Australian Vine Quality Standards Scheme - Vine Assurance:
Australian Grapevine Propagation Material Standard



FINAL REPORT to
GRAPE AND WINE RESEARCH & DEVELOPMENT CORPORATION

Project Number: **GWR 1002**

Principal Investigator: **Peter Hayes**

Research Organisation:

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GWRDC Project Number: GWR 1002

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Abstract:

This project was directed to development of an Australian Standard for Grapevine Propagation Material (AS 5588-2013) encompassing the definition of specifications and guidelines related to the health status; origin, source and traceability; and the authentic, valid naming of grapevine propagation material. This standard is now available for vine improvement organisations and vine nurseries to use as a basis for quality assurance for their customers. To purchase a copy of the standard, visit www.saiglobal.com/shop

Executive Summary:

The project was initiated by the Wine Grape Growers' Association (WGGA) and the Winemakers' Federation of Australia (WFA) with the project funded by GWRDC.

Working within the framework of Standards Australia an Australian Standard for Grapevine Propagation Material (AS 5588-2013) was developed by an Australian Standards Technical Committee, FT-036, comprised of representatives from the key national industry bodies related to wine grapes, wine, vine improvement and vine nurseries in addition to representatives from Wine Australia, Grape and Wine Research and Development corporation (GWRDC), CSIRO Plant Industry, the Department of Agriculture, Fisheries and Forestry (DAFF) and the Australian Society of Viticulture and Oenology (ASVO) along with a representative of the Consumers' Federation of Australia.

The standards document is intended to be practical and does not set impossible goals. The contents of the Australian Standard are based on consensus within the committee which has established specifications and procedures designed to ensure grapevine propagules-cuttings, rootlings, grafted vines and micropropagules-are correctly named, of identified origin and have defined health status and physical specification such that they are capable of reliable and consistent performance.

Being based on sound current industry, scientific and consumer experience, the standard should not be seen as a fixed document but warrants ongoing review to ensure that it keeps pace with new research, technologies and industry experience.

The Australian standard may be deployed by industry leadership bodies as a central plank in promoting the importance of varietal authenticity and viticultural performance for the longer-term wellbeing of the Australian viticulture industries. The use of this standard will also provide further security and assurance regarding varietal identity when promoting to customers and consumers and will better enable compliance with expectations of truth in labelling of end products beyond the vine such as wine.

For individual business to business transactions, use of the standard should contribute substantially to confidence in the varietal integrity and potential performance of grapevine planting material and minimise risk to productivity and quality or grapes and wine in both the short and longer-term.

More broadly the availability of this standard should also provide a base from which to focus future research and developmental efforts to improve vine quality, vineyard

productivity and reliability, and further enhance the reputation of Australian producers for their authentically identified wines (as varietally named wines or components of wines), of distinctive and very high quality.

Confidence in the identity, and related inherent performance characteristics, of established and so-called "emerging", rediscovered or novel varieties will also assist growers and the industry in adapting their selection of varieties to meet the anticipated challenges of

- natural resource limitations (e.g. temperature and water stress or supply limitations),
- pests and disease pressures and trends to reduce chemical inputs, and
- the likely market demand for adapted (e.g. lower alcohol wines) and novel products

Promotion of the availability and benefits of Australian Standard for Grapevine Propagation Material (AS 5588-2013) might best be directed to industry key bodies, notably WGGA and WFA for consideration regarding benefits to their members including potentially via incorporation into supply contracts. In parallel, promotion should be undertaken to vine improvement and vine nursery organisations (respectively AVIA, and VINA and relevant state bodies) such that they are better able to support their members in delivering promotable benefits to their customers.

In the international context, the standard shall add legitimacy to the argument for the development of a rationally framed international protocol and agreement to resolve the challenges of distinguishing varieties and correctly identifying and naming grapevine varieties. This will strongly support international exchange of grapevine varieties and help underpin the appropriate study of varieties and their characteristics and in turn ensure their effective deployment in production, marketing and breeding programs. Considerable potential exists to enable this Australian Standard to underpin the development of an influential international standard.

Following a period of 2 years use and in anticipation of advances in molecular studies and related protocols for distinguishing varieties, together with likely developments in scientific knowledge and its application in vine health and nursery sanitation techniques, the standard should undergo rigorous review and updating.

Background:

The Australian Wine Industry has over the past 15 years established a significant position in the global wine trade. However, its underlying profitability and sustainability are under severe challenge arising from the competitive responses of established and emerging producer countries, many of which have better access to and assurance of the qualities of preferred planting material. Our future competitiveness and profitability will depend in large part on access to quality assured germplasm with a likely need for ongoing diversification in varieties.

