

Protected food, drink or agricultural product name

Single document for 'Welsh Heather Honey/ Mêl Grug Cymru'

GB number: [for official use only]

A protected geographical indication (PGI)

1. Product name(s)

'Welsh Heather Honey/ Mêl Grug Cymru'

2. Country

Great Britain

3. Description of the agricultural product or foodstuff

3.1. Type of product [as in Annex XI implementing regulation 668/2014]

Class 1.4 Other products of animal origin, honey

3.2. Description of the product

'Welsh Heather Honey/ Mêl Grug Cymru' is unadulterated 100% natural honey produced by *Apis mellifera* and is produced from bees foraging and collecting nectar from the heather moorlands in Wales. Most 'Welsh Heather Honey / Mêl Grug Cymru' is sourced from Ling heather (*Calluna Vulgaris*) as Ling heather is far more prolific in Wales than Bell Heather (*Erica Cinera*).

'Welsh Heather Honey / Mêl Grug Cymru' is additive free and can be sourced from a single apiary or more than one apiary. To produce 'Welsh Heather Honey / Mêl Grug Cymru' all bee hives (or apiaries) must be located in Wales – at least 3 miles from any Welsh border (the 'production area') and the nectar making up the honey should be wholly foraged on Welsh heather moorlands. The production area is the area in which beekeepers set up their apiaries in order to produce 'Welsh Heather Honey / Mêl Grug Cymru'.

Other operations such as the simple mechanical (physical) processes of extraction and packing of 'Welsh Heather Honey / Mêl Grug Cymru', which do not alter the chemical or

organoleptic characteristics of the honey, may take place at suitable (Food Registered) premises located within or outside of Wales, so long as the honey source(s) is wholly traceable to the geographical area of origin.

As 'Welsh Heather Honey / Mêl Grug Cymru' is an unpasteurised product, (pasteurisation of honey is typically between 63- 65 degrees centigrade for 30 minutes), this ensures that all enzymes resulting from the natural origin of the honey, are retained and not lost. 'Welsh Heather Honey / Mêl Grug Cymru' is only heated (to a max of 45 degrees C) to help relocate honey (if required) from storage containers to 'bottling'

Only minimal filtration is allowed (ending with 200-micron mesh prior to bottling), this enables the majority of the pollen grains to remain, in the final product and contributes to a higher protein content compared to commercially more processed honeys. The frequent occurrence of air bubbles in 'Welsh Heather Honey / Mêl Grug Cymru' is an indication of the 'natural' unprocessed nature of the product.

'Welsh Heather Honey / Mêl Grug Cymru' is usually produced in the summer between the months of July and September but the length of the season can vary significantly and is very dependent upon weather conditions. The window period for obtaining heather honey can in some seasons be very short (several days) and can result in only small volumes of highly valued quality honey being obtained. The inconsistencies of cropping and the difficulties of obtaining 'Welsh Heather Honey / Mêl Grug Cymru' can make it a rare and premium product which requires specific skills.

The Welsh heather (upon which the bees forage and collect their nectar) influences and contributes to the characteristics in the final product. The key characteristics of 'Welsh Heather Honey / Mêl Grug Cymru' are its visibility, structure and taste.

Chemical characteristics:

All 'Welsh Heather Honey / Mêl Grug Cymru' should meet the criteria specified in The Honey (Wales) Regulations and should be tested against those regulations if there is a risk of adulteration

'Welsh Heather Honey / Mêl Grug Cymru' shall conform to the definition of "blossom" honey and "nectar" honey as defined by the above regulations.

Physical characteristics

Structure/texture: - 'Welsh Heather Honey / Mêl Grug Cymru' is thixotropic, this means it has a 'gel like' consistency, is very slow to set, on stirring it liquefies and then 're-gels'.

Pollen characteristics

To produce 'Welsh Heather Honey / Mêl Grug Cymru' all bee hives (or apiaries) must be located in Wales and the nectar making up the honey should be foraged on Welsh heather moorlands.

'Welsh Heather Honey / Mêl Grug Cymru' has a predominance of Ling heather *Calluna Vulgaris* pollen, however, pure mono-floral heather honey is rare, as heather nectar is often mixed with other nectars from species such as rose bay willow herb, blackberry and gorse.

Organoleptic characteristics

Welsh Heather honey	Description
Colour	Reddish orange to dark amber Rich autumnal orange colour Bright appearance but not clear,
Structure/Texture	Thixotropic – gel like and firm but will become temporarily liquid if stirred or agitated. Smooth, soft consistency
Aroma	Aroma similar to that of heather but with a hint of complexity.
Flavour	Intense sweetness with a touch of bitterness which lifts the intensity of the sweetness. Complexity of flavours

The 'Welsh Heather Honey / Mêl Grug Cymru' PGI application does not refer to 'Welsh Heather Honey which has been blended or mixed with other types of honey.

