The Communications Issues for Producers of Alternative Closures in the Wine Industry

By Damien Wilson and

Professor Larry Lockshin

Abstract

A number of closures are available for sealing wine bottles in today's market. This situation is a marked change from the unique option of the natural cork, which was the only commercial option, up until 10 years ago. Godden's (2002) findings suggest that alternative closures to cork can be used reliably, but consumers are believed to favour the natural cork. The trade, distributors, retailers and hospitality industries are caught between the two alternatives of natural cork or alternative closures (Wilson and Lockshin, 2001). We briefly outline the advantages and shortcomings of the natural cork closure according to existing knowledge. Based on this information, a preliminary study of the wine trade's perceptions of alternative closures were presented by Wilson and Lockshin (2001). In light of the findings by Godden (1999, 2002), Anderson (2003) and others on the technical reliability of alternative closures to natural cork, the finding that the wine trade perceives alternative closures to be poorer alternatives to natural cork is surprising (Wilson and Lockshin, 2001). Wilson and Lockshin (2001) suggested that a poor communication strategy on behalf of alternative closure producers is the most likely reason for this perception. This study defines the need to communicate the benefits of selected alternative closures to the members wine distribution channel that lack knowledge of the closures' advantages over natural cork, along with suggestions on communication strategies.

Introduction

Producers want their wine to be presented to the consumer in the best condition possible. Consumers want wines to be in the condition that allows the wine to be enjoyable. However, natural cork has several faults that can lead to a reduction in wine quality. There has been increased investment and interest in the development of alternative closures, as an alternative to using natural cork to seal bottles of wine. Alternative closures have many supporters, but in order for any product to have market success, all parts of the distribution channel must be aware of the problems and the benefits of the product, to be able to empower the consumer with information (Simchi-Levy, Kaminsky and Simchi-Levy, 2000). Therefore, the producers of alternative closures need to know the distribution channel's perceptions of synthetic closures, in order to determine the appropriate communication strategy.

This paper discusses the perceptions of cork and synthetic closures by members of the distribution channel, and identifies the communications strategies that could be put to best use by the alternative closure producers, to their potential advantage. The paper is organised as follows: The first section discusses the technical problems of cork, and the history and problems that have dogged the alternative closure industry. Secondly, details are provided of the on-going technical trial of closures conducted by the AWRI. We then discuss the impact that the findings of this research may have on perceptions of wine bottle closures. The third section details the communications options available in light of the facts provided. Finally, the marketing implications are provided, with an identified course of action based on the conclusions of this paper.

Background for Wine Bottle Closures

A closure is part of the medium for communicating visual, audible and tactile information to the consumer about a product (Brody and Meyers, 1997). A perfect closure for wine bottles would fulfil three requirements. The closure must be useful for marketing purposes; it would meet all technical requirements and be cost effective (Deves, 1997). All types of closure aim to prevent the contents from spoilage and indicate evidence of tampering. No existing wine closure can presently satisfy all of these requirements under all conditions.

The closure has been shown to have little influence on the consumer's decision to buy a bottle of wine (Corkmasters, 2002a). The closure may be observed prior to purchase if there is something unusual about it [e.g. the screw-cap or coloured cork], but a closure obscured under the capsule will not be seen until the bottle is consumed. Therefore, the closure is only part of the first purchase decision when it can be observed before purchase (Wilson and Lockshin, 2001). However, once the consumer has had the opportunity to consume the product, an assessment may then be made, which is only likely to affect future purchasing habits if the product was determined to be different in some way to what was expected, particularly if the original purchase led to an unsatisfactory consumption experience.

Natural Corks

The natural cork used for bottling wine is the bark of the tree *Quercus Suber*. The cork makes an effective bottle seal over for extended periods, and has been used for maintaining an integral closure for wine bottles for over 300 years. The cork is resilient, flexible, plentiful and, in the best examples, moisture-proof with an airtight seal.

However, Halliday and Johnson (1994) outlined a variety of different intrinsic and extrinsic faults attributable to natural cork as technical issues (Halliday and Johnson, 1994), and these were summarised by Murray and Lockshin (1997) as cork taint [a specific flavour imparted by infected corks], inconsistent quality [leading to oxidation], crumbling of the cork, leakage of wine, all of which lead to increased risks of a poor purchase and even more so for cellaring expensive wines. These physical attributes of cork do not provide much guidance for consumer or trade perceptions about cork or cork alternatives.

