Ref. Ares(2016)2029824 - 28/04/2016

DEFRA WINE PDO APPLICATION

Reference: ENGWINEPDO0001

DARNIBOLE BACCHUS WINE - PROTECTED DESIGNATION OF ORIGIN (PDO)

1. DETAILS OF PROTECTION

a) Name(s) to be registered: DARNIBOLE

b) Equivalent term(s): Darnibole Bacchus

c) Geographical indication type: PDO

2 a). APPLICANT DETAILS

i) Applicant(s): Robert W Lindo

ii) Applicant name and title: Owner Camel Valley Vineyard

2 b). Address

1st Line: Camel Valley Vineyard

2nd Line: Nanstallon

3rd Line:

Town/City: Bodmin

County: Cornwall

Post Code: PL30 5LG

Country: England

Telephone: 01208 77959

Fax: 01208 77959

E-mail: wine@camelvalley.com

Web:www.camelvalley.com

3. PRODUCT DETAILS

a) Category

Wine

b) Description

Darnibole Bacchus is a dry still Cornish wine produced at Camel Valley winery from grapes grown in a unique and delineated area known as Darnibole.

It is critically acclaimed and famous within the English wine industry.

It qualified under the 'English' PDO last year, but is considered unique and sufficiently different so as to merit its own PDO.

Factors:

Appearance: clean, clear, and bright liquid, very pale, light in colour, a tinge of very pale green/lemon when swirled in the glass.

Aroma: clean and fresh, medium aromatics with an expression of the Bacchus grape variety appropriate to the terroir providing for a fine, mineral, almost smoky quality.

Taste: whistle-clean, bone-dry Bacchus with a white-pepper edge. In addition, some or all of the following:

Fresh with an expression of minerality appropriate to the terroir providing for apple or gooseberry notes beginning at the front and persisting throughout. Occasionally, notes of cumquat and white peach appear and grassy notes can appear at the end.

c) Analytic characteristics:

1. **Actual and Total Alcoholic Strengths:** Total alcoholic strength within a range of 10-13% upto15%.
2. **Reducing Sugars:** Less than 7 gms/litre
3. **PH:** No parameters set.
4. **Total Acidity:** 6 - 8.5 gms/litre.
5. **Volatile Acidity:** A maximum of 1.08mg/ litre
6. **Total Sulphur Dioxide:** The maximum Total Sulphur Dioxide is 150mg/litre.
7. **Free Sulphur Dioxide:** Bottled at 25mg/litre; maximum of 40mg/litre for dry wines as defined in Part B, Annex XIV, of Regulation 607/2009.
8. **Copper:** A maximum of 0.5mg/litre.
9. **Iron:** A maximum of 8mg/litre.
10. **Sterility:** There must be no indication of yeast or bacteria liable to cause spoilage of the wine.
11. **Protein stability:** The wine must remain unchanged in appearance after being held at 70°C for 15 minutes and subsequently cooled to 20°C.

d) Organoleptic Characteristics:

Appearance: clean, clear, and bright liquid, light in colour, very pale, a hint of green/lemon when swirled in the glass.

Aroma: clean and fresh, medium aromatics with an expression of the Bacchus grape variety appropriate to the terroir providing for a fine, mineral, almost smoky quality.

Taste: whistle-clean, bone-dry Bacchus with a white-pepper edge. In addition, some or all of the following:

Fresh with an expression of minerality appropriate to the terroir providing for apple or gooseberry notes beginning at the front and persisting throughout. Occasionally, notes of cumquat and white peach appear and grassy notes can appear at the end.

In comparative tastings, Darnibole Bacchus has always been less obviously fruit driven and more mineral than other Bacchus.

4. WINE GRAPE VARIETY:

100% Bacchus.