We suffer considerable uncertainty and risk in our viticultural base. Our range of varieties is based generally on very-long established grapevine varieties often of uncertain lineage and provenance. There is no national set of standards for planting material that enables the consumer to be sure of what the health status of their planting material is or indeed if the material is what it is claimed to be. In fact, there is no national or international consistent

nomenclature or officially recognised type source material and given the demands of Wine Australia's Label Integrity Program, particularly when relating to claims of the varietal components of wines, serious attention to these matters is warranted.

This uncertainty and risk centres around issues of

- Phytosanitary status
- Origin, source or provenance and its traceability
- Nomenclature and assurance of validity in variety/cultivar naming and clonal identity
- Horticultural/viticultural soundness of propagules distributed from quarantine, collections or nurseries.

The somewhat connected issue of the role of a national variety collection whether for research, breeding or for biosecurity purposes is under current review and discussion but final resolution is yet to be achieved; the development of a standard will likely help focus on some of the underpinning issues, especially those related to distinctiveness of individual varieties and authenticity of their naming.

The approach undertaken in this project was to facilitate the development and delivery of the Australian Vine Quality Standard**,** now the ***Grapevine Propagation Material Standard AS 5588-2013*** separately contracted between the GWRDC and Standards Australia, and its linkage with the discrete CSIRO Plant Industry project regarding a Variety Test-Protocol interacting with appropriately selected international variety databases.

Thus the original **Objectives** defined for this project were;

- To facilitate the development of an Australian standard for planting material that guarantees source, traceability, health status and authenticity; the Australian Vine Quality Standard, now termed ***Grapevine Propagation Material Standard AS 5588-2013***

- To satisfy Standards Australia's Part A Criteria for New Project Registration in defining the Relevance, Values, Duplication and Timeliness issues and by demonstrating positive Net Benefit to the community as a whole.

- Subject to support of stakeholders at the initial stage of the project, address Standards Australia's Part B Criteria for Final Process Approval through consultation and development activity between industry representative bodies for the supply chain, including national vine improvement (AVIA), national vine nurseries (VINA), industry representative bodies, WGGA and WFA. Wine Australia involvement is to be targetted, as is collaboration with ADFA and ATGA to achieve a harmonised approach to the issue of standards for grapevine planting materials
- Ensure effective linkage with the project to develop a Variety Test-Protocol interacting with an International germplasm database such as the International Variety Database and thereby underpin the standard.

Project Aims and Performance Targets:

Year 1	Output	Target Date dd/mm/yy	Activities
a	Broad support for establishment of an Australian Vine Quality Standard	30/06/11	Consultative meetings January, May, August 2010. Securing of letters of support for the project and nomination of candidates as representatives to Technical Committee and potentially of Chair.
b	Industry supported submission of the case for developing an Australian Vine Quality Standard	30/06/11	Working group of Technical Committee to develop a case for a standard respecting issues of scope; need and urgency; options apart from a standard; net-benefit analysis; identification of all stakeholders; obstacles to consensus.

Year 2	Output	Target Date dd/mm/yy	Activities
a	Submission of project proposal to Standards Australia	31/07/11	A "Table of Contents" and a separate "Scope of Works and Guiding Material for Drafting of the Standard" submitted to Standard Australia for approval.
b	Agreement from Standards Australia to accept a request for development of a Standard	31/08/11	Review and respond to Standards Australia comments or questions to ensure Standards Australia approve project for contracting.
			Negotiate agreement to allocate Project Manager from Standards Australia to the committee.
c	Draft set of standards developed for circulation by Standards Australia	31/01/12	Receive and consolidate/harmonise/adapt current protocols and guidelines.
			Respond to Standards Australia comments or questions and those from broader community. This will include holding a national consultation meeting with Standards Australia guided consultative committee.
d	Submit agreed final draft set of Standards to Standards Australia	31/05/12	Refine circulated draft in consideration of feedback and submit after approval by Technical Committee and the National Grapevine Biosecurity Committee.
e	Facilitate the interaction of CSIRO Plant Industry in an international "type reference" collaborative project with California and Europe	30/06/12	Facilitate the initiation of an international "type reference" project between Australian, USA and European groups and ensure effective links with Standards Australia project.
f	Finalise project outcomes with key interested parties	30/06/12	Conduct a concluding report and workshop with key elements of industry and its vine supply service sector
g	Final report to GWRDC	30/06/12	Final project report to GWRDC summarising all aspects of Standards Australia project

Progress on this project was delayed as GWRDC in 2011 sought re-endorsement from key industry stakeholders regarding the priority and purpose of a standard.

This delay together with delays in effectively engaging Standards Australia and attaining a contract between GWRDC and Standards Australia saw the project extended over the subsequent financial year with most work, barring final editorial and stakeholder voting for the standard, completed by June 2013.

Final editing in July and August 2013 and ballot of the Technical Committee representatives saw the standard published 12th September 2013.