A natural cork is also given a useful period of life of approximately twenty to twenty-five years before bottle re-corking would be considered prudent practice (Halliday and Johnson, 1994). Natural cork also has a strongly ingrained tradition with the wine consumer (Corkmasters, 2002b). These are the two major factors that are restricting the commercial success of synthetic corks. It is for this reason that synthetic corks may not be accepted into the market place until they have been proven by the test of time.

The problems attributable to natural corks led to the development of research into alternative closures for wine bottles. Wine commentators attribute between less than 1% to approximately 10% of all wines faulty, due to an effect from the natural cork (Murray and Lockshin, 1997; Corkmasters, 2002a; Walsh, 2002). Wine that contains a fault of any kind can alienate consumers, and presents problems for producers trying to grow their brand (Spawton, 1991). This makes the distribution channel more cautious of their offerings to customers. Faulty wine is returned to the retailer or restaurant and they must deal with the consequences. No member of the distribution channel wants to create more work for themselves with administration, and claiming faulty wine, hence the interest in alternative closures to natural cork.

Alternative Closures

Alternative bottle closures consist of a number of different synthetic corks and screw caps (Wilson and Lockshin, 2001). Synthetic corks are inserted into the neck of the wine bottle like a natural cork, and are removed in the time-honoured manner of a natural cork. Screw caps are fixed to the top of the bottle, and are removed by rotation of the capsule to break a tamper-evident seal. This removal process does not provide the same visual, auditory, or tactile information as the other closures (Wilson and Lockshin, 2001).

Advantages of synthetic corks are that they are very difficult to break and are guaranteed not to crumble. They allow colour, texture and printing to be included as part of the overall promotional appeal for the bottle of wine. However, the response from consumers to these new closures has been one of indifference (Wilson and Lockshin, 2001).

Alternative closures were originally developed to combat the effects of *2,4,6-trichloroanisole* [TCA], which is responsible for the 'corked' taste in wine (Eric, Leyland and Rankine, 1976). This fault has caused many a good wine to be ill-appreciated, especially if the chemical is in such a small amount as to render the wine 'dull', but not perceived as corked. Eric and others found that the screw cap closure was superior to natural cork for keeping wine free of faults (Eric *et al.*, 1976). Wineries such as Heggies, Pewsey Vale and Yalumba tried using the screw caps in the 1970s to reduce the incidence of faulty wines, but they experienced declining sales and a poor perception of wines sealed with the new closure. Perhaps this why it is assumed today's consumers will respond poorly to alternative closures.

Approximately ten years ago, pioneering producers began using synthetic corks for their wines. These synthetic 'corks' were not liable to the infection that caused cork taint.

However, these prototype synthetic corks had all the ‘softness of concrete’. Some early synthetic corks also introduced undesirable flavours to the wine, or absorbed the delicate aromatics of wines. Consequently, the market has not embraced alternative closures with gusto.

Buyers who have experienced at least one problem [with natural corks] in the last year were more likely to prefer synthetic closures, or were unsure about their preference without further information (Murray and Lockshin, 1997). These results indicate that a buyer, who had experienced problems with wine, was looking for a solution to that problem. The main concern for producers of synthetic closures is that many consumers are unaware that a bottle of wine can be affected by the natural cork closure (Murray and Lockshin, 1997).

Today, there are a multitude of different colours, designs and proprietary substances used for producing synthetic closures, which can add another level to the marketing of wines; or can detract from a wine’s perceived quality. The new versions are purported to be a dramatic improvement from the problems experienced with early synthetic corks, but not that consumers would be aware (Wilson and Lockshin, 2001). It was suggested that distributors knew little about synthetic closures. As consumers are more likely to ask about this sort of information from their wine retailer, a perceived lack of knowledge of alternative closures is a concern for synthetic closure producers.

