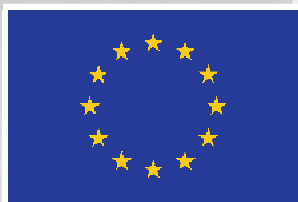


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# HOW TO MAKE **MEAD** STEP BY STEP



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# PROJECT "ESTONIAN AND SLOVAKIAN BEEKEEPERS STUDY TOGETHER IN COOPERATION."

The Project runs for **24 months**, from **01.09.2022** to **31.08.2024**.  
PROJECT NUMBER - 2022-1-EE01-KA210-ADU-000083853

Partners: NGO Alustame Algusest (Estonia) - rec.code 80242993  
Slovak Association of Beekeepers (Slovakia) - rec.code 00178349



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# ACTIVITIES IN THE PROJECT

Organized 2 study trips. In 2023, Slovaks studied in Estonia, and in 2024, Estonians studied in Slovakia. Films have been made of the training days, which can be seen on the YouTube channel of the responsible partner.  
<https://www.youtube.com/@mesilaspere3578>

More about the project's activities is written on the website:  
<https://mesilaspere.com/projektid/koostoprojekt-slovakkia-mesinike-liiduga-2022-2024>

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The project is supported by the Estonian Agency for Erasmus+ and the European Solidarity Corps from the Erasmus+ program.

## RESPONSIBLE EXECUTORS OF THE PROJECT



Marianne Rosenfeld - NGO Alustame Algusest member of the board  
Zuzana Juríčková - Representative of the Slovak Beekeepers' Union  
Chris Rosenfeld - project manager and translator

## PROJECT PARTICIPANTS



Slovaks in Estonia



Estonians in Slovakia

# HOW TO MAKE MEAD

# STEP BY STEP

In recent years, beekeeping has become more and more popular among people. Many will learn to bottle honey, to harvest wax and propolis, but beekeeping brings a whole range of wonderful things and methods of utilizing all products made by bees.

One of them is the possibility of producing the "drink of the gods" - mead, which belongs to the oldest known beverages. Self-made homemade mead will be definitely much tastier than the one you can buy from the store just because of the feeling from a well done job. We divide mead into several categories, such as traditional, flavored, fruity, or special meads



## PRODUCTION OF MEAD

To make traditional mead at home, we will need honey, water, nutritional salt and noble yeast. In the production of flavoured mead, except the above mentioned ingredients you can use herbs, spices or fruits.

In addition to the ingredients, you will also need the following technical equipment - a container for cooking (can be a pot or a water/wine cooker with a thermostat at 100°C, scale (personal for measuring honey and water), funnel (through which we will pour the mead into glass demijohn), small strainer (stainless steel for collecting foam), demijohn (glass 2x 50l) or stainless steel wine container (100 l AIR system), fermentation cap (for demijohn), thermometer up to 110°C (for measuring the boiled solution and when making yeast), refractometer (with a Brix scale for measuring the sugar content in the solution).





We know two basic methods of mead production: **COLD PRODUCTION** and **PRODUCTION IN THE HEAT**.

## COLD PRODUCTION

Cold production is based on mixing honey with water. In order for the honey to dissolve better, the solution can be heated to a temperature of up to 36°C. At this temperature, proteins and aromatic substances are not destroyed. The advantage of cold production is that many aromatic substances are not destroyed. Its disadvantage is the long time it takes to purify the mead (even 2 years) and the more frequent bottling of the mead, because the thermolabile proteins in the solution fall out gradually and form sediment at the bottom of the container. Purification of mead can be accelerated by using bentonite (removing proteins) or filtering.

## HOT PRODUCTION

Hot production involves boiling a solution of water and honey. During cooking, foam forms on the surface (it is mostly destroyed proteins), which we have to remove during cooking. We usually boil the solution until foam stops forming on the surface, it is enough to bring the solution to a boil at 100°C. The advantage of hot production is the quick purification of the mead.

## LIST OF INGREDIENTS FOR PREPARING 100 L OF MEAD:

- 71 l of pure spring water
- 40 kg of honey (e.g. flower, sunflower, honeydew)
- 20 g of yeast (e.g. Schimansky Power)
- 20 g of nutritional salt (e.g. Mautiferm Plus)

**PROCEDURE:** The first step is to prepare a solution by mixing honey and water. We can put 8 kg of honey and 14 l of water into a 30 l container (pot/boiler) and mix. Bring the solution to a boil and collect the foam that forms on the top with a stainless steel strainer. Pour the solution into a stainless steel container with a volume of 100 liters. This cooking procedure must be repeated five times in order to fill the container. Allow the solution to cool to 35°C and add nutrient salt (18g), which must be mixed well in the entire volume.