5. OENOLOGICAL PRACTICE

a) Type of Oenological practice:

Hand picking, crushing to begin within 2 hours of the completion of picking, roller crushing, bladder pneumatic pressing, cold settling at 4C, gentle racking, aromatic yeast, cold ferment at 16C, racking at SG 1000, ferment to dry, fining, no animal products, protein and tartrate stability, sterile filtration, pre-bottling analysis, bottling under screw cap. Thorough keeping of records.

b) Description of practice:

Cultural practices:

- Single or double Guyot hand pruned training system.
- Hand shoot thinning as appropriate, vine leaf wall trimming and fruit/leaf cluster removal as appropriate.
- Hand picking, quality fruit selection.

Details of the specific oenological practices:

- Conveyer allowing quality grape selection.
- Maximum pneumatic pressing pressure 1.5 bar.
- Cool ferment at 16C and maximum temperature 18C.
- Darnibole must be made in the adjoining winery at Camel Valley.

No animal products can be used for any part of the processes e.g. no gelatine.

6. MAXIMUM YIELD

8 tonnes of grape per hectare

And;

56 hectolitres of the final product per hectare

7. DEMARCATED AREA

a) NUTS Area

UKK3, UKK30 [Cornwall and Isles of Scilly]

b) Definition of the demarcated area

The whole 5 hectare area, demarcated as Darnibole, is based on an area of ancient slate subsoil bordered to the West by a marked soil change to alluvial sand (the old River Camel river bed) and to the East the land levels out providing for not enough of a steep slope with the aspect also starting to face slightly East of South. To the South, Darnibole is again bordered by the River Camel's old river bed of sand while above to the North the land is above the optimum thermal band. The disused railway (now the Camel Trail) demarcates the Southern boundary. Darnibole is an ancient name for Delabole, a nearby slate quarry.

c) Maps for the demarcated area can be found at Annex 1

8. LINK WITH THE GEOGRAPHICAL AREA

Darnibole is situated exactly in the centre of Cornwall, 16 kms equidistant from both the Atlantic and the Channel Coasts. The growing season is long and beneficially affected by the Gulf Stream. The Camel River Valley, in which Darnibole is situated, has historically a better climate than the rest of Cornwall. The following FIG 1 is a diagram of degree days* (in Celsius) at Newquay Airport (25 kms away). The airport, despite having no slope, a high elevation, no wind protection, still achieves 1000 degree days* in the better years. The Camel Valley and Darnibole in particular has the advantage of slope, surround, wind breaks, and low altitude and a 15 km separation from the sea.

