



bark to bottle

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→ 21

GREENER BOTTLES HIT EUROPE

A wine described as the “most environmentally integrated” wine product ever offered — complete with an Amorim natural cork — has gone on sale in Europe.

African Dawn is a range of wines produced by the Rooiberg Winery in South Africa. Rooiberg was the first cooperative winery to achieve membership of the Biodiversity and Wine Initiative, set up in 2004 by the South African wine industry and conservation groups.

Apart from embracing the principles of sustainable production, what sets African Dawn Wines apart is a decree that all product packaging — bottles, closures, labels and boxes — must meet its strict environmental policy.

The wine is already available in Holland, Germany, Belgium and South Africa and was recently launched in the world's biggest wine market, the UK and Ireland, marking another milestone in green consumerism.

In a move that has won the endorsement of the World Wide Fund for Nature (WWF), one of the world's most trusted green organisations, African Dawn bottles are sealed with an Amorim cork approved by the Forest Stewardship Council (FSC).

Amorim is the first company in the world to achieve full 'chain of custody' certification from the FSC for a natural packaging product. The FSC certification covers both forest management and the processing of cork from certified forests and ensures that the cork production pathway from bark to bottle meets stringent environmental guidelines.

Amorim's marketing and communications director, Carlos de Jesus, says FSC certified corks are currently available from Amorim alone, as no other cork company has yet developed chain of custody.

“We believe that demand for packaging materials that are responsibly produced, and verifiably so, will only increase in the future,” Mr de Jesus said.

African Dawn Wines managing director Rob van Prooijen said FSC certified cork was the perfect seal for a wine where the



→ FSC certification gives cork producers an avenue for demonstrating their commitment to sustainable forest management and production.

emphasis is on sustainability from production right through every aspect of packaging.

“Securing FSC certified cork to seal this wine was extremely important to us because the closure is a product of nature,” he said.

WWF's logo appears on the bottle label, printed on paper that has also won FSC approval. A percentage of all African Dawn wine purchases goes towards saving endangered species and wildlife habitats worldwide.

The wine's UK importer, Bottle Green, described African Dawn as “the most environmentally integrated product initiative the wine industry has seen”.

“African Dawn wines will appeal to the growing group of ethically aware consumers who want to feel that their purchase can

make a difference,” said Bottle Green's operations and marketing director, Richard Hitchcock.

With the increasing awareness of environmental issues amongst consumers there is growing demand from retailers for packaging suppliers to meet sustainable guidelines.

FSC certification is seen as the most effective way of balancing the environmental, cultural and economic values of forests and it gives cork producers an avenue for demonstrating their commitment to sustainable forest management and production.

“By sourcing raw material from FSC certified forests and through our chain of custody, Amorim meets the demand for sustainable natural packaging products,” said Mr de Jesus.



WINE CHAMPION LEN EVANS: 1930 - 2006

Last year the Australian wine industry mourned the passing of its greatest champion, Len Evans.

A passionate advocate for Australian wines, Evans made an outstanding contribution to the industry over four decades and in numerous roles — winemaker, restauranter, show judge, writer, educator and consultant.

Named 'International Man of the Year' by British wine magazine *Decanter* in 1997 Evans was awarded the OBE (Order of the British Empire) for services to the community and wine industry in 1982 and an AO (Officer in the Order of Australia) in 1999. He was also acknowledged in France with an Ordre du Merite Agricole.

An advisor to Amorim for several years, Evans was a strong supporter of natural cork stoppers and firmly believed that quality cork was the best closure for wine.

Corticeira Amorim chairman António Amorim said the company's executives, many of whom had established a close friendship with Evans, had felt a sense of great loss with his death.

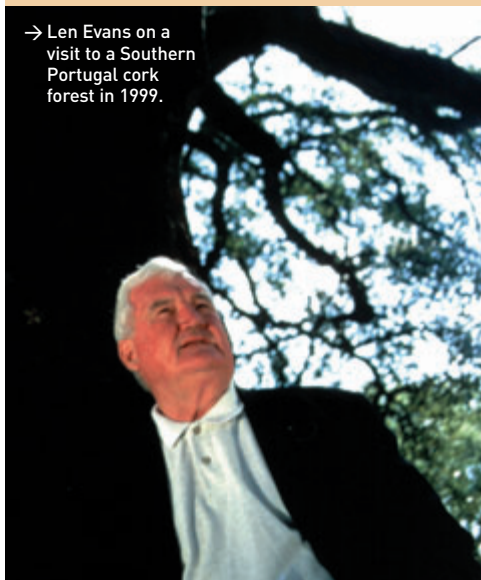
"Amorim benefited greatly from its association with Len Evans," said Mr Amorim.

