

PGI for Maltese Wild Thyme Honey: Achievable, or forever a dream?

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Malta as the Home of Honey

Beekeeping and honey production are longstanding traditions in Malta, with their ancient origins lying deep in the mists of time – and according to some, even being embedded within the name of the archipelago itself, with ‘Malta’s’ etymological origins being traced back in these accounts to the Latinisation of the Greek word for ‘honey’, ‘meli’ ([Jansen, 2018](#), p. 52). Rooted in traditional everyday practices and customs, Malta’s association with honey is bound up with the country’s identity.

I spoke to [Prof. David Mifsud](#) and [Mr Matthew Calleja](#), Principal Investigator and Research Support Officer respectively at the University of Malta, about their research in the Maltese context, funded by [Xjenza Malta](#); this research is being conducted in collaboration with Turkey, where it is funded by TÜBİTAK.



Wild Thyme Honey

Honey is distinguished according to the plants from which the bees collect their nectar. Mifsud outlines certain traits that visibly distinguish wild thyme honey (*għasel tas-sagħtar*): unlike most honeys, wild thyme honey ‘tends to remain in the liquid phase’, because one particularity of the thyme flower is that it contains more fructose than glucose. It is ‘the only mono-floral honey that we can produce in Malta’ (Mifsud) – that is, its nectar is primarily drawn from only one floral source. Wild thyme honey is amber in colour and has ‘a strong aromatic flavour’, says Matthew Calleja.

Maltese wild thyme honey has received international recognition, having been [awarded gold](#) at the 2021 London International Honey Awards.

Where and when does it grow?

There are three honey flows in Malta's seasonal cycle of honey production. The spring multi-floral honey is collected by beekeepers at the end of May, with the nectar coming from different floral sources such as citrus, red clover, borage, different thistles, among others. Wild thyme shrubs flower from the end of May through June, and typically grow wild in open garrigue habitats found mostly [in the northern parts of Malta](#), some areas in Gozo, and on Comino. Wild thyme honey is therefore also known as 'summer honey'. This is followed by the 'autumn honey', in which period bees typically collect nectar from the eucalyptus trees and carob trees, producing honey that is 'dark brown-black in colour' (Mifsud). It is generally collected by beekeepers at the end of October to mid-November. Each of these honeys has a distinctive taste and colour.

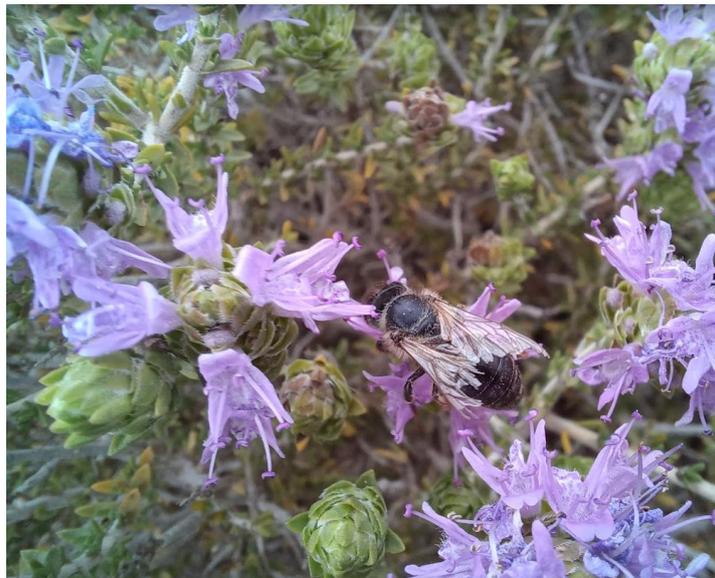


Figure 1: A honeybee forager extracting nectar from wild thyme (*Thymra capitata*). Photo credits: A. Lamoliere

What goes into making Honey?

David Mifsud explains that honey is 'a highly concentrated sugar solution', since most of the water is removed from the nectar collected by the forager bees, when the latter transfer it to the nurse bees at the hive by trophallaxis (mouth-to-mouth). In the process, other chemical reactions occur and enzymes are added. The honey (reduced to a water content of around 18%) is sealed inside the hive cells with wax. This is also the secret of honey's much-exalted health benefits: 'very few micro-organisms, harmful organisms, can live inside it' (Mifsud). This trait also makes it remarkably long-lasting. Honey is thus trusted to be safe, with good reason; however, as Mifsud notes, these particular virtues have also contributed to

the unfortunate perception that honey samples do not require much testing, in comparison to most other (more perishable) foodstuffs.

Mifsud and his team are actively turning this around, insisting on the need for testing on other grounds: establishing the profile-parameters of wild thyme honey.

The Project: Bee-Optech4Honey

Wild thyme honey is the focus of the Malta branch of the project ICT-enabled Bee Foraging Sites and Beekeeper Routes Optimisation for Efficient Honey Production (Bee-Optech4Honey), funded by Xjenza Malta.

Apart from sample analysis to determine the chemical composition and the acceptable margins of variation for this type of honey, the project also involves mapping habitats and studying the bees' natural environment. The team has performed drone surveys of the northern regions of Malta, to identify 'the best regions in Malta to produce thyme honey from' (Calleja). They trained AI software to process these photos and locate areas with a suitable density of wild thyme. This would enable modelling to predict the best spots for apiaries and gauge the optimal number of beehives per apiary and distance between apiaries. This 'optimisation' would make the process more efficient by reducing 'competition between the bees, [and] between beekeepers' (Calleja). In Turkey, this includes mapping optimal migratory pathways for beekeepers who move according to where the sought-after plants are growing.