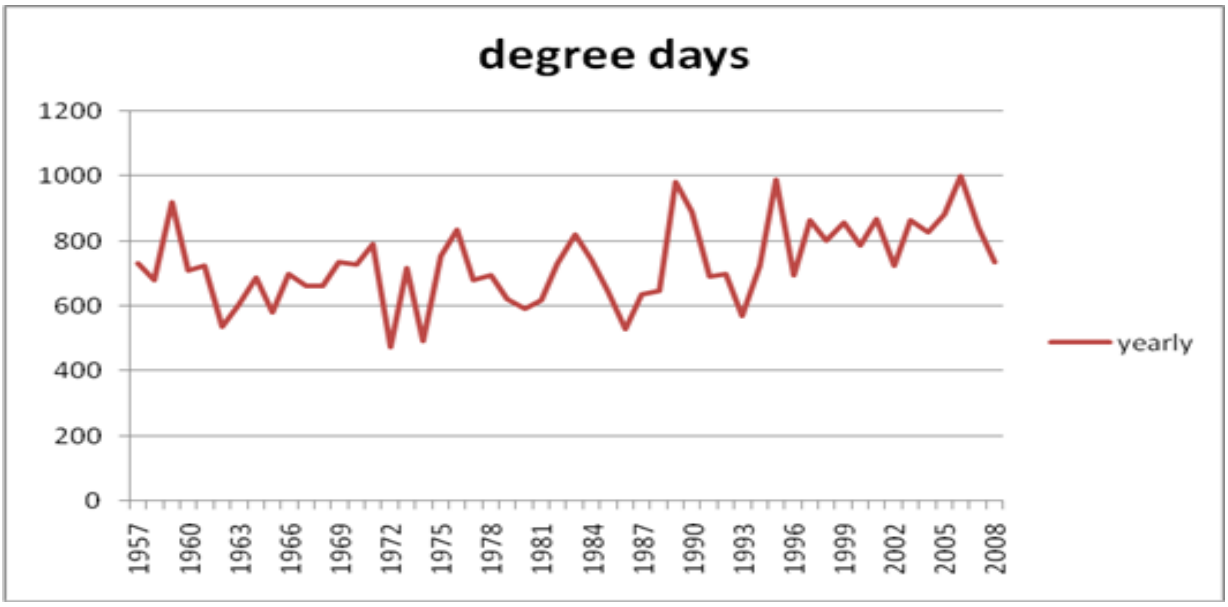


FIG 1 degree days*, Newquay Airport

The following diagram FIG 2 (obtained from the UK Meteorological Office), shows a 10 year rolling average of degree days* at Newquay airport which has increased steadily over 40 years. Darnibole has on average an extra 200 degree days* than the airport.

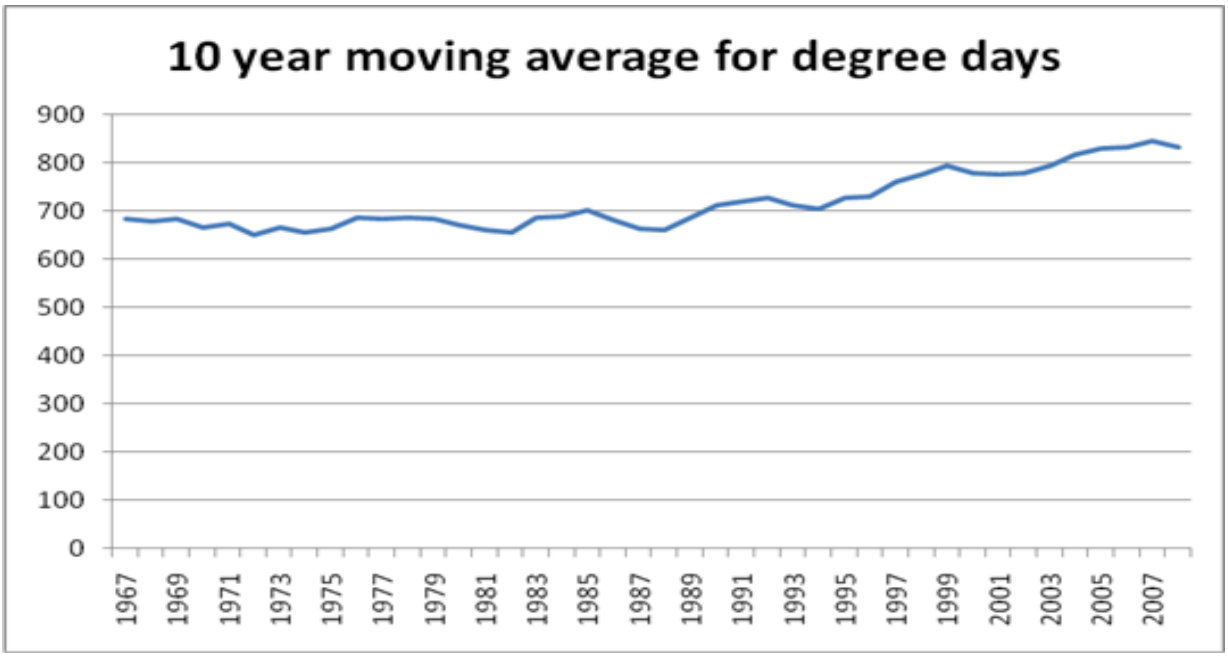


FIG 2

**Degree days is a calculation for measuring the required temperatures to grow crops. It is calculated on a daily basis (over a period of a year) using the following formula:*

((Maximum Temperature + Minimum Temperature)/2) – 10

The subtraction of 10 is in recognition that for vines (Vitis vinifera) the temperature below which no growth occurs(the base line temperature) is 10 degrees Celsius.

a) Details of the geographical area:

The whole 5 hectare area demarcated as Darnibole is based on an area of ancient *Devonian soil* and slate subsoil. The demarcated area also provides the optimum slope/height ratio. The intensity of radiation = K sin A +B. Where K is a constant, A is the angular elevation of the sun and B is the inclination of the slope to the horizontal along a meridian. The steeper the slope, the more radiant heat the vineyard receives. However, as the adiabatic lapse rate produces an average cooling of 2C per 1000 feet (1.5C-3C every day), above Darnibole the number of degree days is reduced below the optimum for producing Darnibole Bacchus wine. The height range of Darnibole is 20-45 metres on a steep South facing slope.