Technical comparisons

Godden (2003) reports that the results of a closure trial of some nine different synthetic corks, four kinds of natural cork, and a type of screw cap suggested that at 48 months post-bottling, the roll-on tamper-evident closure (ROTE, or screw cap), retained the highest level of free-sulfur dioxide. This evidence suggests that wine under the screw

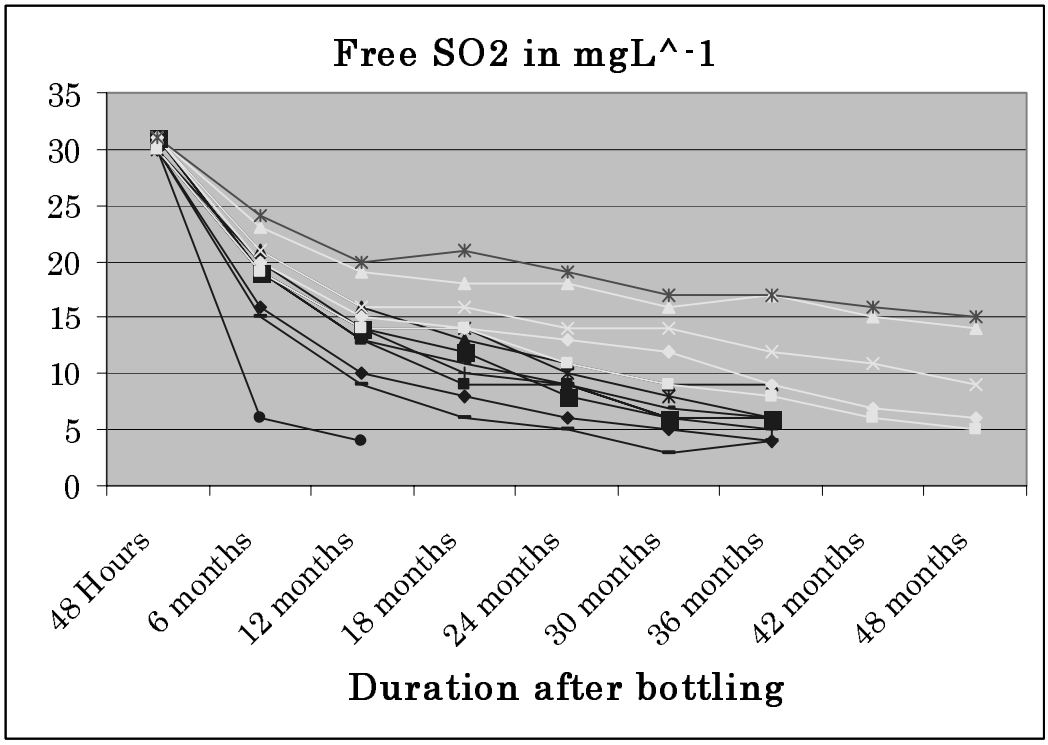
cap is less affected by oxidation during the maturation period (Godden, 1999, 2002, 2003). All other synthetic closures were found to be more likely to be affected by oxidation during maturation than natural cork, which was second to the screw top. Godden implied that the consequences for synthetic closures are that they may be best used for wines produced for early consumption (Godden, 2002).

Importantly, one of the natural cork closures significantly dulled the 'fruitiness' properties of the wine (Godden, 2003). Although there was no perceptible fault in the wine, it was found that there was 1 nanogrram of TCA in the wine examined. The chemical was not found in any of the wines using products other than natural cork in the closure.

Figure 1 below shows the progressive levels of browning in the wine under study, for each closure used in the trial. The red line indicates the ROTE closure, the natural cork closures are indicated with the yellow lines, and the synthetic cork closures are depicted with the blue lines.

Importantly, when the free-sulfur dioxide level in white wine falls below a value of $10mgL^{-1}$, it has poor commercial implications for the wine under bottle. Consequently, the values for free-sulfur dioxide were not recorded for all synthetic corks after the 36-month period.

Figure 1 Free SO2 under different closure types after bottling (Godden 2003)



The main results for the various closures under trial are:

1. The screw-cap closure results in the lowest incidence of browning, and highest free-sulfur dioxide values, over 48 months
2. The natural cork closures performed better than synthetic corks, but contributed varying amounts of TCA to the wines examined.
3. The synthetic corks exhibited differing but reliable results over 36 months.
    a. For the first 24 months, most synthetic cork closures retained a commercially reliable level of free-sulfur dioxide in the wine.

From the AWRI studies, there are a number of implications for marketers. The variation in results is an area that needs to be exploited by the synthetic closure producers. Many of the synthetic corks had similar results to each other. Additionally, despite the issue of potential browning in wines, many synthetic corks are inert with respect to the wine that they are in contact with. There is clearly potential for the producers who did well in the

study to promote the fact that their closure is distinct from the more poorly performing closures.