"We were most grateful for his willingness to help us address the issues we had to face in terms of cork quality. His advice and guidance were invaluable over many years.

"It was a great pleasure to know a man of such capacity and intelligence. All of the Amorim personnel who met Len quickly came to respect his wide range of skills and profound commitment to quality in wine and all aspects of wine production."

Evans was 75. The world of wine is much poorer for his passing.

→ Len Evans on a visit to a Southern Portugal cork forest in 1999.



→ Further research on oxygen permeability will lead to improved cork closures.



CORKS KEEP WINE BREATHING WELL

Natural corks appear to mimic aspects of the winemaking practice of micro-oxygenation, according to new research.

Micro-oxygenation (MO) is a technique used by winemakers to soften tannins, improve mouthfeel and colour and remove undesirable reductive characters.

Because a cork will slowly allow very small amounts of oxygen into the wine after bottling, it has long been held that this property helps the wine to develop and age gracefully, apparently for the same reasons as those put forward in favour of MO. However, until now, researchers have not had a reliable method for measuring the amount of oxygen that enters the wine after bottling and for comparing different types of closures.

With support from Amorim, researchers at the University of Bordeaux have developed a non-destructive method for measuring oxygen ingress into bottled wine. The method depends on the colorimetric measurement of a dye that becomes colourless as it oxidises.

The Bordeaux team recently published the results of three years of their measurements, comparing the oxygen transmission rates (OTRs) of cork stoppers with both synthetic stoppers and screwcaps.

The picture that has emerged puts natural cork into an intermediate position in terms of oxygen transmission rates. The natural corks allowed between 0.1 and 2.7 microlitres a day during the period from 12 months to 36 months. In comparison, over the same period, the synthetic stoppers let in much more oxygen while screwcaps let in noticeably less.

Research by the Australian Wine Research Institute has suggested that reduced or 'rubbery' aromas can develop in wine sealed under screwcap as a result of the closure's low OTR. The same

researchers found that wines under synthetic stoppers tend to lose fruit attributes and develop oxidised or 'wet wool' aromas.

Cork, it seems, appears to allow some, but not too much, oxygen into the wine, preserving fruit intensity and minimising the tendency for reduced characters.

Wine experts and consumers already have a layman's appreciation of how a wine develops under cork over a period of years. But the scientific basis for this process is not well described. For example, it is not clear how oxygen actually enters a cork-sealed bottle.

Amorim is funding research to gain a better understanding of oxygen entry — for example, to determine whether oxygen diffuses through the cork from the atmosphere or comes from within the cork itself.

As with micro-oxygenation in the winery, researchers have only just begun to explore these and other issues. Amorim's research and development director, Dr Miguel Cabral, says it is imperative the cork industry supports such research.

"Amorim believes further research on oxygen permeability will lead to the development of improved cork closures that will give the winemaker more precise control over post-bottling wine development," he said.

"Cork is a complex material and it would be erroneous to suggest that we understand all of its unique properties as well as we should. We have learned from its long history that cork is wonderfully suited as a wine seal but we do not know all the reasons why."

For more information: P Lopes, C Saucier, P-L Teissedre and Y Glories. 'Impact of storage position on oxygen ingress through different closures into wine bottles,' Journal of Agricultural and Food Chemistry, 54(18), 6741-6746, 2006.



GIVING FORESTS A FUTURE

The environmental advantages of natural cork stoppers have long been known by cork producers. Now those advantages are being increasingly recognised by environmental organisations and the global wine industry.

A truly sustainable natural resource, cork is one of the few forms of product packaging that is completely environmentally friendly — it is renewable, fully recyclable and biodegradable.

Cork is the bark of *Quercus suber*, an oak that has flourished in the Western Mediterranean basin for millions of years. In Portugal alone, there are more than 725,000 hectares of cork forest, representing 30 per cent of the global total.

Cork forests help maintain the delicate ecosystems of the Mediterranean and prevent soil degradation across large areas of Portugal and Spain.

The forests provide vital habitat for a range of flora and fauna, ensuring a rich biodiversity. They are home to some of Europe's most endangered species including the Iberian lynx, Barbary deer and Imperial Iberian eagle.

Amorim is first to obtain FSC certification for cork stoppers.

Without wine cork production, farmers would be forced to replace cork trees with other crops, a move that would unsettle a unique balance between social, environmental and economic needs that has existed for hundreds of years.

