

Rules and regulations on the move

THERE HAS BEEN lots of movement with Australian winemaking and labelling legislation, which is causing a great amount of discussion within the Australian wine community. Here are some of the issues currently being directed to The Australian Wine Research Institute's (AWRI) health and regulation information manager Creina Stockley.

Change in minimal alcohol content of wine in Australia

The minimum alcohol content permitted for wine and sparkling wine produced in Australia has been reduced from 8 per cent (80mL/L) to 4.5% (45mL/L) alcohol/ volume. This will allow lower alcohol wine made according to Standard 4.5.1 to be simply labelled as wine.

It does not, however, apply to wine made in New Zealand, or to wine imported into Australia and New Zealand. Note that this may create confusion of standard wine drink size volumes. For example, a standard drink for a wine at 4.5% alcoholic volume is 278mL (a 750mL bottle will contain only 2.7 standard drinks). This is compared with a standard drink for a wine at 18% alcoholic volume, which is 70mL (a 750mL bottle will contain 10.7 standard drinks).

CMC is now a permitted additive for winemaking in Australia

Sodium carboxymethyl cellulose (CMC) is now a permitted additive for wine and sparkling wine production in Standards 4.5.1 (Wine production requirements) and 1.3.1 (Food additives). Sodium CMC or cellulose gum is a polysaccharide, obtained as modified cellulose from plant fibres. It stabilises wine by inhibiting the formation of tartrate crystals and their subsequent precipitation, by acting as a protective colloid that attaches to the surface of dissolved potassium hydrogen tartrate; it has limited effects on calcium tartrate. It is permitted at a level reflecting good manufacturing practices.

Sodium CMC is also a permitted additive for wine and sparkling wine in the European Union (Regulation EC 606/2009).

Electricity consumption for the process of cold stabilisation amounts to approximately 32% of all winery electricity usage. Winemakers have expressed a great deal of interest in additives that circumvent the need for cold stabilisation; thereby decreasing energy consumption, minimising processing operations, and also reducing the carbon footprint.

Other than CMCs, a number of other products are also commercially available (their compositions differ, although they also act as crystallisation inhibitors). These include meta-tartaric acid and products derived from yeast mannoproteins.

In the winemaking process, each type of product can have advantages and disadvantages. Winemakers are urged to investigate the suitability of each product thoroughly prior to use. Much of the existing development work has been carried out in Europe; grape and wine composition can vary and winemaking techniques are also different. Ageing of wines on lees in barrels can give wines a higher level of tartrate stability. There is also a tendency in Europe to age and store wines in cellars at cooler and more stable temperature conditions. Various claims are being made about the impact on final wine quality and, ultimately, how stable the wine is likely to be. The dangers of tartrate deposits in finished wine are obvious, and wine samples with tartrate deposits make up 25% of all samples submitted to the AWRI's winemaking services team each year.

The use of these products is always a point of discussion at the AWRI's seminar presentations. Winemakers are currently



asking about the effectiveness and use in winemaking of CMCs and other products.

The AWRI Commercial Services are launching a performance benchmarking trial over the next few months to assess the performance of CMC and other products as a viable alternative to tartrate stabilisation to address these questions. Wineries interested in being involved in this study should contact the AWRI.

Egg and milk allergen labelling pending requirement for wine in the European Union this year

On 25 November 2005, the European Union (EU) introduced mandatory allergen labelling. Wine was granted a permanent exemption from labelling for isinglass (fish), and a temporary exemption for casein (milk), and egg albumin and lysozyme (egg). This temporary exemption granted for wine will expire on 30 June 2012.

From this date, wine fined using milk or egg derivatives (casein or albumin, respectively) or to which lysozyme has been added and that are still present in the finished product will require a labelling declaration in order to be marketed in the European Union.

The wording will be: "contains..." followed by the name of the allergen. Acceptable examples include: "contains milk", "contains milk proteins", "contains casein (milk)", "contains milk (casein)". "contains egg", "contains egg proteins", "contains albumin (egg)", "contains egg (albumin)", "contains lysozyme (egg)", and "contains egg (lysozyme)".

It is not possible to use alternative expressions such as "may contain", etc. The statement will need to be translated into the language for each member state where the wine may be sold. The EU has provided a document outlining which languages are accepted in each member state, however, official translations have not vet been published. This information will be distributed as soon as it is available and will be updated in Wine Australia's European Union Export Market Guide. In the case of existing stocks, products labelled prior to 30 June 2012 will be exempt from the mandatory labelling of allergens until the stocks are exhausted.

Ask the AWRI is a monthly column, which focusses on viticulture and oenology issues in alternate months. AWRI winemaking and viticulture specialists are available to help Australian wine and grape producers. Call on 08 8313 6600 or email at winemakingservices@awri.com.au