Discussion- Implications for communications strategy

Many synthetic corks have a price advantage over similar performing natural corks. This situation cannot be emphasised strongly enough, especially for wines that are made for early consumption. In addition to this point, many synthetic corks did not affect the wine in the bottle in any manner. Natural cork did, and does affect between 4 and 8% of all wine under that closure through the potential development of TCA (Chastaingt, 2003; Godden, 2003).

There is an opportunity to promote Australian wines bottled under alternative closures as a distinct technical advantage to other producers. Importantly, Australian (and other 'New world') wines have developed the perception that their wines are technically 'correct'. Often these wines are described as 'industrial' by 'Old world' producers (Lichfield, 1999). The implication is that many 'New world' wines lack character and/or *terroir* (a French term that roughly translates to "taste of the earth") (Lichfield, 1999). However, this perception could be developed into a competitive advantage, if new closure types can be promoted as an improvement on traditional closures because of the reduction in the incidence of TCA.

Although synthetic corks do not have a strong foothold in the Australian market, their distribution in the US is more widespread. The Australian wine industry has given its support to the ROTE closure. It is estimated that this year almost 6% of wine bottled, will be bottled under the ROTE closure, and that this amount is approximately double the amount that was bottled under the closure in the previous year (Godden, 2003). Clearly, now is an ideal time to promote the benefits of alternative closures.

The ROTE closure outperforms all other closures across all tests in the trial conducted by the AWRI. The main concern for this closure is that there remains a level of scepticism in the market over the closure's previous failure in the marketplace. A promotional strategy in support of the closure is required, particularly focussing on the reliability and capacity of the closure to outperform all other types in the market. This message would have more credibility if peer leaders in the wine industry were used to express their support for the closure.

Marketing communication considerations

Authors in the cork debate, who expound the benefits of natural cork, refer to 'impartial' organisations like 'Cork Masters' [an unfortunate name for an 'impartial' judge of the debate] for evidence in support of the natural cork (Goncalves, 2000). Their findings that consumers prefer natural cork, were not unexpected, but on finding that Cork Masters are sponsored by APCOR (a Portuguese Cork Association), it was hardly surprised that the findings from their on-line survey only presented comments that favoured natural cork. Surprisingly, this finding was despite their own statistics indicating that alternative closures had varying (and proportionately greater) degrees of support (Corkmasters, 2002c).

The Corkmasters survey found that 56% of people surveyed think that natural corks are the best type of closure (Corkmasters, 2002c), and that 73% preferred natural cork (Corkmasters, 2002b). This finding is surprisingly low, considering that even a generous estimate accounts for approximately 10% of all wine produced, is bottled under non-cork closures. Worrying for the cork industry is that six months earlier, 75% of consumers were listed as preferring natural cork to other closures (Corkmasters, 2002a).

The consumer sentiment for alternative closures is different from one period to the next. There is no inference to whether the samples are the same from one period to the next, but the fact that the most recent survey revealed a higher level of support for alternative closures suggests that consumer acceptance of alternative closures is increasing.

Stelvin caps [screw tops] have been shown to be effective closures for wine, but the ritual of wine consumption was not perceived by the wine distribution channel to be conducive to the adoption of these closures (Wilson and Lockshin, 2001). Murray and Lockshin (1997) raised the important issue that a commitment to synthetic closures must be carefully undertaken, because of the "risk of sending an implicit signal that synthetic closures mean cheap wine". They suggested that neck hangers and other additional information be used to promote the benefits of synthetic closures, but outlined that this did not resolve the problems of appealing to less informed buyers (Wilson and Lockshin, 2001).

Murray and Lockshin found that consumer aversion to an alternative closure is alleviated when information supporting their specific benefits is available (Murray and Lockshin 1997). Suggestions offered by retailers and other members of the distribution channel may be the only information that the consumer has on a new product, particularly for a product such as a bottle closure, for which the consumer has very little information. The power of the salesperson's suggestion can wield substantial impact on the consumer's decision to purchase an unfamiliar product (Murray and Lockshin, 1997).

Members of the distribution channel are some of the most effective media for communication with wine consumers. Whether the consumer purchases wine on-line, through a retailer or by direct mail, the consumer has to read or listen to information provided through the medium in order to make a wine purchase. Considering that the top

20 wine companies in Australia are responsible for 95% of the volume of wine produced (Awbc, 2002), the remaining 1600-odd producers have little financial capabilities to promote their wines using media other than word-of-mouth and publicity.

