Story by Jane Nicholls Illustration by Anna Manolatos



MESSAGE IN A BOTTLE

"We're in a beautiful part of the world with warm sunny days and clear nights, which gives us this unique fruit quality and the ability to make wines that taste quite special," says winemaker Jeffrey Grosset. Since starting Grosset Wines in South Australia's Clare Valley in 1981 he's had his four vineyards A-grade certified organic and biodynamic, won plenty of awards and led advances in the industry, including the introduction of screwcap wine bottles to Australia in 2000. Now he's pioneering the use of technology that guarantees wine-lovers are drinking what they paid for.

One of the state's original wine regions, Clare Valley is home to dozens of wineries, including renowned names like Knappstein, Taylors, Kilikanoon, Pikes, Sevenhill, Tim Adams and Grosset. Last year, almost 200,000 domestic visitors stopped by to stay at least one night. It's a reasonable assumption that many made a purchase from at least one cellar door.

"When people come here, taste the wine and buy it, they take it with them or have us ship it to them - that's the ideal," says Grosset. "It's an old-fashioned reinforcement of trust because it hasn't been bought from a third party but that's not the way of the world now."

It's estimated that counterfeit wines, spirits and beers cost the European Union about \$5.1 billion in sales each year. A common ploy is for an everyday drop to be rebottled or relabelled as a lauded vintage from an award-winning winery and sold at a much higher price - potentially in the hundreds of thousands of dollars. "If you're buying our wine in New York or Shanghai - even from a reputable outlet – it may have gone through many people and the chances of fraud are much higher," says Grosset. He points to the documentary Sour Grapes, which tells the cracking yarn of Indonesian-born fraudster Rudy Kurniawan's multi-million-dollar dupe fest in the United States.

"In Australia, 95 per cent of wine is bottled under screwcap, which makes it more difficult but not impossible to fake," says Grosset. In our neck of the vineyards, usually the scam involves riding off the reputation of a region or celebrated winemaker via label fraud, by making false claims of origin or grape varieties or mimicking the authentic product with a similar name and design.

Hunting for a solution to thwart this criminal trickery, Grosset and Clare Valley grapegrower David Travers returned to the cap for inspiration. In 2019, the pair won the SA government's inaugural Blockchain Innovation Challenge with their idea to store inviolable information in a wine bottle's all-important closure. With a mostly Australian team, led by industrial

designer Andrew Rogers, they got to work solving the technical challenges.

The resulting innovation is Enseal, which uses near-field communication 69 (NFC) technology embedded in a specially designed chip in the screwcap. It works in tandem with blockchain identity platform Entrust to hold immutable records about the wine. "Simply hold any smartphone over the cap and the record pops up on the screen, assuring the provenance, authenticity and seal integrity of that wine," says Grosset. "There's also a marketing opportunity - you could have a link to a video of the winemaker telling you about the wine or any other information you want to offer."

In 2020, in conjunction with Wine Australia, 15 Clare Valley winemakers successfully trialled the Enseal system, which is now protected by international patents. Grosset says they're having conversations with European closure manufacturers, as Enseal could be the chance to finally elevate the use of the screwcap there, too. "We're really proud that we worked on this in little old Gilbert Street in Adelaide," he adds.

Back at his winery, traditional techniques still rule. "We handpick our grapes and we still rack manually," says Grosset, referring to the process of separating the clear wine from solids. Now he's on a mission to disconnect fraudsters from the precious liquid, too.