Quality assurance

Wild thyme honey has, therefore, certain defining features, which are capable of being scientifically verified through analysis. Without such testing, there is a [proven likelihood](#) that adulterated honey (e.g. produced from sugar solution rather than flower nectar) will flood the market; there is currently no guarantee that something marketed as Maltese wild thyme honey will have any thyme content at all, and the project team's analysis has shown 0% thyme in some samples that were misleadingly branded as authentic (and priced accordingly). Acquiring PGI or DOP status would mean that 'for someone to call their honey "Maltese Wild Thyme Honey", they would need to submit it to analysis' (Calleja). If it fails the test, it would lose that label.

Protected Geographical Indication (PGI) and Protected Designation of Origin (DOP) are EU marks of quality, protecting the regional origin of food products, with DOP requiring a stronger and intrinsic connection to the region throughout the process – from the origin of the nectar (in the case of honey) to the processing and packaging of the food. During a seminar on the project, held for the public, beekeepers, and key stakeholders on the 20th November 2025, Mifsud pointed out that the claim for Maltese wild thyme honey's regional particularity rests on: the unique confluence of natural factors, including the indigenous wild thyme and the climate; the human factors that anchor it in a cultural sense of place – the local beekeeping traditions, heritage in terms of trade and traditional cuisine, passed down

through generations; and last but not least, the specific characteristics of the honey itself, which can be established and verified through rigorous testing.

This EU-recognised status is a mark of quality assurance, which protects the consumer; it is also, however, a way to protect the local honey and its production. The very fact of such recognised status at EU level therefore has far-reaching implications beyond the particular batch from which the sample is drawn; Calleja notes that 'if Maltese wild thyme honey is eligible for PGI, then that is a confirmation' of its uniqueness. Other Mediterranean countries produce thyme honey, such as Greece and Turkey, but the distinctive qualities of Malta's local produce will be recognised, and the PGI/DOP would establish how and why it is unique – establishing 'the particular parameters' (Mifsud) for reliable classification. Mifsud's team has been conducting 'a lot of tests in order to have a repertoire of different parameters, so that there is a framework; an understanding of what's going on. Because without this, people out there can start inventing values which may not necessarily be correct.' As a result, 'We have a better picture now than we ever had.' (Mifsud)

In general, for a honey to be considered monofloral, it needs to contain at least 45% pollen from the same floral source. However, the analysis has to take other parameters into account: 'mainly physico-chemical parameters, like moisture content, colour, pH, acidity, etc.' (Mifsud). In determining whether a sample is indeed wild thyme honey, all these characteristics must be considered holistically.

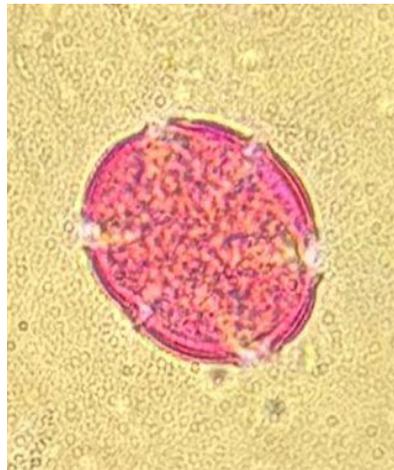


Figure 2: A microscopic photograph of a pollen grain of wild thyme from one of our honey samples. Photo credit: Dr. B. Gambin.

Sustainable production

Local apiculture and honey production mostly take place on a [small scale](#); they occur on-site (and across multiple sites) rather than on anything approaching industrial scale, and are singularly dependent on habitat and seasons, in direct relationship with the land. The source is particularly vulnerable to climate shifts, such as the lack of rainfall, which has narrowed the time-window for the collection of nectar: 'Sometimes the [thyme] flower can remain there

till the first week of July, but with the high temperatures, with the very little rainfall, this is rarely happening in these last 10 years. It used to in the good old days, but... no longer. And during this time of the year, this is the only flower which is available for bees to collect nectar from.' (Mifsud)

The habitat for wild thyme is garrigue (non-agricultural, but not unproductive, land), which historically formed part of the 'commons', accessible to 'common' use rather than exclusively owned ([Alberti et al, 2024](#)); the use of wild thyme by the bees depends on recognising and respecting the value of such land (some of which was historically used for grazing, Alberti et al, 2024). Wild thyme is not agriculturally produced, so its sustainable production depends on preserving and respecting the 'wild' spaces where it grows, and their traditional uses. In fact, a 'major concern' is habitat destruction (Mifsud), e.g. when wild thyme is removed to make room for agricultural land or development.

The international recognition of the honey would be the well-earned coda that would put the seal on a whole grassroots process that includes beekeeping, production, and use – which would be supported by continued monitoring through research and analysis. Mifsud et al's project in fact surveys and keeps tabs on the naturally occurring environmental resources, in addition to analysing honey samples for their quality and composition. Legal protection of the honey is integrally interlinked with protection of land and habitat, as well as of customary beekeeping practices – weaving together environmental sustainability with natural, cultural and culinary heritage. And of course, since a significant number of the jars we buy today are falsely marketed as 'wild thyme honey', the result of having such a verified status would be to ensure wider accessibility to trustworthy quality-honey and its restoration to our tables - this may well lead to the delight of (re)discovering a new or half-forgotten delectable taste for many of us, locals and tourists alike.



Figure 3: The PGI stamp