) closely for new infections at around flowering each season

Testing and support

Virus testing is available through accredited laboratories, including state agriculture departments.

Virus testing can be undertaken at:

- Agriculture Victoria
  Phone: (03) 9032 7515
  Email:
  chs.reception@agriculture.vic.gov.au
- DPIRD Diagnostic Laboratory Services
  Phone: 08 9368 3351
  Email: DDLS@dpird.wa.gov.au

Check with laboratories for recommended sampling, packing and submission requirements to ensure accurate analysis.

Bottom line for wine grape growers

GINV is a newly detected virus in Australia, but there is currently no evidence it is affecting wine grapes locally. The most effective response is to continue following best practice biosecurity and farm-gate hygiene practices: clean planting material, good vineyard hygiene, vector management and regular vineyard monitoring.

More information

- PIRSA GINV website:
  https://www.pir.sa.gov.au/ginv
- Plant Health Australia GINV Fact Sheet:
  https://www.planthealthaustralia.com.au/new-factsheet-supports-awareness-of-grapevine-berry-inner-necrosis-virus/
- Vinehealth Australia GINV information:
  https://vinehealth.com.au/2026/04/gin-virus-detection/
- EcoVineyards Mite control Fact Sheet:
  EcoVineyards-fact-sheet-Biocontrol-of-common-Insect-pests-bud-blister-and-rust-mite-FINAL.pdf
- NSW DPIRD Managing Vineyard Pests Fact Sheet:
  https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0010/110998/managing-vineyard-pests.pdf
- Vinehealth Australia Farm-gate Hygiene Resources:
  https://vinehealth.com.au/tools/farm-gate-hygiene/

Contact

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