If we use a glass demijohn, it is necessary to let the solution cool down in another container first and, after cooling, pour it into the demijohn through a funnel to avoid cracking the glass container. During cooking, one must take into account the evaporation of part of the water. The solution thus obtained should have a sugar content of approximately 32-33% expressed in Brix, which can be checked with a refractometer.



## LIST OF INGREDIENTS FOR THE PREPARATION OF 'SOURDOUGH':

- 1 l of clean spring water
- 0.2 l of honey solution
- 20 g of Schimansky yeast (Power)
- pinch of salt (on the tip of a knife)

**PREPARATION OF YEAST:** prepare yeast according to the instructions, 20 g of yeast per 100 l of honey solution (one package). Mix the yeast in 1 liter of water, 0.2 l of honey solution and a pinch of nutrient salt (2g) heated at 35-38 °C. Leave the yeast to start for approx. 30 min., when the yeast begins to ferment visibly, mix the yeast into the honey solution, the temperature of which should be approximately the same (if the temperature difference between the honey solution and the yeast is more than 8°C, thermal shock may occur and part of the yeast may die) and mix well.



We can find yeast in wine stores under the name Active dry wine yeast, or original mead yeast such as Schimansky. Deep-fermenting and cold-loving yeasts are best suited for the production of mead. Yeast can also be found in beekeeping stores.

The recommended temperature for the first fermentation is 20-25°C. The time of stormy fermentation lasts about 4-7 weeks. The lower the temperature during fermentation is, the more aromatic substances remain in the product.



# RACKING

After violent fermentation and settling of the sediment, we first pour the mead into a clean stainless steel container/demijohn so that the mead is aerated. If possible, it is good to leave the mead to ferment in a cooler environment (12-17°C). More sediment will fall out of the mead over time, so we repeat the 2nd bottling (racking) process after about 3 months, but without pre-aeration, then rackings can be carried out at six-month intervals until the mead is purified. After the last racking, the mead should still be allowed to ripen. During ripening, chemical reactions occur that enhance the taste and aroma.



Maturation takes several months to years, good mead should mature for about 2 years. The container should always be filled to the brim to prevent air from entering and also tightly closed to prevent fruit flies from getting into the mead. The mead produced in this way should contain 13-15% of alcohol. Mead can also be dry (without residual sugar), but it is usually made sweet. It should have a balance of acidity, residual sugar and content of bitter substances.

# RACKING

The main factors affecting the taste of mead are: the type of honey used for its production, the type of yeast, water, fermentation and storage temperature, hygiene of the tools and raw materials used, the method of cold or boiled mead production, whether it was fermented and stored in a glass, stainless steel or wooden barrel . Therefore, it is difficult to achieve the same taste of mead with each production. Over time, everyone will find their own recipe, which will be helped by the notes they take during the production process but also at each mead tasting.



Keeping production records is very important to eliminate errors and highlight successes. You will get better with gradual refinement and crafting, but it takes time, which will be rewarded with praise from your loved ones and success in competitions. I wish you much success in your production and don't forget: Mead is the drink of kings and our ancestors, it has always been on the table during all holidays, and if you want to live long, learn to drink mead.

16.1.2023, Ing. Jozef Čápek, PhD.

# ABOUT THE AUTHOR



Josef Čápek is the founder and chairman of the civil association of the Guild of Mead Producers in Slovakia. He has been producing mead using the traditional method since 2011. Since 2014, he has been organizing the all-Slovak Medovinka Roka competition, which became very popular from the beginning. In national competitions, he won several first places with mead, and his greatest success came from the APIMONDIA international competitions, where he won a silver medal in 2015 and a gold medal in 2022.

From 2018, he is a lecturer of the accredited course Production of Traditional Mead. Graduates of the course acquire the theoretical and practical prerequisites for mastering work in the production of mead in the traditional way. They know the basic raw materials, technological procedure, fermentation process, control conditions and measurements during the production process and principles of proper storage, packaging and sale of mead.

# PRESENTATION OF THE ASSOCIATION

The Slovak Association of Beekeepers is a civil association that brings together beekeepers and friends of bees. The main activity is the promotion of beekeeping and its products, beekeeping education for children and adults, organizing competitions and various educational events. Also creation of an advisory system and publication of the Vcelar magazine almost 8,000 pieces and various professional literature.

An important role in spreading awareness about the importance of bees and beekeeping plays the equipment of the Slovak beekeepers' association Bčelárska Paseka near in the village of Kráľová pri Senec.



The association is based in Bratislava and is the largest beekeeping organization operating in Slovakia. It currently has over 16,000 members. The organization has 2 active websites and a Facebook page.

The Slovak Association of Beekeepers is a member of the international association APIMONDIA and many other organizations.

**[www.vcelari.sk](http://www.vcelari.sk)**  
**[www.vcelarskapaseka.sk](http://www.vcelarskapaseka.sk)**  
**FB: Slovenský zväz včelárov**