3.3 Feed (for products of animal origin only) and raw materials (for processed products only)

'Welsh Heather Honey / Mêl Grug Cymru' is produced from the bees feeding on natural nectar sources from within the designated geographical area during the Welsh Heather honey harvesting season.

For the welfare of the bees, beekeepers need to ensure the bees have sufficient nectar and pollen sources.

During the production season bees should not be supplementary fed except under exceptional circumstances and only on welfare grounds. Bees can be fed sugar syrup and / or associated products, such as pollen substitutes, on welfare grounds. Supplementary feeding should not exceed the bees' two-day feed requirements. If the 2 days is exceeded then the crop will not meet the PGI specification and cannot be sold as 'Welsh Heather Honey / Mêl Grug Cymru'.

These 'feeds' (and/or associated products) do not need to originate from within the geographical designated area

Records should be kept if any substitute feeding occurs during the honey production season including the reason.

Over the Winter period where honey is not being produced, bees can be fed sugar syrup and / or associated products, such as pollen substitutes on welfare grounds

When supplementary feeding occurs over the winter period checks shall be conducted to ensure any syrup stored by the bees around their winter nest has been used up entirely prior to adding honey supers in the spring, in readiness for the next crop, to ensure that no feed ends up in the honey production.

3.4. Specific steps in production that must take place in the identified geographical area

‘Welsh Heather Honey / Mêl Grug Cymru’ is unadulterated 100% natural honey produced by *Apis mellifera* and is produced from bees foraging and collecting nectar from heather moorlands located in Wales.

Other operations such as the mechanical (physical) processes of extraction and packing of ‘Welsh Heather Honey / Mêl Grug Cymru’, which do not alter the chemical or organoleptic characteristics of the honey, may take place at suitable (Food Registered) premises located within or outside of Wales, so long as the honey source(s) is wholly traceable to the geographical area of origin.

3.5. Specific rules concerning slicing, grating, packaging, etc. of the product the registered name refers to

3.6. Specific rules concerning labelling of the product the registered name refers to

The ‘Welsh Heather Honey / Mêl Grug Cymru’ PGI application does not refer to ‘Welsh Heather Honey which has been blended or mixed with other types of honey.

4. Concise definition of the geographical area

To produce ‘Welsh Heather Honey / Mêl Grug Cymru’, all bee hives (or apiaries) must be located in the country of Wales (at least 3 miles from any Welsh border) and the nectar making up the honey should be foraged from Welsh heather moorlands

5. Link with the geographical area

The qualities, and reputation of ‘Welsh Heather Honey / Mêl Grug Cymru’ is directly attributable to its geographical origin.

This PGI application is based on the following three key factors: -

- a) Clear reputation of ‘Welsh Heather Honey / Mêl Grug Cymru’ as a distinct product produced from nectar foraged from Welsh heather moorlands
- b) The Welsh heather in Wales from which the bees forage and collect nectar. The type and quality of heather in Wales is influenced by variety climate, and land management.
- c) The fact that ‘Welsh Heather Honey / Mêl Grug Cymru’ is a marginal crop and the difficulties associated with the product requires specific skills.

It is this combination of both natural factors and human factors which define the characteristics of 'Welsh Heather Honey / Mêl Grug Cymru'.

Welsh Heather

Heather grows widely in Wales and 'Welsh Heather Honey / Mêl Grug Cymru' is produced from heather on both upland and lowland heaths.

In Wales there are approx. 7000ha's of Welsh lowland heaths which represent 10% of the estimated lowland heaths in the UK. Strongholds of lowland heath habitat in Wales are notably Pembrokeshire, Gwynedd, Anglesey and The Gower peninsular.

On upland heaths, hives are typically sited at a maximum altitude of 250m with bees collecting heather at higher altitudes – flying uphill empty to the heather and flying back downhill to the hive with their load of nectar. In Wales, on upland heaths, the heather tends to be located at higher altitudes (than for example in Scotland) because the lower altitudes are predominantly utilised for forestry and enclosed fields. The higher the altitude, though, the more unpredictable the weather conditions and the more marginal the production as bee foraging abiotic activity is closely related to air temperature.

Most 'Welsh Heather Honey / Mêl Grug Cymru' is sourced from a predominance of Ling heather (*Calluna Vulgaris*). Ling heather is more prolific in Wales and flowers later than the Bell Heather (*Erica Cinerea*). Ling Heather is considered to be "the true heather" honey. Pure mono-floral heather honey is rare, as the nectar from heather, is often mixed with nectars from other moorland species such as rose bay willow herb, blackberry and gorse.