Method:

Discussions in early 2010 with key industry bodies including WGGA, WFA, GWRDC, AVIA, Adelaide Hills Vine Improvement, NVHSC and CSIRO Plant Industry provided a basis on which to progress. Brief discussion was undertaken with Wine Grapes SA and with SAVI, to whom copies of the Preliminary Research Proposal were also sent; their initial response was supportive.

Likewise discussion was undertaken with DAFF and Wine Australia to ensure their support and intention to be engaged in the process.

At the outset a working group had been established by WFA and WGGA to:

- Establish a peak policy body for vine improvement.
- Identify mechanisms for ensuring support for the new organization
- Development Australian standards for planting material to then be progressed formally through Standards Australia.

AVIA endorsed the project proposal at its meeting held on 18 January, 2010 and attended by representatives from MIAVIS, Barossa, Adelaide Hills, and VAMVVIA.

A review was undertaken of the supply chain for grapevine propagation material and current standards applicable or relevant to grapevines; this was used to inform the focus of the project and for orientation of members of the Technical Committee.

After contracts were exchanged the Technical Committee was formed and operated under the guidelines and protocols of Standards Australia, working towards a consultative and consensus based outcome.

The Technical Committee was comprised of representatives of;

- Australian Society of Viticulture and Oenology
- Australian Vine Improvement Association;
- Consumers Federation of Australia
- CSIRO Plant Industry
- Department of Agriculture, Fisheries and Forestry
- Grape and Wine Research and Development Corporation
- Riverland Vine Improvement Committee
- Vine Industry Nursery Association
- Wine Australia
- Wine Grape Growers Australia
- Winemakers Federation of Australia

Results/Discussion:

The Committee worked harmoniously and effectively in consolidating its approach and, where relevant, consulting with others from nominating organisations.

Some difficulties arose in defining whether the appropriate approach should be "Normative", prescriptive in form or "Informative", advisory in its approach and following considerable interaction with Standards Australia, a combination approach was adopted.

The current form allows ready adoption of informative guidelines or protocols to be adopted in annex form as circumstances require and new information arises. On the other hand, the core Standard although not entirely in this form, is more "Normative" in its approach and should be subject to formal review and agreement through a future Technical Committee to assess newly emerging knowledge and consider evolution of industry practice.

Outcome/Conclusion:

An Australian Standard, **AS 5588-2013 Grapevine propagation material** was published by Standards Australia via SAI Global on 12th September 2013. See; **http://infostore.saiglobal.com/store/Details.aspx?ProductID=1674947**

Over the next few years it is expected that considerable progress will be achieved in the development of molecular technologies with potentially great impact on the capacity for distinguishing varieties and similarly with technologies for characterising vine pathogens that have substantial impact on vine performance in the nursery and in the vineyard. Ongoing monitoring of this progress and review and adaptation of the standard will therefore be required to retain its currency and relevance.

Recommendations:

- The standard should be actively promoted to all players in the grapevine propagules supply-chain.
- Proposals for R&D and industry extension/promotion efforts around vine identity and vine health and performance be referenced against the standard AS 5588-2013, in order to model priority and assess the potential impact of such work
- The standard should be used as the basis for Australian effort via international organisations such as the OIV to establish effective protocols for distinguishing and identifying grapevine varieties and their accepted authentic names.
- Potential to utilise this standard as a basis for an International Standard for grapevine propagation material should be further evaluated
- The standard should undergo rigorous review and updating after a 2-year period of use and ongoing evaluation; particular account should be taken of;

- The CSIRO Plant Industry led project ***CSP 1102 Grapevine type reference pilot study*** *and* Information being generated by the recently convened Trunk Disease Action Group

Appendix: Communication

GWRDC prepared and distributed a press release at the point of publication of the standard.

Industry representative bodies were periodically updated on progress of the project via activity of their representatives.

A number of meetings with industry groups were undertaken and occasional industry press reportage occurred relating to the project.

Appendix: Intellectual property

The intellectual property from this project resides with Standards Australia via SAI Global.

Appendix: Staff

Peter Hayes: Standards Australia Technical Committee FT-036, Chairman
Richard Hamilton; Drafting Leader
Numani Weerasuriya; Standards Australia Project Manager
Technical Committee Representative Bodies and Nominees:

- Australian Society of Viticulture and Oenology; Dr Mark Krstic
- Australian Vine Improvement Association; Hilary Davis, Prue Henschke
- Consumers Federation of Australia; John Furbank
- CSIRO Plant Industry; Dr Rob Walker
- Department of Agriculture, Fisheries and Forestry; John Power
- Grape and Wine Research and Development Corporation; Dr Liz Waters
- Riverland Vine Improvement Committee; David Nitschke
- Vine Industry Nursery Association; Paul Wright
- Wine Australia; Steve Guy
- Wine Grape Growers Australia; Dr Richard Hamilton
- Winemakers Federation of Australia; Tony Battaglene