Natural factors

The areas in black (Fig 3) illustrate the ideal rainfall areas for vine production in England. The diagram is small but when projected the map shows a black line down the Camel River Valley and Darnibole. The diagram for heat summation over the growing season is identical and shows the Camel Valley to be warmer than the rest of Cornwall and Darnibole is placed directly in the warmest thermal band of the Camel Valley.

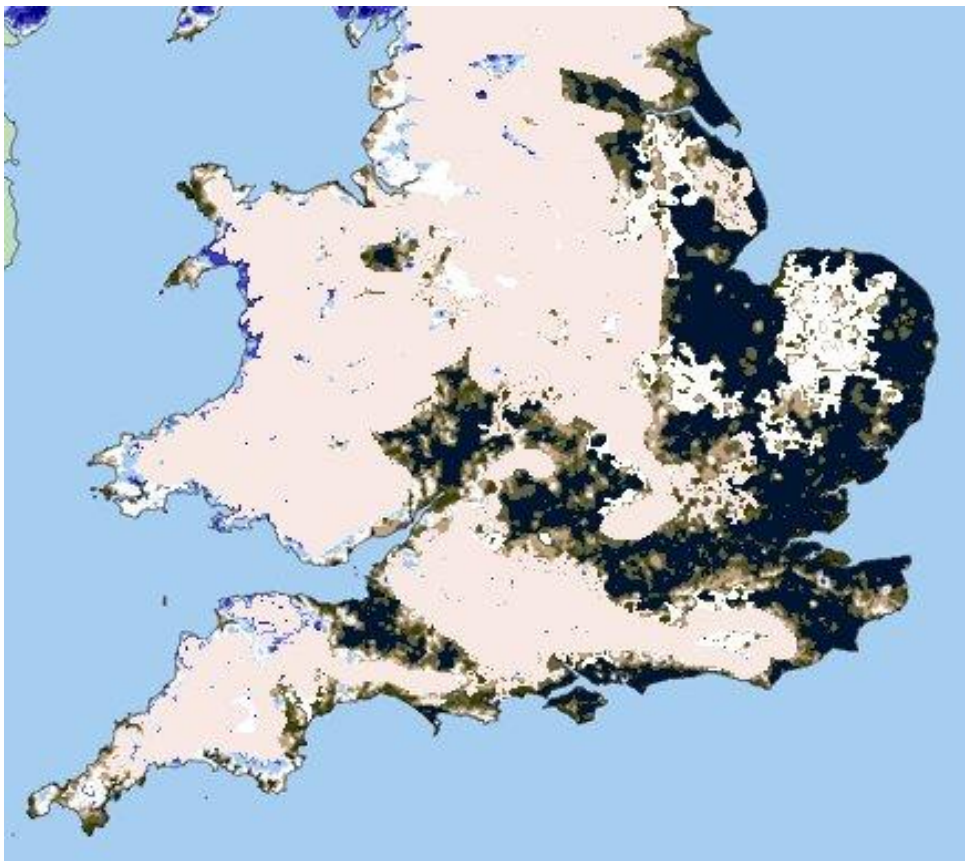


FIG 3

Human factors

The wine grape variety allowed in the PDO area is Bacchus. Bacchus, originally produced in Germany, gets over-ripe in Germany but achieves perfect phenolic ripeness in the long cool growing season experienced at Darnibole.

The maximum yields, already stipulated, are drawn from experience of wine quality at Darnibole.

In addition to the specific oenological practices listed, chaptalisation within EU wine laws has found to be beneficial in cooler years, when the accumulation of natural sugar lags phenolic ripeness. Sweetening is forbidden, because Darnibole should be a dry wine.