Land management and climate influences the distribution, growth and quality of heather in Wales and this has a direct effect on the yield and characteristics of 'Welsh Heather Honey / Mêl Grug Cymru'. The quality of the heather affects the potential honey crop.

Land management of heather moorlands.

"Gold under bracken, silver under gorse famine under heather" is a traditional saying of Welsh Hill farmers (Condry 1966) and highlights the nutrient poor soil conditions which heather requires for its growth. To promote or maintain heather it is necessary to manage the land so that nutrients are continually being removed.

The distribution of heather in Wales reflects history as well as ecology. Now most areas of Welsh heather moorlands are managed as part of agri-environmental schemes to encourage young heather growth by grazing or controlled burning. This encourages young heather which produces more nectar leading to potentially a greater honey yield.

The management of the moorland is a factor for 'Welsh Heather Honey / Mêl Grug Cymru' makers to consider when deciding where to locate their hives. The type and quality of heather confers unique distinctive characteristics to the honey reflected by 'Welsh Heather Honey/ Mêl Grug Cymru's physical, chemical, pollen and organoleptic characteristics.

Climate; -

The production of 'Welsh Heather Honey / Mêl Grug Cymru' is marginal in nature and obtaining a crop of honey can be fraught with difficulties due to changing climatical Welsh conditions.

Wales has a mild, moderate, maritime climate which is heavily influenced by the Gulf Stream. The moist Welsh climate with its high rainfall produces unpredictable weather.

Wales's unpredictable weather influences the heather growing season which affects timing of honey harvests and yields. Highest yields are achieved when there is wet weather in May and June to stimulate heather growth and then fine weather in August to encourages the bees' abiotic activity. However, changing Atlantic weather patterns can lead to an interruption of bees bringing pollen and nectar back to hives.

Although heather can potentially produce a honey crop very quickly (no other flower (except possibly oil seed rape or borage can produce a crop so quickly), yields are unpredictable and if weather conditions are particularly unfavourable there may not be any honey at all.

Human Factors

Welsh honey producers are skilled at working within the variable and unpredictable Welsh climate where, the start, end and sequencing of events throughout the season can be very unpredictable making collecting a crop challenging. This is exacerbated with Welsh heather honey makers where hives are located at higher altitudes and adverse weather conditions are a frequent occurrence.

The Welsh honey maker has to have a sophisticated understanding and knowledge of bee behaviour, their feeding patterns and how climate changes affect this activity. Welsh honey makers have to scrutinise met office data, predict weather forecasts and change management techniques quickly to respond to changing weather conditions. Most activities take place with the caveat "weather permitting". Success depends on the weather, the strength of the bee colony and the quality of heather which depends on the management of the heather moorland.

Producing heather honey also requires its own specific skills several associated with migratory bee keeping.

- Skill in knowing when to transport bees, and optimum time to harvest the comb to coincide with when the ling heather is in bloom.
- Knowledge of managing bee colonies located on moorlands which are typically a long distance from the honey maker's home. The honey maker has to be able to predict environmental conditions on the heather moors and be able to anticipate if conditions change, and if colonies may need feeding.
- Choosing of strong colonies that will survive the altitude and colder heather environments

- Ensuring hives are in good conditions to survive higher altitudes and adverse weather conditions
- Taking actions to minimise the effect of bad-tempered bees which can occur when changeable weather conditions can switch off rapid flow of nectar.
- Skill of extracting heather honey by pressing rather than by centrifugal extraction due to its thixotropic nature.

Although producing 'Welsh Heather Honey / Mêl Grug Cymru' is very unpredictable and requires considerable skill and effort, it can still produce a distinctive honey commanding a premium price.

Reputation and historical importance

The production of honey has historically been very important in Wales and Welsh honey making is embedded in Welsh culture and language.

'Welsh Heather Honey / Mêl Grug Cymru's reputation of being a quality product is recognised by the food industry both within and outside Wales. A few examples of quotes from Great Taste Award judges are shown below.; -

"This dense, viscous, pollen-rich honey. There is a hint of complexity on the aroma, considerably more on the palate. We loved the touch of bitterness as of acidity, giving levels of flavour and lifting the intense sweetness. A characterful and enjoyable honey, with a pleasing persistence on the finish.

This honey has a sticky toffee-like texture, with a smooth and soft consistency that rolls around the mouth pleasingly. The heather lies quite far back, but does give that slightly bitter note against the sweetness, which is lovely and very warming".

Examples of 'Welsh Heather Honey / Mêl Grug Cymru' awards won: -

- Cambrian Mountain Welsh Heather Honey Cilgwenyn Bee Farm Great Taste Award 1*2021
- Bee Welsh - Welsh Heather Honey – Best in Show 2019 at the RWS/National Blue Ribbon award 2019

Product specification

ENDS

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