Additionally, Wilson and Lockshin found that there are a number of issues that the wine distribution channel want addressed before they could openly recommend alternative closures to natural cork (Wilson and Lockshin, 2001). The findings of Wilson and Lockshin highlight one of the first studies to deal with the perceptions of the distribution channel in communicating an innovation in the wine industry to its consumers. The issues raised in their paper are detailed below:

Cellaring Potential

They found that the problems associated with early synthetic corks have made members of the wine trade reluctant to adopt synthetic closures without guarantees that the new closures can perform as well as, if not better than, natural cork for the purposes of cellaring wine

- Compounding this problem, some respondents believed that the 'Stelvin' closure could age wine too slowly. However, many thought that this latter aspect was a benefit, not a problem.

Aesthetic Issues

Many members of the wine trade think that different colours in synthetic corks are used as a promotional tool, but little else. The perception is that many of the colours being used in synthetic corks to promote wine are synonymous with poorer quality products, compared to those wines sealed with a natural cork. To emphasise the problems of aesthetics, most respondents believed that the 'Stelvin' closure was visually unappealing.

Not all synthetic corks are the same

Few respondents knew that there were many different types of production methods for synthetic cork. Many respondents perceived that the problems of early synthetic closures still exist in today's products.

Method of Extraction

Many respondents felt that the method of extraction for a synthetic closure should be as similar as possible to current extraction method. The tools used to extract natural cork should be conducive to synthetic cork extraction.

Inconsistent cork quality

Each set of respondents indicated that natural cork had flaws. Synthetic cork problems were also mentioned, but with mixed responses as to whether they are easy or difficult to use. The respondents exhibited various levels of knowledge of faults attributable to cork, but all respondents outlined that any type of cork can be responsible for problems in wine.

Further Adoption

All respondents gave qualified support for synthetic closures if they can reduce the incidence of faulty wine. All respondents indicated that they would be more likely to endorse synthetic closures if the larger wine companies used these closures across a broad range of brands (as opposed to just concept brands).

Green Issues

In order to be competitive with natural cork, it is desirable for synthetic closures to be recyclable and/or biodegradable. All respondents indicated that this would help increase the adoption of synthetic closures.

Some of the above issues are being addressed with the technical studies conducted by the Australian Wine Research Institute and other technical organisations conducting research into the capacities of these closures around the world. Despite this research into the technical merits of alternative closures, little evidence exists on the alternative closure producers adopting the above issues in any literature of examples of their promotional strategies.

Conclusions and Recommendations

The alternative closure was a logical evolution for a product that was consistently proving to be faulty. Murray and Lockshin quoted Fuller (1995 in Murray and Lockshin 1997) that cork faults cost the wine industry upwards of $10- billion per year. The development of an alternative that did not contribute faults in wine would ideally save that amount of money. Therefore there is significant interest and investment in solving this problem.

In light of the problems associated with the perception of alternative closures, and the historical problems experienced by alternative closure producers, any communication strategy needs to incorporate the characteristics of integrity and reliability. In this way, the consumer is more likely to adopt the product, in light of the problems associated with early examples of the closures (Brannan, 1998).

From a communication perspective, it is important for the producers of alternative closures to focus on an audience of wine distributors. The aim of communicating with the consumer is too expensive for a fragmented production segment to advertise, but utilising public relations and sponsorship would be the best method to communicate the strengths of alternative closures with the distribution channel and consumers alike.

Based on the findings of Wilson and Lockshin (2001), the following segments of the distribution channel can utilise these messages:

- Retailers can highlight the benefits of a reduction in faults from alternative closures to knowledgeable clients, and promote the ease of use of 'Stelvin caps' for parties, BBQs and other social occasions to those consumers with more interest in convenience and consistency of product. For those consumers who

respond to bright packaging, the synthetic closure will aid sales to this segment.