The Lindo family at Camel Valley (the Darnibole Winery) are a second generation producer and wine making family with over 20 years of experience. From 2006 to 2011 Sam Lindo, the son and wine maker, won the 'UK Wine maker of the Year' Trophy 3 times and was runner up on the other 2 years. They hold 3 International Wine Challenge Awards and four Italian Bollecini Del Mundo Trophies. They have won numerous Gold medals and in the 2011 United Kingdom Wine of the Year Competition won 3 Gold and 7 Silver medals.

From the Masters of Wine judges Darnibole received Gold Medals at the English and Welsh Wine of the Year Competition, 2010 and 2011.

b) Details of the product:

Darnibole Bacchus' distinctive intensity, flavour, mouthfeel and finish is due to Darnibole having a long growing season for the UK with a lower average summer peak temperature, giving Darnibole Bacchus a restrained, fine, mineral quality and an apple or gooseberry character.

Evidence of Darnibole Bacchus' distinctive character and renown is as follows:

5th March 2012: Sussex Wine List - It is the results of a tutored tasting with a wine educator and the blog author writes:

'But credit where it's due, probably the wine of the night was the Camel Valley Darnibole Bacchus 2010. It was utterly goosebericious.'... 'Camel Valley's rendition was much weightier and had a smokier complexity. Yum.'

Also;

The Daily Telegraph: http://www.telegraph.co.uk/foodanddrink/8490105/Wine-Review-English-wines.html

Camel Valley Darnibole Bacchus 2009**,** Cornwall (Fortnum & Mason)

'Whistle-clean, bone-dry Bacchus (England's most promising grape for still whites) with a white-pepper edge. Camel has made only a small parcel of this wine, from just one vineyard.'

Wall Street journal: Darnibole Bacchus on Nathan Outlaw's Michelin Two Star Restaurant's tasting menu (link with local food community): http://online.wsj.com/article/SB10001424052702303772904577333291165222780.html?mod=googlenews_wsj

Derek Smedley Master of Wine (International Wine Challenge Super Juror): English Wine Producers annual tasting:
Derek Smedley @DerekSmedleyMW

'Camel Valley excel again both still & sparkling. Darnibole Bacchus 2011 a great expression of the grape.'

The slate sub soil has excellent drainage and is considered responsible for the comments above as much as the long cool growing season.

c) Interaction (Link):

The restrained aroma and apple and gooseberry character is partly determined by the growing season which, is explained by rainfall mapping, including degree days, aspect and slope. Ancient slate sub soils are famous around the world, particularly in Germany, for their beneficial effect on grape production and wine quality. In Darnibole there is the unique combination of the geographic position and the ancient slate sub soil. In many years of Bacchus grape wine making at Camel Valley, Darnibole Bacchus has always achieved higher competition awards (always Gold) than other Bacchus.

At Camel Valley, wine has been made from Bacchus grapes sourced UK wide, however, it has always been the mineral distinctiveness of Darnibole only Bacchus that shows through.

The Camel Valley Winery and winemakers have evolved a perfect system of Darnibole Bacchus grape production which is documented and the winery is certified under ISO 9002.

9. FURTHER CONDITIONS

Due to the period of time (being within 2 hours) for picking the grapes to crushing them it is impossible for Darnibole Bacchus to be made anywhere other than the Camel Valley Winery; because there is no other winery in close enough proximity. The Darnibole conditions are unique in Cornwall, which explains why wineries and vineyards have not proliferated in Cornwall.

Packaging within the demarcated area.

Bottling within the demarcated area, or immediately adjoining is considered an imperative quality control. The principle of ‘Estate grown and bottled’ is long established.

