HOW INTERSPECIFIC HYBRID VARIETIES PRODUCED FORTIFIED WINE IN TAIWAN

Perhaps in Asia more than in many other parts of the world, wine growing is a story of trial and tribulation. Weather conditions can be extremely challenging, forcing producers and researchers to be more resourceful than elsewhere. A case in point is **Chien-hao Chen**, assistant professor of wine and spirits at the National Kaohsiung University of Hospitality and Tourism in Taiwan, who has spent years perfecting a technique for making wine on the island.

CONFERENCES

Assistant-prof. Chien-hao Chen

> Grape growing in Taiwan is relatively recent and can be traced back to the early 1940s when Taipei Imperial University imported hundreds of grape varieties. Predictably, only the heat resistant varieties such as Black Queen survived

in the tropical climate. The variety was created by Kawakami Zenbei, the godfather of Japanese viticulture, by combining Bailey and Golden Queen to achieve both elegance and durability. Golden Muscat and Bailey A are also important cultivars grown in Taiwan. Despite these efforts to introduce vines, however, all the grapes were foxy, redolent of strong animal-like aromas and unpleasant to drink. Harvesting is dictated by the typhoon season in July and August, forcing growers to pick unripe fruit – they contain about half the phenolic compounds found in Bordeauxgrown grapes.

Burgundy-educated Chien-hao Chen repeatedly conducted trails with winemaking but was constantly displeased with the results.

'Vino Formosa' has a long waiting list of clients

Boasting a PhD in tropical agriculture, Chien-hao Chen then sought out historical examples of high quality wine produced in tropical climates and settled on Madeira fortified wine. During the Age of Exploration, sailors had noticed that the taste of Madeira seemed to improve during long sea voyages. Producers therefore began artificially

heating their barrels to simulate these conditions.

Seeking to replicate their work, Chien-hao Chen began producing a wine from Taiwanese grapes which were dried a few days before crushing and fortified with grappa.Barrels were stored for three months in a purpose-built solar-powered heating room, after which chemical analysis revealed

that the wine contained significantly higher levels of phenolic compounds; the foxiness also decreased ten times. He still found the wine undrinkable however and left the wine in the barrel for a year longer, then another year. But after three years, the flavour started to improve; after four, a honey-like sweetness and pleasant spice character developed. Nature had successfully concentrated the flavours of the wine following 10% annual evaporation.

Chien-hao Chen entered the wine in a European competition where it scored 84 points, just shy

of a medal. The next year it scored 85, then the following year it won a gold medal in Paris and went on to win medals in several competitions. Through his experiments, Chien-hao Chen believes he has demonstrated Taiwan's ability to produce high quality wine, despite low quality grapes. His 'Vino Formosa' – a nod to the Portuguese name for Taiwan and thus to Madeira – is a blend of

Golden Muscat and Black Queen. He and his students make around 3,000 bottles of it every year and plan to expand to 6,000. It isn't difficult to understand why: retailing for about \in 80 a bottle, there is a long waiting list to purchase it.