Cork forest management is a powerful example of positive interaction between humans and nature as the harvesting process is based on sustainability. By law, trees may not be cut down and bark can only be stripped once every nine years.

According to Amorim's marketing and communications director Carlos de Jesus, the recent Forest Stewardship Council (FSC) accreditation of cork forests validates the unique ability of cork to contribute to the advancement of environmental, economic and cultural aspects of the Mediterranean.

Amorim, the world's leading wine cork producer supplying 25 per cent of the global market, is the first company to obtain certification of cork stoppers from the Forest Stewardship Council.

The certification of Amorim corks follows the FSC accreditation in 2005 of a portion of cork forest in Portugal's Alentejo region and several of Amorim's cork processing units.

Mr de Jesus says the FSC certification of a batch of Amorim stoppers completes a 'chain of custody' that extends from forest

management through to the final product.

"In part, FSC certification is recognition of something that has been there for centuries — and because it asks more of growers and producers it will have a positive impact on cork quality," he said.

Apart from achieving chain of custody certification for three of its production facilities, Amorim has also achieved ISO14001 accreditation — an internationally recognised standard of excellence relating to environmental practices.

"For Amorim, FSC certification of our production processes is an endorsement of our environmental practices and further testimony to the value of cork as the only truly environmentally friendly wine closure," said Mr de Jesus.

The use of cork as a wine closure has the backing of the global conservation organisation, World Wide Fund for Nature (WWF).

The WWF has called on the wine industry to make cork the preferred closure for wine. The organisation says synthetic and screwcap closures are more harmful to the environment and it argues that the future survival of the cork forests depends upon the market for cork closures.

Around the globe, 'green consumerism' has become a major focus for business and this is no more evident than in the UK supermarket chains, which sell almost three-quarters of the 80 million cases of wine purchased by British consumers each year.

Tesco, Britain's biggest retailer, has announced plans to introduce green labelling to show its customers how much carbon dioxide has been generated as a result of a product's manufacture, packaging and transport.

The initiative follows a decision by rival retailer Marks & Spencer to become 'carbon neutral' within five years. The five-year plan includes a commitment to using sustainably-sourced packaging materials.

Energy consumption in production is another area where cork has a distinct advantage over alternatives. Both screwcaps and synthetic closures require enormous amounts of energy in production, adding to carbon dioxide emissions and global warming.

Cork closures, on the other hand, have a very small carbon footprint. And in the forest, the cork oak not only has the capacity to produce oxygen, but its unique cell structure captures greenhouse gases from the atmosphere.

Additionally, unlike synthetic stoppers, used wine corks are biodegradable and highly recyclable. Although recycled wine corks are never again used as stoppers, the product has many other uses in industrial applications, building, domestic products, sport and leisure.



→ Cork - the only truly environmentally friendly wine closure.



→ Cork forests help maintain the delicate ecosystems of the Mediterranean.



DROP US A LINE

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IN BRIEF

ACADEMY PRIZES AWARDED

A student from Bordeaux, Paulo Lopes, won the 2006 Amorim Academy Grand Prix last November for his work titled *Oxidation phenomena during the ageing of bottled wine — the role of the stopper*.

His thesis shows that contact between wine and oxygen plays an important part in wine ageing and therefore the choice of closure is critical.

Lopes found that high oxygen ingress, as exhibited by synthetic closures, can result in oxidised aromas. On the other hand, too low oxygen ingress, as shown by screwcap closures, promotes the development of sulfide-like aromas.

Natural cork closures displayed intermediate oxygen ingress, suggesting they are more suitable for wine development post bottling.

The Amorim Academy's 'Coup de Coeur' prize for 2006 was awarded to Gilles Masson for his work on a 'Rosé wine colour chart' — a tool to help winemakers define the true colour of rosé wines. → 01

SCREWCAP FAULTS A CONCERN

Judges at last year's International Wine Challenge (IWC) suggested problems with wines sealed under screwcap may have been underestimated in the past.

IWC chairman Sam Harrop said he was concerned about the incidence of taint amongst screwcap-sealed wines, while noting a decline in problems with wine under cork.

Over 13,000 wines were tasted blind at the IWC, the biggest wine competition in the world. Judges found faults with 2.2 per cent of wine under screwcap, while 2.8 per cent of the wine was affected by taint relating to cork.

In the September edition of British publication *Off Licence News (OLN)*, Harrop said there was a possibility problems associated with cork taint may have been over-inflated in the past, or perhaps the work

of cork companies to improve quality was starting to filter through.