10. CHECKS

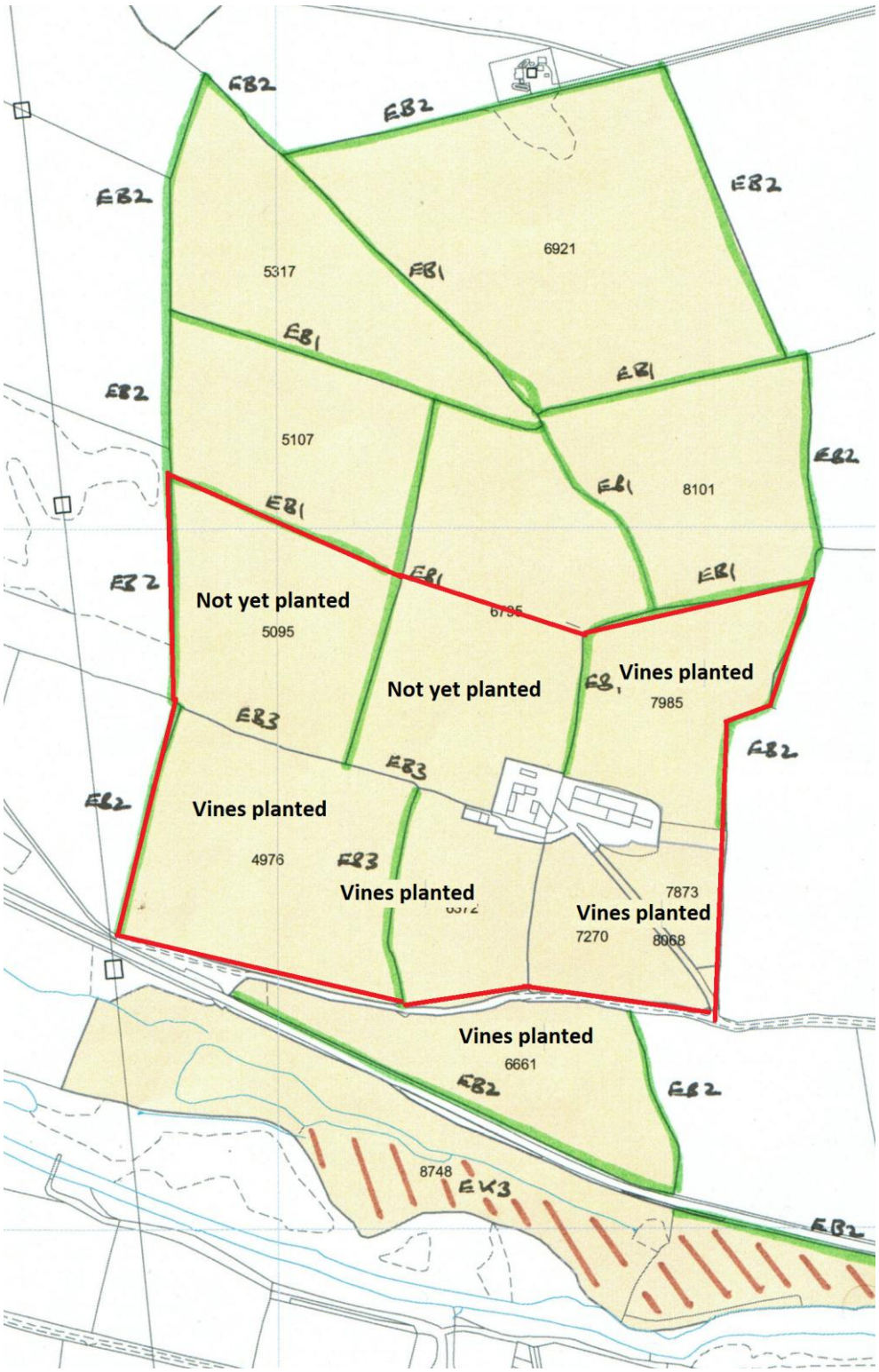
1. Darnibole Bacchus must be analysed by an independent accredited laboratory to ensure that all criteria are met. Currently, this is the laboratory used for the only other English PDOs, Corkwise.

2. The production records will be verified in the same way and by the same body (Food Standards Agency (FSA) Wine Standards Branch) as the English PDO applications are currently.

3. All vineyard activities must be recorded and retained for inspection, by an accredited agronomist, to be named each vintage year.

Annex 1

Darnibole Map



Camel Valley Map