- Hospitality employees need to be informed of the benefits of these new closures, and particularly the ease of use and reduction in faults attributable to the cork. Hence, the ritual of testing the wine by the sommelier no longer need exist. Time saved by not having to perform the 'extraction ritual' could be made up by providing a higher standard of service and attention to detail for all consumers in the dining establishment. This action would help improve the potential for 'tips'.
- Distributors have the greatest breadth of connections with the producers and retailers/restaurateurs. This group has the potential to communicate to all levels of the wine trade by word-of-mouth promotion. The producers of synthetic closures need to inform this segment effectively, and respond to all queries regarding the performance and production of a synthetic closure. Further, this segment of the channel often refers to the cellar-door outlet at a winery. If screw-caps are adopted on all wines in a portfolio, the staff member is not delayed by the time taken to go through the opening ritual for wines under natural or synthetic cork. All inconsistencies in communication to this segment can lead to potential fallacy or miscommunication to other members of the wine trade. Thereby increasing the level of confusion surrounding the value and use of synthetic closures.

Quite simply, a concerted communication strategy must be undertaken if closures other than cork aim to challenge natural cork as an alternative closure to wine bottles. Evidence from Eric *et al* (1976), Murray and Lockshin (1997), Wilson and Lockshin (2001) and Godden (2002, 2003) suggest that alternative closures to cork have notable advantages over natural corks. Synthetic corks can be used to attract attention; appeal to segments of consumers through colour, design and texture alternatives; and utilise a colour scheme for a new brand. Screw caps [ROTE] are positioned to improve maturation potential; have appeal for social occasions without traditional wine opening tools; and reduce faults in wine. These notable advantages over natural corks need to be

communicated effectively to the consumer.

Alternative closure producers have been unable to utilise a mass-marketing promotional campaign because of their fragmented nature. Consequently, the most effective form of promotion for this segment would be to promote through word of mouth and publicity. Members of the wine distribution channel must be aware of each closure's potential, and communicate that potential to wine distributors, who can communicate the benefits of their closure to customers. As Murray and Lockshin indicated, with information on the benefits of alternative closures, the consumer is more likely to favour them over natural cork (Murray and Lockshin, 1997).

References

AWBC, A. W. a. B. C. (2002). Statistics at a glance, AWBC. **2003**.

Brannan, T. (1998). Integrated marketing Communications, an integrated guide to. London, Kogan Page Ltd: 143.

Brody, A. L. and K. S. Meyers (1997). The Wiley Encyclopedia of Packaging Technology, Wiley Interscience: pp. 206-217.

Chastaingt, M. (2003). Trop de vins sont bouchonnés, la grogne s'amplifie. *La Vigne*(140): 28-33.

CorkMasters (2002a). January 2002 Executive Summary, CorkMasters. **2002**.

CorkMasters (2002b). June 2002 Executive Summary, CorkMasters. **2002**.

CorkMasters (2002c). Real opinions from real people in the Real Cork debate, CorkMasters. **2002**.

Deves, M. (1997). Uncorking Cork- A report into the future of cork in the Australian Wine Industry. *Wine Industry Journal* **12**(2): pp. 168-179.

Eric, B., D. A. Leyland and B. C. Rankine (1976). 'Stelvin' - Evaluation of a new closure

for table wines. *The Australian Grapegrower and Winemaker* **Annual technical issue 148**(56): 58-59.

Godden, P. W. (1999). AWRI Trial of the Technical Performance of Various Types of Wine Closure. *The Australian Grapegrower and Winemaker*(May): 59-64.

Godden, P. W. (2002). Update on the AWRI trial of the technical performance of various types of wine bottle closure. T. r. #133. Adelaide, AWRI.

Godden, P. W. (2003). Discussion of the findings of the AWRI closure trial- Post 48 months. D. Wilson. Adelaide.

Goncalves, E. (2000). The Cork Report. Bedfordshire, England, The Royal Society for the Protection of Birds**:** 34.

Halliday, J. and H. Johnson (1994). The Art and Science of Wine. UK, Mitchell Beazley: 232.

Lichfield, J. (1999). The Brand New French Revolution, Independence on Sunday. **2003**.

Murray, W. and L. Lockshin (1997). Consumer acceptance of synthetic corks. *International Journal of Wine Marketing* **9**(1): pp.162-163.

Simchi-Levy, D., P. Kaminsky and E. Simchi-Levy (2000). Designing and Managing the Supply Chain. Singapore, McGraw-Hill: 321.

Spawton, A. (1991). Marketing Planning for Wine. *European Journal of Marketing* **25**(3): 1-48.

Walsh, I. (2002). Screwcaps oust corks, Boylen Publishing. **2002**.

Wilson, D. and L. Lockshin (2001). Perceptions of Synthetic corks- what can the trade tell you? *Australian and New Zealand Wine Industry Journal* **16**(1): pp.101-103.