"It's quite alarming to find that some of the other faults that have been around in the past are almost as bad as cork taint. While we've been raving about cork taint, all these other issues have been ignored," Harrop said in the *OLN* article. → 02

ROSA REWARD IN SPAIN

Amorim has been acknowledged for its development of ROSA Evolution at ENOMAQ 2007 — the International Show of Winery and Bottling Machinery and Equipment held in Zaragoza, Spain recently.

Staged every three years, ENOMAQ is one of the most important international wine trade shows with an emphasis on showcasing new technology and production methods.

Amorim received the ENOMAQ prize for 'technical innovation' for its work in developing ROSA Evolution — a refinement of the steam-distillation process that has proven to be highly effective in the fight against 2,4,6-trichloroanisole (TCA).

NATO FUNDS FOREST STUDY

A study funded by NATO will investigate pesticide contamination in cork forests in North Africa.

The three-year €380,000 study involves scientists from Scotland, Portugal, Morocco, Tunisia and Italy.

Pesticide contamination is thought to be a possible cause of TCA (2,4,6-trichloroanisole) taint in cork.

"The cork industry is important to the North African economy and it is essential that the 'cork taint' problem is investigated both to support the use of real cork by the wine industry and to help protect biodiversity in the Mediterranean coastline," said professor Andrew Hursthouse, a member of the project team.

The cork industry is aware of the potential for pesticide contamination of cork oaks, which is why bark from the base of trees is not used for wine closures.

WINERIES DISPLAY CORK MARK

More wineries are choosing to highlight their choice of closure on product packaging by displaying the 'Cork Mark' developed by the European Cork Federation (C.E. Liège).

Quinta de Couselo winery in Galicia, Spain — which traces its history back to 12th century Cistercian monks and has been run by the Vicente family since 1898 — has included the Cork Mark on the labels of its 2006 vintage wines.

And in England, the award-winning organic vineyard, Sedlescombe, is now displaying the Cork Mark on its range of organic red, white and sparkling wines. A statement by the winery said it would "continue to use cork as a way of supporting the unique ecosystem of the Portuguese cork forest and the livelihood of the people working there."

The Cork Mark was created as an international symbol to identify cork products or products that incorporate natural cork. → 03

CONSENSUS ON CLOSURES

During the OIV Congress in Spain last year the Amorim Academy presented the conclusions of three panels studying the impact of wine closures on the consumer, the environment and wine development.

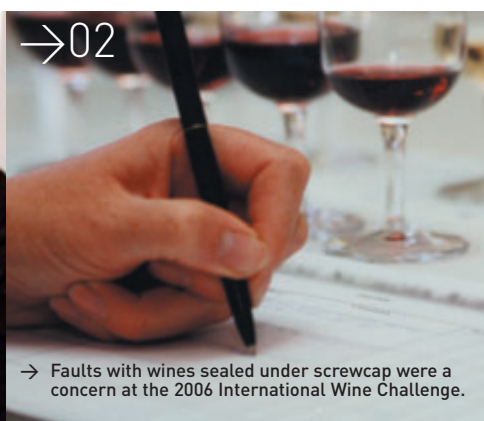
As far as the consumer is concerned, the panel suggested the image of wine quality was linked to cork. On wine development, the panel determined that for long-term cellaring, cork is a safer option. Cork was also a clear winner in terms of the impact closures have on the environment.

For further information on the Amorim Academy visit www.academie-amorim.com



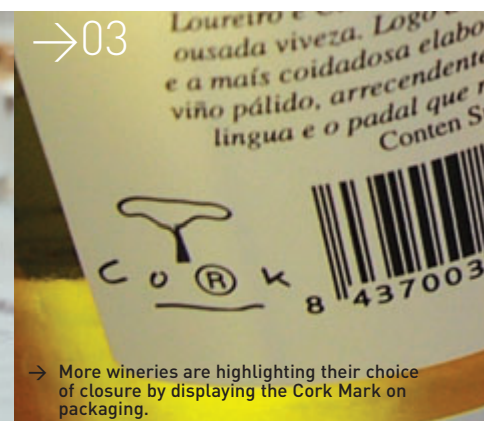
→ 01

→ Paulo Lopes (left) accepts the 2006 Amorim Academy Grand Prix prize from Joaquim Amorim.



→ 02

→ Faults with wines sealed under screwcap were a concern at the 2006 International Wine Challenge.



→ 03

→ More wineries are highlighting their choice of closure by displaying the Cork Mark on packaging.